INTERNATIONAL
PUBLIC FINANCE CONFERENCE

ANADOLU UNIVERSITY

36th International Public Finance Conference

"Fiscal Policies and Inflation"

E-Proceedings Book

Supported by TÜRKİYE CUMHURİYET MERKEZ BANKASI and TÜBİTAK

27- 30 October 2022, Amara Luxury Resort & Villas
Antalya, Türkiye

36th International Public Finance Conference "Fiscal Policies and Inflation"

Editors

Prof. PhD. M. Erkan ÜYÜMEZ

Assoc. Prof. PhD. Canatay HACIKÖYLÜ

NİSAN

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36th International Public Finance Conference
October 27-30, 2022
Antalya, TR

ANADOLU UNIVERSITY

General Information

https://maliyesempozyumu.anadolu.edu.tr/
https://publicfinance.anadolu.edu.tr/

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and

The Faculty of Economics

SUPPORTERS

The Organization Committee also gratefully acknowledges academic support from the following institutions:

TÜBİTAK

and

Türkiye Cumhuriyet Merkez Bankası

DATES & VENUE

Dates 27-30 October 2022

Venue Amara Luxury Resort,
Antalya, TR.
Esentepe Mah. Ahu Ünal Aysal Cad. No:1
Göynük Kemer, Antalya.

REGISTRATION

Registration and Information Desk is located at Amara Luxury Resort Hotel, **Antalya, TR** from 09.00 to 16.30.

ANADOLU UNIVERSITY

BADGE

Participants should kindly wear personal name badges at all times during the Conference. Name badges will be provided in participants' conference bags at the Registration Desk.

SESSIONS

Sessions at 36th International Public Finance Conference are in English and Turkish. Each session is moderated by a Convenor. Each contributed paper will be presented orally for about 15 minutes, and followed by maximum 5 min discussion. The Convenor may decide and change the order of presentations. Each rooms is equipped with a computer and data projector.

PASSPORTS AND VISAS

Please check if you need an entry visa for TR and insurance. Applications for visas could be made to the TR Consulate in your country.

36th International Public Finance Conference
October 27-30, 2022
Antalya, TR

ANADOLU UNIVERSITY

PROGRAM AT A GLANCE

Thursday , October 27, 2022

14:00- 18:30 Registration

Friday, October 28, 2022

09:00-09:45 Opening Ceremony – Salon Anadolu
Mustafa Erkan Üyümez (Chair of Organizing Board)
Selami Sezgin (Dean of Faculty of Economic)
Fuat Erdal (Rector of Anadolu University)

09:45-10:00 Coffee Break

10:00-11:30 Keynote Speakers– Salon Anadolu

"Public Finance, Inflation and Turkish Economy"
Mahfi Eğilmez (Altınbaş University, TR)
Fatih Özatay (TOBB-ETU, TR)
Convenor: **Fuat Erdal** (Anadolu University, TR)

11:30-12:00 Coffee Break

12:00-13:00 Sessions

13:00-14:00 Lunch

14:00-15:00 Keynote Speaker– Salon Anadolu

"Public Finance: Growing Challenges, Shrinking Space"
Ayhan Köse (Worldbank, USA)
Convenor: **Yılmaz Kılıçaslan** (Anadolu University, TR)

15:00-15:15 Coffee Break

15:15-16:15 Sessions

16:15-16:30 Coffee Break

16:30-17:30 Sessions

17:30-17:45 Coffee Break

17:45-18:45 Sessions

Saturday, October 29, 2022

09:00-10:00 Sessions

10:00-10:15 Coffee Break

10.15-11:15 Sessions

11:15-11:30 Coffee Break

11:30-12:15 Keynote Speaker (online)– Salon Anadolu

Economics of Good and Evil the Quest for Economic Meaning Gılgames to Wall Street and Current Issues
Tomáš Sedláček (Charles University, CZE)
Convenor: **Cumhur Dülger** (Anadolu University, TR)

12:15-13:30 Lunch

13:30-14:30 Sessions

14:30-14:45 Coffee Break

14:45-15:45 Sessions

16:00-18:00 Closing / Plenary Session

Sunday, October 30, 2022

09:00-12:00 Check Out

Program

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Opening Ceremony

October 28, 2022; 09:00 – 09:45; Salon Anadolu

Mustafa Erkan Üyümez (Chair of Organizing Board)
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Keynote Speakers

October 28, 2022; 10:00 – 11:30; Salon Anadolu

"Public Finance, Inflation and Turkish Economy"

Mahfi Eğilmez (Altınbaş University, TR)
Fatih Özatay (TOBB-ETU, TR)

Convenor: **Fuat Erdal** (Anadolu University, TR)

F1Anadolu

October 28, 2022; 12:00 – 13:00; Salon Anadolu

An Analysis of the Role of Government Debt on the Inflation Expectations in Turkey Using the Markov-Switching Model

Süleyman Kasal (Anadolu University, TR)
Şebnem Tosunoğlu (Anadolu University, TR)

The Predicament of Public Finance in Combat to Inflation: Inflation Psychology

Emine Yöney (Harran University, TR)
Binhan Elif Yılmaz (İstanbul University, TR)

Examination of the Relationship Between Inflation and Indirect Taxes: Case of Turkey Between 2019-2022

Hakan Bay (Dokuz Eylül University, TR)
Özge Önkan (Sinop University, TR)

Convenor: **Selami Sezgin** (Anadolu University, TR)

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F1Yunus Emre

October 28, 2022; 12:00 – 13:00; Salon Yunus Emre

Possible Reflections of Artificial Intelligence on Tax Inspections
Ali Osman Yılmaz (Social Security Institution, TR)
Mustafa Erkan Üyümez (Anadolu University, TR)

Evaluation of the Effect of Electronic Tax Applications on Tax Revenues and Taxpayers
Arzu Kızılkaya (Kırıkkale University, TR)
M. Kemal Bostan (Kırıkkale University, TR)

Metaverse: Evaluation of the Alternative Virtual Universe in the Context of Taxation Power
Ayşegül Yücel (Bandırma Onyedi Eylül University,TR)
Burçin Bozdoğanoğlu (Bandırma Onyedi Eylül University,TR)

Convenor: **Emrah Ferhatoğlu** (Eskişehir Osmangazi University, TR)

F1Frigya

October 28, 2022; 12:00 – 13:00; Salon Frigya

Comparison of the 2021-2027 Pre-accession Financial Aid Instrument (IPA III) with Antecedents & Its Station Against Taxation
Birol Ubay (Revenue Administration, TR)
Özben Güldoğan (Revenue Administration, TR)

An Assessment of 2021-2027 Multiannual Financial Framework and Next Generation EU in the Context of the European Union's Future Perspective
Özlem Genç (Ankara University,TR)
Ceran Arslan Olcay (Ankara University,TR)

Evaluation of Quality of Life in Developed and Developing Countries for Public Finance
Rabia Selinay Değirmenci (Kırıkkale University, TR)
Eda Yeşil (Kırıkkale University, TR)
Convenor: **Bernur Açıkgöz** (İzmir Katip Çelebi Universityi, TR)

F1Dorlion

October 28, 2022; 12:00 – 13:00; Salon Dorlion

How Many Companies Were Founded in Ottoman?
Celali Yılmaz (İstanbul Medeniyet University, TR)

Taxation of Social Enterprises, Evaluations for Turkey
Abdurrahman Taraktaş (Anadolu University, TR)

The Evolution of Tax Penalties: A Historical Read
İmran Arıtı Erdem (Ankara Yıldırım Beyazıt University, TR)
Şahin Yeşilyurt (Ankara Yıldırım Beyazıt University, TR)

Convenor: **Güneş Çetin Gerger** (Manisa Celal Bayar University, TR)

F1Eskişehir

October 28, 2022; 12:00 – 13:00; Salon Eskişehir

Level of Accountability in the Use of Public Resources in the Response Against COVID-19: An Evaluation for Turkey
Dürdane Küçükaycan (Eskişehir Osmangazi University, TR)

The Role of The Turkish Court of Accounts in Ensuring Fiscal Discipline in Türkiye
Gamze Kabadayı (Sivas Cumhuriyet University, TR)
Tülin Altun (Sivas Cumhuriyet University, TR)

Convenor: **Hakkı Hakan Yılmaz** (Atılım University, TR)

Keynote Speaker – Salon Anadolu

October 28, 2022; 14:00 – 15:00; Salon Anadolu

"Public Finance: Growing Challenges, Shrinking Space"

Ayhan Köse (Worldbank, USA)

Convenor: **Yılmaz Kılıçaslan** (Anadolu University, TR)

F2 Anadolu

October 28, 2022; 15:15 – 16:15; Salon Anadolu

Metaverse and Its Effects on Tax Law

Ersan Öz (Pamukkale University, TR)

NFT and Its Taxability As A New Generation Investment Instrument

Burçin Bozdoğanoğlu (Bandırma Onyedi Eylül University, TR)

A New International Tax Administrative Cooperation: Information Reporting Obligation on Digital Platform Operators and Turkey

Leyla Ateş (Altınbaş University, TR)

Convenor: **Ziayettin Bildirici** (Anadolu University, TR)

F2 Yunus Emre

October 28, 2022; 15:15 – 16:15; Salon Yunus Emre

Evaluation of the Norms Determining the Tax Base in Turkish Value Added Tax in Terms of "Principle of Justice in Taxation"
Zübeyir Bakmaz (İnönü University,TR)
Zeynep Arıkan (Dokuz Eylül University,TR)

Tax Remedy for Unjust Income and Wealth Distribution
Yusuf Karakoç (Dokuz Eylül University, TR)

Evaluation of Gambling Tax in Türkiye in Terms of Tax Justice
Zeynep Arıkan (Dokuz Eylül University, TR)
Hakan Bay (Dokuz Eylül University, TR)

Convenor: **Mustafa Erkan Üyümez** (Anadolu University, TR)

F2 Frigya

October 28, 2022; 15:15 – 16:15; Salon Frigya

Theoretical Bases of the Basic Budget Deficit-Inflation Relation in the Context of Intertemporal Budget Constraint
Özcan Erdoğan (Kütahya Dumlupınar University, TR)
Turgay Ceyhan (Mehmet Akif Ersoy University, TR)

Financialization of Consumer Loans and Aggregate Demand Management
Yaşar Tamer Ergül (Anadolu University, TR)
Sedef Oluklulu (Anadolu University, TR)

Effect of Covid-19 Pandemic on Inflation and Tax Perception; An Empirical Review - Comparison of University Graduates Between Two Surveys
Burhanettin Onur Kireçtepe (Tokat Gaziosmanpaşa University, TR)
Bernur Açıkgöz (İzmir Katip Çelebi University, TR)

Convenor: **Mehmet Oğuz Arslan** (Anadolu University, TR)

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F2Dorlion

October 28, 2022; 15:15 – 16:15; Salon Dorlion

Evaluation of Public Policies on Population in Turkey
Ezgi Altundağ (Kırıkkale University, TR)
Alparslan Uğur (Kırıkkale University, TR)

Conditional Cash Transfer for Education in Secondary Education as A Public Policy and Fiscal Space Analysis for Developing the Program in Different Scenarios
Hakkı Hakan Yılmaz (Atılım University, TR)
Nihat Akbulut (MoNE, TR)

Preparation of Social Studies Teachers for Social Studies Lesson for Secondary School Tax Education: Undergraduate Education and Evaluation of Materials Used for Preparation
Yasemin Arıman (Karadeniz Technical University, TR)
Mehmet Tunçer (Karadeniz Technical University, TR)

Convenor: **Şebnem Tosunoğlu** (Anadolu University, TR)

F2Eskişehir

October 28, 2022; 15:15 – 16:15; Salon Eskişehir

Semantic Analysis of Horizontal and Vertical Equality Principles in Taxation: A Conceptual Discussion
Ökkeş Kısa (İnönü University, TR)
Adnan Gerçek (Bursa Uludağ University, TR)

Determination of the Tax Base and the Evaluation of the Assessment Process in the Taxation of the Wealth Due By Investment in the Turkish Tax System
Selda Aydın (Ankara Hacı Bayram Veli University, TR)
Fazıl Aydın (Ministry of Treasury and Finance, TR)

The Effect of Income Taxes on Poverty: Panel Data Analysis
Merve Malak (Afyon Kocatepe University, TR)
İhsan Cemil Demir (Afyon Kocatepe University, TR)

Convenor: **Erkan Aydın**(Marmara University, TR)

F3Anadolu

October 28, 2022; 16:30 – 17:30; Salon Anadolu

A Policy Proposal for Excise Tax in Turkey: Nudging in Public Policy
Osman Gülden (Manisa Celal Bayar University, TR)
Mustafa Miynat (Manisa Celal Bayar University, TR)

Analysis of Taxpayer Behaviors from the Perspective of Behavioral Economics
Hilmi Çoban (Ankara Hacı Bayram Veli University, TR)
Yeşim Tuygun (Ankara Hacı Bayram Veli University, TR)

The Role of Tax Ethics as A Way to Legitimize Taxpayers' Tax Evasion Behavior in Turkey
Emine Yöney (Harran University,TR)
Ebru Bilgin (Harran University,TR)

Convenor: **Adnan Gerçek** (Bursa Uludağ University, TR)

F3Yunus Emre

October 28, 2022; 16:30 – 17:30; Salon Yunus Emre

"Principle Purpose Test" in Preventing the Abuse of Tax Treaties
Şerif Emre Gökçay (İstanbul University, TR)
Altan Rençber (İstanbul University, TR)

Participation On Tax Crimes in Republic of Turkey and Turkish Republic of Northern Cyprus
Onur Ciddi (Yakın Doğu University, KKTC)

Outlook of Reactions to Tax Pressure: Cases in Criminal Courts and Tax Courts by Years
Taner Ercan (Kırklareli University,TR)

Convenor: **Zeynep Arıkan**(Dokuz Eylül University, TR)

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F3Frigya

October 28, 2022; 16:30 – 17:30; Salon Frigya

Taxation of Digital Services in Terms of Country Practices
Mehmet Alper Elmalı (Atatürk University, TR)

Concept of the Permanent Establishment in Taxation of Social Media Institutions with Non-Residence
Müge Seda Ateş (Inönü University, TR)

Evaluation of the Taxation of Social Media Content Producers From the Point of View of The Turkish Tax System
Yaren Yitkin (Ankara Yıldırım Beyazıt University, TR)
Dilara Karlı (Ankara Yıldırım Beyazıt University, TR)
Şeyma Sarıcalar (Ankara Yıldırım Beyazıt University, TR)

Convenor: **Abdurrahman Taraktaş** (Anadolu University, TR)

F3Dorlion

October 28, 2022; 16:30 – 17:30; Salon Dorlion

The Moral Hazard Issue in the Automobile Insurance Sector: Empirical Findings
Ali Balkı (Afyon Kocatepe University, TR)
İsa Sağbaş (Afyon Kocatepe University, TR)

Contribution of Kırklareli University Students to Urban Economy
Yusuf Cengiz (Kırklareli University, TR)
Naci Tolga Saruç (İstanbul University, TR)

Trust in Public Institutions and Ideology: How Do Ideological Orientations of Incumbent Parties and Individuals Affect Trust in Public Institutions?
Erkam Sarı (Aydın Adnan Menderes University, TR)
Sacit Hadi Akdede (İzmir Bakırçay University, TR)

Convenor: **Pelin Varol İyidoğan** (Hacettepe University, TR)

F3Eskişehir

October 28, 2022; 16:30 – 17:30; Salon Eskişehir

Obstacle to Legal Protection Provided by the Institution of Stay of Execution: Collateral Regulation Introduced by Law No. 7351

Gülçin Karasu Öztemel (İstanbul Aydın University,TR)

Evaluation of Decisions in the Field of Taxation in the Individual Application Decisions of the Constitutional Court

Zümre Ercan (Kırıkkale University, TR)
Seyfi Yıldız (Kırıkkale University, TR)
Nur Sena Oğuz (Kırıkkale University, TR)

Convenor: **Nurettin Bilici** (Çankaya University, TR)

F4Anadolu

October 28, 2022; 17:45– 18:45; Salon Anadolu

Carbon Tax as an Environmental Tax
Nur Sena Oğuz (Kırıkkale University, TR)
Seyfi Yıldız (Kırıkkale University, TR)

Green Buildings in Turkey and Tax Policies for Ensuring Energy Efficiency in Buildings
Merve Beydemir (İnönü University, TR)

Analysis of the Twin Deficits Hypothesis: Southeastern European Countries
Hatice Altınok (Anadolu University, TR)

Convenor: **Canatay Hacıköylü**(Anadolu University, TR)

F4Frigya

October 28, 2022; 17:45– 18:45; Salon Frigya

The Effect of Fiscal Rules and Fiscal Councils on Primary Budget Balance in EU Countries: Panel Data Analysis
Emine Kepez (Ankara Yıldırım Beyazıt University, TR)

Financial Sustainability: Country Examples Based on Economic Indicators
Büşra Yılmaz (Aksaray University, TR)
Hüseyin Dirican (Aksaray University, TR)

Public Financial Auditing in the Open Government Understanding: Armchair Audit
Ebru Yalçın (Kütahya Dumlupınar University, TR)

Convenor: **Zeynep Karal Önder**(Anadolu University, TR)

F4Dorlion

October 28, 2022; 17:45– 18:45; Salon Dorlion

Options for Fiscal Consolidation in Western Balkans 6
Uran Radoniqi (South East European University, NMK)
Abdylmenaf Bexheti

Omniscience Government and Ordoliberalism in the Case of Public Intervention
Cumhur Dülger (Anadolu University, TR)

The Relationship Between Public R&D Expenditures in the Field of Energy and CO2 Emissions: The Case of OECD Countries
Bora Azamet Korkmaz (Anadolu University, TR)

The Role of Funds in Solving Social Problems
Agnieszka Wójcik-Czerniawska (Warsaw School of Economics, Poland)
Convenor: **Cumhur Dülger** (Anadolu University, TR)

F4Eskişehir

October 28, 2022; 17:45– 18:45; Salon Eskişehir

Causes and Consequences of Kidnapping in Sokoto and Zamfara States, Nigeria
Sadiq Launi (Federal Polytechnic Bauchi, Nigeria)

Evaluating the Politics of Local Government Autonomy in Nigeria
Jafar Ibrahim Dass

Determinants of Low Stock Market Participation: Qualitative Perspective from Pakistan Stock Exchange
Muhammad Naveed

Convenor: **Sedef Oluklulu** (Anadolu University, TR)

S1Anadolu

October 29, 2022; 09:00 – 10:00; Salon Anadolu

Deduction of Losses of Joint Ventures in Relation to Turkish Corporate Tax
Erkan Aydın (Marmara University, TR)

The Effect of Syrians Residing Under Temporary Protection on Tax Compliance: A Provincial Quantitative Research
Neslihan Çoşkun Karadağ (Çukurova University,TR)
Hüseyin Güler (Çukurova University,TR)
Ebru Özgür Güler (Çukurova University,TR)

Implementation of "TRT Banderole Fee" in Import and Problems in Implementation
Canatay Hacıköylü (Anadolu University,TR)

Convenor: **Leyla Ates** (Altınbaş University,TR)

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S1YunusEmre

October 29, 2022; 09:00 – 10:00; Salon Yunus Emre

Political Economy of Sharing Tax Burden an Empirical Analysis of Turkish Provinces
Sacit Hadi Akdede (İzmir Bakırçay University, TR)
Öznur Özdamar Gıovanıs (İzmir Bakırçay University, TR)

How to Enhance the Fiscal Performance of Municipalities: A Nonlinear Examination of the Turkish Metropolitan Municipality Experience
Eda Yeşil (Kırıkkale University, TR)
Hakkı Hakan Yılmaz (Atılım University, TR)
Pelin Varol İyidoğan (Hacettepe University, TR)

The Effect of Covid-19 Pandemic on Tax Revenues in Touristic Provinces: Evidence from Turkey
Yasin Acar (Bilecik Şeyh Edebali University, TR)

Convenor: **Naci Tolga Saruç** (İstanbul University, TR)

S1Eskişehir

October 29, 2022; 09:00 – 10:00; Salon Eskişehir

Towards State Capitalism? The Case of Turkey's Sovereign Wealth Fund
Berkay Ayhan (Kadir Has University, TR)

Fiscal Democracy And Tax Expenditures
Özgün Akduran Erol (İstanbul University, TR)

Macroeconomic Populism in Action: The Remaking of the Term- A Comparative Analysis upon Latin American and Turkish Experiences
Aslıhan Özel Özer (Manisa Celal Bayar University,TR)
Buğra Özer(Manisa Celal Bayar University,TR)

Convenor: **İsa Sağbaş**(Afyon Kocatepe University,TR)

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S1Frigra

October 29, 2022; 09:00 – 10:00; Salon Frigya

An Econometric Investigation on Income Inequality in Turkey
Cevat Tosun (Hitit University, TR)

Comparison of the Tax Burden of the OECD Countries with the Critic and Rafsi Approach
Mustafa Çanakçıoğlu (İstanbul Gelişim University,TR)
Ömer Faruk Görçün (Kadir Has University,TR)

The Efficiency Problem in Tax Audit in Turkey: An Analysis in the Context of European Unıon and OECD Member States
Neslihan Karakuş Büyükben (Afyon Kocatepe University,TR)
Kamil Güngör (Afyon Kocatepe University,TR)

Convenor: **Seyfi Yıldız** (Kırıkkale University, TR)

S1Dorlion

October 29, 2022; 09:00 – 10:00; Salon Dorlion

Causality Relationship Between Economic Growth and Tax Collection/Accrual Rates: The Case of Turkey
Ayşegül Durucan (Kırıkkale University, TR)

The Impact of The Capital Tax Burden on The Process of Capital Accumulation in Turkey After 1980
Seda Yılmaz (Aydın Adnan Menderes University, TR)
Sevim Yaman Güçlü (Aydın Adnan Menderes University, TR)
Demet Akdeniz (Aydın Adnan Menderes University, TR)

Buoyancy Effect of Total Tax Revenues in Turkey
Pınar Bengi Kaya (Afyon Kocatepe University,TR)
Gülsüm Gürler Hazman (Afyon Kocatepe University,TR)

Convenor: **Binhan Elif Yılmaz**(İstanbul University, TR)

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S2Anadolu

October 29, 2022; 10:15 – 11:15; Salon Anadolu

Development and Implementation of the Tax Literacy Score (TLS) Scale: The Case of Marmara Region in Turkey

Feride Bakar Türegün (Bursa Uludağ University, TR)
Güneş Çetin Gerger (Manisa Celal Bayar University, TR)
Adnan Gerçek (Bursa Uludağ University, TR)
Emine Rüyam Küçüksüleymanoğlu (Bursa Uludağ University, TR)

Sharing and Gig Economy: Opportunities and Threats with Respect to Tax and Social Security Systems

Leyla Ateş (Altınbaş University, TR)
Başak Güneş (Altınbaş University, TR)

Empirical Analysis of the Effect of Exclusion of Minimum Wage from Taxes on Economic Sizes in Turkey

Arzu Kızılkaya (Kırıkkale University, TR)
Yağmur Yavilioğlu Kaya (Kırıkkale University, TR)
Seyfi Yıldız (Kırıkkale University, TR)

Convenor: **Yusuf Karakoç**(Dokuz Eylül University, TR)

S2YunusEmre

October 29, 2022; 10:15 – 11:15; Salon Yunus Emre

Foreign Currency-Denominated Government Domestic Debt: Is It a Major Risk Source for Turkey?

Şebnem Tosunoğlu (Anadolu University,TR)
Süleyman Kasal (Anadolu University,TR)

The Effect of Tax Damages on the Need Borrowing and Its Impact of Cost

Özlem Tümer (Niğde Ömer Halisdemir University, TR)
Memduh Aslan (Kocaeli University, TR)

Factors Affecting the Culture of Public Expenditures in Turkey: An Empirical Study

Nagihan Erdal (Afyon Kocatepe University, TR)
İhsan Cemil Demir (Afyon Kocatepe University, TR)

Convenor: **Metin Erdem**(Bursa Uludağ University, TR)

S2Frigya

October 29, 2022; 10:15 – 11:15; Salon Frigya

Panel Data Analysis of The Place and Impacts of Green Taxes in Selected OECD Countries

Mustafa Bolahatoğlu (Bursa Uludağ University, TR)

The Audits of Supreme Audit Institutions in Supporting Environmental Sustainable Development

Gonca Güngör Göksu (Sakarya University, TR)

Tax Policies Used and Can Be Used for Green Reconciliation: Recommendations for Turkey

Hakan Özdemir (Ministry of Treasury and Finance, TR)
Okan Atak (Ministry of Treasury and Finance, TR)

Convenor: **Eda Yeşil**(Kırıkkale University, TR)

S2Dorlion

October 29, 2022; 10:15 – 11:15; Salon Dorlion

The Impact of Local Government Policies on Internal Migration in Migrant Regions: The Cases of Andalucia
Zeynep Karal Önder (Anadolu University, TR)

A Study on the Empty Homes Tax
Semra Altıngöz Zarplı (Bilecik Şeyh Edebali University, TR)

Evaluation of Public Procurement Process in Municipalities in the Framework of Competition and Efficiency
Kendal Deniz (Çanakkale Onsekiz Mart University, TR)
Erdal Eroğlu (Çanakkale Onsekiz University, TR)

Convenor: **Özhan Çetinkaya**(Bursa Uludağ University, TR)

S2Eskişehir

October 29, 2022; 10:15 – 11:15; Salon Eskişehir

The Effect of Rent Controls and Regulations on Fighting Against Inflation and The Applicability of These Policies in Turkey
Cihan Kızıl (İstanbul University, TR)

Taxation Policies Tackling with Inflation in Turkey: A Comparative Analysis of Rhetoric and Policy Implementations
Aslıhan Özel Özer (Manisa Celal Bayar University, TR)

Considering the Regulation of Inflation Adjustment in Terms of Constitutional Taxation Principles
Eda Özdiler Küçük (Ankara University, TR)

Tax Policy to Support Fight Against Inflation
Orhan Elçi (Ministry of Treasury and Finance, TR)

Convenor: **Neslihan Çoşkun Karadağ** (Çukurova University,TR)

ANADOLU UNIVERSITY

Keynote Speaker – Salon Anadolu

October 29, 2022; 11:30 – 12:15; Salon Anadolu

Economics of Good and Evil the Quest for Economic Meaning Gılgames to Wall Street and Current Issues

Tomáš Sedláček (Charles University, CZE)

Convenor: **Cumhur Dülger** (Anadolu University, TR)

S3Anadolu

October 29, 2022; 13:30 – 14:30; Salon Anadolu

The Relationship between the Right to a Fair Trial and Taxation in the Decisions of the Constitutional Court
Z. Ertunç Şirin (İstanbul University, TR)



Individual Application Process to the Constitutional Court
Cenker Göker (Ankara University, TR)



The Relationship Between Right to Property and Taxation in the Decisions of the Constitutional Court
Çağıl Süt Göker (Ankara University, TR)



Witness' Statements During Tax Proceedings within the Framework of the European Court of Human Rights Decisions
İrfan Barlass (İstanbul University, TR)



Convenor: **Doğan Şenyüz**(Bursa Uludağ University, TR)

S3YunusEmre

October 29, 2022; 13:30 – 14:30; Salon Yunus Emre

Theoretical Discussions on Financial Privileges and Financial Discrimination: Are Menstrual Products Merit Goods?
Özgür Saraç (Dokuz Eylül University, TR)

Economic, Social and Fiscal Reasons of Expenditure Taxes in Türkiye: A Historical Analysis
Tülin Altun (Sivas Cumhuriyet University, TR)

The Relationship Between Governance and Economic Performance: An Evaluation on the Effect of the European Union Process on Turkey's Economic Performance
Özlem Atay (Ankara University,TR)
Özlem Genç (Ankara University,TR)

Convenor: **Özgür Biyan** (Bandırma Onyedi Eylül University,TR)

S3Frigya

October 29, 2022; 13:30 – 14:30; Salon Frigya

Convicts and Prisons in the Public Expenditure Window: Social Rights and A Budget-Based Perspective
Gamze Yıldız Şeren (Namık Kemal University, TR)

The Role and Importance of Local Governments in Solving Environmental Problems
Meltem İrteş Gülşen (Anadolu University, TR)
Ahmet Mıdık (Anadolu University, TR)

Bank-Specific Determinants of the Non-Performing Loans: An Empirical Analysis for Turkey
Pınar Karahan Dursun
Nilgün Çağlarırmak Uslu (Anadolu University, TR)

Convenor: **Nilgün Çağlarırmak Uslu** (Anadolu University, TR)

S3Dorlion

October 29, 2022; 13:30 – 14:30; Salon Dorlion

Power and Trust as Determinants of Tax Compliance: An Evidence for the Slippery Slope Framework from Turkey
Hamdi Furkan Günay (Gümüşhane University, TR)

Obesity Tax Awareness: A Field Research
Uğur Hanay (Gebze Technical University, TR)
Sevil Işık Özder (Gebze Technical University, TR)
Talha Gezgin (Karamanoğlu Mehmetbey University, TR)

The Tampon Tax: Efficiency or Equity?
Ebru Bilgin (Harran University, TR)
Ömer Batuhan Beşirli (Zonguldak Bülent Ecevit University, TR)

Convenor: **Yasin Acar** (Bilecik Şeyh Edebali ~~U~~niversity, TR)

S3Eskişehir

October 29, 2022; 13:30 – 14:30; Salon Eskişehir

Valuation in Determining the Truth Taxable Income
Müslüm Gümüş (Hakkari University, TR)
Mustafa Erkan Üyümez (Anadolu University, TR)

Tax Regulations in the Understanding of Democratic State
Gülseren Aydın (Beykent University, TR)

The Role of the State in Development with Blockchain Technology on the Floor of Information Technologies
Hüda Carda (Bandırma Onyedi Eylül University, TR)
Ökkeş Kısa (İnönü University, TR)

Convenor: **Ferdi Çelikay**(Eskişehir Osmangazi University, TR)

ANADOLU UNIVERSITY

S4YunusEmre

October 29, 2022; 14:45 – 15:45; Salon Yunus Emre

Taxable Event of the According to Income Elements
Erdinç Alp (Ordu University, TR)

A Solution to Provide Fairness in Income Distribution in Turkey: Basic Income
Arınç Boz (Zonguldak Bülent Ecevit University, TR)

The Effect of Housing Price Increase on Income Distribution: An Empirical Analysis Between OECD Countries (2010-2020)
Gökhan Ünalan (Atılım University, TR)
Özge Çamalan (Atılım University, TR)

Convenor: **Cihan Yüksel**(Mersin University, TR)

S4Frigya

October 29, 2022; 14:45 – 15:45; Salon Frigya

Use of Digital Currency in Tax-Free Financing of Public Spending
Memduh Aslan (Kocaeli University, TR)

Digital Wallet and Tax Dimension
Orçun Avcı (Aksaray University, TR)

Evaluation of Taxation of Income Generated by Real Persons From Social Media Platforms by Comparing Various Countries: Problems and Suggestions
Cansu Dilibal (Bursa Uludağ University, TR)
Hüda Carda (Bandırma Onyedi Eylül University, TR)
Özgür Biyan (Bandırma Onyedi Eylül University, TR)

Convenor: **Hilmi Çoban** (Ankara Hacı Bayram Veli University, TR)

S4Dorlion

October 29, 2022; 14:45 – 15:45; Salon Dorlion

Tax Misdemeanor Sanctions and the Problem of Competence in Methods of Judicial Application Against Them
Erdem Utku Çakır (Bursa Uludağ University, TR)

Applicability of the Mutual Agreement Procedure in Tax Penalty with the Right to Reconciliation and Sue
Zinnur Tunç (İstanbul University, TR)

Action of Rescission in Tax Execution Law in Terms of Right of Property and Right to Defence
Özge Mutlu Kaya (Anadolu University, TR)
Barış Tanrıvermiş (Anadolu University, TR)

Convenor: **Eda Özdiler Küçük**(Ankara University, TR)

S4Eskişehir

October 29, 2022; 14:45 – 15:45; Salon Eskişehir

Quality Education as a Sustainable Development Goal
Yeşim Çam (İstanbul University, TR)

Tax Load in Turkey and Evaluation of Tax Load in Terms of Tax Types (2006-2020 Years)
Fatma Akkaş (Dokuz Eylül University, TR)

Digital Workplace Concept in International Tax Law
Mustafa Karataş (Atatürk University, TR)

Convenor: **Hakan Bay**(Dokuz Eylül University, TR)

S5SalonAnadolu

October 29, 2022; 16:00 – 18:00; Salon Anadolu

Closing / Plenary Session

An Analysis of the Role of Government Debt on the Inflation Expectations in Turkey Using the Markov-Switching Model

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Abstract:

According to the Monetarist Approach, inflation is only a monetary phenomenon and the control of inflation is provided by the Central Banks through monetary policy Conversely, advocates of the fiscal theory of the price level (FTPL) argue that the price level is a function of fiscal policy factors. According to this viewpoint, the Central Bank cannot implement effective policies to maintain price stability while the fiscal policy is unsustainable. Additionally, the Ricardian Equivalence Theorem in the FTPL also expires. Because the government debts effective in the formation of inflation by creating a wealth effect. In other words, budget deficits and government debts are effective in determining the price level. According to "the unpleasant monetarist arithmetic" theory (Sargent and Wallace (1981)), financing budget deficits with borrowing can have more inflationary consequences than monetary financing of debts in the long run. Because, if permanent budget deficits are financed with borrowing, the government will have to finance with seignorage for debt burden payments. Thus, we will face a higher inflation than the inflation that will arise due to the fact that the deficits are financed with seignorage. Monetary and fiscal policy measures should be harmoniously implemented in order to reduce inflation. Due to the decisive role inflation expectations play on inflation, the inflation expectations have been frequently examined for many years. In order to maintain price stability, it is also necessary to reveal the factors which influence inflation expectations. Although studies on inflation expectations are widespread, the macroeconomic factors which determine inflation expectations is a less emphasized issue in the literature. The inflation rate, exchange rate, policy interest rate, output gap, energy prices, food prices, oil prices, real wage gap, unemployment rate, annual money supply growth were used as explanatory variables in the studies on which economic agents use to form inflation expectations. When fiscal policy is unsustainable, how the increasing budget deficits and government debt would affect inflation expectations is one of the questions. The primary balance, budget deficits and government debt stock variables can also be used as an indicator of the fiscal stance in shaping inflation expectations. The effects of fiscal policy in directing inflation expectations can be demonstrated in this way. High inflation has been one of the most critical problems of the Turkish economy recently. During high inflation periods, there are common discourses about the high budget deficits and government debts, government debt financing methods, and the relationship with inflation in Turkey. Therefore, it is vital to examine the effects of the fiscal policy stance on inflation. In addition, the effects of government debt on inflation expectations should also be examined during periods of budget deficits. This study examines the role of government debt on inflation expectations in Turkey between the periods 2006:1-2021:12 with the Markov regime

switching model. The main objective of the study is to analyse in a nonlinear way how government debt affects expectations during periods of low and high inflation expectations. For this reason, Markov regime switching model was used in the study. The Markov regime switching model is a nonlinear method introduced to the literature by Hamilton (1989; 1990; 1994; 1996). In this method, with the changing regime, the variables switch to a new structure. Therefore, this method offers the opportunity to evaluate regimes in a different way. This study analyses the reactions of the variables in the low and high inflation expectation regime through the Markov regime switching model. In the model, the annual inflation rate, the central government total government debt stock, exchange rate volatility, the deviation of the industrial production index from the trend (output gap) and the CBRT policy interest rate variables were used together with the expectation of 12 months ahead annual CPI obtained from the Central Bank of the Republic of Turkey (CBRT) Market Participants Survey. The study results indicate that inflation worsens expectations even more in the regime of high inflation expectations. This result indicates that the deterioration in expectations has a high rigidity. Government debt affects inflation expectations more negatively in the high inflation expectation regime than in the low inflation expectation regime. Therefore, it is important to achieve a sustainable structure of the government debt in the regime of high inflation expectation. The coefficient of the output gap is positive in both regimes. In other words, the increase in the output gap increases inflation expectations. However, the increase in the output gap worsens inflation expectations even more in the high inflation expectations regime. These results also reveal that exchange rate volatility increases inflation expectations in both regimes. In addition, and lastly, increases in the CBRT policy interest rate reduce inflation expectations in a high inflation expectation regime.

Keywords: Inflation Expectations, Fiscal Policy, The Fiscal Theory Of The Price Level, Markov Switching Model

JEL Codes: E52, E62, D84

The Predicament of Public Finance in Combat to Inflation: Inflation Psychology

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Abstract:

Price stability is one of the ways to achieve a better economic performance. It is also one of the most important concerns of governments regarding macroeconomic management.

Inflation is a form of distraction from price stability. It is defined as the general and persistent increase in the prices of goods and services and the erosion of the purchasing power of money.

Inflation is of three types according to its source. These; demand, cost and price inflation. Demand inflation occurs when aggregate demand is greater than aggregate supply. The excess of expenditures in an economy that exceeds production is called the "inflationary deficit". Demand inflation is fed by resources such as financing public expenditures with open budget or revenues other than tax revenues, loosening the monetary policy of the government and creating fiduciary money by the credit volume.

Cost inflation occurs when the general price level rises as a result of price increases in one or more of the production inputs. For example, raw material prices may rise, labor demand may increase faster than labor supply, wage increases may exceed productivity increases, and an increase in tax rates may cause new costs to arise. Finally, a high interest rate increases the cost of capital and contributes to cost inflation.

Price inflation (structural inflation) happens when prices are not formed according to the rules of the market economy. The characteristics of the sectors in which some goods are produced, the political nature of the income distribution policies followed by the government may lead to price inflation. In addition, the high demand for some goods (iron, oil) due to import requirements increases the cost of industries that use these goods as inputs.

As inflation leads to price increases that are higher than wage increases, production increases, employment increases, and profits increase through to new investments. In this way, although inflation stimulates the economy, it also has very important negative effects.

Inflation creates consequences to the detriment of wage earners. In an inflationary environment, delays in tax collection reduce the real value of taxes. Inflation, which changes the relative price structure in the economy, causes the allocation of resources to move away from optimality, and the distribution of income and wealth to change. Inflation also has a reducing effect on the total savings level in the economy. Finally, while inflation causes a decrease in investments because it raises interest

rates, at the same time, as the rate of inflation increases, inflationary expectations turn expectations for the future into negative, weakening the tendency to take risks and making speculative investments attractive (Yılmaz, 2020: 390-391).

According to the modern public finance understanding in the fight against inflation, the fiscal policy should be contractionary when faced with demand inflation. For this, measures such as reducing public expenditures and/or increasing taxes can be taken. However, if the current inflationary process points to a cost inflation or if inflation has become structural, different ways of fighting should be chosen and coordination with monetary policy should not be lost.

These effects cause inflation to be perceived as a threat and a stressor, and accordingly, factors that create the psychology of inflation may emerge. In the context of inflation psychology, it is possible to talk about the predicament of public finance in the fight against inflation.

In this study, qualitative research method was preferred in order to understand the pressure, stress, expectations, attitudes and behaviors of individuals towards inflation. Qualitative research is carried out to develop a detailed understanding of a complex subject, but also to explore a problem (Creswell, 2013, 48). In terms of the subject and purpose of this study, the data collection technique was diversified.

In this context, first of all, semi-structured in-depth interviews will be conducted. Next, a focus group meeting will be held to evaluate the interview results. In-depth interviews and focus group participants will be determined by snowball sampling method. Snowball sampling method is used in cases where it is difficult to identify the members of the population and to illuminate social issues as well as its importance in defining the sample (Robson, 2017, 318). Here “researchers start by identifying a few participants who fit the criteria of the study and then ask these people to recommend a colleague, a friend, or a family member” (Tracy, 2013: 136). It would be appropriate to use this method to reach people who will sincerely share their views and experiences on the inflation psychology.

The psychological burden and changes caused by inflation can be observed in the interviews with people (from different professions, income and age groups) reached through snowball sampling from different cities of Turkey. In this study, a study group (sample) of 10 people is planned. It is aimed that four of these people will be wage earners (two minimum wage employees in the private sector, two wage employees in the public sector), two employers, two housewives and two students. At the focus group meeting, there will be at least 6 and at most 8 faculty members working in the finance departments of universities in different cities of Turkey.

In the study, semi-structured in-depth interview guide will be used to understand the psychological effects caused by inflation in depth. The questions to be asked to the participants are the survey questions included in Epstein and Babad's (1982) study. In the questionnaire used by the authors in the study, 4 variables were used. These; (1) Income, (2) Threat, (3) Stress, (4) Changes in economic behavior. This distinction will also be taken into account in the interviews. In the focus group interview, questions will be asked to the participants regarding the evaluation of the interview results. As a result of this study, the findings of both studies will be evaluated together.

Although face-to-face opportunities are preferred for data collection, digital opportunities will be used if the participants are in different cities. Analysis of the data will be carried out through the MAXQDA Qualitative Data Analysis Program.

Keywords:

JEL Codes:

EXAMINATION OF THE RELATIONSHIP BETWEEN INFLATION AND INDIRECT TAXES: CASE OF TURKEY BETWEEN 2019-2022

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Abstract

Inflation has become a problem of many countries today. It is inevitable that inflation in an economy, like many other macroeconomic variables, will affect tax revenues. According to the cyclical situation of an economy, inflation can affect indirect taxes from different perspectives. While it is clearer to determine the effect of direct taxes on the economy due to the receipt of people's income, it is difficult to comprehend the effect of indirect taxes hidden in goods or services on the economy. Therefore, it is important to determine the relationship between inflation and indirect taxes.

The aim of this study is to determine how indirect taxes and inflation affect each other between January 2019 and May 2022. In our study, this relationship was tested with Engle-Granger cointegration analysis, and it was concluded that there were breaks in CPI (Consumer Price Index), PPI (Producer Price Index) data and indirect taxes.

Keywords: Indirect Taxes, Inflation, Cointegration Test

Jel Codes: K34, E31, C52

1. Introduction

One of the most important sources of income in a country is taxes. Indirect tax type is taken over the goods and services purchased by the persons. Indirect taxes are used as a fiscal policy tool as well as being used as a tax policy. For example, total demand is high and total supply is low in inflation, which is expressed as a situation that expresses a continuous and noticeable increase in the general level of prices. In order to reduce the total demand, it is necessary to increase the taxes in amount. However, it is important which taxes will be increased as much as the amount of taxes to be increased. In other words, it is necessary to be selective in the composition of the taxes to be increased in the fight against inflation. Otherwise, the problem of recession in the economy may be encountered in the long term.

2. Literature Scan

In his study in 1974, where he investigated the effects of direct and indirect taxes on inflation, Auld used 1949-1970 period data for Canada. Within the framework of the results, it was determined that some tax increases slowed down the total interest rate and this reduced the rate of demand inflation.

Henry and Karakitsos, in their study in 1986, found that a reduction in indirect taxes in the short term would reduce inflation.

In their study examining the relationship between value added tax and inflation rate in 2011, Arısoy and Ünlükaplan concluded that VAT revenues have an inflationary effect.

In a study conducted in 2015 to examine the effect of tax policy on inflation in Nigeria, Anichebe found a long-term relationship between the tax policy applied in Nigeria between 1981-2012 and inflation. In addition, it concluded that the personal income tax rate has a negative effect on inflation in the long term, whereas corporate tax, consumption and real estate tax rates have a positive effect on inflation.

In their study conducted in 2020, Koester, Dreher and Vlad examined the effect of changes in indirect tax rates on the consumer price index and found that the contribution of changes in indirect taxes to the Euro zone consumer price index inflation had an average effect of 0.2 percentage points and that the contribution to consumer price index inflation increased even more during the periods when tax rates increased.

3. Data Set and Method

At this stage of our study, information will be given about the data set and method.

3.1 Data Set

In this study, from the data covering January 2019 and May 2022; data on indirect taxes were obtained from the Monthly Realizations of the Central Management Budget on the website of the Presidency Strategy and Budget Presidency of the Republic of Türkiye, and data on the consumer price index and producer price index were obtained from TurkStat. Producer price index, PPI, consumer price index CPI, and indirect taxes are abbreviated as DLI.

3.2 Method

In order to correct the seasonal effect of the time series, the first computer program, CENSUS I, was introduced by the National Bureau of Economic Research in 1954. The derivatives of the CENSUS program are symbolized by the letter "X" followed by a number and continued with a new arrangement deemed necessary for seasonal correction at every stage such as X-1, X-2, … starting from X-0. The X-12 method is the continuation of these series (Yolsal, 2010: 247-250).

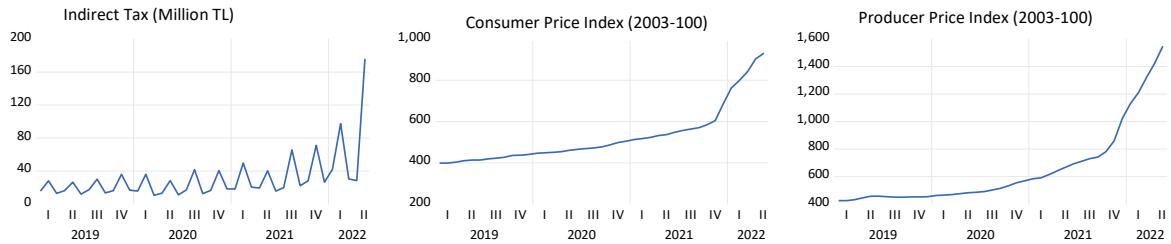
In cases where the Mann Whitney U test can be used, when the assumptions of the test are not met, when the sample size of at least one of the groups is =N<30, independent groups are used as non-parametric equivalents of the T test (Gürsul, Çilengir, 2011:54). Levene's test tests whether the variance of the masses from which k samples are taken is equal (Kuş, Keskin, 2008: 78).

The margin of error, which is the linear information of the non-stationary series and is found to be stationary, is called an imbalance error. The error correction model, on the other hand, is a process in which the said imbalance error takes its place in a typical VAR model. First of all, Granger discussed the relationship between cointegration and error correction model (Tetik, 2011:47).

4. Empirical Findings

The time path graph of the variables is drawn and presented in Figure 1.

Figure 1: Time Chart of Variables



Source: It was drawn by the author through the package program (EViews) taking into account the data for the period January 2019 - May 2022.

When the graphs presented in Figure 1 are examined, it is seen that the indirect taxes variable has seasonal fluctuation. There is no clear seasonal effect on CPI and CPI variables, and these variables were also cleared of seasonality and logarithms were taken by the Census-X12 method against possible seasonal effects.

Figure 2: Graphics of Seasonally Free and Unseasonalized Series



Source: It was drawn by the author through the package program (EViews) taking into account the data for the period January 2019 - May 2022.

As can be seen from the graphs, it is clearly seen that seasonal effects on indirect taxes are eliminated, although there are no serious changes in PPI and CPI after the variables are cleared of seasonality. In order to check whether the seasonal effects make a significant difference on the descriptive statistics of the variables, descriptive statistics related to both states of the variables were calculated and presented in Table 1.

Table 1: Descriptive Statistics of Variables

	DLI	CPI	PPI	DLI_MA	CPI_MA	PPI_MA
Average	31.10271	527.7229	649.2580	30.40932	526.8292	647.9083
Median	20.53300	477.2100	515.1300	23.47498	487.0646	538.7675
Maximum	176.1960	931.7600	1548.010	131.2215	926.7876	1534.221
Minimum	10.52600	398.0700	424.8600	16.01775	391.0482	411.6892
Std. dev.	**29.30519**	**138.3001**	**292.1244**	**19.09983**	**136.4155**	**290.1986**
Bias	3.395673	1.622663	1.724179	3.827108	1.576922	1.685513
Kurtosis	16.26284	4.776841	4.991868	20.16017	4.687256	4.872161

Jarque-Bera	379.2933	23.38589	27.09196	603.1418	21.85568	25.40087
Probability	0.000000	0.000008	0.000001	0.000000	0.000018	0.000003
Observation number	41	41	41	41	41	41

When the descriptive statistics based on the raw data and seasonally adjusted data of the variables are examined in Table 1, it is not seen that the other statistics are not very different except for the standard deviation of the direct tax variable. However, in order to be sure of this, since the variables were not normally distributed, it was tested whether the variances were equal in order to determine whether the medians from the central tendency measurements and the variance from the change measurements changed.

Table 2: Median and Variance Tests

Variables	Mann-Whitney U Test	Levene Test
DLI	1.6322(0.1026)	1.93(0.1686)
CPI	0.0556(0.9556)	0.000436(0.9834)
PPI	0.1206(0.9040)	0.00000183(0.9966)

While the equality of hydrangeas hypothesis was tested with the Mann-Whitney U test, the equality of variances hypothesis was tested with the Levene test. According to the results, no statistically significant difference was found in the median and variance of seasonally-free raw variables and seasonally-free variables at the 5% significance level. This result means that the variables do not lose their characteristics after seasonal separation. Based on these results, analyses will continue with seasonally free batches.

As can be seen from the graphs of the series, there is an increase after September 2021. The main reason for this situation is the continuous interest rate reductions made by the CBRT in September 2021. In order to determine whether this decision caused fracture on the series, a fractured ADF unit root test was performed, and the results are given in Table 3.

Table 3: Unit Root Analysis

Variables	Test value	Probability value	Breakage date	Result
DLI	-4.0812	0.3223	2022:1	Non-stationary
CPI	-0.5073	0.9935	2021:09	Non-stationary
PPI	-1.9671	0.9921	2021:11	Non-stationary

ΔDLI	-9.4986	0.0024	-	Stationary
ΔCPI	-7.1951	0.0051	-	Stationary
ΔPPI	-5.2142	0.0170	-	Stationary

Source: It was calculated by the author through the package program (EViews) taking into account the data for the period January 2019 - May 2022.

According to the results of the fractured ADF test, while the series were not stationary at their level values, they became stationary at their first differences. Since the stationarity level of the series is the same, the Engle-Granger test can be performed to examine the long-term relationships between these variables. Engle-Granger cointegration analysis was performed through the Eviews 12 program and the results are given in Table 4.

Table 4: Cointegration Analysis

Panel A				
Dependent Variable	tau-statistics	Prob. *	z-statistics	Prob. *
LPPI	-5.057317	0.0010	-33.07742	0.0003
LDLI	-6.121792	0.0000	-46.22995	0.0000
Panel B				
Dependent Variable	tau-statistics	Prob. *	z-statistics	Prob. *
LCPI	-5.515337	0.0003	-37.84289	0.0000
LDLI	-7.108248	0.0000	-54.21608	0.0000

Source: It was calculated by the author through the package program (EViews) taking into account the data for the period January 2019 - May 2022.

According to the results given in Table 4, there is a cointegration relationship between both indirect taxes and PPI and indirect taxes and CPI at the 5% significance level. Since there is a long-term relationship between the variables, the question of how many months after the shocks in the short term will return to the equilibrium value should be answered. This variable also known as the error correction coefficient in the econometric literature, and the coefficient should be between -1 and 0 and should be statistically significant.

Table 5: Long- and Short-Term Equations for PPI

Coefficient of	Variation	Std. error	t-statistics	probability
Panel A				
fixed	4.593997	0.249195	18.43536	0.0000
LDLI	0.523767	0.078654	6.659087	0.0000
D2021M09	-0.207923	0.132924	-1.564222	0.1263
DT2021M09	0.390591	0.083205	4.694321	0.0000
Panel B				
fixed	0.030776	0.005908	5.208974	0.0000
ΔDLI	0.029829	0.024720	1.206646	0.2352
Error_PPI(-1)	-0.053157	0.064789	-0.820467	0.4172

Table 5 shows the long-term equation for PPI in Panel A and the short-term equation in Panel B. According to the long-term equation results, PPI increases by 0.52% on average when there is a 1% increase in indirect taxes. In addition, the shock in September 2021 caused an increase of0.39% on average on PPI, but also had a statistically significant effect. When the short-term effect given in Panel B is examined, it is observed that indirect taxes have an average effect of 0.029% on PPI in the short term, but it is not statistically significant. In addition, although the error correction mechanism coefficient is negative in accordance with the theoretical expectation, it is not statistically significant.

The long-term and short-term effects of indirect taxes on CPI are presented in Table 6.

Table 6: Long- and Short-term equations for CPI

Variable	Coefficient	Std. Error	t-Statistics	Prob.
Panel A				
C	5.101280	0.174752	29.19158	0.0000
LDLI	0.331153	0.055158	6.003766	0.0000
D2021M09	-0.152280	0.093215	-1.633634	0.1108
DT2021M09	0.231861	0.058349	3.973703	0.0003
Panel B				
C	0.021002	0.003900	5.385004	0.0000
ΔLDLI	0.014488	0.018881	0.767354	0.4477
Error_CPI(-1)	-0.036850	0.057072	-0.645680	0.5225

Table 6 shows the long-term equation for CPI in Panel A and the short-term equation in Panel B. According to the long-term equation results, CPI increases by 0.33% on average when there is a 1% increase in indirect taxes. In addition, the shock that occurred in September 2021 has an average of0.23% increasing effect on CPI, but it is also statistically significant. When the short-term effect given in Panel B is examined, it is observed that indirect taxes have an average effect of0.014% on CPI in the short term, but it is not statistically significant. In addition, although the error correction mechanism coefficient is negative in accordance with the theoretical expectation, it is not statistically significant.

Result

As a result of the analyzes made in the study, it was seen that CPI data broke in September 2021, PPI data in November 2021 and indirect taxes in January 2022. Both the new economic model put forward in Türkiye and the interest decisions taken are among the main reasons for these breaks. At 5% significance level, there is a cointegration relationship between both indirect taxes and PPI and indirect taxes and CPI. Since there is a long-term relationship between the variables, there is no answer to the question of how many periods will return to equilibrium value aftershocks in the short term. Therefore, new policies should be produced. These policies can be listed as follows:

- It should be ensured that the government and the Central Bank act jointly on inflation. In particular, consensus should be reached on the reduction of interest rates.
- Care should be taken to ensure that interest increase, and discount decisions are made at the right time. Changes made/to be made should be supported by scientific and persuasive analysis.
- Exchange rate should be balanced, and dollarization should be prevented.
- The reserves of the Central Bank should be increased. The point that decision-makers want to reach should be zoomed with economic principles.
- The decrease in the value of TL increases the export by decreasing the prices, while increasing the price of the imported products. Although the increase in exports is economically appropriate, this situation is negative in terms of imports.
- In order to transform the current balance into a permanent current surplus, it is necessary to reduce imports and increase the prices of imported products. However, while doing this, it should be considered that there is no serious decrease in the purchasing power of the people and therefore, the loss of welfare should be kept to a minimum.
- Especially the well-established companies that borrow or trade in foreign currency should be supported by the administration against the rapid value losses in TL.

References

Anichebe, A. (2015). Implications of Tax Policy on Inflation in Nigeria (1981 - 2012). *Developing Country Studies, 5*(21), 103-113.

Arısoy, İ., & Ünlükaplan, İ. (2011). Katma değer vergisi, enflasyon oranı ve kamu harcamaları arasındaki ilişkilerin dinamik analizi. *Sosyoekonomi, 16*(16), 93-112.

Auld, D. (1974). The Impact Of Taxes On Wages And Prices. *National Tax, 27*(1), s. 147-150.

Gürsul, F., & Çilengir, S. (2011). *Bilimsel Araştırmalarda Veri Analizi ve Yorumlanması.* İstanbul: İstanbul Üniversitesi Yayınları.

Henry, S., & Karakitsos , E. (1986). Inflation, Unemployment And Indirect Taxation. *Bulletin of Economic Research, 39*(1), 29-47.

Koester, G., Dreher, F., & Vlad, A. (2020). The Role Of Indirect Taxes In Euro Area Inflation. *Economic Bulletin Boxes*, https://www.ecb.europa.eu//pub/economic-bulletin/focus/2020/html/ecb.ebbox202006_06~8a537e86c2.en.html.

Kuş, C., & Keskin, İ. (2008). Levene ve Barlett Testleri Üzerine Bir İnceleme. *Selçuk Üniversitesi Ziraat Fakültesi Dergisi, 22*(44), s. 78-83.

Tetik, S. (2011). *Türkiye'de Ekonomik Büyüme ve Enerji Harcamaları Arasındaki İlişki.* Ankara: Ankara Üniversitesi Fen Bilimleri Enstitüsü Yayımlanmamış Yüksek Lisans Tezi.

Yolsal, H. (2010). Mevsimsel Düzeltmede Kullanılan İstatistiki Yöntemler Üzerine Bir İnceleme. *Öneri Dergisi*, s. 245-257.

POSSIBLE REFLECTIONS OF ARTIFICIAL INTELLIGENCE ON TAX INSPECTIONS

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Abstract
The data produced with technological developments continues to grow increasingly. The taxation problems of tax administrations on digitalized economic activities and their ability to audit these economic activities are discussed. It is seen that the tax inspection method is in a change from the classical inspection model to the risk-based inspection form as a result of changing economic conditions and technological advances. It can be said that with the help of artificial intelligence applications, it has the potential to provide much more insight into tax inspection activities and increase the accuracy of tax inspections. In tax examinations, it can be said that it is inevitable that the importance of artificial intelligence applications will increase in the near future. The aim of this research is to determine the contribution and impact of the developments in the field of artificial intelligence and data analytics on tax inspections. It can be said that it is inevitable to use artificial intelligence and data analytics to increase the scope and effectiveness of tax inspection. In a digitalized economy, suggestions for artificial intelligence and data analytics will be presented for the tax administration to reduce tax loss and evasion, increase taxpayer compliance, and increase the efficiency and efficiency of tax inspections. Within the scope of the research a literature review on big data, data analytics and artificial intelligence will be presented. Afterwards, foreign country applications on tax analytics and artificial intelligence will be discussed. Within the scope of the study, evaluations and results regarding the possible contribution and reflection of artificial intelligence to tax inspections will be presented to the beneficiaries.

Keywords: Tax Inspection, Artificial Intelligence, Big Data, Data Analytics.
JEL Code: H26, H83.

1. Introduction

Our organization and activities are changing as a result of developments in information technologies (IT) and the effects of these developments on areas such as health, education, security, transportation, economy, agriculture and industry. As a result of all these developments, the need for a deeper and more effective analysis of different types and large amounts of data arises in order to monitor, manage and control business processes. The data produced with technological developments continues to grow increasingly.

The taxation problems of tax administrations on digitalized economic activities and their ability to audit these economic activities are discussed. It is seen that the tax inspection method is in a change from the classical inspection model to the risk-based inspection form as a result of changing economic conditions and technological advances.

The inspection process, which started with record checks on paper in the past, now includes data warehouses that include e-applications such as e-ledger and e-invoice. Using data analytics and technologies, it becomes possible to reveal relationships that cannot be discovered with classical methods from the data owned by institutions or companies. It can be said that with the help of artificial intelligence applications such as big data analysis technologies, artificial learning (machine learning), deep learning and natural language processing, it has the potential to provide much more insight into tax inspection activities and increase the accuracy of tax inspections. In tax examinations, it can be said that it is inevitable that the importance of artificial intelligence applications will increase in the near future.

The aim of this research is to determine the contribution and impact of the developments in the field of artificial intelligence and data analytics on tax inspections. Considering that tax inspection rates in Turkey are around 2%; It can be said that it is inevitable to use artificial intelligence and data analytics to increase the scope and effectiveness of tax inspection. In a digitalized economy, suggestions for artificial intelligence and data analytics will be presented for the tax administration to reduce tax loss and evasion, increase taxpayer compliance, and increase the efficiency and efficiency of tax inspections. Within the scope of the research a literature review on big data, data analytics and artificial intelligence will be presented. Afterwards, foreign country applications on tax analytics and artificial intelligence will be discussed. Within the scope of the study, evaluations and results regarding the possible contribution and reflection of artificial intelligence to tax inspections will be presented to the beneficiaries.

2. Literature Research

2.1. Artificial Intelligence

Artificial intelligence is a broad concept used to describe technologies that make machines "intelligent" (IIA, 2017: 5). It is seen that artificial intelligence is defined differently in the literature. Say (2018: 83) defines artificial intelligence as "the branch of science that examines how natural systems can do every cognitive activity that artificial systems can do at even higher levels of success".

Regarding the term artificial intelligence;

- Deep learning,
- Machine learning (artificial learning)
- Image identification,
- Natural language processing,
- Conceptual informatics,
- Intelligence upgrade,
- Conceptual increase,
- Machine-enhanced intelligence concepts are also used.

Research companies conduct artificial intelligence research and development activities to automate and copy human analytical intelligence, decision-making ability. Artificial intelligence applications are widely used in many sectors and fields.

Ordinary daily tasks such as data analysis, loss modelling, credit analysis, valuation transactions, transaction processing, and many other tasks that have been done for years can be done more effectively and easily with artificial intelligence (IIA, 2017: 5).

2.2. Big Data

Big data is expressed as "conversion of all kinds of corporate data digitally coded by both humans and machines, and personal data generated through internet and social media sharing, into a meaningful and workable form" (Tellan, 2014: 42).

Big data for inspection; It can be said that it refers to large amounts of financial and non-financial data, accounting and non-accounting data, all quantitative and qualitative data in different formats.

The reliability, accuracy and completeness of the data on which artificial intelligence algorithms are based is very important. In practice, it is very common for data to be inconsistent and insufficiently defined. Often, systems do not communicate with each other, or they communicate through complex plug-ins or custom settings. Therefore,

the way the data is gathered, combined and validated is critical (IIA, 2017: 11).

Data warehouse of the Tax Inspection Board; Data originating from e-applications within the body of the Revenue Administration (e-invoice, e-ledger, e-waybill, e-declaration etc.), notifications of all financial institutions, especially banks, and all data transferred by institutions and organizations, especially The Ministry of Commerce.

2.3. Data Analytics

The typical data analysis concept is used to reveal patterns in data and relationships between them. Data analytics is the process of gathering and analyzing data to discover and visualize information using statistical science and modern numerical computation methods (Özdemir, 2019: 41). According to KPMG (2012: 2), data analytics is "the process by which insights are obtained from operational, financial and other forms of electronic data within or outside the organization." Data analytics can also be described as a set of tools developed to make sense of big data (Salijeni)

In data analytics, algorithms are designed by humans. Errors in algorithms will affect data analytics results (IIA, 2018: 4). Therefore, the design of algorithms is vital in data analytics. However, data analytics, combined with the judgment of the inspectors, make the forecasts and valuations of the inspectors better equipped to formulate the audits. Auditors' qualifications are among the challenges that auditors face in using data analytics (Earley, 2015: 496-498). Therefore, an auditor who does not have sufficient knowledge and competence in data analysis technologies may have difficulty in understanding the area he is auditing. Therefore, it is necessary to increase the equipment of the inspectors in data analysis technologies.

3. Artificial Intelligence Applications

Many countries such as Switzerland, France, Belgium, Canada, USA, England and Australia use big data analytics to determine tax evasion (İlgün 2020: 14).

The Chinese Government is trying to develop its big data analysis capacity with the "Golden Tax Phase III Project". In this context; On March 1, 2019, the national and local tax systems were combined. However, real estate, household registration and data of some government offices have not yet been included in the database. Therefore, there is a risk of tax evasion. Therefore, "big data" and "cloud platform" functions still need to be developed. (Zhou, 2019: 202).

With the "British Connect system" used by HM Revenue and Customs Office in England, it has enabled the determination of the professions with the highest probability of tax irregularities and tax evasion. It tries to estimate the total income of taxpayers by working on data obtained from many different sources such as real estate records, bank

accounts, loans, vehicle licenses, employment records, insurance policies, local government and hospital records. The British Connect System has enabled the detection of activities with a high risk of tax evasion and irregularities (Maciejewski, 2017: 125) In addition to governments, artificial intelligence-based applications are also used by private companies for auditing. Artificial intelligence-based applications were first used by PwC in audit activities. PwC Halo is a data auditing tool that analyzes vast amounts of data and provides advanced risk assessment (PwC, 2016: 11-13). EY Helix is data analytics driven auditing technology using artificial intelligence tools. Helix GLAD technology of the same company can catch risky entries in ledger accounts by using artificial intelligence technologies. Deloitte's first cognitive control application is Argus. Apart from this, there are also technologies called Optix and Cortex. These technologies are artificial intelligence development technologies with hardware such as smart automation and machine learning (Nadas, 2021: 47-49).

4. Electronic Applications and Activities in Turkey

Many electronic applications related to tax business and transactions are used by the Ministry of Treasury and Finance in Turkey. There is a Risk Analysis Evaluation and Research System (RADAR) under the Risk Analysis General Directorate of the Ministry of Treasury and Finance. RADAR System can be expressed as an analysis tool that allows working and cross-checking on big data. It is aimed to carry out analyzes by transferring cluster analysis results created by machine learning method to this system (MTF, 2022: 119).

36 applications and activities are carried out electronically by the Revenue Administration. Among these applications; E-Declaration, E-Invoice, E-Ledger, New Generation Payment Recorder, E-Archive, E-Polling System, E-Notification, E-Ticket, E-Waybill, E-Producer Receipt, E- Self Employment Receipt, Prepared Declaration System, VAT Refund Risk Analysis System, Revenue Institutions Standard Return System, False Document Risk Analysis Program (SARP) are included. When these electronic applications are examined, it is understood that artificial intelligence-based applications have not been used yet (AR, 2022: 111-125).

The unit responsible for tax inspection in Turkey is the Tax Inspection Board. Within the VDK, tax inspections are carried out on a risk-based basis. In this context; Risk Analysis System (VDK-RAS) is one of the most basic applications. The Risk Analysis System data warehouse consists of information collected continuously and periodically from public institutions, professional organizations, real and legal persons. Tax Inspection Board analyzes taxpayer activities, sectors, and scales of taxpayers through big data, and risky areas are identified (TIB, 2022: 26-27). Apart from the Risk Analysis System;

- VDK-RAS (Risk Analysis System)
- MBR (Taxpayer Information Report) application
- VDK-VEDAS (Tax Inspection Analysis System)
- VDK-SIGMA (Continuous Surveillance and Control Network)
- E-Inspection
- VDK-EID (Electronic Inspection File)
- VDK Taxpayer Portal electronic applications are also used (TIB, 2022: 27-33).

It is understood that e-applications in Turkey are not yet artificial intelligence-based applications.

5. Use of Artificial Intelligence based applications in Tax inspections

In this part of the research, evaluations on the possible contributions of artificial intelligence-based applications to tax inspections will be presented. In many countries, artificial intelligence-based applications are used in tax transactions. However, it has been determined that the use of artificial intelligence technologies in data analytics is limited except for certain developed countries.

Artificial intelligence can help taxpayers identify potential fraud risks. In addition, it can contribute to taxpayers in identifying clues to tax evasion. AI-based applications can detect tax evasion cases in advance that could be missed by tax inspectors. Risky taxpayers identified using artificial intelligence can be subject to immediate audit. Therefore, tax collection amounts can be increased.

As a result of further increasing the efficiency of tax inspections, the areas of informal work can be narrowed. It can also help taxpayers improve their tax compliance. It can contribute to the full and accurate determination of the real income of taxpayers through artificial intelligence-based applications. As a result, taxpayers' activities to hide their income can be reduced.

Very large data sets, which are impossible for tax inspectors to examine effectively and in a timely manner, can be analyzed with artificial intelligence in a short time. As a result, it can contribute to revealing the income movements of taxpayers. Taxpayers are aware of the low probability of their detection due to low tax inspection rates (Üyümez et. al., 2021: 436). That's why AI applications can help make tax inspections continuous and more effective. As a result of increasing the probability of being inspected, taxpayers' behaviors against tax legislation can be reduced.

The fact that companies hide their earnings through the transfer pricing process distorts competition among companies and reduces the tax revenues of the state. By using artificial intelligence applications, the factors that cause such tax loss can be detected

quickly. In addition, it can provide measures to be taken by analyzing the legal gaps in the tax legislation (Turan, 2020: 60-61).

6. Conclusion

Today, where the volume of big data continues to increase rapidly, not day by day, it has been determined that there is a need to develop data analysis methods primarily by using artificial intelligence-based applications.

In order for tax inspectors to perform more effective, high quality, accurate and comprehensive audits on existing e-applications and for the Tax Inspection Board to perform its duties more effectively, data analysis technologies should be utilized. In addition, it is considered critical to implement artificial intelligence applications in order to increase the efficiency and productivity of tax inspections.

It has been determined that in the developing and changing economic conjuncture, it is necessary to increase the knowledge of tax inspectors in artificial intelligence-based applications and data analytics, and to adapt both organizational and corporate culture to the new situation.

References

Earley, C. E.(2015). "Data Analytics in Auditing: Opportunities and Challenges". *Business Horizons* 58/5, pp. 493-500.

İlgün, M.F. (2020), Vergi Denetim Sürecinde Büyük Veri Analitiği, *SEYAD*, 8(1), pp. 1-23.

KPMG (2012). Leveraging data analytics and continuous auditing within internal audit. https://assets.kpmg/content/dam/kpmg/pdf/2016/05/Leveraging-Data-Analytics.pdf (07.09.2022).

Maciejewski, M. (2017). "To do More, Better, Faster and More Cheaply: Using Big Data in Public Administration". *International Review of Administrative Sciences* 83/1, pp. 120-135.

Ministry of Treasury and Finance. (2022). MTF 2021 Annual Report https://ms.hmb.gov.tr/uploads/2022/03/Hazine-ve-Maliye-Bakanligi-2021-Yili-Faaliyet-Raporu.pdf (08.10.2022).

Nadas, E. (2021). " Artificial Intelligence Applications in Accounting and Auditing", (M.Sc. Thesis), İstanbul Bilgi University, İstanbul.

Özdemir, İ. (2019). "Roadmap For The Use of Big Data Analytics in Auditing", (M.Sc. Thesis), Gazi University, Ankara.

PwC. (2016). Technology in the PWC audit: Driving innovation. https://www.pwchk.com/en/audit-assurance/technology-in-pwc-audit.pdf (03.07.2022).

Revenue Administration. (2022). RA 2021 Annual Report https://www.gib.gov.tr/sites/default/files/fileadmin/faaliyetraporlari/2021/2021_faaliyet_raporu_4.pdf (09.10.2022).

Say, C. (2018). *50 Soruda Yapay Zeka*. İstanbul: 7 Renk Basım Yayın ve Fimcilik Ltd. Şti.

Tax Inspection Board. (2022). TIB 2021 Annual Report https://ms.hmb.gov.tr/uploads/2022/04/VDK-2021-Birim-Faaliyet-Raporu.pdf (10.10.2022).

The Institute of Internal Auditors. (2017). Küresel Bakış Açıları ve Anlayışlar https://www.tide.org.tr/file/documents/pdf/GPAI-Artificial-Intelligence-Part-I-Revised.pdf (10.01.2022).

The Institute of Internal Auditors. (2018). Küresel Bakış Açıları ve Anlayışlar, IIA'nın Yapay Zekâ Denetim Çerçevesi https://www.tide.org.tr/file/documents/pdf/Artificial-Intelligence-Part-III-15-02-2018.pdf (10.01.2022).

Tellan, D. (2014). "*Büyük Veri Türbülansını Yönetmek*", Türkiye Bilişim Derneği, TBD 31. Ulusal Bilişim Kurultayı Bildiri Kitabı, pp. 41-42.

Turan, D. (2020). Yapay Zekâ ve Vergi Uygulamalarına Etkisi. *Anadolu Akademi Sosyal Bilimler Dergisi*, 2 (1), pp. 55-70.

Üyümez, M.E., Yılmaz, A.O. ve Ünlüer, S. (2021). Vergi İncelemesinin Amaçları ve Bu Amaçlara İlişkin Sorunlar Nelerdir?: Bir Durum Çalışması. *İktisadi İdari ve Siyasal Araştırmalar Dergisi*, 6(16), pp. 432-452.

Zhou, L. (2019). Opportunities and Challenges of Artificial Intelligence in the Application of Taxation System, https://www.atlantis-press.com/proceedings/icemci-19/125927534 (03.03.2022).

Evaluation of the Effect of Electronic Tax Applications on Tax Revenues and Taxpayers

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Abstract

Taxes are at the top of the public revenues that the state needs in order to finance the public services it provides. The correct execution of the taxation process and its support with auditing are of great importance for the prevention of public deficits. Performing taxation transactions correctly and fulfilling their obligations under appropriate conditions are the main expectations of taxpayers from the process. In today's conditions, where information technologies are more advanced than ever before, it is seen that the taxation process and other related transactions and the parties of the tax also take their share from these developments.

Meeting the collective needs of societies living under a certain state structure is possible with the provision of public goods and services. The first thing that comes to mind in terms of financing required for the presentation of the said goods and services is taxes. Discussion issues such as the characteristics of the ideal tax system, the provision of justice in taxation, the methods used in taxation have been discussed by some thinkers for centuries, but it can be said that it has a century-old history in the context of modern finance. Of course, the direction of the discussions in the modern sense is greatly affected by the developments in information technologies.

Due to the increase in the use of the internet and technology, the fact that many works that are done in the traditional sense have been moved to the electronic environment, inevitably brought about a transformation in the public sphere as well as in the private sector. These change movements, which are put forward with the perspective of e-transformation in the public sphere, are adapted to every possible area of daily life with e-government and its related applications. With the developing technology, it has become possible to carry out tax transactions and processes in a much more rapid and efficient manner in the computer and internet environment. The Tax Office Automation Project (VEDOP) has been developed for purposes such as increasing the service quality, ensuring taxpayer satisfaction and increasing voluntary tax compliance. With the project, which covers electronic applications, it is aimed to provide fast, low-cost, effective and efficient

service by transferring many taxation transactions to the electronic environment.

Investments in information and communication technologies in Turkey have been continuing regularly since 2002, and the e-transformation project was implemented in 2003. Tax Office Full Automation Project (VEDOP), which dates back to 1995, was put into service of taxpayers and administrative staff in three phases, the last of which was in 2007. It is aimed that VEDOP will contribute positively to tax compliance by reducing tax losses and evasion, as well as reducing transaction costs, increasing working efficiency and facilitating processes for tax parties. In today's Turkey, almost all business and transactions between the tax administration and taxpayer can be carried out electronically.

In order to collect taxes effectively and efficiently in our country, a faster, easier and more accurate tax collection process has been developed by using the advantages of the information age, and the taxpayer-oriented taxation process has been transferred to the electronic environment. Electronic tax applications, also known as e-application, are constantly developing in our country as well as all over the world, and the number of electronic services is increasing. Therefore, electronic tax applications (e-application), which are taxpayer-focused and provide ease of transaction, for the financing of taxes, which are the most important and serious source of income of public expenditures, enable citizens to comply with taxes, reduce taxation costs, make taxes on time and fully, ensure state-citizen rapprochement, and enable citizens to become closer. The importance of playing a participatory role is an issue that cannot be ignored.

In this context, in our study, the effect of electronic tax applications on tax revenues and taxpayers by taxpayer groups listed in the Income Tax Law has been examined with the help of quantitative data using the survey technique. In the study, statistical data analyzes (Chi-Square, Crosstabulation, Reliability Analysis) were conducted with SPSS (Statistical Package for the Social Sciences) by asking 20 questions for 200 taxpayers. The analysis revealed that electronic tax applications are advanced in terms of functionality, use and benefit, and that the applications are useful and more practical for taxpayers. In addition, it has been concluded that it contributes to the increase of tax revenue and to the collection of taxes on time, without delay, effectively and efficiently. It has been observed that e-applications increase tax revenues and create positive benefits on taxpayers such as paying taxes voluntarily, paying faster, avoiding fake documents, minimizing tax loss and tax evasion. Again, as a result of the research, hypotheses have been established on the questions of whether electronic tax applications facilitate tax auditing and increase tax revenues, which are an important source for public revenues, and as a result of the evaluations, it is predicted that electronic applications increase tax revenues and electronic applications are beneficial as tax payment incentives. In our country, it will contribute to the taxpayers to be more conscious and participatory by making all taxation transactions through e-applications, and that the social responsibility of citizens towards taxes will be strengthened more as the trust bond between the state and the citizen is established thanks to easier and more understandable applications, and many taxpayers are in the tax offices. Positive data and important results have been achieved, such as the prevention of the time-wasting problem, the increase in the service satisfaction limit, the minimization of the margin of error and the rapid

access to the right information.

Keywords: Tax, Taxpayers, Electronic Applications, E-Application, Tax Revenues
Jel Codes: H2, H26, H27, H60

METAVERSE: EVALUATION OF THE ALTERNATIVE VIRTUAL UNIVERSE IN THE CONTEXT OF TAXATION POWER

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Abstract

Many new concepts emerged with digitalization. At the last point reached by the world of science, humanity met the metaverse. Using cryptocurrency and blockchain technologies, the metaverse can be defined as "a persistent, living digital universe that provides individuals with a sense of agency, social presence, shared spatial awareness and the ability to participate in a comprehensive virtual economy with deep social impact". In simpler terms, the metaverse is a cognitive universe where people can connect through virtual reality devices without the need for physical action. Beyond blockchain and cryptocurrency technologies, the metaverse is built as an extended reality space where virtual reality, augmented reality and mixed reality technologies are used together. Using virtual reality devices, people can create a virtual reality world built with avatars representing themselves and take part in this virtual space. In this virtual space, it is aimed to create a perceptual reality universe that is closest to people's five senses of sight, hearing, touch, taste and smell. In the Metaverse, digital objects are modeled as tokens, their ownership is recorded based on the blockchain and can change hands on decentralized exchanges. As a result of these transactions using a digital wallet, a value is created. Given the possibility that states can generate large amounts of revenue, it is inevitable that national governments will demand taxes to contribute to the economies of these virtual universes. However, there are uncertainties about states attempting to tax the borderless and anti-authoritarian metaverse based on their taxing powers. It has been discussed how the taxation power, which is an integral part of sovereign power, will be in the long run and according to which procedures and principles states can tax the metaverse concept that creates "surplus value" in the process of rapid digitalization.

Keywords: Metaverse, taxation power, blockchain technology, crypto money technology
JEL Code: K34, K15,

1. Introduction

Many new concepts have emerged with digitalization. With blockchain and crypto money technology, the economic relations that reach dimensions produce different concepts day by day and reveal new applications. metaverse is the last concept offered to humanity by the scientific world, which is advancing in technologies such as central processing units, graphics processing units, data processing, machine learning, artificial intelligence, and cryptographyverse. Metaverse is a concept that refers to the new generation of the internet, which describes an immersive and multi-sensory experience in the hands-on use of various devices and technological developments on the internet. With the transition to Web 4.0, which offers a four-dimensional operation after Web 3.0, a virtual universe in which blockchain and crypto assets are used is the last stage of science for now. The existence of humans in another universe in a three-dimensional form may cause problems along with many innovations. In the metaverse, which is an anti-authoritarian, unlimited, and free world, there is no constitutional text regarding any state/company/company control or order. This situation may create a chaotic situation in the metaverse. It is possible to say that there is no owner of the metaverse, where there is no state control, and that there is no power dominating the metaverse. The consequence of the taxation authority, which is the most important tool for the continuity of the state, is open to discussion in the metaverse, which is determined to be devoid of the sovereign authority of the states for now. This situation creates an uncertain outcome for the state's most important financial resource and brings many discussions afterward.

1. The Concept of Metaverse

1.1. General Framework

Metaverse can be defined as "an enduring, living digital universe that provides individuals with a sense of agency, social presence, shared spatial awareness, and the ability to participate in an inclusive virtual economy with profound social impact." Block Chain and Metaverse Technology Working Committee Final Report, 2022:56) The metaverse, which is defined by the author Neal Stephenson as "a virtual universe where people come together and communicate physically in three dimensions" in his 1992 book "Snow Crash," is etymologically the combination of the Ancient Greek words meta, meaning "after," "beyond," and "verse," meaning "universe." (Steel, 2022:68)

The Metaverse is a collaborative virtual open space formed by the convergence of virtualized physical and digital reality. More broadly, the metaverse refers not only to virtual worlds but to multidimensional experiences of internet use and application as a whole (the spectrum combining Web 2.0, augmented reality, third-dimensional technology (3D), and virtual reality). It is designed so that activities that take place in

isolated environments (buying digital land and building virtual homes, participating in a virtual social experience, etc.) will take place in the metaverse. Metaverse is device independent and does not belong to a single provider. It appears to be an independent virtual economy enabled by digital currencies and immutable tokens (NFT), with technologies such as blockchain in the background. The metaverse, which will be a parallel universe to real life, aims to create a virtual public space. In this new space, people will be able to shop, go to the movies, attend meetings, and visit cities and museums while wearing virtual reality devices.

With the spread of emerging technologies such as digital reality and blockchain, it is seen that great potential for the metaverse has emerged. When we look at the basic components of the Metaverse, blockchain, virtual and augmented reality, and cyber security technologies come to the fore in terms of key technologies. While blockchain technologies are among the main components of the metaverse, it is seen that they are directly related to the game, entertainment, and commerce titles in the metaverse. In terms of the metaverse, the main sectors with market opportunities are gaming, tourism, education, e-commerce, the real estate market, entertainment, the arts, sports, media, advertising, software, and application development. While the metaverse market size is estimated to be 38.85 billion dollars in 2021, this value is expected to increase to 47.48 billion dollars in 2022 and to 678.80 billion dollars by 2030. In another study, it was estimated that the amount of income that can be obtained from the metaverse will reach $800 billion worldwide by 2024. (Block Chain and Metaverse Technology Working Committee Final Report, 2022:22)

Blockchain and crypto assets; metaverse platforms that have been integrated into its infrastructure and economy are also called crypto metaverse. For example, Decentraland, Cryptovoxels, Alien Worlds, Axie Infinity, and The Sandbox can be given. is coming. Metaverse digital objects are modeled as tokens; their ownership is recorded on the blockchain; and they can be exchanged on decentralized exchanges. It is considered that cryptocurrencies will play a key role in the transfer of value within the metaverse. Currently, virtual real estate can be purchased on the platform called Decentraland with the Mana cryptocurrency. Land acquisition in the Metaverse environment has become a remarkable development recently.

In general, it is necessary to have a digital wallet to be able to trade in the metaverse. Each platform uses its cryptocurrency. Every asset developed in the Metaverse is an NFT. For this reason, it is necessary to access the store of the selected metaverse platform for trading. The purchase is made using the digital wallet and the owned NFT is defined to the digital wallet. (Gilbert, 2022: 7) There is no binding legal regulation in real life for the lands traded in the Metaverse environment.

2. Taxation in Metaverse

Considering the possibility that users can earn a high amount of income as a result of the rapid change process in the value created in the Metaverse, it is inevitable for states to demand taxes from these virtual universes to contribute to their national economies. However, the subject of taxation of the metaverse, due to its independent structure, contains great uncertainty. This situation raises questions about whether the taxation authority in the metaverse will be made according to the classical classification (personality, property) or another classification. The fate of taxation authority, which Jean Bodin stated as one of the unique features of sovereign power, is beginning to be shaken in the presence of alternative universes such as the metaverse. The fact that users create value or generate income as a result of their transactions in Metaverse suggests that transactions will be subject to tax. However, there is no regulation on which country's taxation authority will include the created value within the framework of which rules. (Zhang, 2022: 7,8)

At this point, the strategic question in terms of taxation authority is whether local and national tax authorities around the world can claim tax authority over transactions that take place in a virtual arena. Another question is: when metaverse transactions by tax authorities and virtual entities can be associated with real-world people or organizations, who should be taxed? For example, questions arise as to whether the Nike brand is taxed on the sale of virtual goods, its virtual presence in the metaverse, or Nike's real-world headquarters in Oregon. The same question arises at the point of providing services other than sales. (Lopez: 2022)

Although sales and service transactions will occur in the metadatabase, transactions will generate real-world revenue because they are, in most cases, linked to real-world people and organizations. Users will convert their crypto assets into real currencies. Until tax authorities around the world develop a virtual entity, it seems more likely that they will impose a tax liability on a real person with a close and meaningful connection to a real-world legal entity or metadata processing transaction in terms of the value created. (Lopez:2022) The taxpayer may be the legal or beneficial owner of the metaverse seller or a person or organization that exercises management authority over the transactions carried out by the metaverse seller.

Basically, whether and how metaverse transactions will be taxed by the relevant tax authorities:

- identifying the physical person or entity behind the largely virtual transaction
- identifying the type of property or service in question;

- determining whether it includes virtual or real-world property or services, as well as, where applicable, the relevant location;
- will be determined by determining the nature and source of income. (Lopez:2022)

If buyers and sellers are in the same country, domestic law may be used to determine who is taxed and how. However, in cases where the relevant parties are in different countries, tax agreements can be used. This indicates that the state's taxation authority in the metaverse will be limited by agreement and cooperation in the short term.

A company transitioning to the metaverse environment should act with the awareness that its actions may have direct tax consequences. For example, a company that purchases or leases virtual real estate in a metadatabase in exchange for cryptocurrencies may realize a taxable gain in cryptocurrency, depending on the tax laws of the jurisdiction in which the company is a taxpayer. If a company decides to develop its own NFTs and sell them in a metaverse, any gains from an increase in the value of that NFT can be taxed along with the cryptocurrencies the company receives in return (Stipdonk & van de Berg: 2022).

In these examples, the question arises when these gains are taxable. At the moment of this virtual transaction, or when the cryptocurrency is converted to euros or dollars? In this regard, when a taxable event may occur is entirely dependent on where the entity is a tax resident. (Lopez:2022) In practice, it seems more appropriate to carefully consider where to establish the business entity that will operate in a metadatabase and to determine this before starting work to avoid long-term "exit tax" discussions with tax authorities. VAT or sales tax will also need to be considered concerning metaverse transactions. The real-world locations of buyers and service recipients will be relevant in this context. Tax administrations are unlikely to accept a situation where a seller's buyers are virtual avatars in a virtual digital space and their physical identities and locations are not available or unknown. Metaverse vendors should consider an approach to developing a customer identity and data system that will allow customers to collect the necessary real-world information to meet VAT and sales tax-related payment and reporting requirements.(Stipdonk & van de Berg: 2022)

3. Conclusion

To follow up on transactions with crypto assets before the Metaverse, the European Commission launched a public consultation in 2021 to strengthen the rules on administrative cooperation and expand information exchange in the crypto asset and e-money fields. In this context, the Administrative Cooperation Directive (DAC-8) was established. The "Crypto-Asset Reporting Framework and Amendments to the Common

Reporting Standard" report has also been published by the OECD. However, although these reporting standards set for crypto assets are applicable in the metaverse, they will be made to the extent permitted by the metaverse. Because crypto asset transactions made with virtual wallets allow users to generate new addresses before each transaction, even though service providers share users' wallet addresses with governments, While blockchain transactions themselves are public and traceable, the person behind the wallet generally remains anonymous.

Secondly, the metaverse, etc., of the taxation process is to be made based on the principles of taxation authority. Technology may be insufficient. For this reason, a virtual revenue administration should become a virtual presence in the metaverse, where almost every institution and organization has a digital twin, especially by making radical changes in international taxation principles and basic tax treaties. In this process, the cooperation of international organizations to limit double taxation and taxation authority by encouraging cooperation between countries may be the start of taxation in the metaverse.

Third, a procedure needs to be established on what to do in case of any conflict. It is necessary to prevent conflicts that may occur by including the necessary framework concepts in the relevant legislation in other basic areas of law. Because legal regulations are not made as fast as digitalization, it should not be forgotten that the principles that states use in applying tax laws can provide a solution up to a point, that even though the principles are revised, technology can be followed to the extent permitted by the systems, that the classical state understanding now poses a threat to modern states, and that the existence of the state element in the future is controversial.

References

Çelik, R. (2022). "What Is The Metaverse? Conceptual Evaluation And Overview", Balkan and Near Eastern Journal of Social Sciences, No: 08 (01), ss. 67-74.

T.C. Ministry of Environment, Urbanization and Climate Change. (2022). Blockchain and Metaverse Technology Working Committee Final Report 2022, General Directorate of Geographic Information Systems, August 2022, Ankara.

Gilbert, S. (2022). *"Crypto, web3, and the Metaverse",* Bennett Institute For Public Policy Brief, Mart 2022, ss. 1-17.

Lopez, Fernando R. (2022). "Metaverse and Taxation", https://pragermetis.com/insights/metaverse-taxation/, (09.11.2022).

Stipdonk H. & Roger v. (2022). "Taxes Become More Complex When Entering The Metaverse", https://www.bakermckenzie.com/en/insight/publications/2022/10/taxes-complex-metaverse, (09.11.2022)

Zhang, Q. (2022). "Rule of The Metaverse", Metaverse, No: 03(01), ss. 1-21.

Comparison of the 2021-2027 Pre-accession Financial Aid Instrument (IPA III) with Antecedents & Its Station Against Taxation

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Abstract:

The Instrument for Pre-Accession Assistance (IPA) are the project based grants which are provided the IPA beneficiary in adopting and implementing the political, institutional, legal, administrative, social and economic reforms required to comply with Union values and to progressive align to Union rules, standards, policies and practices with a view to Union membership. IPA is implemented in seven-year cycles depending on the EU's multi-annual financial framework. In the period of 2007-2013; a series of European Union programmes and financial instruments for candidate countries or potential candidate countries were combined and gathered under the umbrella of IPA. Currently; there are two Framework Agreements signed and still are in force under the name of IPA which are 2007-2013 IPA and 2014-2020 IPA II. The negotiations for the 2021-2027 period IPA III Framework Agreement are still carried out between the EU Commission and beneficiary countries including Turkey. The IPA III Framework Agreement, which is expected to be signed in the first quarter of 2022, will enter into force retroactively from the beginning of 2021.

IPA funds; It is distributed through direct management through Commission departments and/or executive agencies, including Union Delegations, or indirectly through institutions accredited by the EU Commission in the beneficiary country. While the budget share was allocated for each beneficiary country according to the size and capacity of that country in the Council Regulations determining the framework of IPA and IPA II, this practice is abandoned with IPA III and a performance-oriented budget allocation is started. Accordingly, the beneficiary country that produces more successful projects will get a larger share of the IPA pie. Turkey benefited from the project-based grant support of 4.799 billion Euros within the scope of the IPA Framework Agreement in the 2007-2013 period and 3.533 billion Euros within the scope of the IPA II Framework Agreement in the 2014-2020 period. In the IPA III period, the total fund amount allocated by the EU for all beneficiary countries is 14.2 billion Euros, and no country-based allocation is foreseen.

IPA III also aimed at full membership of the beneficiary countries in contrast with IPA aimed at the restructuring of these countries, and IPA II aimed at stability. Similarly, while IPA III emphasizes compliance with the basic principles of the Union, IPA aims at compliance with Copenhagen criteria with the funds it provides, and IPA II aims at legislative support.

Also with IPA III, participation in other Union programs under direct management has started to gain more importance. Other Union programs are programs that envisage the participation of member countries in the functioning of the internal market and in harmony within the Union, and in some cases, third countries also participate in these programs by paying a contribution.

One of the most important rules in the application of IPA funds is that local taxes are not covered by these funds. In other words, the taxes incurred due to the supply of goods and services and the works done by the Union Contractors within the scope of the projects carried out within the framework of IPA are considered as ineligible expenditures in terms of IPA legislation and are not funded. For this reason, tax exemption provisions are included in all IPA Framework Agreements. However, there are some differences in the tax exemption provisions among Framework Agreements. E.g; While the supply contracts made by the Contractors within the scope of the IPA Framework Agreement are subject to stamp duty, these contracts are exempted from the stamp duty in the IPA II and (probably) IPA III Framework Agreements.

On the other hand, the basis of benefiting from these tax exemptions in all Framework Agreements is the signing of a valid Union Agreement. Tax exemptions can be used in two ways. These; Ex-ante and Ex-post methods. Application of both methods has been linked to the VAT Exemption Certificate to be obtained by applying to the relevant authorities with the documents referred in the General Communiqués regulating the application. The validity of the VAT exemption certificate is limited to the duration and budget of the Union Agreement and cannot be used in cases exceeding this implementation period and budget constraint. Although the negotiation process of IPA III continues, it is not expected that the IPA III Framework Agreement to be signed will bring a different tax provision than the IPA II Framework Agreement. However, it is possible that the new General Communiqué to be prepared in practice will be prepared in a way that will resolve the problems experienced in the previous periods.

Keywords: European Union, Tax Exemption, Financial Aids

JEL Codes: H20, H25, H26

AN ASSESSMENT OF 2021-2027 MULTIANNUAL FINANCIAL FRAMEWORK AND NEXT GENERATION EU IN THE CONTEXT OF THE EUROPEAN UNION'S FUTURE PERSPECTIVE

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Abstract

Budgeting process in the European Union is based on multi year financial programmes called multiannual financial framework. The current multiannual financial framework of 2021-2027 has some unique features. Firstly, it has brought a new own resource based on non recycled plastic packaging waste. Additionally, Next Generation EU established to combat effects of COVID 19 entered into force as a complementary to the 2021-2027 Multiannual Financial Framework. Recovery and Resilience component of Next Generation EU has the capacity to offer 338 billion Euros as grants and 385.8 billion Euros as loans. This vast amount is anticipated to be financed through the loan mechanism entailing risk sharing and responsibility among member states. Repayment of debt thus requires creating new resources. 2021-2027 Multiannual Financial Framework has determined priority areas such as digitalisation, protection of environment, cohesion, migration and border control, security and defence. In the light of the future prospects, digitalisation and green investments have been emphasized. Almost half of the budget has been allocated to those areas. In this context, 20 % of resources are planned to be spent to achieve objective of digitalisation. In the framework of this study, 2021-2027 Multiannual Financial Framework and Next Generation EU have been analysed in terms of the changes brought about in the process and future prospects of the Union.

Key Words: 2021-2027 Multiannual Financial Framework, Next Generation EU, digitalisation, European Union budget

JEL Code: E62, F15

1. Introduction

The European Union budget is based on own resources composed of revenues of import duties of the Union plus Gross National Product shares and Value Added Tax contributions of member states. The resources are pooled to implement policies and finance institutions of the Union. How the implementation of policies will be financed are determined focusing on the needs of the Union and priorities are decided. Since 1988, budgeting process is based on multiyear financial programmes called multiannual financial framework. The most recent multiannual financial framework has been set to prevail during the period 2021-2027. The 2021-2027 Multiannual Financial Framework has come into force with the Next Generation EU. Next Generation EU has been established to contain the damaging effects of COVID 19 on member state economies.

The 2021-2027 Multiannual Financial Framework has culminated in essential amendments. A new item of own resources called plastics own resource has been put forward. Additionally, Next Generation EU has made possible the loan mechanism to finance Resilience and Recovery Fund. This new mechanism has raised concerns over need to generate resources and questions on the repayment of the common debt.

This study aims at analysing 2021-2027 Multiannual Financial Framework and Next Generation EU established under the circumstances of COVID 19 crisis. In this context, changes on the revenue and expenditure items of the budget will be evaluated focusing on digitalisation prioritised in line with the future perspective of the European Union.

2. Structure and Formation of the European Union Budget

The European Union budget can be considered as a financial act compromised among the institutions of the Union- the Commission, the Council and the Parliament. In this context, the budget is a pool of resources contributed by member states to implement policies established to achieve goals of the European Union and finance the institutions founded to this end (European Union, 2022b). While revenues are accrued mainly through contributions of member states and import duties, spending is decided in the light of priorities of the Union and distributed by means of funds founded to deliver the Union's objectives. The main budgeting principle is laid out in the Treaty on the Functioning of the European Union article 312 stating that the expenditure must be matched by revenue (European Union, 2022a).

The European Union budget that has been designed in the context of the multiannual financial frameworks since 1988 is composed of the contributions coming from the member states to carry out and finance policies established to attain the objectives of the Union. The main sources of revenue called the own resources consist of customs duties, Gross National Income (GNI) based and Value Added Tax (VAT) based contributions coming from the member states.

Budget making system based on conventional own resources has gone through transformations due to enlargement and deepening processes of the European Union (European Union, 2022a). The most recent transformation in terms of revenue has occurred in the budgeting process of 2021-2027 Multiannual Financial Plan which has coincided with the period of COVID 19. In this respect, while conventional own resources have been maintained, a new source of revenue, new own resource based on the non recycled plastic packaging waste, in short plastics own resource, has been established coherent with "green objectives" (European Commission, 2022a). Furthermore, the Commission has made proposals to establish new resources based on emissions trading system, carbon border adjustment mechanism and reallocated profits of multinationals (European Commission, 2021).

As for expenditures, spending side of the budget is a common accord of the Union to finance priority areas which are determined in compliance with the needs of the Union cyclically. For instance, objectives of green and digital transition, strengthening cohesion, nurturing innovation along with combating illegal migration, improving border management and enhancing security have been prioritised in the context of the 2021-2027 Multiannual Financial Framework (European Union, 2022b).

3. 2021-2027 Multiannual Financial Framework and Next Generation EU

The most recent multiannual financial framework planned to prevail for a 7 year period covers the 2021-2027 cycle. 2021-2027 Multiannual Financial Framework differentiates from other multiannual frameworks since the drafting and coming into effect of the plan have coincided with COVID 19 crisis and a complementary element-Next Generation EU has come into force. Multiannual financial framework and Next Generation EU together form a vast amount (worth 2018 billion Euros in current prices) and offer a huge amount of financial facility to recover from the damage caused by COVID 19 crisis and achieve the transformation the European Union has been anticipating. Next Generation EU that has been founded to help member states combat COVID 19 crisis has been annexed to the financial framework. In 2022 prices, the multiannual financial framework is worth 1211 billion Euros while Next Generation EU is worth 806 billion Euros (European Union, 2022b). Main priority areas stated as headings have been determined as follows: single market, innovation and digital; cohesion, resilience and values; natural resources and environment; migration and border management; security and defence; neighbourhood and the world; European public administration.

Table 1. Allocations of 2021-2027 Multiannual Financial Framework and Next Generation EU per heading (in billion Euros)

Headings of Spending	Multiannual Financial Framework	Next Generation EU	Total
Single market, innovation and digital	149,5	11.5	161
cohesion, resilience and values	426.7	776.5	1203.2
natural resources and environment	401	18.9	419.9
migration and border management	25.7	-	25.7
security and defence	14.9	-	14.9
neighbourhood and the world	110.6	-	110.6
European public administration	82.5	-	82.5
Total	1210.9	806.9	2017.8

Source: European Commission, https://ec.europa.eu/info/strategy/eu-budget/long-term-eu-budget/2021-2027/spending/headings_en, (17.10.2022)

According to the findings of Table 1, investments dedicated to innovation and digitalisation, cohesion and environment have large shares of the budget. Those headings are also contributed via Next Generation EU (European Union, 2022b).

2021-2027 Multiannual Financial Framework has been drafted in the atmosphere of COVID 19 and the priority areas have been determined taking into consideration combating crises of COVID 19, illegal immigrants and environment. Confluence of those factors have led the European Union to establish a more comprehensive one off solution by establishing the Next Generation EU. The largest component of the Next Generation EU-Recovery and Resilience Fund is composed of 723.8 billion Euros in current prices. 338 billion Euros as grants and 385.8 billion Euros as loans have made up this amount. 83.1 billon Euros have been allocated to other programmes as contribution of Next Generation EU. Components of Next Generation EU and its allocations on other programmes are seen in Table 2.

Table 2. Components of and Allocation of Next Generation EU on Other Programmes (billion Euros in 2022 prices)

Recovery and Resilience Facility (RRF)	€723.8 billion
of which, loans	*€385.8 billion*
of which, grants	*€338.0 billion*
ReactEU	€50.6 billion
Horizon Europe	€5.4 billion
InvestEU	€6.1 billion
Rural Development	€8.1 billion
Just Transition Funds (JTF)	€10.9 billion
RescEU	€2 billion
Total	**€806.9 billion**

Source: European Commission**,** https://ec.europa.eu/info/strategy/recovery-plan-europe_en, (17.10.2022)

Recovery and Resilience Facility of Next Generation EU has brought about the loan mechanism that has been on the agenda since the global crisis of 2008 and sovereign debt crisis thereafter. Through this facility, the Commission generates funds by borrowing in capital markets and lends to member states. Debt issuance in this context has started as of June 2021 and is anticipated to take place between the period 2021-2026. Yet, repayment will be done between 2028-2058. (European Commission, 2022c)

As is known, Next Generation EU is the consequence of COVID 19 crisis. The process of establishing Next Generation EU has set the stage for challenging debates that reflect divergences in the Union (Fabbrini, 2022; 189). How the resources will be created, at what rate the resources will be allocated as loans and grants, how the repayments will be made have been the hot topics of the discussions (Kaygusuz, 2020; 8). The tension between Northern and Southern member states have appeared as Frugal Four versus Irresponsible South during this crisis. Austria, Denmark, Sweden and Netherlands forming frugal four have confronted establishing a bail out fund or issuing common debt by blaming southern member states for profligacy. On the other hand, southern member states have emphasized solidarity (Bialasiewicz, 2020). After all, Recovery and Resilience Fund as a part of Next Generation EU has been founded with the capacity to grant 338 billion Euros and to lend 385.8 billion Euros with the accord of Germany, France and the Commission (Tesche, 2022; 489). Recovery and Resilience Fund is based on a loan mechanism that the Commission raises funds by borrowing in capital markets.

On the other hand, Next Generation EU has revealed a number of debates. To begin with, loan mechanism has brought about approaches such as setting of this mechanism may lead to accomplishing financial union. Common borrowing and responsibility have paved the way for

such arguments. Concerning how member states will apply for the fund, member states' programmes prepared to benefit from the Recovery and Resilience Facility of Next Generation EU, have been conditioned to be consistent with green and digital transformation roadmaps. Last but not least, maintaining rule of law has been emphasized. In this respect, future perspective and European values have been reflected to the running of the Recovery and Resilience Facility (Fabbrini, 2022; 192).

However there are some issues that pose great challenges on Next Generation EU. Those issues are as follows: concerns on running the loan mechanism, the need of the Union to create new sources of revenue for the repayment of borrowing, Russia-Ukraine war's exacerbating effect on concerns over energy and increasing pressure on finding new sources of energy, prospective problems in the repayments of loans, the fear of pressure of rising inflation on investments (The Economist, 2022).

3.1. Future Perspectives and Next Generation EU

The objectives of the European Union as promoting sustainable development based on balanced economic growth, price stability, full employment, a highly competitive social market economy, a high level of protection of the environment in the framework of peace, freedom, justice and security put forward since 1950s are being complemented by the objective of green and digital single market recently. When the 2021-2027 Multiannual Financial Framework is evaluated in terms of spending, with the contribution of Next Generation EU, almost half of the budget is allocated to green and digital transformation. The share of digital investments is %20 while the share of green investments is %30. In the draft of Shaping Europe's Digital Future, artificial intelligence, meta data analysis, 5G network and digital skills have been determined as priority areas. Digital investments are attached great importance in terms of competition with global rivals-United States of America and Asian economies. Digital investments are also considered to be a solution in the field of employment (European Commission, 2022d).

Table 3. Financing of Digitalisation in the Context of 2021-2027 Multiannual Financial Framework (billion Euros in current prices)

Programmes	Contribution of the Programmes to Digitalisation (billion Euros)
Digital Europe	7.6
Connecting Europe	2.07
Horizon Europe (total capacity 95.5) (%35)	33.25 (share of digitalisation)
Invest EU (total capacity 26.2) (%10)	2.62 (share of digitalisation)
Creative Europe MEDIA	1.4

EU For Health (total capacity 5.3)(%10)	0.53
Recovery and Resilience Facility (total capacity 672.5) (%20)	134.5 (share of digitalisation)
Total	181.97

Source: European Commission, https://digital-strategy.ec.europa.eu/en/activities/funding-digital, (17.10.2022).

Financing of digitalisation in the context of 2021-2027 Multiannual Financial Framework is provided through the programmes of Digital Europe, Connecting Europe, Creative Europe MEDIA and EU for Health. Horizon Europe, the largest research programme of the European Union, Invest EU and Recovery and Resilience Facility contribute to digitalisation either. In total, resources invested into digitalisation are estimated to sum up to 181.97 billion Euros in 2022 prices (European Commission, 2022e).

4. Conclusion

The budget of the European Union is formed based on the own resources gathered to implement the policies of the Union to achieve common objectives stated as promoting sustainable development, balanced economic growth, price stability, full employment, establishing a highly competitive social market economy, a high level of protection of the environment in the framework of peace, freedom, justice and security. Own resources consist of revenues obtained from import duties, and Gross National Income and Value Added Tax shares of member states. Designed as multiyear financial programmes, the budget is decided with the common accord of the Commission, Council and the Parliament. In terms of spending, priority areas are designed taking into account the needs of the Union. The current multiannual financial framework has brought a new own resource and proposals are prepared to pave the way for new ones. Complementary element of the 2021-2027 Multiannual Financial Framework, Next Generation EU has also brought an essential practice in which the Commission generates funds by borrowing in capital markets. This loan mechanism is subject to common borrowing and responsibility. Therefore, it has raised questions on how new sources will be generated and how repayment will be made.

In terms of the spending side of the current multiannual financial framework and Next Generation EU, priority areas have been determined as single market, innovation and digital; cohesion, resilience and values; natural resources and environment; migration and border management; security and defence; neighbourhood and the world; European public administration. Spending side of the budget reflects circumstances under which the budget has been drafted. Those areas have been focused to combat damaging effects of COVID 19, refugee and environment crises. The budget is projected to bear green and digital elements. Thus, half of the budget is allocated to green and digital investments. Through programmes founded for digitalisation purposes and the contribution of wide ranging programmes such as

Horizon Europe, Invest EU and Recovery and Resilience Fund, digitalisation is anticipated to be financed. Contribution of programmes to digitalisation amounts to 181.97 billion Euros in 2022 prices.

References

Bialasiewicz,L.(2020). "National stereotypes in times of COVID-19: the 'frugal four' and the 'irresponsible South", https://www.opendemocracy.net/en/can-europe-make-it/national-stereotypes-in-times-of-covid-19-the-frugal-four-and-the-irresponsible-south/, 26.02.2021.

European Commission. (2021). Future-proof Taxation-Commission Proposes New, Ambitious Business Tax Agenda, https://ec.europa.eu/commission/presscorner/detail/en/ip_21_2430, 17.10.2022.

European Commission. (2022a). Plastics Own Resource, https://ec.europa.eu/info/strategy/eu-budget/long-term-eu-budget/2021-2027/revenue/own-resources/plastics-own-resource_en, 17.10.2022.

European Commission. (2022b). Headings: Spending Categories, https://ec.europa.eu/info/strategy/eu-budget/long-term-eu-budget/2021-2027/spending/headings_en, 17.10.2022.

European Commission. (2022c). Next Generation EU, https://ec.europa.eu/info/strategy/eu-budget/eu-borrower-investor-relations/nextgenerationeu_en, 17.10.2022.

European Commission. (2022d). Shaping Europe's Digital Future, https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/shaping-europe-digital-future_en, 17.10.2022.

European Commission. (2022e). Funding for Digital in the 2021-2027 Multiannual Financial Framework, https://digital-strategy.ec.europa.eu/en/activities/funding-digital, 17.10.2022.

European Union. (2022a). Revenue, https://european-union.europa.eu/institutions-law-budget/budget/revenue_en, 17.10.2022.

European Union. (2022b). Spending, https://european-union.europa.eu/institutions-law-budget/budget/spending_en, 17.10.2022.

Fabbrini, F. (2022). "The Legal Architecture of the Economic Responses to COVID-19: EMU beyond the Pandemic", Journal of Common Market Studies, 49(2), pp. 193-217.

Kaygusuz, Ö.(2020). "COVID-19 Krizi ve AB'nin Yeni Dönüşüm Dinamikleri Gelecek Nesil AB Mümkün mü?", Boğaziçi Üniversitesi-TÜSİAD Dış Politika Forumu Araştırma Raporu, DPF2020-AR02.

Tesche,T.(2022). "Pandemic Politics: The EU in Times of the Coronavirus Emergency", Journal of Common Market Studies, 60(2), pp. 480-496.

The Economist, (2022, May, 26). The EU's covid-19 recovery fund has changed how Europe spends money, https://www.economist.com/europe/2022/05/26/the-eus-covid-19-recovery-fund-has-changed-how-europe-spends-money, 07.06.2022.

Evaluation Of Quality of Life İn Developed And Developing Countries For Public Finance

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Abstract:

Doktorant Rabia Selinay Değirmenci Doç. Dr. Eda Yeşil Abstract The concept of the developed country, based on the definition of the United Nations, is said to countries with national income percapita of 10,000 dollars and above, while countries with national income percapita of between 1,000 and 10,000 dollars are defined as developing countries. Economic data affecting per capitanationalin come, the country's tax, finance and monetary policies cover a significant place. There is also a difference in the quality of life between developing countries and individuals in developed countries. The applied monetaryand/or fiscal policies very according to the countries development indicators. These policies and quality of life are regulated. The quality of life of individuals is assessed in the society where they live, based on their own needs. These situations, security in society, the phenomenon of justice, social needs, food, we can say that physics like water, housing, are the fulfillment of needs. When these substances are combined with the economic structure of the country, quality of life emerges. The relation ship between public finance policies and the sustainability of the quality of life of the public sector is a discussion. The approach and opinions of classical Economics argue that if the state does not play too much role, the quality of life for individuals will be better, while Keynesianeconomicsarguesthattheapproacheswithstateinterventionwillimprovethestandards of life. The important thing about public finance policies is that the country is decided on policies that must be implemented in line withit scurrent situation. The right decision simprove the economic structure of the country, while also increasing the social structure and the quality of life for people. The public finance substructure examines the countrys in flation status, tax policies, the countrys budget deficit and debtstatus, population growth issues, capital status, and the quality of sustainable life. The living standards of individuals depend on these economic factors mentioned. Economic factors, as well as social factors, have taken a significant place, but the decisivesituation is the economy. The relationship between public expenditure and public income is also of great importance to the decisitiveness of livingstandards. It is also important for the countrys economy whether public expenditures are provided with the right flow of expenditure to are a such as health, education, defense, investment. As of the 1980 years, the GDP measurement has been identified bye conomists of the time of many errors. Under thescope of GDP, it is stated that failure to measure economic benefits, not to detect povertyrates, not to detect literacy and economic problems are the causes of errors. There are key determinants within the human development indexes. Health, knowledge levels of individuals, income level, purchasing power parity are some of these elements. It is wrong to measure a country's level of development only by its level of social development. When both social and economic growt hare

examined together, weareable to comment on a country. The states can regulate public financial structures through the regulations they make for their public services, the way they use income sources, and their budgets. It can lead governments to regulate their budget structures in open or high policy documents. High policy documents are created in accord an with the state's debt status, inflation, economic development indicators. The articles that are considered to be the economic situation of countries can be shaped. Incountries where inflation is high, there are reductions in purchasing power, while in countries where in flation is low, the purchasing power is higher than those with high inflation rates. The poor economic situation in countries is a decline in income andprosperity. With this drop, inequalities are the result of irregularities in pricestability, increased debt loads and reduced savings. As a result of research, the quality of life for individuals depends on many cases. With social policies imposed by governments, public finance structures of societies are being changed. It is important that the degree of impact of thequality of life of individuals, public finance policies, are the circumstances. The most important thing to consider here is the situation in the country in which individuals live. As a result of literatures can, Schalock (2000) has collected the determining elements of life quality. He evaluated the public finance structure both socially and economic all and stressed that countries should be based on these indicators. Quality of life is generally associated with the concept of fiscal sustainability and is one of the main factors in increasing sustainability. It has become important in line with the sustainable development objectives set out by the United Nations. Inaddition to Turkey, the quality of life of many developing countries, compared to developed countries, was looked at by this study. Reportssuch as “Economicprosperity Index, Consumer Trust Indices, World Health Organization life Quality Indices, OECD better life Index” haveallowed us to be familiar with countries and to comment on their quality of life. With the policies that a state has implemented correctly, the quality of life of individuals will increase. The communities of individuals with high quality of life will be more peaceful.In the study, the relationship between 2012-2021 periodanalysed OECD better life index in developing countries and OECD public expenditures, public revenues, budget balance and debt datas by using dynamic panel data analysis. The aim of the study is to have a statistically significant relationship.

Keywords: Quality of life, Public Finance, Dynamic Panel Data Analysis,

JEL Codes: Public Economics, Fiscal Policies and Behavior of Economic Agents,Behavioral Finance- H, H3, G4

How Many Companies Were Founded in Ottoman?

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Abstract:

Our knowledge of the Ottoman financial history consists of limited repetitions. Such are the figures regarding how many companies were established during the Ottoman period. There are different figures regarding the number of companies established during the Ottoman period. The common point in all of them is the part where there was very little incorporation in the Ottoman Empire and most of them were under the control of foreigners. In these generalizations, with the comfort of knowing the end of the movie, it is easy to make generalizations. There is a de-facto failure. But does this failure in establishing a company or does it in keeping the established companies alive? In an interview with Kemal KARPAT, the statements "In 1908, although there were only 9 Ottoman companies, this number increased to 129 in 1918" inspired the title of this paper. The emphasis in the sentence is incorporated company (A.Ş.), which in 1908 was "only 9". Since the number of people reached “129” in ten years, the rate of increase was huge. It is admirable that this development was achieved in the environment of wars. However, the numbers "only 9 companies before 1908" and "129 companies in total in 1918", arises the question, "which were these?" When you think about the well-known companies of the period are counted, it is easily exceeded. It is possible to see the "magic 129" number in other sources that contain information about the numbers of Ottoman Joint Stock Companies (OAŞ). For example, researchers such as AVCIOĞLU (1968: 130), ÇAVDAR (1971: 100-101), AKŞİN (1980: 281-282), TOPRAK (1982: 63), ZÜRCHER (2004: 126) repeat similar numbers. When the references of the aforementioned studies are examined, it is noteworthy that the common source is Ahmet EMİN [YALMAN]'s book published in English. When Ahmet EMİN (1930: 143) is examined, it is understood that the section containing information on OAŞ consists of a single paragraph that references a newspaper article: The figures regarding the numbers of OAŞ in Ahmet EMİN (1930) are based on "some general statistics published in Istanbul newspapers on September 9, 1918". When the "Istanbul newspapers of September 9, 1918" were examined in order to reach the reference of Ahmet EMİN (1930), "general statistics" regarding OAŞ were not found. However, in the article titled "İktisadî İnzibat" published in Vakit Newspaper a few days later, with the signature of "Mehmet ASIM [US]", there is information about OAŞ in Ahmet EMİN (1930). The aforementioned newspaper article by Mehmet ASIM is an introductory article for a book titled "Ottoman Joint Stock Companies in Ottoman", recently published by the Ottoman Ministry of Commerce and Agriculture "recently". The figures given in Mehmet ASIM's newspaper article have also been compiled from the book in question. In summary, the source of repeated information on the number of OAS in many current academic studies is the same book. If the information put in chronological order: 1- A book about OAŞ was published by the Ministry of Trade and Agriculture (The Ottoman Catalog 1918, Primary Source). 2- In the days when the book was published, an introductory article about the book was published in Vakit Newspaper (Mehmet ASIM 1918, Secondary Source). 3- In an English book, Vakit newspaper is referenced and information about the number of OAŞ’s is given (Ahmet EMİN 1930, Cited from Secondary Source). 4- The information in the book, which was published in English by a journalist in 1930, has been a reference to many

contemporary studies (Cited from a Secondary Source). 5- As a result, there were sufficient references that “the number of OAŞ in the Ottoman Empire was 129”. The problem is that the accuracy of the original version of the reproduced information is not confirmed. For example, although some basic deficiencies regarding the scope of the book were mentioned in the introduction article in Vakit newspaper about the primary source book, Ahmet EMİN (1930), who referenced the newspaper, did not mention these deficiencies, so there is no information about these deficiencies in subsequent studies that refer to it. As Mehmet ASIM points out in his newspaper article, the data in the book in question are incomplete. Apart from the neglect of companies that were not considered "Ottoman", many companies were overlooked because it was not possible to collect regular information about companies during the Wars. Essentially, the Ottoman Catalog is a parallel to Edgar PECH's French Catalogue, which was published a few years ago. In addition, there are many errors in the single paragraph information in Ahmet EMİN (1930). TOPRAK (1982: 64) draws attention to a few of these errors. However, aside from the abundance of mistakes, the approach in Mehmet ASIM (1918)'s newspaper article bears the "reflex of defending the Second Constitutional Monarchy against the Abdulhamid period" in terms of economic practices. The expressions in Ahmet EMİN (1930) are similar in terms of "the reflex of defending the Republican period against the Ottoman period". Aside from the mistakes made in reaching the "magic 129" figure, there are publications showing that the number of companies in 1908 was higher. For example, in the article titled “The Situation of Commercial and Industrial Companies in Ottoman” by Mehmet Vehbi [SARIDAL] in 1925, there is information that there were 53 AŞ in 1908 and 34 new companies were established in 1918 alone. On the other hand, there are those who think that the sources, which give the number of companies as 9 in 1908, are "compassionate". KIVILCIMLI (1974: 111) asserts that “5 companies were established from 1863 to 1908 revolution, 37 companies were established from 1909 to 1914, and 55 companies were established between 1914 and1918”. Although there is no reference to the figures given, it is understood from the bibliography of the book that its source should be TAHSİN-SAKA (1930). This interpretation of the information in TAHSİN-SAKA (1930), like the error in Ahmet EMİN (1930), is based on the assumption that no joint stock company could have been established in the past and closed before that date, except for those existing in 1930, based only on those existing in 1930. In summary, in the first quarter of the twentieth century, there have been many political and economic changes, some of which are described as "revolution" and some as "trauma". It is difficult to imagine that such a turbulent period is a healthy basis for the survival of economic enterprises. Despite the wars, there were attempts to establish joint stock companies within the framework of the "National Economy" policy, but the established companies did not last long. Even if some of the major changes (for example, the Constitutional Monarchy and the proclamation of the Republic) are perceived positively, their impact is not the same for all economic enterprises. For example, some companies founded by the "notables of the Committee of Union and Progress" were liquidated after the Republic due to their owners. Many companies mentioned in the Ottoman Catalog (1918) were either closed or "in liquidation" until the Turkish Catalog (1930) was published. The common feature of most of these companies is that their founders are “Unionists”. Considering that even routine power changes in the democratic period affect the "successes" of some companies, it cannot be thought that a radical political transformation such as the transition from the Ottoman Empire to the Republic did not have an impact on the continuity of economic enterprises. Although the effects of this factor were the subject of academic study in the Republican period (BUĞRA 1995), this "transformation effect" on Ottoman joint stock companies has not been taken into account yet. Therefore, it does not seem easy to reach an opinion about a period just by looking at the “most recent balance sheet”. Most of today's popular information on the number of OAŞ’s consists of hand-to-hand, erroneous and incomplete transmission of information contained in a source that provides partial information about that period. As Mehmet ASIM stated in the newspaper article in question, considering that the total number of OAŞ and their activities were not known even by the relevant public institution at that time, it is inevitable for those who read the total number of OAŞ to be disappointed. For, the Ministry of Commerce of the time did not know this number in 1918 either! But there is no doubt that the number

is much more than the "magical 129". (If the application made to TUBITAK in 2022 with a project with the same title is accepted, it will be possible to clarify the said number in the coming years with a database to be created from various sources.)

Keywords: Ottoman Joint Stock Companies, the Ottoman Ministry of Commerce and Agriculture, Ahmet Emin YALMAN

JEL Codes: N15, N83, N84, O16

Taxation of Social Enterprises, Evaluations for Turkey

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Abstract:

Social enterprises (SEs) are receiving more attention especially in the post-Covid era and are being discussed around the world as an alternative approach to achieving social well-being among people in a community. Overall, the purpose of SEs has gone beyond traditional businesses; The aim is not only to generate income, but also to combat social problems and increase the welfare of the country. In this view, the role of SEs is to provide support to states on issues such as poverty, education, environment and unemployment. Basically, there are two different forms of an enterprise in the capitalist system. Business corporations can be viewed as profit maximizing businesses whose purpose is to generate shareholder value; the other is non-profit organizations that exist to achieve social goals. From this perspective, SEs are innovative organizations that combine profit-oriented and social mechanisms, through which profits are directed mainly towards the development of such organizations or public affairs. This agenda differentiates SEs from private sector organizations that prioritize social change over profit maximization. Although SEs and ordinary businesses (for-profit businesses) have different business goals, the two organizations have similarities in their business models and challenges to compete with other businesses. Given that SEs prioritize social missions, their profitability is often lower than traditional businesses. As a result, these phenomena create potential barriers for SEs to access financing opportunities from private investors. It is possible to explain social entrepreneurship as an entrepreneurship model in which commercial activities are used for the realization of a social purpose and this income is spent on the relevant social goal. Definitions of SEs have evolved on the basis of a variety of direct activities, which complicates their nature and distinguishes them from nonprofits. SEs are business-oriented organizations established to achieve social goals in a financially sustainable way. It is seen that SEs operate with the aim of generating public benefit rather than a commercial profit through the implementation of socially significant projects. In general, the characteristics of SEs are that, unlike other organizations, they are market oriented (generating income) and have social goals rather than profit alone. They are a combination of the social values and missions of non-profit and for-profit organizations. It is argued that SEs have three essential characteristics: (1) to have a secondary (own) character and a primary (non-commercial) public interest character, (2) to have no expectation of profit, and (3) to implement a socially significant enterprise. In addition, for institutions that define themselves as SG, five criteria need to be considered; social impact, innovation, profit and financial sustainability, democratic management and the ability to reinvest profits in businesses or social causes. From the definitions of SEs it is clear that their role is not only to achieve and solve social goals, but also to be sustainable in terms of profitability and finances to compete with other traditional businesses. SEs appear to be hybrid organizations founded with a social purpose and use a for-profit business model to generate the financial resources needed to support their social mission. It is argued that SEs are strongly associated with market-oriented organizational activities for social purposes, focusing on the creativity ability of individual social entrepreneurs to use market-oriented ideas and run their organizations. Significant challenges faced

by SEs, including lack of legal recognition and policy structure, lack of access to quality human capital, lack of access to large financial capital and lack of support for growth, must be resolved. In addition, the major obstacles faced are the lack of legal definition and the lack of recognition of SEs as business entities. As a result, these issues create confusion for many social entrepreneurs operating under various legal forms, preventing them from engaging in large business activities or reaping tax and financial benefits for nonprofits. Since SEs in Turkey do not have a special legal personality, they can be organized in various legal structures. They act within the current legal framework by choosing one or more of the existing structures in line with their own needs. Almost two-thirds of SEs operate as companies and cooperatives. Associations and foundations constitute 17.1% of SEs. It is seen that there are those who argue that a legal entity specific to social entrepreneurship should be recognized in Turkish legislation, as well as those who oppose it. It would be very appropriate to introduce a new type of legal entity to SEs in the legislation. Besides; Improvements need to be made by SEs in taxation and access to financial resources, which are seen as the most problematic for the development of social entrepreneurship. The most frequently mentioned problem area regarding the legislation is taxation. For this reason, it is necessary to provide various tax advantages to SEs that fulfill certain conditions. It can also be ensured that institutions that fulfill these conditions are defined as "social purposes" and that these institutions are given the opportunity to use this phrase in their titles. SEs who fulfill the requirements to benefit from tax advantages can also benefit from an incentive for the insured people they employ.

Keywords: Social Enterprises, Social Innovation, Tax Policy

JEL Codes: L31, H53, K34

The Evolution of Tax Penalties: A Historical Read

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Abstract:

In the process from ancient times to the present, taxes have led to the existence of a multidimensional relationship between the state, which is the creditor, and the taxpayer, who is the debtor. In this relationship, there is a tax compliance problem changing form until today, and the methods chosen to ensure this compliance and/or punish non-compliance have also been a part of these changes. It is seen that tax penalties, which include sanctions for acts that constitute the illegal side of tax compliance, vary in the historical process and they have gone through many stages before fines or imprisonment, while reaching today's world. In this process, tax penalties that are sometimes strange and cruel were put into practice. In this context, it is known that very interesting and cruel tax penalties are applied from ancient states to pre-revolutionary France and England and even to the People's Republic of China today. The clay tablets included the drawing of a taxpayer who was sentenced to bastinado because he failed to pay tax belonging to Ancient Egypt circa 2000 BC and it is one of the oldest examples of the above-mentioned issues. It is also known that taxpayers who fail to pay their taxes in Ancient Egypt were kept in prisons under difficult conditions. This heavy attitude towards taxpayers also showed itself in Ancient Greece. During this period, it is seen that people were held hostage in the relevant regions to ensure the collection of taxes. In fact, administrators in Greek city-states who opposed the collection of heavy taxes were accused of treason. Accordingly, it is understood that non-compliance with taxation is seen as a very serious crime. On the other hand, Aztecs resorted to penalties such as slavery or confiscation of assets in case of non-payment of tax. The Islamic scholar Abu Yusuf, in his famous book Kitabu'l Haraç, attached great importance to the behavior of tax officers towards taxpayers and drew attention to some points. He, for example, fiercely opposed punishments such as beating taxpayers who did not pay their taxes at that time, sticking needle-like sharp instruments into their bodies to inflict pain, loading heavy loads such as stones on them, and keeping them waiting under the scorching sun. A similar approach was exhibited by Imam Maverdi, emphasizing the atrocities assemblies in Islamic society. This assembly not only looked at heavy tax burdens or other tax issues, but also examined some inappropriate behavior by tax officials towards taxpayers. Undoubtedly, one of the most interesting punishments was the one applied in India: the governor of Bengal imposed a penalty on taxpayers who failed to pay their taxes by wearing leather robes full of live cats. While punishments were like this in the early stages of history, heavy punishments continued to exist in some countries as we approached the present day. In this context, approximately 2,000 people who refused to pay their taxes in Germany in 1898 were sentenced to death, and the death penalty for tax evasion in China continued until 2011. In some cases, taxes themselves were used as a means of punishment. For example, people accused of treason in Ancient Rome and during the French Revolution were either punished with death or subjected to a very heavy

tax burden. Another historical example is that Marc Antony levied a double tax on cities that supported Brutus. A similar type of tax penalty was applied in England in 1655, and thus, with a new tax enacted on the axis of political motives, a ten percent tax was imposed on the former royalists in the previous period. Again, the traveler Ibn Jubayr stated that Muslims living under the rule of non-Muslims were heavily taxed by the ruler of the region as a result of supporting the Muslims in the war. As seen in the examples presented here, taxes were not applied as a means of financing public expenditures, but rather as a means of punishment. It should be noted that in the historical process, contrary to the heavy punishment of the act of not paying taxes, ideas have been put forward that these acts do not constitute a crime in the sense of criminal law. The ideas of philosophers such as John Locke and Adam Smith shed light on our day and contribute to the examination of the existence and purpose of tax penalties. In this respect, it is of great importance to evaluate the old practices, together with the social, political, or legal atmosphere of the period, in terms of understanding the point reached today and shaping the future. Especially with the effect of the development in the criminal law due to the change in the understanding of punishment, today we see that lighter tax penalties take place in the legal systems of the countries compared to the past. The definition of "light" here is due to the change in the form of the penalty in case of non-payment of tax, and today tax penalties (unless tax evasion) are punished with fines. In terms of tax evasion, the prison sentence is foreseen and when the stages passed in the historical process are evaluated, a softening is determined in terms of this penalty as well. Examining the historical stages of tax penalties is of great importance for us to understand the contemporary trends regarding tax penalties today, as well as the meaning of taxes for modern society, which is in the background of many important events in history. The goal of this research is to trace the origins of punishments in the present system by looking at previous economic and political systems. Within this context, the transformation of the criminal law in general and the process of reaching the principle of the prohibition of imprisonment for debt, which is encountered in the law of obligations, are considered together, and also the transformation of tax penalties and the meaning it carries are examined in a multidimensional way.

Keywords: History of Taxation, Tax Penalties, Criminal Tax Law

JEL Codes: H26, K34, K14, N40

Level of Accountability in the Use of Public Resources in the Response Against COVID-19: An Evaluation for Turkey

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Abstract:

Policy makers around the world have taken key policy measures to combat the COVID-19 pandemic. It has been combating the pandemic with the measures taken, especially monetary and fiscal policy, public health and humanitarian control measures. In particular, the main purpose of the implementation of fiscal policies has been to reduce the negative effects of the pandemic on the economy and health. Governments have aimed to keep the economies alive with regulations such as postponing tax payments, expanding tax regulations, preventing layoffs and underemployment, and business loans. In this context, emergency fiscal policy packages including additional spending measures, tax cut programs, loans and loan guarantees aimed at financing necessary health services and addressing income losses were announced by governments one after another.

Huge amounts of public resources were used with these fiscal policy packages, which were urgently prepared by governments to combat the pandemic. Working with local researchers in 120 countries, the International Budget Partnership (IBP) evaluated the use of approximately 400 emergency fiscal policy packages in the March-September 2020 period to determine countries' accountability levels. IBP has found that governments are inadequate in managing the use of fiscal policy packages against the crisis in a transparent and accountable manner. In addition, the results obtained are in parallel with the results of the Open Budget Index announced in previous years. Among the 120 countries, Turkey is one of the 32 countries that disclose the least information. Australia, Norway, Peru and the Philippines are countries that disclose adequate information. The aim of this study is to analyze the findings and evaluate the situation of our country with good country practices.

The first COVID-19 case in Turkey was recorded on March 11, 2020. The President of the Republic of Turkey announced on 18 March 2020 an 'Economic Stability Shield' package to reduce the economic impact of the COVID-19 pandemic. The Law on Reducing the Effects of the New Coronavirus (COVID-19) Epidemic on Economic and Social Life and Amending Some Laws No. 7244 was published in the Official Gazette dated 17.04.2020 and numbered 31102. As part of the fight against COVID-19, it was announced that a 100 billion lira resource set was put into use as the Economic Stability Shield package in April 2020 in Turkey.

It is known that the fiscal policy packages for the emergency situation in the face of possible pandemics or economic crises such as COVID-19 will continue to be used as indispensable intervention tools for governments in extraordinary situations. Among 120 countries, 4 countries disclosed sufficient information on the use of funds in these packages, which were put into practice as a fiscal policy tool in extraordinary situations, while 29 countries disclosed some information and 55 countries disclosed limited information. 32 countries, including Turkey, are included in the classification of countries that disclose the least information. In the context of the right to budget, the promotion and implementation of fiscal policy packages, the supervision of the legislature and the Court of Accounts, and the

participation of the public are important in terms of accountability. The results obtained for public financial management, which is built on fiscal transparency and accountability, are extremely inadequate. Within the framework of accountability, every country's policy makers have the obligation to justify and explain their actions in the use of public resources, while struggling with an extraordinary process such as the pandemic.

Governments have chosen to take and implement urgent measures to combat the COVID-19 crisis. Hence, for many governments, accountability arrangements have been seen as an unnecessary burden. Taking good practice examples as an exemplary model for other countries is important for public funds to be used in the next possible pandemic process. Because the pandemic has exposed the risk of worsening inequality in income distribution for low-income workers, women and other disadvantaged groups. Details on the use of public funds in programs created for households and businesses to combat the COVID-19 pandemic needed to be shared. Information such as who is entitled and why, along with the types of support, the amount and the number of beneficiaries should have been shared with the public one by one. Few countries like Peru have prepared a special website and answered all these questions to the public. Since governments are not owners of public funds, they are responsible for managing their use well. In times of crisis such as pandemics, disasters and tragedies, the accountability role of governments should not change. Accountability has become even more important in order to prevent negative economic conditions that may occur after extraordinary periods.

Jel Codes: H11, H83, I14.

Keywords: Accountability, Turkey, COVID-19 pandemic.

The Role of The Turkish Court of Accounts in Ensuring Fiscal Discipline in Türkiye

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Abstract:

Fiscal discipline, which can be described as the sustainability of budget balance and government debt stock, is important to our country as it is for all countries. Ensuring fiscal discipline is the prior condition for economic stability. The reason behind many past economic crises experienced in our country is that the fiscal discipline had not been procured. In order to ensure fiscal discipline in our country, a number of reforms have been made. Kamu Mali Yönetimi ve Kontrol Kanunu (KMYKK) (The Public Fiscal Management and Control Law) no. 5018 has been one of the important steps taken in order to ensure fiscal discipline. The purpose of this law is to strengthen the accountability and financial transparency, extend the supervision of the Turkish Court of Accounts into a broader area, realize internal control more effectively and the transition to performance-based budget. With the law no. 5018, several regulations have been made in the Turkish Court of Accounts. Within the regulations made with KMYKK no. 5018, there is the removal of the visa and registration procedures before expenditures and this situation is truly important. With the removal of the visa and registration procedures before expenditures, the Turkish Court of Accounts focuses on after expenditure audit. Thus, the Turkish Court of Accounts can evaluate on how the resources are used efficiently, effectively and sparingly. With the law no. 5018, the audit coverage of the Turkish Court of Accounts has also been regulated. All administrations in the scope of general management have been included into the audit scope of the Turkish Court of Accounts. The audit performed by the Turkish Court of Accounts has been called as external audit in the law no. 5018 and the Turkish Court of Accounts has become the only institution to be given the responsibility of external audit. Also, parallel to the law no. 5018, the new Turkish Court of Accounts Law no. 6085 has been made. Hereby it has been aimed for the new Turkish Court of Accounts law to keep in pace with the changes made in the area of public fiscal management. Regulations have been made in the audit function of the Turkish Court of Accounts with the law no. 6085 and the Turkish Court of Accounts audit has been dismissed from being accountancy account audit. With the Turkish Court of Accounts Law no. 6085, in the new public fiscal management system, in addition to being an institution performing external audit and account judgment, the task of reportage has also been given to the Turkish Court of Accounts. In this regard, the audit scope of the Turkish Court of Accounts has expanded substantially and the number of reports to be prepared by the Turkish Court of Accounts has been diversified. With the Turkish Court of Accounts Law no. 832 in 1996, the authority of performance audit has been given to the Turkish Court of Accounts but the Turkish Court of Accounts could not use this authority as it was intended to be. The authority of performance audit has been included extensively in the Turkish Court of Accounts Law no. 6085 with the KMYKK no. 5018. The changes and regulations made show the importance of the Turkish Court of Accounts's role and that the tasks and authorities of the Court of Account has been increased. But also,

some deficiencies are seen in the Turkish Court of Accounts and these deficiencies are being criticized. The Turkish Court of Accounts is being criticized because the international standards cannot be fully integrated into execution process. In terms of audits, the imbalance between performance audit and regularity audits and the performance audit staying in the background is being criticized. The definition of performance audit in the law no. 6085 is thus: 'it is being performed by evaluating operating results in terms of the goals and indicators specified by the administrations within the scope of accountability'. The terms of efficiency, effectiveness and sparingness not finding a place in this definition makes performance audit prone to be criticized. The uncertainty of the Turkish Court of Accounts's judicial position is also among the criticized topics. Also, an effective communication network not being available between the Turkish Court of Accounts and the Great National Assembly of Türkiye and the unavailability of an explicit provision in the Great National Assembly of Türkiye's by law on how the reports will be discussed on which rules and procedures after the expansion of the reporting task of the Turkish Court of Accounts are other criticized points. The purpose of this study is to remark the essential condition of a country's development and advancement that is the term of fiscal discipline and to examine to what extent the Turkish Court of Accounts should take a role in establishing fiscal discipline. In this context, in this study the term of fiscal discipline and its importance has been described and the problems which can be caused by fiscal indiscipline have been included. Then, what can be done to achieve fiscal discipline have been described. Within the scope of the policies advocated by some economic thoughts, their approach to fiscall discipline have been discussed. After that, the Turkish Court of Accounts has been introduced with its main lines. First, the history of the Turkish Court of Accounts and its organizational structure and then its duties and authorities have been mentioned. Finally, the innovations made in our country as to establish fiscal discipline and the Turkish Court of Accounts's role have been analyzed. In terms of innovations, the regulations made with the law no. 5018 and the Turkish Court of Accounts's audit have been discussed. In this frame, the transition to performance-based budget system and its supplementary factor of performance audit have been explained. In accordance with the regulations made, fiscal transparency and accountability have also been included.

Key Words: Fiscal Discipline, Accountability, The Turkish Court of Accounts
Jel Codes: H60, H63, H83,

Metaverse and Its Effects on Tax Law

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Abstract:

Even though the word Metaverse has become popular in recent years, it is a word that has been used for about thirty years. American writer Neal Stephenson used the word "Metaverse" to mean a virtual world in his 1992 novel Snow Crash. Metaverse is the realization of activities carried out in today's internet environment in a virtual world based on blockchain and crypto money infrastructure by using three-dimensional, augmented and virtual reality technologies. Metaverse is the general name of the virtual worlds that we can perceive with our senses and can be found in user identities called avatars. Virtual reality refers to a technology that uses glasses that do not have an open place, which is used to perceive a non-existent world as if it exists, to experience the feeling of being there. Augmented reality, on the other hand, refers to a technology in which glasses with usually open parts are used to display visual elements, sound and other sensory inputs on the real world to improve the user experience. The term metastore is also frequently used for the Metaverse. Metadata warehouse actually replaces today's terms such as "internet", "cyberspace", "cyber world". Facebook founder Mark Zuckerberg defines the future of the internet for the Metaverse. Metaverse is a digital platform that allows simulated social interactions using augmented reality, virtual reality, blockchain and cryptocurrency to create spaces such as buildings, roads, bridges that most closely mimic the real world, enabling the use of avatars for rich user interaction. can be defined as the environment. Avatar can be defined as a personalized graphic drawing or icon representing a character or self, representing the user in the Metaverse environment. Through this avatar, you can talk to other avatars, navigate the Metaverse world or perform any actions you want. Avatar is widely used in games today, takes on online roles and is considered an integral part of messaging systems, blogs, some applications of artificial intelligence, especially virtual reality. You can use avatars, your cryptocurrency wallet, to navigate the Metaverse worlds (about 900 at the moment, but the number is growing). Thus, your avatar and your digital assets are not lost in the transition from one Metaverse world to another. There are many income sources on Metaverse, such as buying land, selling land, performing e-commerce transactions, virtual merchandising and virtual advertising activities. Everywhere there is income, the phenomenon of the state brings the concept of "tax" to the agenda. The question of how the economic and commercial activities in the Metaverse worlds will be taxed becomes important. Since the concept of Metaverse and its technologies are relatively new, there are no specific and detailed legal tax regulations regarding this issue yet. Tax laws aimed at understanding the Metaverse economy are still very inadequate. In the future, detailed tax regulations, laws, communiqués and similar tax resources will emerge on the Metaverse. Although the Metaverse is a virtual world, it has interaction and connection with the real world. For example, an avatar who buys a product that he sees and likes in a Metaverse virtual store will eventually get this product in the physical world. It is very difficult to determine the products and services consumed in the Metaverse environment. The values in the physical world are given for the products bought and sold in the Metaverse world. It is possible to access the bank account from which this value comes or goes. Making a detailed analysis of the

economic activities on the Metaverse will be the starting point for collecting these activities from real and legal persons such as income tax, corporate tax, value added tax. For example, it will be fairly easy to determine how the income or sale of digital real estate bought or sold on the Metaverse will be taxed. Although the Metaverse economy has many problems and unknowns, it cannot be expected to remain a virtual tax haven that is not taxed or tax-free. It can be stated that as the studies and researches on the Metaverse increase, the processes related to taxation will also become clearer. The first problem of the Metaverse economy regarding taxation is which country will receive tax. Since there is a virtual world in the middle, it is very difficult to physically determine which country's jurisdiction is performing transactions. Here, the concept of citizenship or nationality can be taken as a basis. The second problem in taxation of the Metaverse economy is in determining who the avatar is, the taxpayer. Blockchain technology can be used to identify the real buyer in e-commerce transactions on the Metaverse. While sales and service transactions will occur in the metadata warehouse, these transactions will be in exchange for real-world value, linked to real-world people and organizations. This real value will be converted into cryptocurrency and spent on the Metaverse. When the tax administration can associate the Metaverse transactions performed by avatars with people or organizations in the real world, the problem of determining the taxpayer or taxpayer in taxation will be resolved. The tax administration can obtain various information about the wallet addresses of citizens and taxpayers, cryptocurrency transactions and crypto assets. Three basic questions need to be answered in the taxation of Metaverse transactions. 1-) Determining the location of the real-world person or organization behind the economic or commercial transaction performed on the Metaverse, 2-) Determination of the nature, source and tax base of the tax subject obtained on the Metaverse, 3-) Determining the tax type, tariff or rate to be collected. Transactions in the Metaverse will eventually be subject to real-life tax liabilities. Taxes for Metaverse transactions may be accrued based on the physical location of the taxpayer operating with the virtual workplace and/or avatar. Internet tax office-like structures can also be opened on the Metaverse. Thus, virtual tax offices that serve taxpayers on the Metaverse can be created. Tax applications such as invitation to explanation and reconciliation can be easily carried out in the virtual tax offices on the Metaverse through the avatars of the taxpayers. Although Metaverse technologies are relatively new, they have the potential to revolutionize taxation. As the trainings on Metaverse and taxation, master's and doctoral theses increase, the related literature will expand rapidly as book and article studies in this field intensify. Technical information needs of professionals working in the field of taxation, such as SMMM, CPA, and Tax Inspectors, will be met to some extent. This study will try to examine the possible changes and innovations that the Metaverse realm will bring about in tax law.

Keywords: Metaverse, Cyrptocurrencies, Taxation, Tax Law.

JEL Codes: H20, H29, K34, O33, O38.

NFT AND ITS TAXABILITY AS A NEW GENERATION INVESTMENT INSTRUMENT

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Abstract

NFTs are seen as very popular tools in the recent period when there is a technological revolution in how digital forms of artistic and cultural expressions are transformed into investments. NFTs, a product of blockchain technology, can be issued in different structures and functions, and especially with the development of metaverse applications, they emerge as a potential tool in terms of controlling access to digital content in decentralized systems. NFTs allow any digital content to be represented as crypto assets, thus creating a digital Marketplace that is difficult to control.

In the study; NFTs are evaluated in terms of intellectual and artistic works due to the creation process, the marketplaces where NFT trading takes place, and the transaction volume, as well as the digital contents with which NFTs are associated. In addition, the taxability of NFTs and the situation of different countries in this regard are examined and suggestions are made for Turkey.

Keywords: Non fungible token, NFT, taxation, blokchain, tax administrations, digital asset tax
JEL Code: G18, G23, H2, K1, K24, K34, Z11

1. Introduction

NFT (Non-Fungible Tokens) is a concept that has become popular recently, especially as a product of Blockchain technology. Although NFT is particularly associated with works of art, NFT's creation is not limited to works of art. Apart from this, materials such as interviews, photographs, videos, prominent signs, etc.; The creation of digital goods, brand-qualified NFTs is also possible.

Although Blockchain technology is used as a basis in the creation process, NFTs are different from cryptocurrencies in which this technology is used. NFT provides the owner with an ownership relationship in a decentralized Blockchain network, as well as allowing indelible information about the history of the NFT process to be stored on the Blockchain network.

In addition to the creation process of NFTs, which come to the fore especially with the transfer of works of art to the digital environment and attract attention with their high sales values, discussions on intellectual property rights continue in our country in a legal sense. However, the main purpose of the study is the sale of NFTs, earnings methods and taxability of earnings, rather than the debate in intellectual property rights.

The issuance and sale of NFTs takes place in what is called the “NFT Platforms” or “NFT Marketplaces”. NFT generation and trading require widespread use of crypto wallets. Most NFT marketplaces require the cryptocurrency to be purchased first and added to a secure wallet, then linked to the marketplace.

In the study, the NFT creation process, the differences of NFT Marketplaces from crypto asset trading platforms and the need for legal regulation, the NFT trading process will be discussed. The taxability of NFTs, which reached a high transaction volume in a short time in the last period of the digitalization process, is the main subject of the study. In this context, the country's practices regarding the taxability of NFTs are included in the study and suggestions are made regarding the arrangements that can be made by taking into account the existing tax laws in Turkey.

2. What’s the Meaning of NFT?

NFT is the abbreviation of the English term “Non-Fungible Tokens” and it is one of the innovations that blockchain technology has included in our lives. The Turkish equivalent of NFT, which is expressed as the meaning of the word cannot be substituted, changed, or duplicated, has been determined as "Qualified Intellectual Deed" by the joint work of the Presidency Digital Transformation Office and the Turkish Language Institution. These tokens, which can also be referred to as unique tokens, usually provide rights such as access to certain content or granting royalties. NFTs, like other tokens, work on the blockchain. The main features of these tokens are that they are cryptographic and not double; In other words, they are unique. NFTs are also not divisible. In addition, it is not possible for one NFT to replace another NFT (Blockchain Türkiye, 2021: 12).

Unlike cryptocurrencies, tokens are crypto assets that do not have a blockchain of their own and are traded on the blockchain of another cryptocurrency. Tokens are generally intangible assets that can be substituted more than once and have some economic functions, such as money, when produced in the blockchain network. NFTs, which can also be referred to as unique tokens, usually provide rights such as access to certain content or granting royalties. This is why NFTs are often associated with works of art (Tevetoğlu,2021: 73-74).

At this point, it is also possible to define NFT as the recording or tokenization of a digital or real-world asset through Blockchain technology and smart contracts in a way that cannot be substituted, changed, deleted or divided (İçten,2022:139).

3. Technological Components of NFT

As can be understood from the definition, NFT is produced, marketed and traded using some technological components. In this respect, there are elements such as blockchain technology, smart contracts, standards and protocols, data coding behind the NFTs to take place in the market and to be traded. It is possible to develop different versions of NFTs on Ethereum and other new generation blockchains in general. Simply put, NFTs are usually created as a digital asset that is inherited with Ethereum's ERC 721 Token Standard (EC,2021:28).

In the Ethereum blockchain, where most of the NFTs find application, the NFT creation process is called "mint". The name comes from the English figurative term minting money (Araalan,2022).

NFTs, produced or transferred to digital media; It is formed by making images, gifs, video or audio files a part of the blockchain, that is, by “minting” them. The production, storage and trading of NFTs costs the user a fee called “gas fee”. To complete a simple NFT trade, a transaction fee of between $60-100 is required for each transaction (EC, 2021:28).

4. NFT Production, Uses and NFT Marketplaces

Crypto assets are traded in three currently known markets. These; centralized trading platforms, (Centralized Exchange- CEX) decentralized trading platforms (Decentralized Exchange- DEX) and over-the-counter market (OTC). The trading platforms of NFTs are described as NFT marketplaces and they are platforms that operate separately from crypto asset platforms. There are examples of both platforms working on the CEX and DEX markets mentioned above.

Centralized Exchange-CEX are institutions that mediate and provide custody services for online trading of crypto assets. In general, nominal currencies (USD, EURO, TL etc.) or crypto assets in countries are transferred to user current accounts on these platforms, and they are bought and sold (in a sense, as a closed circuit within the platform). Centralized trading platforms can exchange fiat (fiat) currencies and crypto assets, as well as mediate the exchange of two different crypto assets.

Decentralized Exchange (DEX) are platforms that allow peer-to-peer trading of crypto assets online without the need for any intermediaries. Unlike centralized cryptocurrency exchanges, a DEX does not allow trading between fiat and cryptocurrencies. In DEXs, only other cryptocurrencies can be traded with other cryptocurrencies.

The NFT purchase process is simply the purchase of “ETH” or crypto money that can be used in the transaction from crypto asset trading platforms, loading them into the crypto asset wallet, and then connecting this wallet to the NFT market place, and the process is finished by NFT token’s uploading to wallet which is paid with these cryptocurrencies (Wang et al,2021).

The NFT market is divided into two levels, one at the "project level" and the other at the "ownership level". At the ownership level, the NFT market is segmented into Primary and Secondary Markets. Project level NFT market; It is divided into 6 main sections: Art, Collectibles, Sports, Utility, Metaverse and Games. Some NFT trading platforms focus on a specific area such as sports, digital arts and the like, while others cover all types of NFTs in the market, attracting a larger audience.

As the most recognized NFT marketplaces; These include OpenSea, Nifty Gateway, SuperRare, Rarible, Mintable, Binance, Marketplace, Decentraland. Crypto wallets that are frequently used for NFT production and trading can be counted as MetaMask and Coinbase.

5. NFT in terms of Intellectual Property Rights

It is important to note that ownership over the NFT does not always mean the intellectual property of the asset represented in the NFT. NFTs can represent photos, videos, music, artwork, online gaming content, tweets, and other types of digital files. At issue here is the electronic representation of this property. Unless specifically included, it will not cover essential intellectual property such as copyright of NFT and the work NFT represents.

Making an NFT sale will not automatically transfer the intellectual property rights to the relevant NFTized work to the buyer. However, all or some of the intellectual property rights can be transferred by adding provisions in this direction to the smart contract that forms the basis of the sales transaction (Tevetoğlu, 2022:9). When the practical applications are examined, in general, only the ownership of the relevant NFT is transferred in the sale of NFT, and the intellectual property rights of the brought work are not transferred.

So what then is it that millions of US dollars are given and taken? For example, what the person who "buys" Dorsey's first tweet actually receives is not the rights on that work, but an alphanumeric value that gives other people the right to say that they "got their first tweet from Jack Dorsey." (Güçlütürk,2022). A contract will be needed, as the right to reproduce or transmit to the public will come into effect even for a person to display the work associated with NFT, which she/he has "purchased" by paying a

price, on digital platforms. In order to meet this and to create a general framework, ready-made framework license projects such as "NFT License" are created (Güçlütürk,2022).

6. NFT Taxability and Country Examples

6.1.Foreign Country Examples

USA:The United States pioneered tax regulation for NFTs. The Internal Revenue Service (IRS) introduced a legal regulation in November 2021, and in this context, it is obligatory to declare profits due to transactions made in the context of NFT purchase and sale (Nelson,2021). The IRS, which considers cryptocurrencies as a stock, has considered NFTs as a collectible product and has determined different tax legislation and rates for both.

Since NFTs are a new concept in terms of tax law, there is no clarity on which tax to classify. If NFTs are considered collectibles, this means they will be taxed at a flat tax rate, which in practice in the US corresponds to a higher tax than cryptocurrencies that are treated as stocks.

South Korea: The South Korean Tax Administration (FSC) has announced that NFTs will be taxed from 2023. In the statement made by the South Korean Tax Administration; stated that only some NFTs will be classified as virtual assets and therefore will be subject to the so-called “other income” tax class, referring to users who choose to invest or pay on a large scale. In this context, the South Korean Tax Administration now equates NFTs, which they did not consider as virtual assets, with cryptocurrencies.

Norway: Norway was the first country to publish guidance on NFT taxation. Accordingly, the NFT creation transaction (minting) is excluded from the scope of the taxable event. However, any cryptocurrency must be used to create the NFT and capital gains tax must be paid on the proceeds from the sale of that cryptocurrency. The market value of the cryptocurrency sold at the time of sale will be considered the cost price in terms of NFT (Divly,2022).

If NFT is held, there is a wealth tax and the value of the NFT must be declared. The value to be declared is the value of the NFT on 1 January in the year following the income year. If an exact value cannot be determined, the amount paid for it as property value must be included in the declaration (Divly,2022).

6.2. Evaluations for Turkey

Crypto assets and NFTs are not yet defined in our tax legislation, but crypto assets are defined as "intangible assets" in the Central Bank (TCMB) regulation. Although NFTs are inseparable, immutable, and indelibly mapped to the source entity, there is no doubt that they are "virtual assets". In our laws, there is no provision regarding their virtual/digital equivalents in the wording of the regulations covering physical assets.

In taxation of real persons, converging the digital assets represented by NFTs to their physical counterparts and subjecting them to taxation according to the relevant

one of the seven income elements of the GVK, to which their physical counterparts are subject, will constitute a violation of Article 73 of the Constitution, as it will result in "taxation by comparison" (İçten,2022:158).

Taxation of works of art in the digital environment, which is currently an important application area of NFTs, to physical works of art through "convergence" is also not applicable as it would be contrary to this provision of the Constitution. The fact that NFTs do not have a standard form also shows that the "intangible asset" qualification made by the Central Bank is not the right approach for taxation.

7. Conclusion

Some NFTs represent digital artworks, while others represent non-artwork etc. represents the digital versions of physical assets. These products are used by their owners' avatars or game characters in the virtual environment. For this reason, it is considered a more correct approach to evaluate NFTs by considering the rights and benefits they provide to their owners.

While the developments in the digital field, especially with blockchain technology, have been discussing how to tax crypto assets in the world for a long time and a common point has not been reached, recently these discussions have been started with NFTs, De-Fis, (Decentralized Finance-) Decentralized Finance), DAOs (Decentralized Autonomous Organizations) were added.

In addition, the legal characteristics of these assets need to be defined within the framework of other laws (Civil Law, Commercial Code, Code of Obligations, FSEK, etc.). It is not possible to reflect and meet this need in legal regulations at the rapid pace of digitalization. While the definition of the crypto asset has not yet been made in the relevant law, it will not be the right approach to tax it within the framework of our tax laws.

The addition of these constantly changing and developing digital assets (including crypto assets) as a new income element in addition to the seven existing income elements under the title of "digital asset" and the revenues obtained from them under the title of "digital asset gains" in our tax legislation and regulating a suitable the tax regime to these gains will be an important initiative that will allow the Tax Administrations to act legally and quickly.

This new earnings-specific taxation regime; flat and low-rate taxation, exemption for those below a certain limit, not collecting with other income elements, exemption or low-rate taxation in case of long-term holding, retroactive loss deduction etc. is thought that the inclusion of elements such as these is a structure that complements this approach, can provide voluntary compliance, and will also ensure progress in the same way with current country practices.

It is envisaged that the establishment of a department related to "Digital Assets" within the Revenue Administration will provide significant support to this process, with staff specialized in this field, anticipating needs, and informing citizens and taxpayers, including technology literacy, in cooperation with international organizations.

References

Araalan, C. (2022). "NFT'lerin Türk Hukuku Çerçevesinde Değerlendirilmesi", Legal Blog, 25.04.2022, https://legal.com.tr/blog/genel/nftlerin-turk-hukuku-cercevesinde-degerlendirilmesi/ ,(06.06.2022)

Blockchain Türkiye (BCTR) (2021). Kriptovarlıkların Vergi-Muhasebe ve Denetim Yönünden İncelenmesi, https://bctr.org/dokumanlar/Kripto_Varliklarin_Vergi_Muhasebe_ve_Denetim_Yonunden_Incelenmesi.pdf , (27.07.2022)

Divly (2022). "Guide to Declare NFT crypto taxes in Norway (2022)", https://divly.com/en/guides/NFT-taxes-Norway , (16.08.2022)

European Commission (2021). Demisfying Non Fungible Tokens (NFTs), EU Blockchain Observatory and Forum, https://www.eublockchainforum.eu/sites/default/files/reports/DemystifyingNFTs_November%202021_2.pdf , (02.02.2022)

Güçlütürk, G.O. (2022). "NFT'lerin Oluşturulması ve Transferinin Eser Sahibinin Mali Haklarıyla İlişkisi", 25.03.2022, https://nasamer.ku.edu.tr/nftlerin-olusturulmasi-ve-transferinin-eser-sahibinin-mali-haklariyla-iliskisi/ , (06.06.2022)

İçten, T. (2022), "NFT Uygulamaları ve Vergilendirilmesi Mevcut Durum ve Öneriler", Vergi Dünyası, Ekim 2022, Yıl:42, Sayı:494.

Nelson, W. (2021), "NFT owners in the US to start paying taxes on their investments", 08.11.2021, https://www.nme.com/news/gaming-news/nft-owners-in-the-us-to-start-paying-taxes-on-their-investments-3090185 ,(03.03.2022)

Tevetoğlu, M. (2021). Hukuki Yönleriyle Kriptovarlıklar ve Kriptovarlıkların İlk Arzı, Genişletilmiş 2. Baskı, Aristo, İstanbul, 2021.

Tevetoğlu, M. (2022). "NFT'nin Gündeme Taşıdığı Hukuki Sorunlar", İstanbul Barosu Bilişim Hukuku Komisyonu Yapay Zeka Çalışma Grubu, Yapay Zeka Çağında Hukuk, s.9, https://www.istanbulbarosu.org.tr/files/komisyonlar/yzcg/2022subatbulten.pdf , (08.04.2022).

Valburn, M. (2022). "Understanding the Art of NFT Taxes", 07.06.2022, https://www.entrepreneur.com/money-finance/understanding-the-art-of-nft-taxes/401878 , (09.08.2022)

Wang, Q., Li R., Wang, Q., Chen, S. (2021). "Non-Fungible Token (NFT): Overview, Evaluation, Opportunities and Challenges", https://arxiv.org/pdf/2105.07447.pdf , (03.08.2022)

A New International Tax Administrative Cooperation: Information Reporting Obligation on Digital Platform Operators and Turkey

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Abstract:

The project of the Organization for Economic Co-operation and Development (OECD) Tax Administrations Forum that was initiated in 2017 to ensure effective taxation of income from the sale of goods and services in the sharing and gig economy (OECD 2019) gave its final output with the "Model Rules for Reporting by Platform Operators with respect to Sellers in the Sharing and Gig Economy" (Model Rules) published in 2020 (OECD 2020; OECD 2021; OECD 2022). These rules were mainly built on the information reporting obligation imposed by domestic law on platform operators that enable sharing and gig economy transactions. In addition, considering the limitations of tax administrations in accessing information in case the platform operators are located outside the borders of the jurisdiction, the need to establish an international legal framework has been included in the system in order to automatic exchange information from the tax administration of the residence jurisdiction of the platform operators to the tax administration of the residence jurisdiction of the platform sellers.

In the face of the pressure created by the 2008 World Economic Crisis on the national budgets, the leaders of the Group of 20 countries underlined the importance of inclusive international tax cooperation at the London Summit on April 2, 2009, and transparency and information exchange have been made one of the central elements of these cooperation (Ateş 2021: 4). In this direction, the information exchange provision in the OECD Tax Agreement Model, which forms the basis of many international agreements, has been strengthened, tax information exchange agreements have been developed, and the Multilateral Agreement on Mutual Administrative Assistance in Tax Matters has been updated with a protocol and opened for signature to all countries. While international administrative cooperation peer review processes were started to be operated and made effective by exchange of information upon request, the category of international administrative cooperation via automatic exchange of information was expanded day by day. The automatic exchange of financial account information was followed by the exchange of cross-border tax rulings and country-by-country reports. With the implementation of the Model Rules published by the OECD, a new element will be included in international tax administrative cooperation, and this category will be further expanded.

While studies have determined the size of the sharing economy on a global scale as 15 billion USD for 2014, it is predicted that this size will reach 335 billion USD for 2025 (OECD 2019: 17). On the other hand, in a study conducted by the European Commission, it has been estimated that the difference between the income expected to be collected and the income accrued, that is, the tax gap, for 2018 in the sharing and gig economy, is between 2.7 billion and 7.1 billion Euros. This volume is expected to triple by 2025 (European Commission 2020: 11). Considering the dimensions of the sharing and gig economy and its contribution to the tax gap, it seems inevitable for tax administrations to cooperate internationally. As a matter of fact, the European Union has activated supranational law for the establishment of such cooperation between member states and the European Council has adopted a directive (called DAC7) on March 22, 2021 (see Council of European Union 2021).

Although there are no official figures regarding our country's share in the sharing and gig economy, Turkey was ranked 94th among 213 countries in an international index study called Timbro Sharing Economy Index, which compares the impact of the sharing economy among countries (Bergh, Funcke & Wernberg 2018). On the other hand, according to a market research based on consumer surveys, Turkey is among the fastest growing countries in the field of sharing economy (Beutin 2018: 37). In short, it is not possible for Turkey to stay out of these developments. In this respect, the primary purpose of this paper is to determine the level of compliance of our country with the aforementioned international legal framework by means of legal analysis; then, based on this determination and using the comparative law method, Turkey's position against international tax administrative cooperation is evaluated.

Keywords: International Tax Administrative Cooperation, Automatic Exchange of Information, Sharing and Gig Economy, Digital Platform Operator, Digital Platform Seller

JEL Codes: K34, K33, H26, H83, H87, E62

EVALUATION OF THE NORMS DETERMINING THE TAX BASE IN TURKISH VALUE ADDED TAX IN TERMS OF "PRINCIPLE OF JUSTICE IN TAXATION"

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Abstract

It is a constitutional obligation to consider the principles of "taxation according to the ability to pay" and "equity in taxation" in determining the value added tax base. These principles have been regulated in Constitution paragraph 1 of Article 73 as *"Everyone is obliged to pay taxes according to their financial power in order to meet public expenditures. A fair and balanced distribution of the tax burden is the social objective of fiscal policy".* However, the inclusion of another tax into the value added tax base is interpreted as the "tax on tax". It is asserted that this situation contradicts to the aforementioned constitutional taxation principles. Because, the elements such as "tax, duty, fee, portion, fund provision" that are required to be included in the value added tax base essentially arise in the liability of the seller. Also, these elements are expenditure taxes, which are reflected separately from the transaction price to the counterparty (buyer). This situation, in the final analysis, causes the final consumer, who is the bearer of the value added tax, to have to pay the "tax on tax" and to bear an unfair tax burden. Although the Constitutional Court doesn't consider the inclusion of another tax in the value added tax base unconstitutionally, the importance of economically of the issue is obvious. Therefore, the legal and economic consequences of the "tax on tax" norm are required to be evaluated separately.

In this study, it will be focused on what the tax base is in Turkish value added tax law and the problems that arise by considering the elements included and not included in the tax base will be tried to be clarified.

Keywords: Value added tax base, taxes included within the tax base, tax on tax, tax justice.
JEL Code: H20, H29, K34.

1. Introduction

The Turkish value added tax (VAT) system is the most comprehensive of the taxes levied on the expenditures and with the highest revenue. Because, the entire goods and services within the scope of commercial, agricultural, and self-employment activity and the entire imported goods and services are subject to VAT. For this reason, it is of vital importance to determine the VAT base, which is the element on which the tax that is required to be transferred to the Treasury is calculated, fully and accurately. Since the VAT base directly affects the amount of tax that is required to be transferred to the Treasury, the legislator has given a special importance to the determination of the tax base and has made special arrangements in this regard.

The provisions regarding the tax base in the VAT Law are regulated as articled and separately according to the delivery and service transactions, imports, international freight and passenger transportation, foreign currency transactions, and special tax base forms. In accordance with Article 20 of the VAT Law, the VAT base in the delivery and service transactions is “the value that corresponds to these transactions". In fact, there is no complete clarity about what is included in the VAT base and what is not. For this reason, special regulations have been legislated under Articles 24 and 25 of the VAT Law. Under Article 24, in where the elements that are required to be included in the VAT base are regulated, it was specified that VAT is required to be also calculated on elements such as "tax, duty, fee, portion, fund provision".

In Article 24 of the VAT Law, VAT is also stipulated on expenditure taxes which is a controversial issue in terms of the principle of justice in taxation. Justice is one of the most discussed and emphasized issues legally. Justice can vary based on the person, time, and place. In fact, justice of taxation refers to how the tax burden is distributed among the taxpayers. Justice is as significant as the distribution of the tax burden in terms of where, when, and how it will be used as a socio-economic policy tool. Horizontal and vertical justice is tried to be achieved with benefit and financial power approaches. Those at the same level must pay the same tax while the ones at different levels have to pay different taxes. It is significant for those who benefit more to pay more taxes in order to achieve justice.

Taxation should be performed by considering the justice of taxation. As an indirect tax, value-added tax is levied the same on everyone, regardless of solvency. In order to achieve justice of taxation in VAT, the factors that are included and not included in the tax assessment should be revealed and questioned.

2. General Structure of Value Added Tax

The taxation of expenditures, in general terms, is realized in a way of taxation of goods and services subject to purchase and sale. Taxes for this purpose are also called “transaction tax”. VAT, on the other hand, constitutes to the most advanced and modern form of transaction taxes. VAT is reflected to the buyer of the goods or services. However, it is an expenditure tax declared and paid by the person delivering the goods or performing the service. VAT, as in many countries of the world, obtains field of application in Turkey for economic, financial, and political reasons.

Developed countries mostly enforce VAT to establish a good transaction tax system and to reduce the effects of various periodical imbalances on the budget. Developing countries, on the other hand, enforce this tax to increase their budget revenues and thus to ensure fiscal discipline. Because, the main purpose of VAT is to tax the total value added occurred within the process from the production stage to the final consumption stage. Although there are some differences among the countries while reaching this goal, all countries try to get the maximum benefit from this tax. In addition, this tax has a special place and importance in the integration process with the world economies.

VAT, which is an objective tax, with this aspect, doesn't distinguish between the economic sectors and social segments. VAT doesn't deal with the social status of individuals and doesn't discriminate. On the other hand, this tax has a complementary feature to direct taxes such as income and corporate taxes. Income, which the income and corporate taxes system cannot tax, can be covered in the widest way with VAT during the expenditures. This factor gains importance in our country where income tax is not fully implemented and many earnings are excluded from its scope.

VAT entered into force in Turkey with the Law No. 3065 and started to be implemented since 01.01.1985. The Law No. 3065 included the entire production and sales stages of the goods and service from the initial production stage to the delivery to the end consumer into the tax subject. Because, VAT is a spread expenditure tax levied at every stage of the production, distribution, and service sectors. VAT taxpayers can reflect this tax to the counterparty using the price mechanism. However, the tax paid for business inputs is reduced using the "reduction mechanism". Thus, only the value included at that stage is taxed. In this respect, natural and legal persons and unincorporated organizations that are in the position of "final consumer" are burdened with this tax. Since the final consumer cannot reflect the tax, it becomes the party feeling and bearing the VAT burden.

3. Historical Process of Turkish Value-Added Tax

The taxation of expenditures in Turkey was introduced in 1925 with the abolition of the teind, constituting a quarter of the state revenues (Dikmen, 1945: 97,98). The general consumption tax rate in the General Consumption Tax Law No. 735, entered into force in 1926 and aimed to tax consumption, was determined as 2.5%. The collection of the tax was by sticking stamps (Varcan & Çakır, 2000: 183). When the implementation of the General Consumption Tax was not successful, the Transaction Tax Law No. 1039 was adopted in 1927 (Yaşa, 1956: 66). Such tax levied on the sales price of the goods in the process starting from production to delivery to the final consumer has been of two kinds: spread transaction taxes and collective transaction taxes. The industry and production began to be taxed through said tax. As a result of this tax, the consumption and purchase and sale of all kinds of goods and commodities decreased and economic life was paralyzed (Erkan, 5). Due to unjust practices in transaction taxes, these taxes have been replaced by production tax within the framework of the Expenditure Taxes Law No. 6802. With the production tax applied under the Expenditure Taxes Law, industrialists faced a heavy tax burden in the production of taxable goods. Although the tax rates in

the Production Tax have been differentiated in line with the objectives of industrial policy and in accordance with the understanding of justice, this tax has not been accepted due to the difficulties of implementation.

VAT as a type of transaction (expenditure) tax has been implemented since 1985 with the VAT Law No. 3065. VAT and production (expenditure) taxes such as employment tax, transport tax, PTT services tax, announcement and advertisement tax, sugar consumption tax, sports-toto tax, business tax have been abolished. Although the legal obligant of VAT is the one who delivers the goods or performs the service, this tax is an expenditure tax imposed on the final consumer (due to the discount mechanism owned). VAT is a tax levied on the value added that occurs at each stage in the process from production to final consumption. In micro terms, added value refers to the difference between the sale price and the purchase price (Uzunoğlu, 2014: 3).

VAT is an expenditure tax imposed to eliminate the injustice of the fulfilled transaction taxes and to ensure self-control. It is important that VAT doesn't lead to accumulation in the tax assessment. Since the tax is levied on the value added in VAT, there is a decrease in the tax, not an accumulation. This is represented by an inverted pyramid.

4. The Role of Expenditure Taxes In The Formation of The Value Added Tax Assessment

In accordance with Article 24 of the VAT Law, elements such as taxes, duties, fees, shares, fund provisions taken internally are included in the VAT assessment. In accordance with Article 21 of the same Law, all kinds of taxes, duties, fees and shares paid on import are also included in the VAT assessment. Such expenditure taxes arising from the delivery of goods or the performance of services or importation and which should be included in the VAT assessment are exemplified as "special consumption tax (SCT), electricity consumption tax, entertainment tax, wastewater fee and banderole fee".

The inclusion of SCT in the tax assessment of VAT is criticized on the grounds that it is a "tax of tax" and causes debates on justice. Likewise, the addition of the entertainment tax to the VAT assessment is the taxation of the tax and contradicts the principles of justice, equality, and the rule of law in taxation. The receipt of VAT on special consumption tax and entertainment tax is only a few examples of the application of Articles 21 and 24 of the VAT Law, and it is possible to reproduce such examples.

The Constitutional Court rejected the objection that the collection of VAT from the SCT was unjust (AYM, 2014: 3). Therefore, the arguments that it is not just to include SCT in the VAT assessment have no legal validity. However, the economic burden imposed on the final consumer by the inclusion of SCT in the VAT assessment is obvious.

5. An Equitable Value-Added Tax

Article 73, paragraph 2 of the 1982 Constitution emphasizes the issue of "justice in taxation" by stating that *"The balanced and just distribution of the tax burden is the social objective of fiscal policy"*. In paragraph 1 of the same article, there is a rule that

"Everyone is obliged to pay taxes according to his/ her financial power to cover public expenses". The principle of financial strength should be applied to all taxes in the Turkish tax system. The principle of financial power should also be applied in terms of VAT, which has an important place in expenditure taxes and provides large revenues to the state. In VAT, the tax burden is borne by the final consumer, not the main taxpayer. The final consumer is the contractor, in other words, the carrier of the tax. The tax assessment is decisive for the tax to be just. The tax assessment is shaped by elements that are included and not included in it. The justice of the tax assessment is completed with the correct determination of the tax issue. The justice of the tax assessment is completed with the correct determination of the tax issue. Exempting expenditure taxes on consumption from VAT makes it easier to reach financial strength by reducing the VAT burden of the final consumer.

VAT is an expenditure tax levied at each stage of the production-final consumption chain, and SCT is a one-time expenditure tax. Spenders may be able to pay two types of indirect taxes, both VAT and SCT, due to a transaction. On the other hand, VAT is also paid on SCT. Although the application of the tax of the tax is legally approved by the Constitutional Court, it is an economic burden. The weight of this burden remains on the contractor of the tax, i.e., the final carrier, the final consumer. The practice of collecting VAT on expenditure taxes should be stopped. Thus, the final consumers pay as little tax as the VAT of the SCT and other expenditure taxes.

6. Conclusion

The most important source of income of the state is taxes. Indirect taxes also occupy an important place in tax revenues. VAT, the foremost of the indirect taxes, is among the basic tools of modern taxation. VAT, the foremost of the indirect taxes, is among the basic tools of modern taxation. VAT makes a significant contribution to tax revenue. In addition to the financial purpose of the tax, it also has purposes such as serving justice and contributing to welfare. In order to achieve these goals, the tax assessment must be fully comprehended. An equitable VAT doesn't mean an equitable tax assessment. Practices such as healthy rate implementation, placement of document order, dissemination of tax awareness, simplification of legislation serve to determine the VAT assessment fairly.

Since deliveries of goods and performance of services subject to SCT and other expenditure taxes are also subject to VAT, expenditure tax can be paid three times due to one transaction. This situation causes the VAT burden to increase unfairly. Therefore, it is important to determine well the elements that are included and not included in the tax assessment. The VAT received on the added value on the goods and services at each stage and ultimately remaining on the final consumer should be provided with a tax assessment structure that will not create a burden.

References

Journals/Periodicals;

Dikmen, M. O. (1945). "Türkiyede Muamele Vergisinin İnkişafı", *İstanbul Üniversitesi İktisat Fakültesi Mecmuası*, 5 (1-4), pp. 96-127.

Yaşa, M. (1956). "Muamele Vergilerinde Teklif Safhası", *Maliye Araştırma Merkezi Konferansları*, 2, pp. 65-80.

Books;

Uzunoğlu, N. (2014). *Herkes İçin Katma Değer Vergisi Kanunu Yorum ve Açıklamaları*, İstanbul, Maliye Hesap Uzmanları Derneği.

Varcan, N., Çakır, T. (2000). *Türkiye Maliye Tarihi*, Eskişehir, Anadolu Üniversitesi Yayınları.

Internet Sources:

Anayasa Mahkemesi. (2014). https://www.resmigazete.gov.tr/eskiler/2015/04/20150407-14.pdf, (10.10.2022).

Erkan, Ü. Katma Değer Vergisi İle İstihsal (Üretim) ve İstihlak (Tüketim) Vergileri Arasindaki Farklar, Her İki Vergi Rejiminin Uygulamasına Yönelik Avantaj ve Dezavantajlar, https://www.platodenetim.com/resimler/dosyalar/dosya_1626256162_12180 16139.pdf, (10.10.2022).

Tax Remedy for Unjust Income and Wealth Distribution

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Abstract:

The economic activities and relations taking place in the market do not always mediate the formation of a balance of interests between the parties. It is a known fact that, depending on time, place and general-special conditions, imbalances arise instead of establishing a balance of interests between the parties of such relations. In addition to the inequalities that people are born with and endure, inequalities that appear later are added.

Humans are born into an unequal Earth; some people are born on unequal conditions. This inequality sometimes depends on one's body-health. Although it is not possible to completely end such inequalities, it is essential to ensure a development, change, and livelihood in accordance with those conditions. The inequality that needs to be emphasized is more common among similar ones; It is an inequality that results in one getting richer and the other getting poorer, one getting a job and the other being unemployed. This type of inequality arises due to the failure to establish a balance of interests between the parties and individuals, and the deterioration of the existing balance.

It should never be forgotten that people have equal rights, even if they do not have equal conditions. It is impossible to equate conditions-opportunities. However, it is possible to partially or completely eliminate the inequality that existed at the beginning, thanks to the equal enjoyment of rights by individuals. Equal enjoyment of rights is expressed as equal opportunity. It is the starting point that everyone has the right to live. However, although having the right to life requires living humanely, it is known that not everyone has such an opportunity. Having economic-financial means does not depend on the human offspring directly and absolutely. Because, in order to execute the baby's life, first of all, and especially to his mother; also to his family for a long time; He is dependent and dependent on those who provide for him. In this regard, it is necessary to know and understand that the difference between being in a family with the necessary and sufficient means and being without parents makes sense.

It is never possible or necessary for people to become equal in all aspects. However, it is necessary to give the opportunity and allow the person to improve both his livelihood and material-spiritual aspects by taking advantage of the rights equally. A reasonable balance must be observed in the possession and exercise of rights.

There is a certain level of joint responsibility between individuals and society in terms of establishing a nonexistent or deteriorating balance. It is accepted that the State should primarily use its taxation authority on behalf of the Nation and especially to eliminate the income and wealth distribution injustice of the people living in its country in order to establish and maintain the balance that does not exist or deteriorates. Influencing the distribution of income and wealth while generating income is not as important and possible as influencing it through expenditures.

Fairness in the distribution of income and wealth needs to be considered before the taxation phase. Because the reason for this injustice is not taxation. It is not possible to correct a situation for which there is no reason, through taxation. This is similar to the expectation of establishing a harmonious-moderate order with the resolution of disputes through the courts. Courts create the perception-fact of law in a society with their decisions; They try to meet expectations. However, illegality is not due to the decisions of the courts, but to the forms of human relations; It is because of their moral behavior or not. It is not the job of the courts to eliminate the causes that led to it. Courts are responsible for resolving disputes that have arisen. It is not a preventative for the emergence of conflicts. Judgment is the last refuge of the helpless; It is not the first and only solution.

If inequality and cost of living are not a result of taxation, it is not possible to eliminate this result by taxation. Undoubtedly, it is a known fact that inequality is created in this country through taxation. This negative situation-result can be prevented through taxation. For this reason, instead of trying to eliminate inequalities arising from other reasons, it is necessary not to cause inequalities through taxation.

For years, it is seen that inequality has not decreased, but rather increased, even though it has been emphasized that taxes are used as a tool other than financial purposes, or it is thought that there are applications for this purpose, by emphasizing the extra-fiscal purposes of the tax. Then there is definitely something wrong with this job. This Statement aims to discuss this issue.

Keywords: Tax, Income Distribution, Wealth Distribution, Justice, Taxation

JEL Codes: K34, H26, H21

EVALUATION OF GAMBLING TAX IN TÜRKİYE IN TERMS OF TAX JUSTICE

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Abstract

In accordance with the Law No. 5035 which entered into force on 01.01.2004 in Türkiye, games of chance have been included in the scope of the gaming tax. Games of chance in Türkiye refers to all sorts of games and parimutuel betting organized by the institutions and organizations authorized within the framework of the legislation and the result of which is determined based on coincidence. The taxation process of games of chance in Türkiye involves two stages. The first of these is the taxes levied during participation in the games, and the second is the taxes levied on the awards and lottery prizes obtained. In the first stage, the tax arises with the participation of the participant in the game. This tax is referred to as "gaming tax". Accordingly, the income obtained from all sorts of games of chance is subject to gambling tax. Parimutuel betting on sporting events, horse races and other games of chance are subject to gambling tax. The institutions that have been given the right and authority to organize games of chance in games of chance are taxpayers. Today, with the technological advances and the development of digitalization, games of chance are played, and income is obtained through the websites created by many domestic and foreign illegal organizations. The scope of these activities is increasing day by day. High lottery prize rates make these games more attractive and lead people to play illegal games of chance. Therefore, it is necessary to keep people away from illegal activities with measures such as making legal games of chance more attractive and encouraging employment, supporting the information sector with incentives, supporting sports activities with tax regulations, reducing high special consumption tax and value added tax rates. Since games of chance involve illegal activities, it is of utmost importance to manage the games of chance market without causing economic problems and without exceeding the legal limits. When it is considered as an important financial resource for individuals and the state, it is quite clear that this sector is indispensable. However, these games must be played within the legal framework and their effective control must be ensured. In this study, following the conceptual explanations of games of chance and the reasons that lead people to games of chance, the structure and application of the gambling tax in Türkiye and its legal dimension were examined. By addressing the policies applied within the scope of the gambling tax, a solution is proposed by assessing the special situations in terms of those playing the games and those operating the games.

Keywords: Gambling Tax, Mutuel Betting, Participant, Tax Justice.
JEL Code: H20, K34, L83

1. Introduction

One of the ways that people have resorted to in order to make money since ancient times is games of chance such as gambling, betting etc. Chance and betting games stand out as a rising habit of both the world and our country. In particular, the interest in games of chance in our country is increasing day by day. People continue to spend some of their income on games of chance, as if they pay taxes on a regular basis. While it is usually played by men, it has changed course with behavioral changes, has become widespread among housewives and student groups with no income, and has even become a gateway to livelihood for some people. The gain obtained by playing these games is not provided by labor. Games of chance often result in winning and losing. Individual habits, hopes, expectations, environmental factors lead to games. In addition to being a means of entertainment, games of chance are a way of entertainment that makes use of leisure time. Games of chance should be controlled at a level that will not adversely affect human life and will not cause behavioral disorders. It is important for people in the society to play these games without being harmed. Games of chance sector, which is increasing and diversifying day by day, is a sector with a large money circulation. In terms of financial control of this sector and creating resources for the public sector budget, it is necessary to receive a "games of chance tax" through games of chance in terms of financial and social policies. The tax on games of chance, which taxes these earnings that are not based on labor, should be able to serve the social purpose as well as the financial purpose. It is necessary for the society to be able to restrict the habits and behaviors of people playing games, to use the tax revenues obtained for the benefit of the society, to encourage the institutions that organize games of chance to work for the benefit of the society, and to keep the level of playing games of chance reasonable and not to constitute a crime. These issues are the issues that should be considered in order for the taxation of these games, which can be considered as an economic activity, to emerge as a fair application within the understanding of the social state.

2. Definitions Related to Games of Chance

Games of chance can be mixed with some other games and activities. Although games of chance, gambling activities, betting games and games of hazard activities show different characteristics, they do not differ in terms of quality. In today's developing and changing world, the varieties of chance games are increasing and participation in these games gains different dimensions. The word "chance" has been passed through the French word "chance". Words such as fortune and happiness, which can be counted as the equivalent of this word in Turkish, do not exactly match the word luck, and "luck", which is often used in the sense of coincidence, refers to unplanned results, obscurity

and uncertainty (Yaşar, 2010: 142) While the word "betting" is expressed in the Turkish Language Association dictionary as "an oral agreement that agrees to give something to a party that will be justified in its opinion or claim", the game of chance is expressed as "games such as lottery, lotteries, football pools, horse racing, which are paid in advance and then won money based on chance". Gambling is "a game of chance played with money" (TDK, 2022). Gambling, which is *considered as a prohibited activity and a crime in the legal system, is defined as "games performed for gain and in which profit and loss depend on chance"* according to Article 228 of the Turkish Penal Code. Gambling, which is a game of luck played by placing money, is not a game of chance/fortune. As a result of games of chance, it refers to all kinds of games based on coincidence. These are the situations that occur as a result of coincidence and develop outside the requests or designs of people (Tunçay, 1993; Kılıç, 2006:6). Although games of chance, gambling activities, betting games and games of hazard activities show different characteristics, they do not differ in terms of quality. According to Article 3 of the Law No. 5602 on the Regulation of Taxes, Funds and Shares Received from the Revenue of the Games of Chance in Türkiye;

Games of Chance refer to all kinds of games and mutual bets organized by the institutions and organizations authorized under the relevant legislation and determined based on coincidence.

Mutual Betting refers to all kinds of tournaments, competitions, sports games organized at home and abroad, where the result depends partly on the skill of the participant and partly on coincidence, and the games that are played based on estimating the result on any event or situation and that give a bonus to those who predict correctly among the participants.

3. Reasons That Lead People to Games of Chance

Although there are various reasons that lead people to games of chance, the most important reason is economically based, and similar reasons such as financial inadequacies and poverty put people in expectation in these games. The factors that lead people to gambling and games of chance are as follows:

- Family structure and change in the family, family adaptation and communication
- People's expectations of getting rich easily in a short time and in a short way, poverty and economic inadequacies increase the hope of these games.
- The reflection of the miscommunication between the spouses to the children,
- Being a financial interest provider and a means of entertainment,
- A group of friends and an unhealthy environment,
- The desire to increase social and individual poverty and quality of life,

- Prospects for the future; house, car, luxury life,
- Disrupted income distribution,
- Advertising with mass media about games and the games becoming institutionalized and becoming a social habit,
- The desire to start a business, invest,
- The state of the physical environment, such as Las Vegas, TRNC, are important places of attraction where games of chance are played.

Considering games of chance in general, it is seen as the shortest way to living in prosperity and wealth (Sağır & Çabuk, 2010:157).

4. Approaches Related to Games of Chance

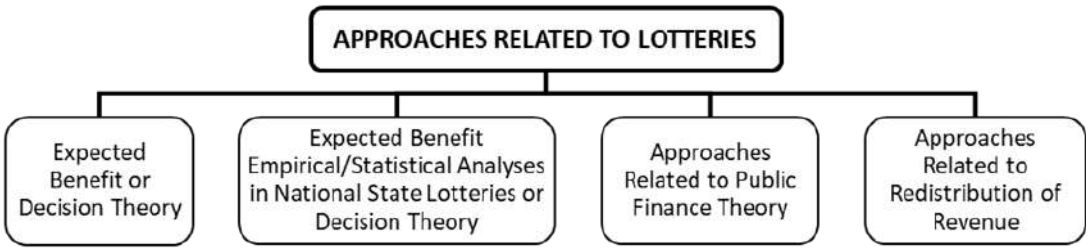
The units that organize the games of chance should work for the benefit of the society. It is important to make investments that benefit the society from those who play the games of chance. However, for this, non-governmental organizations and the legal structure should be effective and social and economic stability should be ensured. If the free play of games of chance is provided only by taking into account the material return, undesirable situations such as social deterioration, crime increases, and impoverishment occur. Based on these considerations, the following conclusions have been reached based on the European Court of Justice's approach that games of chance are an economic activity (Kılıç, Arslan, & Öktem, 2009:57).

- In European Union member countries, games of chance activities were limited and even further prohibited, and these activities were not allowed to be a special source of profit.
- Due to the high amount of revenue and bonuses to be earned from games of chance, these games involve a high level of crime and fraud.
- Games of chance are addictive to the extent that they can harm people and society.
- It contributes significantly to activities that will benefit the society in areas such as games of chance, social aid works, charity activities, sports, and culture.

The court, which does not see games of chance as an economic activity by itself, emphasized that each member country should organize games of chance within the framework of its unique social and cultural characteristics (Schindler & Schindler, 1994). Research on lotteries reflects different perspectives. In traditional public finances, it is expressed according to the tax structure and burden of the state, and from the public preference view, lotteries are considered as the effect of elections and ideologies by

economists. Studies on lotteries are grouped into four groups. These approaches are as follows:

Figure 1: Economic Approaches Related to Lotteries



Source: Analysis of State Lottery Institutions in Terms of Public Financing: It was prepared by us by using the article titled Evaluation of the National Lottery Administration in the Privatization Process (Uğur, 2015: 3).

The principles on which economic approaches to lotteries are based are as follows: (Uğur, 2015:3-4)

- Expected Benefit or Decision Theory: In this approach, they have little information about the traditional economy or why individuals who avoid risk enter into unfair bets. For economists, understanding gambling is a serious problem. The lottery ticket looks like a product with a lot of features, some customers like it, some do not like it, some find it attractive, and some find it worthless.

- Empirical/Statistical Analyses in National State Lotteries: The studies in this group provide examples from the state lottery in UK, America, and Canada.

In the UK, it is stated that the increase in net income in lottery sales will increase the net income of the lottery organizers. In Canada, it has been determined that there is a relationship between the donation to charity and lottery tickets. Donations and lottery tickets are complementary.

- Approaches Related to Public Finance Theory: According to this approach, lotteries are seen to increase public funds, and this is applied for social welfare. Aid lotteries are conducted to increase public funds.

Increasing funds with the lottery contributes greatly to social welfare compared to donations to charity.

- Approaches Related to Redistribution of Revenue: According to this approach, it is important for gamblers to give up something in order to gain something. Gambling motivation takes into account not only the benefits by winning, but also the costs related to working and not winning. In this theory, the poor part of the population gambles for more entertainment, pays lottery taxes with the tickets they buy, and the giants increase their income.

5. Legal Regulation Related to Games of Chance Tax

As the first stage in the taxation of games of chance in Türkiye, taxes are levied during the playing of games of chance. This tax is a tax on games of chance. It is taken during the participation in the games. Later, in the second stage, there is a tax on bonuses and awards after the games are played. This tax is inheritance and transfer tax. The tax on game of chance is an expense tax. It is taken from the participation in the game. The Inheritance and Inheritance tax is a wealth tax and taxes the donation obtained as a result of the game. Income from games of chance is not subject to income tax. Because according to our Turkish Tax System, resource theory is essential, and in order to tax income, it should be provided from production factors such as labor, capital, soil and entrepreneurship. The principle of taxing games of chance in Türkiye is first of all the "social state" principle of the 1982 Constitution and again the "financial power" principle of the Constitution. Financial power is essential in the tax taken to achieve social and economic goals and to cover public expenses. Article 73 of the 1982 Constitution states that "everyone is obliged to pay taxes according to their financial power". As an indication of financial power, taxation of income, wealth, and expenditure refers to the fair conduct of taxation.

Three organizations are authorized to organize mutual betting and chance games in Türkiye. These are; General Directorate of National Lottery Administration, Sports Toto Organization Presidency and Türkiye Jockey Institution. Games of Chance refer to all kinds of games and mutual bets organized by the authorized institutions and organizations within the framework of the legislation and based on coincidence (Tosuner, Arıkan, & Bay, 2022:475). In accordance with the Law No. 5602 on the Regulation of Taxes, Funds and Shares Received from the Revenue of Games of Chance, the revenue obtained from the activities of games of chance is subject to the tax of games of chance. Mutual betting and chance games that will be subject to a tax on games of chance are:

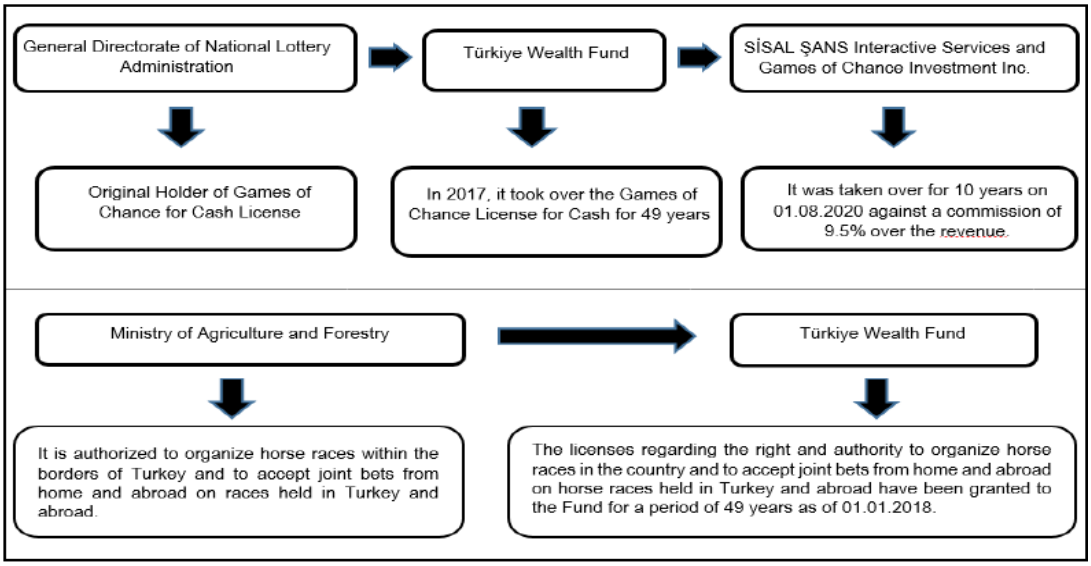
- Mutual betting based on sports competitions
- Horse racing
- Other games of chance (policy, super lottery, scratch-off ticket, chance ball, national lottery…)

Taxpayer of Tax on Games of Chance: These are the institutions that have been given the right and authority to organize games of chance. In case of transfer of this right and authority, the taxpayer, transferee institution, organization, or private legal entities. Institutions that generate income in games of chance are the legal taxpayers. The participant is only economically liable for the tax on games of chance due to the fact that the tax on games of chance that emerged during the participant's participation in

the game organized by the institution is an indirect tax. In accordance with the 3rd paragraph of Article 6 of the Law No. 5602, the taxpayers of the tax on games of chance consist of the following institutions;

- General Directorate of National Lottery Administration,
- Spor Toto Organization Presidency,
- Türkiye Jockey Club.

Figure 2: Privatization of the National Lottery and Transfer of Horse Racing to the Türkiye Wealth Fund



Source: It was prepared by us by taking into account the historical change process.

Three organizations are authorized to organize mutual betting and chance games in Türkiye. These are; General Directorate of National Lottery Administration, Spor Toto Organization Presidency and Jockey Institution of Türkiye. The license rights of the games of chance (National Lottery, Immediate Win, Policy Lottery, Super Lottery, Chance Ball, Number Ten) played in cash have been granted to Türkiye Wealth Fund Inc. for a period of 49 years in 2017 and the license works carried out by the National Lottery Administration within the scope of the contract between Türkiye Wealth Fund A.Ş. and the Contractor Company SİSAL ŞANS Interactive Services and Games of Chance Investment Inc. have been taken over by the contractor company on 01.08.2020 for a period of 10 years. The company, which won the National Lottery tender, received a 9.5% share of the sales in return for this service**.** The higher the revenue of the games of chance, the more the company that won the tender will earn. As of today, there is online access to 75 games of chance through the national lottery.

Base of Tax on Games of Chance: The tax base is the revenue from games of chance. Revenue; It is the amount remaining after the value added tax is deducted from the amount obtained from the participants in return for playing the games of chance.

Rate of Tax on Games of Chance: The rate of the tax is 5% in mutual betting based on sports competitions, 7% in horse races and 10% in other games of chance.

Declaration and Payment of Tax on Games of Chance: The taxation period in the tax on games of chance is one month of the calendar year in which it operates. The tax on games of chance is paid within the same period by declaring to the tax office to which the taxpayers are affiliated with a declaration until the evening of the 20th day of the month following the relevant taxation periods.

The tax on games of chance is not accepted as an expense in the application of income and corporate tax and cannot be deducted from any tax. Because the tax on games of chance is not related to the acquisition of income or corporate income in terms of income and corporate taxpayers, it is a fair practice not to be deducted as an expense.

Table 1: Resources Provided to the Public and Social Contributions (TL)

	2017	2018	2019	2020	2021
Value Added Tax	466.497.662,59	514.571.833	503.247.003	232.443.850	7.249.596,66
Tax on Games of Chance	261.198.367,.64	288.215.911	282.013.237	129.683.047	4.027.553,73
AYGET	12.593.987,40	14.328.249	12.933.518	5.702.413	135.469,28
Treasury Total (VAT, TGC, AYGET)	740.290.017,63	817.115.993	798.193.758	367.829.310	11.412.619,67
Public Share*	653.901.869,37	768.783.973	640.163.593	297.627.993	4.625.877,42
Total Direct Transfers to Public	653.901.869,37	768.783.973	640.163.593	297.627.993	4.625.877,42
Overall Total	1.394.191.887,00	1.585.899.966	1.438.357.351	665.457.303	16.038.497,09

(*) Annual Public Share is transferred to the Defense Industry Support Fund, Promotion Fund, Olympic Games Preparation and Regulation Board, Higher Education Credit and Dormitories Institution and Social Services and Child Welfare Institution by the Ministry of Treasury and Finance.

Source: It is taken from the activity reports on the website of the General Directorate of National Lottery Administration (MPİ, 2022).

As seen in Table 1 Added Tax, Chance Games Tax, Municipal Entertainment Tax are paid over the revenue of the games of chance, many funds and institutions are transferred at the rates determined within the framework of the legislation, and the institutions that organize the games are given a certain share. The increase in the taxes received from

the revenue of the games of chance and the transfers to the institutions over time caused the bonuses paid to the participants to decrease over time. This situation led the players of these games to illegal games such as gambling with foreign origin and similar games via the internet by shifting them to tax-free and uncontrolled areas.

6. A Perspective on Games of Chance and Tax on Games of Chance in Terms of Justice

The tax on games of chance, taken from mutual betting and games of chance, is not a tax on labor and labor. It is a tax levied on the money of money. There is no labor in the income from these games. This income is not a gain. It is about the power of money as games such as gambling, which are seen as morally bad and socially harmful, turn into a game of chance over time. Controlling these games, which can lead to the transformation of earnings into acquisition, possession, and a self-proclaimed winning passion, (Yaşar, 2010:133) and taxing the income from these games, is in accordance with the understanding of justice. For people who try to improve their welfare without working, games of chance mean gaining profit without producing. Making money the easy way is based on the desire to be rich. It promotes inertia. It breaks the desire of employees to work due to the expectation of being rich and encourages them to leave the labor empty, as well as dragging those who do not work well into laziness. It is important to tax the games of chance to prevent these negativities. Many countries in the world think that bringing taxes to people who do not contribute to prosperity, are idle, and do not use labor within the framework of smart city practices will contribute to the productive human factor by mobilizing idle labor and thus provide employment and production increase (Örselli & Dinçer, 2019:100-102). This tax aims to tax inertia by taking into account the tendency of people who prefer to stand idle instead of working towards entertainment and games of chance. When considered in terms of developing countries, in societies where there are differences between classes in addition to unemployment and poverty, the fact that these games are seen as a way of being rich causes the social values to be shaken. For this reason, the tax on games of chance tries to provide justice quickly by ensuring social balances between the labor that works and the labor that does not work. Everyone who plays these games in games of chance pays the same tax. The equal participation of non-employee, high-income, low-income employees in tax harms tax justice. Because this tax does not take into account the personal and family status of individuals, income and wealth status, and whether they have a job, it can be thought that it is contrary to the principle of taxation according to financial power. However, taxation of games at different rates contradicts the principle of equality and justice in taxation. Nowadays, games of chance and mutual betting can be played in any environment and at any time and by people of all ages, without any distinction of time and place, and games in any corner of the world can be bet on with

digitalization. Such easy access to games of chance can disrupt social balances and very easy access to gambling can increase the habit of personal gambling. Within this framework, differentiation of tax rates will not contribute to justice on a personal basis but will create an unequal situation among those who play the same game. Pursuant to Article 58 of the Constitution, titled "Protection of Youth", "The state takes the necessary measures to protect young people from alcoholism, drug addiction, guilt, gambling and similar bad habits and ignorance" and measures have been taken to prevent young people from gaining gambling and similar habits and to prevent the danger of young people playing these games excessively. Within this framework, he tried to ensure social balance, equality and justice and protect moral values by imposing restrictions on the play of these games for gain purposes. The interest in chance and betting games in the world and in Türkiye increases the rate of playing these games day by day. People spend some of their income on games of chance, as if they pay taxes on a regular basis. Although men play these games more than women, the housewife and student group with no income are in the habit of spending a certain amount on these games every month (Yaşar, Şans Oyunları ve İddaa, 2010:140). Pursuant to Article 59 of the Constitution, titled "Development of Sports and Arbitration", the State takes measures to improve the physical and mental health of Turkish citizens of all ages and encourages the spread of sports to the masses. However, it should not be professional athletes and sports branches that should be encouraged here, but amateur sportsmen and sports branches performed as amateurs. The purpose of the provision makes it necessary for all citizens to take measures for physical and mental health.

7. Conclusion and Evaluation

In order to keep up with this development and change in the globalizing world, games of chance have also become globalized, the types of games have increased, their dimensions have expanded and a large market of games of chance has emerged. Taxation of the profits generated in the sector has become indispensable to prevent the growth of the sector in a way that disrupts social and economic balances. With the increase in the place and importance of the sector in world trade, people's interest in these games is increasing. Thus, some of the personal income flows to these games regularly. Illegal websites are on the rise. People who play games of chance are people who aim to make a lot of money with little money without working. The principles on which the revenue from games of chance in Türkiye will be subject are regulated within the framework of the relevant legislation. All kinds of games and mutual bets organized by the authorized institutions and organizations within the framework of the Turkish Tax Legislation and based on coincidence are games of chance. Tax on Games of Chance, which is collected through these games, is collected from the participation of the

participant in the games whose return is not determined in advance. The event that feeds the tax occurs when the participant pays a fee to the game. Bonuses won are not included in the tax on games of chance. Rewards and bonuses are subject to inheritance and transfer tax. As an expense tax, the process to be taxed before the bonus and reward with the chance games tax, and as a wealth tax, the process to be taxed after the inheritance and transfer tax with the reward and bonus is operated. It is possible to draw some conclusions from the evaluations related to games of chance and taxation.

- This tax is in accordance with the understanding of justice in terms of controlling the games of chance and taxing the earnings without labor.
- It may affect consumer behavior in preventing justice and cause personal preferences to change.
- The application of the tax on games of chance at different rates has no significant contribution to justice at the personal level.
- It is fair to tax children and young people to prevent games of chance from being played in moderation and to prevent children and young people from playing games for profit.
- It provides income to the treasury. When the social impact of the collected tax is reflected on the low-income individuals, the effect of providing financial resources with the taxes received from the low-income segment is negative for this segment.
- The habit of playing games of chance is increasing day by day, and people spend some of their income on these games as if they pay taxes to the state.
- Not all games of chance are played within the legal framework. Many betting sites that do not have a license and permission provide services electronically and carry out unregistered activities. In these games, which are usually played through foreign betting sites, there are financial losses due to tax-free websites.
- Games of chance are a way for people to earn money as a result of expectation without the factor of labor.
- The fact that sports activities enter the sector as a means of entertainment, not only as a game but also as an activity within the scope of gambling, being an environment for money events can lead to social problems and damage moral values. There is a purpose of making money and entertainment in playing these games. It is necessary to pay attention to the fact that sports do not become unfair gains and to tax the gains obtained.

Games of chance, which are played for many reasons such as making money, filling free time, being very rich without working, trying your luck, paying debts, and fulfilling your expectations from life, are taken from people who play these games. The tax on games

of chance prevents the earnings of the chance sector from going out of the country. It is necessary and important to control the chance sector with various measures and to balance the playing habits of those who play these games.

References

Kılıç, T. (2006, Eylül 13). Şans Oyunları Kurumlarında Sosyal Sorumluluk. *Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü İşletme Anabilim Dalı Yayınlanmamış Yüksek Lisans Tezi*. Ankara. https://tez.yok.gov.tr/UlusalTezMerkezi/tezDetay.jsp?id=3wwzvwdSO1_chO8ntlCPMA&no=syY-SLohmBYU0qS8CZ9SMQ (01.09.2022).

Kılıç, T., Arslan, M., & Öktem, M. (2009, Ekim). Şans Oyunları Kurumlarının Sosyal Sorumluluğu: Türkiye İçin Gözlemler. *Yakın Doğu Üniversitesi Sosyal Bilimler Dergisi, II*(2), 50-69.

MPİ. (2022). *Milli Piyango İdaresi Genel Müdürlüğü.* http://www.millipiyango.gov.tr/node/themes/bluemasters/documents/faaliyet_2021.pdf (03.09.2022).

Örselli, E., & Dinçer, S. (2019). Akıllı Kentleri Anlamak: Konya ve Barcelona Üzerinden Bir Değerlendirme. *Uluslararası Yönetim Akademisi Dergisi, 2*(1), 90-110. https://dergipark.org.tr/tr/download/article-file/712822 (08.08.2022).

Sağır, A., & Çabuk, S. (2010). Şans Oyunlarının Toplumun Beklentileri Üzerine Etkisi: "Sakarya Örneği". *Sakarya Üniversitesi Fen Edebiyat Fakültesi Fen Edebiyat Dergisi, 12*(1), 143-166. http://www.fed.sakarya.edu.tr/arsiv/yayinlenmis_dergiler/2010_1/2010_1_M10.pdf (05.09.2022)

Schindler, G., & Schindler, J. (1994, March 24). *Judgment of The Court.* from Article 177 of the EEC Treaty by the High Court of Justice of England and Wales (Queen's Bench Division) for a preliminary ruling in the proceedings pending before that court between: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:61992CJ0275&from=EN (15.10.2022).

TDK. (2022). *T.C. Atatürk Kültür, Dil ve Tarih Yüksek Kurumu Türk Dil Kurumu*. Türk Dil Kurumu: https://sozluk.gov.tr/ (01.09.2022).

Tosuner, M., Arıkan, Z., & Bay, H. (2022). *Türk Vergi Sistemi* (26. b.). İzmir: Kanyılmaz Matbaası.

Tunçay, M. (1993). *Türkiye'de Piyango Tarihi ve Milli Piyango İdaresi.* Ankara: Milli Piyango İdaresi Yayını.

Uğur, A. (2015). Kamusal Finansman Açısından Devlet Piyango Kurumlarının Analizi: Özelleştirme Sürecinde Milli Piyango İdaresi'nin Değerlendirilmesi. *Ekonomik ve Sosyal Araştırmalar Dergisi, 11*(2), 1-24.

Yaşar, M. (2010, Haziran 1). Şans Oyunları. *Kahramanmaraş Sütçü İmam Üniversitesi Sosyal Bilimler Dergisi, 7*(2), 101-142. https://dergipark.org.tr/tr/pub/ksusbd/issue/10279/126109 (03.09.2022).

Yaşar, M. (2010, Güz). Şans Oyunları ve İddaa. *Elektronik Sosyal Bilimler Dergisi , 9*(34), 138-171. https://dergipark.org.tr/tr/download/article-file/70229 (08.09.2022).

THEORETICAL BASES OF THE BASIC BUDGET DEFICIT-INFLATION RELATION IN THE CONTEXT OF INTERTEMPORAL BUDGET CONSTRAINT

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Abstract

To do econometric analysis of the inflation-budget deficit relations wafts sometimes to the different results from the different countries to the researcher. Does this originate from the inconsistency of the theory? According to us, these discrepancies don't originate from inconsistency of theory. We are of the opinion that the theoretical bases aren't formed enough on inflation-budget deficit relations. These inabilities cause to being constituted in the inadequate and poor shapes also of the econometric models.

First of all, to prevent the wrong economic modellings is need us to do exactly the mathematical modellings of theoretical bases. This will bring about the result to be consistent of the econometric modellings and the results of econometric search when mathematical modellings of theoretical bases are exactly done. Our objective, the various tropisms in mathematical modellings would reveal while we do this study. We have tried to involve these different tropisms also while we form the models in our study.

Basic subject of our study is to provide the glibness in relation of budget deficit and inflation. Aim of our study is to form the infrastructure of concepts appertaining to the mathematical economics. The method of study is the kernel modelling of fuzzy logic. Our discoveries indicate to be possible of impressing the dependent variables (inflation and budget deficit) by the basic independent economical variables. In context of conclusion is possible to provide the economic growth without falling the impasse of budget deficit and inflation in the numeral space.

Keywords: Budget deficit, inflation, fuzzy logic, interest rate, kernel modelling
JEL codes: E31, H62, H69

1. Introduction

As the budget deficits bring about macroeconomic problems, governments want to keep these deficits at a reasonable level. The first observed macroeconomic impact of budget deficits is generally the increase in inflation. Therefore, in order to achieve financial stability which is the ultimate goal of monetary policy, it is important to control budget deficits and financial outlook in a country (İpek & Akar, 2016: 168).

Governments try to finance budget deficits by printing money, borrowing from domestic or foreign markets. So, the macroeconomic impact or consequences of budget deficits vary depending on the way in which this deficit is financed. Covering the deficit by printing money leads to inflation, while financing by domestic borrowing raises interest rates and causes credit volume to shrink (Doğru & Şentürk, 2013: 90). Besides, the payment of foreign debt and foreign debt interests, which are due to be paid, by increasing the money supply in the domestic market increases inflation.

Significance of study is in its indicating the method of multidimensional analytic thinking in numeral space for the main branch of the public finance. Aim of study is to form the infrastructure of concepts appertaining to the mathematical economics. The method of study is the kernel modelling of fuzzy logic. Scope of study is limited with the propositions and the proofs in relations of inflation and budget deficit within the outward economy.

2. Theoretical Framework

Classical economists say that the main determinant of inflation is monetary factors and fiscal policy has no effect on inflation. On the contrary, Keynes focuses on the demand side problems of the economy, contrary to the classics, and argues that budget deficits resulting from the increase in public expenditures or the decrease in tax revenues may affect inflation by increasing demand (Bedir & Dikmen, 2014: 891). Under the assumption of full employment in the economy, the monetarist macroeconomic model suggests that the increase in the real value of bonds will increase the value of net assets in the economy and consequently the budget deficits will increase the price level together with the aggregate expenditures (Altıntaş, Çetintaş & Taban, 2008: 190).

Sargent & Wallace (1981) state that the central bank will have difficulty in monetizing budget deficits, either in the current year or in the future. If the budget deficits persist, the amount of money doesn't increase much, and the debt stock grows, the central bank encounters Unpleasant Monetarist Arithmetic and is forced to increase both money supply and inflation. Moreover, when the interest rate on government bonds is higher than the economy's growth rate, the central bank becomes unable to control the monetary base and inflation. The monetarist approach advocates that the central bank should be independent in order to prevent this and to generate fiscal surpluses. If the independent central bank acts rigidly in monetary expansion, the treasury will have to generate surpluses to reduce its debt stock (Günaydın, 2004: 164-165).

Budget deficits financed through borrowing increase real interest rates, and interest payments start to be paid by borrowing. At the end of this process, debt stock and interest payments gradually increase. Ultimately, the government increases the money supply to

repay these extremely high debts, which leads to a much higher inflation (Günaydın, 2004: 165). However, foreign debts help to reduce domestic interest rates and meet import costs in the long term, thus reducing the general level of prices. On the other hand, budget deficits can be tried to be covered by increasing taxes or borrowing from the domestic market with high interest rates. The budget deficit financed by domestic borrowing will lead to an increase in public expenditures and will reduce private sector expenditures. In this case, the net effect of the budget deficit on consumer prices will be uncertain (Doğru, 2014: 115).

According to Ricardian Equivalence Theorem, the public is able to perceive that debt financing will be financed by future taxes and that the avoided taxes in the current period will be offset by the value of future taxes and that private savings will be adjusted to compensate for changes in the national savings level. Therefore, such a policy implementation will not cause any change on aggregate demand, interest rate and prices. Consequently, public deficits will not create a wealth effect and fiscal policy will be ineffective (Dornbusch & Fischer, 1994:587; Saçkan, 2006: 11).

Barro (1974) supports the Ricardian Equivalence Theorem and state that tax increases would not have an effect on consumption expenditures, but the increase in taxes positively affect disposable income by increasing savings. Thus, the private sector will increase its savings in order to meet the expected increase in taxes in the future. Consequently, covering budget deficits by creating additional private sector savings or selling government bonds will not have a negative impact on interest rates, investments and net exports (Altıntaş et al., 2008: 187-188).

In the Fiscal Theory of the Price Level developed under the leadership of Leeper (1991), a direct and indirect relationship is established between the general level of prices and fiscal policies. In this theory, it is stated that budget deficits and financing policies applied to close these deficits will have an inflationary effect. Woodford (1995) describes a simple example of the process by which fiscal policies affect inflation. An increase in the general level of prices will lead to a decrease in the net real value of private sector assets as well as the value of debt securities. The decrease in private sector assets will reduce the aggregate demand through the effect of wealth.

Tanzi (1978) states that due to reasons such as the delay of tax collection and the flexibility of tax system, the increase in inflation decreases the real value of tax revenues. In developing countries, the decline in the real value of tax revenues due to inflation leads to an increase in the budget deficit. Patinkin (1993) propounds that an increase in inflation rate causes a decrease in real public expenditures. Thus, inflation increases are effective in decreasing the real value of expenditures and reducing budget deficits.

3. Empirical Literature

While some of the studies in the literature show that budget deficits and inflation are positively related to each other, others show that they are negatively related. However, there are studies suggesting that inflation and budget deficits don’t affect each other in any way. It is difficult to say that there is a clear consensus in the literature on the relationship

between budget deficit and inflation. This part of the study includes empirical studies that are implemented in Turkey and in the world.

Fischer & Easterly (1990) conclude that the correlation between budget deficits and inflation is weak in low inflation periods and is quite high in hyperinflation periods. In this study, it has been suggested that the monetization of budget deficits increases inflation, leads to a fall in real tax revenues and an increase in the budget deficit. Moreover, it is emphasized that a moderate budget policy should be followed for stability and sustainable growth. Neyaptı (2003) founds that budget deficits positively affect inflation in countries without central bank independence and financial market development in the study conducted with panel data tests for 54 developed and less developed countries. Ishaq & Mohsin (2015) conduct their studies for 11 Asian countries using panel data set and reveal that the financing of budget deficits by seigniorage led to inflation. In addition, in the presence of institutions that are not strong enough and well designed, there is a much stronger relationship between budget deficits and inflation. When financial markets are fragile, it is the easiest way for governments to create money in financing the budget deficit. The study emphasizes that central bank independence is very important in the budget deficit-inflation relationship. Şahin (2019) suggests that budget deficits have a significant and positive impact on inflation in both short term and long term in Turkey via ARDL method.

Kasseeah, Weng & Moheeput (2011), in their studies for a sample of 20 African countries by panel data, conclude that inflation drops as the independence of Central Bank increases. Further, a significant and positive relationship is found between the inflation and budget deficit which is an indicator used in the measurement of the Central Bank independence. Lin & Chu (2013) examine 91 countries with dynamic panel quantile regression model and reveal that budget deficits are more inflationary than high inflation rates in periods of high inflation. Moreover, it is emphasized that chronic budget deficits have a more inflationary effect in high and medium inflation economies than in low inflation economies. Egeli (1999), in his study with the least squares method for 23 developing countries, finds that the effect of inflation on budget deficits is negative due to inflation tax. Abdioğlu & Terzi (2009) suggest that there is a negative connection between inflation and budget deficits in the long term in their studies on the Turkish economy with the Pesaran, Shin and Smith (2001) bound testing approach.

Koru & Özmen (2003) could not determine a direct relationship between budget deficits and inflation with the Johansen cointegration and VAR method for Turkey, and thus no results supporting the monetarist theory and fiscal theory of price level are found. Sahan & Bektasoglu (2010) analyses 16 countries of EU and Turkey by employing panel cointegration test and concludes that there is no long term relationship between inflation and deficits in developed countries, whereas Turkey has a long term relationship among inflation and budget deficit. Georgantopoulos & Tsamis (2011) could not find any significant correlation between budget deficits and inflation for Greece by VECM and Johansen cointegration analysis. Chukwuani & Egiyi (2020) conclude that there is no causal nexus between inflation and budget deficit in the study conducted with time series for Nigeria.

Khieu (2021) reveals that budget deficits do not have a significant effect on inflation in his study using the VAR model for Vietnam.

4. Modelling of the Optimistic and Pessimistic Scenarios

We can model the intertemporal budget constraint in the following manner:

$$B_0 = \sum_{t=1}^{\infty} r_t(R_t - G_t) - \lim_{n\to\infty} r_n B_n \quad (1)$$

The budget deficits are little than the total debt stock if the $\lim_{n\to\infty} r_n B_n$ term is little than zero here and it's supposed that the government couldn't provide intertemporal budget constraint. Government will meet by the perpetual debt to the financing of the expenditures under the circumstances and the due debts will be financed by the debt again. Above

r: Interest rate,

R: Public incomes,

G: Public expenditures and

B: Budget balance symbolize.

We can do the following modelling when we evaluated in the light of the basic budget deficit to the above situation generating in intertemporal budget constratint.

$$B_t = \sum_{t=1}^{\infty} r_t(G_t - NIP_t) - \lim_{t\to\infty} r_t R_t \quad (2)$$

In the event that $\lim_{t\to\infty} r_t R_t$ term is immeasurably small than zero here; the public incomes are immeasurably small than the difference of the public expenditures and the net interest payments and they are immeasurably small also than the total debt stock and government can't liquidate total debt stock except that it doesn't provide the noninterest surplus. This situation we have modelled above, express' the dilemma of the chronic budget deficit. This situation will create the ascent also on the interest rates. Above

NIP: symbolizes net interest payments.

Proposition 1: We can propose on an optimistic first proposition of that kind to get rid of the debt helical when looking to the subject in terms of budget constraint:

$$B_0 = \sum_{t=1}^{\infty} r_t\,(R_t - R_{t-1}) > 0 \vee \lim_{n\to\infty} r_n B_n = 0 \Rightarrow \sum_{t=1}^{\infty} r_t\,(R_t - G_t) + \lim_{n\to\infty} r_n\,B_n \quad (3)$$

Proof 1: If we consider formation of the real interest in the financial markets; consequently

$$\sum_{t=1}^{\infty} r_t - r_{t-1} < 0 \Rightarrow \sum_{t=1}^{\infty} pi_t - pi_{t-1} < 0 \quad (4)$$

Here

pi: symbolizes the price index.

Proposition 2: We can propose on an optimistic second proposition of that kind to get rid of debt helical when subject was addressed in terms of budget constraint:

$$B_0 = \sum_{t=1}^{\infty} r_t\,(G_t - G_{t-1}) < 0 \vee \lim_{n\to\infty} r_n\,B_n = 0 \Rightarrow \sum_{t=1}^{\infty} r_t(R_t - G_t) + \lim_{n\to\infty} r_n\,B_n \quad (5)$$

Proof 2: If it is considered formation of real interest in financial markets; all in all

$$\sum_{t=1}^{\infty} r_t - r_{t-1} < 0 \Rightarrow \sum_{t=1}^{\infty} pi_t - pi_{t-1} < 0 \quad (6)$$

Synchronous Proposition 1: We can propose on a synchronous optimistic proposition of that kind to provide getting rid of debt helical when investigating to the trouble in terms of budget constraint:

$$B_0 = \sum_{t=1}^{\infty} r_t\,(R_t - R_{t-1}) > 0 \vee \sum_{t=1}^{\infty} r_t\,(G_t - G_{t-1}) < 0 \vee \lim_{n\to\infty} r_n\,B_n = 0 \Rightarrow \sum_{t=1}^{\infty} r_t(R_t - G_t) + \lim_{n\to\infty} r_n\,B_n \quad (7)$$

Synchronous Proof 1: When we investigated formation of real interest in financial markets; result

$$\sum_{t=1}^{\infty} r_t - r_{t-1} < 0 \Rightarrow \sum_{t=1}^{\infty} pi_t - pi_{t-1} < 0 \quad (8)$$

Proposition 3: It can be proposed on a pessimistic first proposition as follows for debt helical to be included when we maintained in terms of budget constraint our approach to subject:

$$B_0 = \sum_{t=1}^{\infty} r_t\,(R_t - R_{t-1}) < 0 \vee \lim_{n\to\infty} r_n B_n < 0 \Rightarrow \sum_{t=1}^{\infty} r_t\,(R_t - G_t) - \lim_{n\to\infty} r_n\,B_n \quad (9)$$

Proof 3: The expansion of the realization when we considered formation of real interest in financial markets

$$\sum_{t=1}^{\infty} r_t - r_{t-1} > 0 \Rightarrow \sum_{t=1}^{\infty} pi_t - pi_{t-1} > 0 \quad (10)$$

Proposition 4: We can propose such as on a pessimistic second proposition as to the included debt helical when our approach to subject continued in terms of budget constraint:

$$B_o = \sum_{t=1}^{\infty} r_t\,(G_t - G_{t-1}) > 0 \vee \lim_{n\to\infty} r_n\,B_n < 0 \Rightarrow \sum_{t=1}^{\infty} r_t\,(R_t - G_t) - \lim_{n\to\infty} r_n\,B_n \quad (11)$$

Proof 4: When it was considered formation of real interest in financial markets; mechanism:

$$\sum_{t=1}^{\infty} r_t - r_{t-1} > 0 \Rightarrow \sum_{t=1}^{\infty} pi_t - pi_{t-1} > 0 \quad (12)$$

Synchronous Proposition 2: We can propose such as on a synchronous pessimistic proposition reference to included debt helical when we continued our approach to subject in terms of budget constraint:

$$B_0 = \sum_{t=1}^{\infty} r_t\,(R_t - R_{t-1}) < 0 \vee \sum_{t=1}^{\infty} r_t\,(G_t - G_{t-1}) > 0 \vee \lim_{n\to\infty} r_n\,B_n < 0 \vee \lim_{n\to\infty} r_n B_n < 0 \Rightarrow \sum_{t=1}^{\infty} r_t\,(R_t - G_t) - \lim_{n\to\infty} r_n\,B_n \quad (13)$$

Synchronous Proof 2: When it was investigated formation of real interest in financial markets, result:

$$\sum_{t=1}^{\infty} r_t - r_{t-1} > 0 \Rightarrow \sum_{t=1}^{\infty} pi_t - pi_{t-1} > 0 \quad (14)$$

Maximax Proposition 1: We can propose thus on an optimistic-pessimistic proposition reference to included debt helical when we addressed also subject in terms of budget constraint:

$$B_0 = \sum_{t=1}^{\infty} r_t\,(R_t - R_{t-1}) > 0 \vee \sum_{t=1}^{\infty} r_t\,(G_t - G_{t-1}) > 0 \vee \lim_{n\to\infty} r_n\,B_n < 0 \Rightarrow \sum_{t=1}^{\infty} r_t\,(R_t - G_t) - \lim_{n\to\infty} r_n\,B_n \quad (15)$$

Maximax Proof 1: When focusing on the inflation in terms of formation of real interest in financial markets, the result:

$$\sum_{t=1}^{\infty} r_t - r_{t-1} > 0 \Rightarrow \sum_{t=1}^{\infty} pi_t - pi_{t-1} > 0 \quad (16)$$

Proposition 5: We can propose on an optimistic proposition as follows reference to included debt helical when we addressed in terms of the basic budgetary deficit to trouble of budgetary deficit:

$$B_t = \sum_{t=1}^{\infty} r_t\,(G_t - G_{t-1}) < 0 \vee \lim_{t\to\infty} r_t\,R_t > 0 \Rightarrow \sum_{t=1}^{\infty} r_t\,(G_t - NIP_t) + \lim_{t\to\infty} r_t\,R_t \quad (17)$$

It's seen to be gone the monetization by the treasury and the central bank here and the effect of this has been demonstrated below too.

Proof 5: When we focused on the inflation as considering formation of real interest in financial markets;

$$\sum_{t=1}^{\infty} r_t - r_{t-1} < 0 \Rightarrow \sum_{t=1}^{\infty} pi_t - pi_{t-1} < 0 \quad (18)$$

Proposition 6: It can be proposed on an optimistic proposition as follows reference to included debt helical when we investigated in terms of basic budgetary deficit to trouble of budgetary deficit:

$$B_t = \sum_{t=1}^{\infty} r_t\,(NIP_t - NIP_{t-1}) < 0 \vee \lim_{t\to\infty} r_t\,R_t > 0 \Rightarrow \sum_{t=1}^{\infty} r_t\,(G_t - NIP_t) + \lim_{t\to\infty} r_t\,R_t \quad (19)$$

Proof 6: When we addressed as considering the compound of real interest in financial markets, result:

$$\sum_{t=1}^{\infty} r_t - r_{t-1} < 0 \Rightarrow \sum_{t=1}^{\infty} pi_t - pi_{t-1} < 0 \quad (20)$$

Synchronous Proposition 3: We can propose on a synchronous optimistic proposition thus to enable to get rid of debt helical when investigating trouble in terms of basic budgetary deficit:

$$B_t = \sum_{t=1}^{\infty} r_t\,(G_t - G_{t-1}) < 0 \vee \sum_{t=1}^{\infty} r_t\,(NIP_t - NIP_{t-1}) < 0 \vee \lim_{t\to\infty} r_t\,R_t > 0 \Rightarrow \sum_{t=1}^{\infty} r_t(G_t - NIP_t) + \lim_{t\to\infty} r_t R_t \quad (21)$$

Synchronous Proof 3: When we consequently focused on inflation as addressing the formation of real interest in financial markets;

$$\sum_{t=1}^{\infty} r_t - r_{t-1} < 0 \Rightarrow \sum_{t=1}^{\infty} pi_t - pi_{t-1} < 0 \quad (22)$$

Proposition 7: It can be proposed on a pessimistic proposition as follows reference to included debt helical when we addressed with regard to basic budgetary deficit to problem of budgetary deficit:

$$B_t = \sum_{t=1}^{\infty} r_t\,(G_t - G_{t-1}) > 0 \vee \lim_{t\to\infty} r_t\,R_t < 0 \Rightarrow \sum_{t=1}^{\infty} r_t\,(G_t - NIP_t) - \lim_{t\to\infty} r_t\,R_t \quad (23)$$

It's seen that treasury and central bank haven't gone to monetization in the above equity and the impartial monetary policy is followed and the reflection of this has been demonstrated below too.

Proof 7: It's result us to reason when we investigated inflation as considering compound of real interest in financial markets:

$$\sum_{t=1}^{\infty} r_t - r_{t-1} > 0 \Rightarrow \sum_{t=1}^{\infty} pi_t - pi_{t-1} > 0 \quad (24)$$

Proposition 8: It can be made a pessimistic proposition as follows reference to included debt helical when we evaluated with regard to basic budgetary deficit to trouble of budgetary deficit:

$$B_t = \sum_{t=1}^{\infty} r_t\,(NIP_t - NIP_{t-1}) > 0 \vee \lim_{t\to\infty} r_t\,R_t < 0 \Rightarrow \sum_{t=1}^{\infty} r_t\,(G_t - NIP_t) - \lim_{t\to\infty} r_t\,R_t \quad (25)$$

It's got the impression that treasury and central bank haven't gone to monetization in above equity and they have followed an impartial monetary policy and it's seen also reflection of this below.

Proof 8: Result is reasoned when we looked at the subject of inflation as considering formation of real interest in financial markets:

$$\sum_{t=1}^{\infty} r_t - r_{t-1} > 0 \Rightarrow \sum_{t=1}^{\infty} pi_t - pi_{t-1} > 0 \quad (26)$$

Synchronous Proposition 4: We can propose on such as a synchronous pessimistic proposition reference to included debt helical when we addressed with regard to basic budgetary deficit to problem:

$$B_t = \sum_{t=1}^{\infty} r_t\,(G_t - G_{t-1}) > 0 \vee B_t = \sum_{t=1}^{\infty} r_t\,(NIP_t - NIP_{t-1}) > 0 \vee \lim_{t\to\infty} r_t\,R_t < 0 \Rightarrow \sum_{t=1}^{\infty} r_t\,(G_t - NIP_t) - \lim_{t\to\infty} r_t\,R_t \quad (27)$$

It's thought that treasury and central bank have followed an impartial monetary policy as not clashing to monetization in this proposition and proof of this is as follows too.

Synchronous Proof 4: When we got under the lens inflation in the fashion of an active result as reckoning with formation of real interest in financial markets, result:

$$\sum_{t=1}^{\infty} r_t - r_{t-1} > 0 \Rightarrow \sum_{t=1}^{\infty} pi_t - pi_{t-1} > 0 \quad (28)$$

Minimaxmax Proposition 1: We can propose on an optimistic-pessimistic-optimistic proposition thus reference to included debt helical when we investigated in the light of budget constraint also to trouble:

$$B_t = \sum_{t=1}^{\infty} r_t\,(G_t - G_{t-1}) < 0 \vee \sum_{t=1}^{\infty} r_t\,(NIP_t - NIP_{t-1}) > 0 \vee 0 \vee \lim_{t\to\infty} r_t\,R_t > 0 \Rightarrow \sum_{t=1}^{\infty} r_t\,(G_t - NIP_t) + \lim_{t\to\infty} r_t\,R_t \quad (29)$$

Treasury and central bank follow a partial monetary policy as going to monetization in this proposition and proof of this is in the following manner.

Minimaxmax Proof 1: The emergent result is when we focused on inflation as considering compound of real interest in financial markets, as supposing to be provided in the economic effectiveness:

$$\sum_{t=1}^{\infty} r_t - r_{t-1} < 0 \Rightarrow \sum_{t=1}^{\infty} pi_t - pi_{t-1} < 0 \quad (30)$$

Miniminimin Proposition 1: We can propose on an optimistic-optimistic-optimistic proposition such as reference to the process of included debt helical when we addressed with regard to budget constraint also to problem:

$$B_t = \sum_{t=1}^{\infty} r_t\,(G_t - G_{t-1}) < 0 \vee \sum_{t=1}^{\infty} r_t\,(NIP_t - NIP_{t-1}) < 0 \vee \lim_{t\to\infty} r_t\,R_t < 0 \Rightarrow \sum_{t=1}^{\infty} r_t\,(G_t - NIP_t) + \lim_{t\to\infty} r_t\,R_t \quad (31)$$

Treasury and central bank follow an impartial monetary policy as not clashing monetization and proof of this is in the following manner.

Miniminimin Proof 1: The apparent result is when it was concentrated on inflation as considering compound of real interest in financial markets, as supposing to be been active economically:

$$\sum_{t=1}^{\infty} r_t - r_{t-1} < 0 \Rightarrow \sum_{t=1}^{\infty} pi_t - pi_{t-1} < 0 \quad (32)$$

5. Conclusion

The important thing in relation of inflation-budgetary deficit is to form the path of the economic growth which will rescue from debt helical to the economy. Also ad hoc, it's needed that the growth rate is higher from the rate of the debt increase. Only, the basic trouble is that growth will been provided by what kind of the funds. According to us, the solution of getting rid of debt helical is over here too. This means to continue the vicious cycle if the provided funds by the borrowing is put under growth's order while it is achieved growth. Nowadays, the expenditures achieving growth are the R&D (research and development) expenditures and expenditures which are spended for the environmental technologies. In our opinion, growth should been achieved by means of financing via monetization of R&D expenditures and enviromental technologies' expenditures so that this means to be used monetization at the direction of the increasing economic productivity.

The important factor causing inflation is blinked when the approach of inflation-budgetary deficit is looked from the viewpoint of the primary budgetary deficit. This factor is to constitute the exception of interest which is paid from the government budget. It's required to minimize possibly the effect of this exogenous variable on government budget. Being looked from the viewpoint of primary budgetary deficit to approach of inflation-budgetary deficit or rather, being blinked the interest element can't hinder to concretize the inflationist effect of interest on economy. As for approach of budget constraint is to embody in its structure the inflationist effect of interest. However, even so we have addressed basic budgetary deficit in our analysis and our approach.

We have addressed the relation of the interest rate and the inflation rate in our study. Inflation rate is an important component of interest rate. Consequently, the decrease in budgetary deficit, the fall in interest rates are provided and therefore, the fall

also in the rate of the cost inflation being a derivative of inflation rate is seen when we endured the optimistic scenario. Being a great contrast to, the rise in budgetary deficit causes to the ascent in interest rates and this provides the inflation rise via cost inflation too when we endured the pessimistic scenario. The situation us to try to describe above is such as the two edged knife. As for, the solution of this trouble endures mathematically to the decrease of budgetary deficit. In asmuch as, the public sector is an important player in the market.

References

Abdioğlu, Z. & Terzi, H. (2009). "Enflasyon ve Bütçe Açıkları İlişkisi: Tanzi ve Patinkin Etkisi", *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi,* No: 23(2), ss. 195-211.

Altıntaş, H., Çetintaş, H. & Taban, S. (2008). "Türkiye'de Bütçe Açığı, Parasal Büyüme ve Enflasyon Arasındaki İlişkinin Ekonometrik Analizi: 1992-2006", *Anadolu Üniversitesi Sosyal Bilimler Dergisi,* No: 8 (2), ss. 185-208.

Barro, R. (1974). "Are Government Bonds Net Wealth?", *Journal of Political Economy,* Vol. 82 (6), pp. 1095-1117.

Bedir, S. & Dikmen, A. (2014). "Bütçe Açığı ve Enflasyon: Türkiye İçin Bir Sınır Testi Yaklaşımı", International Conference on Eurasian Economies, 1-3 July 2014, Skopje, Macedonia.

Chukwuani, V. N. & Egiyi, M. A. (2020). "Nexus Between Budget Deficit and Inflation: Granger-Causality Test Approach", *International Journal of Academic Accounting, Finance & Management Research,* Vol. 4 (10), pp. 19-23.

Doğru, B. (2014). "Yüksek Enflasyon Dönemlerinde Bütçe Açığı ve Enflasyon Arasında Nedensellik İlişkisi Var mıdır? 1978-2002 Dönemi Türkiye Örneği", *Eskişehir Osmangazi Üniversitesi İİBF Dergisi,* No: 9 (1), ss. 113-129.

Doğru, B. & Şentürk, S. (2013). "Latin Amerika Ülkelerinde Bütçe Açığı ve Enflasyon Arasındaki Eş Bütünleşme İlişkisinin Analizi", *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi,* (41), ss. 89-109.

Dornbusch, R. & Fischer, S. (1993). *Macro Economics,* 6th Edition, New York: McGraw-Hill Inc.

Egeli, H. (1999). "Gelişmekte Olan Ülkelerde Bütçe Açıkları", *Süleyman Demirel Üniversitesi İİBF Dergisi,* No: 4(4), ss. 1-14.

Fischer, S. & Easterly, W. (1990). "The Economics of the Government Budget Constraint", *The World Bank Research Observer,* Vol. 5 (2), pp. 127-142.

Georgantopoulos, A. & Tsamis, A. (2011). "The Macroeconomic Effects of Budget Deficits in Greece: A VAR-VECM Approach", *International Research Journal of Finance and Economics,* (79), pp. 156-166.

Günaydın, İ. (2004). "Bütçe Açıkları Enflasyonist Midir? Türkiye Üzerine Bir İnceleme", *Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi,* No: 6 (1), ss. 158-181.

Ishaq, T. & Mohsin, H. (2015). "Deficits and Inflation: Are Monetary and Financial Institutions Worthy to Consider or Not?", *Borsa Istanbul Review,* Vol. 15 (3), pp. 180-191.

İpek, E. & Akar, S. (2016). "Bütçe Açığı ve Enflasyon Arasındaki İlişki: Türkiye İçin Ampirik Bir Analiz", *Marmara Üniversitesi İktisadi ve İdari Bilimler Dergisi,* No: 38 (2), ss. 167-189.

Kasseeah, H., Weng, J. & Moheeput, K. (2011). "Central Bank Indepedence: Evidence from Africa", *Journal of Emerging Trends in Economics and Management Sciences,* Vol. 2 (4), pp. 325-332.

Khieu, H. V. (2021). "Budget Deficits, Money Growth and Inflation: Empirical Evidence from Vietnam", *Fulbright Review of Economics and Policy,* Vol. 1(1), pp. 61-78.

Koru, A. & Özmen, E. (2003). "Budget Deficits, Money Growth and Inflation: The Turkish Evidence", *Applied Economics,* No: 35 (5), ss. 591-596.

Leeper, E. (1991). "Equilibria Under Active and Passive Monetary and Fiscal Policies", *Journal of Monetary Economics,* Vol. 27 (1), pp. 129-147.

Lin, H. & Chu, H. (2013). "Are Fiscal Deficits Inflationary?", *Journal of International Money and Finance,* Vol. 32 (1), pp. 214-233.

Neyaptı, B. (2003). "Budget Deficits and Inflation: The Roles of Central Bank Independence and Financial Market Development", *Contemporary Economic Policy,* Vol. 21 (4), pp. 458-475.

Patinkin, D. (1993). "Israel's Stabilization Program of 1985, or Some Simple Truths of Monetary Theory", *Journal of Economic Perspectives,* Vol. 7 (2), pp. 103-128.

Saçkan, O. (2006). "Genel Fiyat Düzeyinin Belirlenmesinde Para ve Maliye Politikası Dominant Rejimler: Türkiye Örneği, 1988-2005", *Uzmanlık Yeterlilik Tezi,* TCMB Emisyon Genel Müdürlüğü, Ankara.

Sahan, F. & Bektasoglu, Y. (2010). "A Panel Cointegration Analysis of Budget Deficit and Inflation for EU Countries and Turkey", Empirical Studies in Social Sciences, 6th International Student Conference, 14-15 April 2010, Izmir University of Economics, Turkey.

Sargent, T. & Wallace, N. (1981). "Some Unpleasant Monetarist Arithmetic", *Federal Reserve Bank of Minneapolis Quarterly Review,* Vol. 5 (3), pp. 1-17.

Şahin, B. (2019). "Analysis of the Relationship Between Inflation, Budget Deficit and Money Supply in Turkey by ARDL Approach: 1980-2017", *Journal of Life Economics,* Vol. 6 (3), pp. 297-306.

Tanzi, V. (1978). "Inflation, Real Tax Revenue, and the Case for Inflationary Finance: Theory with an Application to Argentina", *Staff Papers,* Vol. 25 (3), pp. 417-451.

Woodford, M. (1995). "Price-Level Determinacy Without Control of a Monetary Aggregate", *Carnegie-Rochester Conference Series on Public Policy,* 43, pp. 1-46.

Financialization of Consumer Loans and Aggregate Demand Management

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Abstract:

Aggregate demand management, in terms of fiscal policy, is the government's making changes in public revenues and expenditures in order to achieve its macroeconomic goals. These changes can also affect the demands of individuals by influencing their incomes. In this study, it is discussed how aggregate demand management is affected by increasing financialization and access to consumer loans. As it is known, financialization has increased in the Turkish economy in parallel with the developments in the world, and new financial instruments have begun to be used. In particular, with the Transition to a Strong Economy Program, the government's borrowing needs have decreased significantly. Financial institutions, especially banks, have turned their attention to consumers, there has been a significant increase in credit cards and consumer loans, and this process continues. In this case, consumers can spend beyond the government's objectives, for example, with a contractionary fiscal policy. In this case, conventional fiscal policy instruments may not be as effective as expected. As a matter of fact, it can be thought that the recent regulations on financial instruments, such as the limitations on credit card installments, have been introduced as a support for conventional policies. In this context, the Turkish case is analyzed within the framework of the changes in household indebtedness after 2001 and the previous period, when consumers' access to credit increased, and their connection with aggregate demand management policies is discussed.

Keywords: Effective fiscal policy, aggregate demand management, financialization
Jel codes: H30, H31

EFFECT OF COVID-19 PANDEMIC ON INFLATION AND TAX PERCEPTION; AN EMPIRICAL REVIEW – COMPARISON OF UNIVERSITY GRADUATES BETWEEN TWO SURVEYS

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Abstract

Tax perception is an important factor affecting tax compliance and, accordingly, tax revenue. In cases where the tax perception is negative, tax compliance decreases and this causes reactions such as tax avoidance or, in more advanced cases, tax evasion. In a crisis, such as the pandemic, when public expenditures are expected to increase, taxpayer compliance will be much more important in collecting taxes that will finance these expenditures. It is known that there are many variables that affect tax perception. In this study, it will be tried to determine how the tax perception is affected during and after a global crisis, namely the pandemic.

Also, this study will analyze whether the Peacock-Wiseman hypothesis is valid in Turkey during the pandemic period. It will be limited to the analysis and comparison of the answers of university graduates who responded to the survey conducted during the pandemic with those of the university graduates who responded to the survey conducted after the pandemic. There will not conduct a full demographic analysis.

Keywords: Tax perception, tax compliance, Covid-19 Pandemic
JEL Codes: H29, J16, J10, K34

1. Introduction

Taxes can be called an administrative act, a sacred duty or interference with the property right, and there are many other definitions of taxes. Many of these definitions ignore the fact that taxes are a social event. No matter for what legal or religious reason we rationalize taxes; tax is an economic burden on those exposed to it. In many cases, taxpayers try to reduce the tax they will bear, and some different taxpayers fulfil their tax duties in a timely and complete manner, even though they may face severe economic consequences.

Tax is a financial burden that individuals have to bear as a result of an administrative act carried out by the tax administration, which has the public power regarding taxation. Although 24.1% of taxpayers consider taxation a sacred duty (Çoban & Sezgin, 2004), the European Commission of Human Rights says, "... any law involving some form of financial liability includes depriving the person of his/her possessions as much as the amount that needs to be paid from the respective assets" (Yaltı, 2006). By this, it states that the taxation process is the result of deprivation of property as much as the part that causes a decrease in the assets and may constitute an intervention to the property right. The European Court of Human Rights (ECtHR), on the other hand, states that it acknowledges the case-law of the European Commission of Human Rights, saying, "that taxation as an intervention to the rights to give assurance in Article 1 of the Protocol" (Yaltı, 2006).

The Covid-19 Pandemic is losing its impact, at least for Turkey. However, the Covid-19 Pandemic, which has been a very serious global crisis since the beginning of 2020 and radically changed the way of thinking of both ordinary people and the people with authority, can also be evaluated with the potential to have an impact on the tax perception of taxpayers. Regardless of how we define the tax, for an ideal tax system, the tax compliance of the taxpayer should be ensured at the highest possible level. One of the most important factors affecting tax compliance is tax perception.

The effect of the Covid-19 Pandemic on the tax perception of taxpayers in the Pandemic's peak period has been examined in the study titled "The Effect of the Covid-19 Pandemic on Tax Perception; An Empirical Review". (Kireçtepe & Açıkgöz; 2022) In this study, the main question is how the tax perception of taxpayers changed after the Covid-19 Pandemic. Also in this study, there will be a follow-up question if the findings of the previous study of Kireçtepe and Açıkgöz were similar to this study. In addition, the participants will be asked whether inflation, which is not included in the aforementioned study and is one of the important study areas of public finance, is perceived as an area affected by the Covid-19 Pandemic in this study. Because of the high level of uncertainty and significant deterioration in public finances caused by the pandemic, tax compliance has become much more complicated. New public finances call for a rethink of taxation and expenditure policies once the recovery is well underway.

In the context of the Peacock-Wiseman theory, which is one of the theories that try to describe the reason for the increase in public expenditures, taxpayers are expected to agree to pay higher taxes in times of crisis. In the study, it will also be analysed whether there is a change in taxpayers' view of paying taxes during and after the Covid-19 Pandemic period.

2. Analyses of Demographic Variables

Table 1: Data on Age of Participants

Variables	Number	Percentage
Age (New)		
18-25	17	%12,6
26-35	9	%4,5
36-50	64	%47,4
51-65	40	%29,6
66+	5	%3,7
Total	135	%100
Age (Old)		
18-25	17	%10,7
26-35	21	%13,2
36-50	28	%17,6
51-65	92	%57,9
66+	1	%0,6
Total	159	%100

When we look at the age groups of the respondents, we see that the majority of them are in the 36-65 age range. This situation can be said to indicate that the survey does not properly represent the entire society.

Table 2: Data on Gender of Participants

Variables	Number	Percentage
Gender (New)		
Male	92	%68,1
Female	42	%31,1

Other	1	%0,7
Total		%100
Gender (Old)		
Male	127	%79,9
Female	32	%20,1
Total	159	%100

At older survey, women participants constitute 20.6% of the total participants, while men constitute 79.3%; this rate does not reflect Turkey's demographic structure. At new survey, women participants constitute 31.1% of the total participants, while men constitute 68.1%; this rate still does not reflect Turkey's demographic structure but there is a development between surveys. Although the gender statistics of taxpayers are not kept, it would not be too misleading to mention that the participants in the study have a gender structure close to the gender of taxpayers, given the labour force participation rates (TURKSTAT, 2019).

Table 3: Occupational Changes Because of the Covid-19 Pandemic

Variables	**Number**	**Percentage**
Occupational Changes Because of the Covid-19 Pandemic		
Used to have a job, not anymore	8	%5,9
Used to be an unemployed, not anymore	8	%5,9
Nothing Changed	119	%88,2
Total	159	%100
Occupational Changes Because of the Covid-19 Pandemic		
Used to have a job, not anymore	12	%7,5
Used to be an unemployed, not anymore	3	%1,9
Nothing Changed	144	%90,6
Total	159	%100

When the answers given to the survey are examined, it can be interpreted that the Covid 19 pandemic does not cause new unemployment among university graduates. It can be concluded that there is no significant difference between the results of the two surveys.

Table 4: Data on Marital Status of Participants

Variables	**Number**	**Percentage**
Marital Status (New)		
Married	93	%68,9
Single	42	%31,1
Total		%100
Marital Status (Old)		
Married	116	%73
Single	43	%27
Total	159	%100

Table 5: Data on Occupational Background of Participants

Variables	**Number**	**Percentage**
Occupational Background		
Retired	17	%12,6
Tradespeople	2	%1,5
Worker	21	%15,6
Unemployed	4	%3
Owner of SME	3	%2,2
Civil Servant	47	%34,8
Student/Working	6	%4.4
Student/Not Working	13	%9,6
Self-Employed	22	%16,3
Total	135	%100
Occupational Background		
Tradespeople	5	%3,1
Worker	24	%15,1
Unemployed	8	%5

Owner of SME	18	%11,3
Civil Servant	64	%40,3
Student/Working	4	%2,5
Student/Not Working	15	%9,4
Self-Employed	20	%12,6
Owner of Big Enterprise	1	%0,6
Total	159	%100

We see that people from many different professions respond to the survey. However, the fact that civil servants were in the majority for both surveys and the occupational groups that submitted tax returns were also in the minority may have prevented the desired result in determining tax awareness. But it is also possible to interpret the same situation as follows: Considering the rate based on declaration (GİB, 2019) which is lower than 9% in all income taxes, it is observed that the rate of taxpayers who pays tax based on declaration is high in our sample. Due to the high rate of taxpayers directly dealing with tax, it would be possible to say that the study has a sample with a high sensitivity in tax issues.

3. Evaluation of Results

Table 6: Support Rates of the Government's Struggle Against Covid-19

Variables	Number	Percentage
Do You Support the Precautions Taken by the Government Regarding the Covid-19 Pandemic?		
I Totally Support	10	6,3
I Support	31	19,5
I am Indecisive / Do not Know	18	11,3
I Do not Support	54	34
I Definitely Do not Support	46	28,9
Total	159	100
Did You Support the Precautions Taken by the Government Regarding the Covid-19 Pandemic?		
I Totally Supported	6	4,4

I Supported	55	40,7
I was Indecisive / Did not Know	26	19,3
I Did not Support	30	22,2
I Definitely Did not Support	18	13,3
Total	135	100
Do You Support Lifting the Precautions Taken by the Government Regarding the Covid-19 Pandemic?		
I Totally Support	8	5,9
I Support	48	35,6
I am Indecisive / Do not Know	30	22,2
I Do not Support	35	25,9
I Definitely Do not Support	14	10,4
Total	135	100

One of the surprising results of the study was that although the total support was 25.8% during the pandemic, this support rate increased to 43.5% in the post-pandemic survey. It can be said that the measures that encountered a serious reaction during the pandemic are at least more acceptable after the pandemic. One of the questions added to the post-pandemic survey was about support for the removal of pandemic measures. The fact that those who support and do not support the abolition of these measures are almost equal and the existence of a serious undecided rate of 22,1% shows that there is no consensus for the removal of the measures.

Table 7: Support Status for the Financial Measures Taken by the Government During the Struggle Against Covid-19

Do You Support the Economic Precautions Taken by the Government Regarding the Covid-19 Pandemic?		
I Totally Support	7	4,4
I Support	16	10,1
I am Indecisive / Do not Know	13	8,2
I Do not Support	62	39

I Definitely Do not Support	61	38,4
Total	159	100
Did You Support the Economic Precautions Taken by the Government Regarding the Covid-19 Pandemic?		
I Totally Supported	4	3
I Supported	28	20,7
I was Indecisive / Did not Know	25	18,5
I Did not Support	44	32,6
I Definitely Did not Support	34	25,2
Total	135	100

It is possible to observe a similar phenomenon at the point of economic measures. Especially the fact that the rate of I absolutely do not support is 13% lower and the proposition I support is 10.6% higher, shows that people approached the economic measures taken in the pandemic positively after the pandemic. However, it should not be overlooked that the total support is lower in economic measures. One can argue that this is an old phenomenon which can be dated back even to the 16th century; Machiavelli stated that "people forget losing their fathers more quickly than losing the property they inherited from their fathers " (Machiavelli, 1993)

Table 8: Comparison of the Answers to the Question “Do You Find These Precautions Sufficient?”

Do You Find These Precautions Sufficient?		
I Find Totally Sufficient	2	1,3
I Find Sufficient	9	5,7
I am Indecisive / Do not Know	5	3,1
I Do not Find Sufficient	56	35,2
I Definitely Do not Find Sufficient	87	54,7
Total	159	100
Did You Find These Precautions Sufficient?		
I Found Totally Sufficient	2	1,5

I Found Sufficient	14	10,4
I was Indecisive / Did not Know	8	5,9
I Did not Find Sufficient	51	37,8
I Definitely Did not Find Sufficient	59	43,7
Total	135	100

Similar to the first two questions, it can be commented that the post-pandemic support is relatively higher in finding the measures sufficient. Although the overall rate of I do not sufficient of 81.5% is still very high, the rate was higher at 89.9% during the pandemic.

Table 9: Comparison of the Answers to the Question "Do You Think the Budget Deficit Increased During the Covid-19 Pandemic?"

Do You Think the Budget Deficit Increased During the Covid-19 Pandemic?		
Yes	148	93,1
No	11	6,9
Total	159	100
Did You Think the Budget Deficit Increased During the Covid-19 Pandemic?		
Yes	120	88,9
No	15	11,1
Total	135	100

There seems to be no argument that the budget deficit has increased during the Covid 19 pandemic. However, it can be determined that there is a difference of 4.2% between surveys.

Table 10: Comparison of the Answers to the Question "How has your purchasing power changed compared to before the Covid-19 Pandemic?"

How has your purchasing power changed compared to before the Covid-19 Pandemic? (During Pandemic)

It became higher	1	0,6
It did not change	22	13,8
It became lower	136	85,5
Total	159	100
How has your purchasing power changed compared to before the Covid-19 Pandemic? (After Pandemic)		
It became higher	4	3
It did not change	8	5,9
It became lower	123	91,1
Total	131	100

While the rate of those who said that their economic situation did not change during the pandemic was 13.8%, the rate of those who gave the same answer to the same question after the pandemic decreased to 5.9%. The rate of those who got worse increased from 85.5% to 91.1%.

3. Conclusion

People tend to become more resilient. One can see that one of the surprising results of the study was that although the total support was 25.8% during the pandemic, this support rate increased to 43.5% in the post-pandemic survey. It can be said that the measures that encountered a severe reaction during the pandemic are at least more acceptable after the pandemic. It is possible to observe a similar phenomenon at the point of economic measures. Especially the fact that the rate of I absolutely do not support is 13% lower and the proposition I support is 10.6% higher, shows that people approached the economic measures taken in the pandemic positively after the pandemic.

This result obtained from the survey confirms the Peacock-Wiseman hypothesis. Even though they showed a higher reaction during the crisis, the citizens adapt to the measures taken over time and do not react as highly as in the first moment.

References

Çoban, S. Çoban, H., Sezgin. S. (2004). "Vergi Mükelleflerinin Davranışları Üzerine Ampirik Bir İnceleme: Denizli Örneği", Türkiye'de Vergi Kayıp ve Kaçakları Önlenmesi Yolları. Türkiye 19. Türkiye Maliye Sempozyumu, Yaklaşım Yayınları, Ankara, pp.777-792.

GİB. (2019). Merkezi Yönetim Gelirleri, https://gib.gov.tr/sites/default/files/fileadmin/user_upload/VI/GBG/Tablo_18.xls.htm access date 10.11.2022.

Kireçtepe, B.O., Açıkgöz, B. (2022). Effect of COVID-19 Pandemic on Tax Perception: An Empirical Study. In: Açıkgöz, B., Acar, İ.A. (eds) Pandemnomics: The Pandemic's Lasting Economic Effects. Accounting, Finance, Sustainability, Governance & Fraud: Theory and Application. Springer, Singapore.

N. Machiavelli, N. (1993). Prens, çv. N. Güvenç, İstanbul: Anahtar Yayınevi.

TÜİK. (2020). "İstatistiklerle Kadın", https://data.tuik.gov.tr/Bulten/Index?p=Istatistiklerle-Kadin-2019-33732 , (06 Mart 2020), access date 10.11.2022.

Yaltı, B. (2006). Vergi Yükümlüsünün Hakları, İstanbul: Beta.

Evaluation of Public Policies on Population in Turkey

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Abstract:

While the population includes individuals within a certain period of time in the territory whose borders are determined, the citizenship bond is not taken into account when determining the number of population in this region. Even if the individual has migrated, he is considered a part of the population. The variability of the population between regions depends on many factors. These factors constitute the framework of the population policy to be implemented by the state. Variables such as population growth rate, distribution of the population within national and international borders, and demographic characteristics affect the concept of population policy. All plans, programs and measures taken for the realization of economic, social and societal goals are defined as population policy. It has been seen from the past that Turks were able to establish cities without support and fulfill all the requirements of a normal city life. The Ottomans implemented the policy of resettlement, that is, the policy of "settlement", in order to rule in the conquered regions and to ensure population density. The Ottoman administration, aware of the importance of the population, would make laws in the following years in order to "make easier the marriage process" and assign inspectors to the provinces to increase the marriage rate. There are three types of population policies that we see in the world and in our country in certain periods, "pronatalist, antinalist, to improve the quality and quantity of the population". Pronatalist policies are policies that will increase the population, and antinalist policies are policies that will reduce the population. Countries implement the policies they deem necessary according to the needs of their population structures. In our country, pronatalist practices have been started in order to increase the decreasing population with the end of the years of National Struggle. Between 1927 and 1965, the best method to increase the population was to reduce death rates by reducing death rates during birth and combating epidemic diseases. However, in this period, the aim is to increase the population both in terms of quantity and to carry out studies that support their development in terms of quality. Since 1965, the debates on the need to combat the uncontrolled increase in the population have emerged and the transition to antinatalist policies, which is the opposite of the population increase policy, has been made. With the transition to antinatalist policies, measures were started to be taken to reduce fertility and these measures were legalized. Studies have been carried out on the spread of birth control measures, especially in low-income populations with high fertility rates. The General Directorate of Population Planning was established in 1965 in order to monitor the development of the population and its measures. In this period, it was decided that necessary measures should be taken to increase educational and preventive measures regarding births and deaths. With the transition to the planned economy, it is seen that the population policies have been legalized in the development plans. Along with the development plans, it is aimed to improve the qualifications of the population in terms of education, health and workforce in order to reach a

population structure whose population policies are balanced and in harmony with the aim of sustainable development. At the same time, necessary measures have been taken to increase the quality of life and to minimize the differences between regions. Today, while policies are being implemented to improve the quality and quantity of the population in Turkey, policies are being made to replace the aging population with the young population. According to the understanding of the social state, the state provides support such as maternity benefit (child benefit), breastfeeding and milk aid, part-time work support, caregiver allowance and daycare allowance, and incapacity allowance. With the "3 child policy" initiated in 2009, the necessity of increasing the population has come to the fore. The three-child policy is important in terms of increasing our population. Because while the first child represents the father and the second child represents the mother, the third child adds a plus value to the population. Therefore, while it is important to increase our population, it is important to raise this increasing population in a qualified manner. The aim of our study is to evaluate the effectiveness of population policies implemented in Turkey, taking into account the practices of other countries. The issues of uncontrolled migration and refugee problem, which are one of the important factors in the increase of population today, are excluded from our study. In our study, what can be done for the effectiveness of population policies is listed.

Keywords: Turkey, Population, Population Policies.

JEL Codes: Public Policy, Marriage,Family Structure, Fertility, Family Planning, Child Care , Children ,Youth

Conditional Cash Transfer for Education in Secondary Education as A Public Policy and Fiscal Space Analysis for Developing the Program in Different Scenarios

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Abstract:

The fact that The Conditional Cash Transfer for Education (CCTE), which have been given in order to increase school attendance rates of school-age children in Turkey, has not been able to reach the targeted level of effectiveness since 2013. As a result of the study on the impact of Conditional Education Aid (CCTE) on children's school attendance (A research by Ministry of Family and Social Policies and Gazi University, 2012), it is seen that conditional education aids significantly reduce absenteeism rates. However, there are also studies showing that the practice of program does not work effectively. As the results of research of the UNICEF (2011) Working Team, it is seen that the amount of aid remained the same in the practice of CCTE program, the amount of assistance provided was not high, it was not developed a practice to provide a certain amount of increase towards families who made a certain improvement in the program, the beneficiaries interviewed did not find the benefits of the program at a satisfactory level, in the practice of CCTE program limitation of presenting the program to the poorest 6% looks a problem (UNICEF Working Group, Yılmaz et al., 2011:48-50). Regarding the data for practice of the program, it is seen that the rate of students benefiting from CCTE program at secondary education level (high school) is below 10%. For this reason, in order to continue using CCTE as an effective policy tool to ensure equal opportunity in education, it is seen that there is a need to increase the amount of payments on the one hand, and to remove the obstacles to poor children's access to these aids, on the other. In this context, the main research purpose of the study is to analyze the policies aimed at increasing the amounts paid in order to provide the expected results under various scenarios and to reach wider segments of the CCTE program within the framework of the fiscal field approach in terms of fiscal sustainability. With the analysis of the long-term effects of policies and stabilization programs aimed at reducing government indebtedness, the negative effects of the public expenditure cuts envisaged in these policies and programs on investment and growth have been especially discussed in the fiscal literature. The concept of fiscal space has emerged in the light of discussions on how to create effective policies for growth and poverty reduction without adversely affecting the financial sustainability and debt repayment power of countries. The main axis of these discussions is the success levels and long-term effects of fiscal adjustment programs. A preliminary version of fiscal space definition has made by Heller (2005a, 3) as “the availability of budgetary room that allows a government to provide resources for a desired purpose without any prejudice to the sustainability of a government’s financial position. “Then with including economic stability notion, he expanded the definition as “room in a government´s budget that allows it to provide

resources for a desired purpose without jeopardizing the sustainability of its financial position or the stability of the economy" (Heller 2005b). Perotti (2007) has criticized the fiscal space definitions of IMF-World Bank from two perspectives. His first criticism is that such definitions are not that different from any intertemporal budget constraint definition. He emphasis that it is a common knowledge that to increase expenditures; an increase in revenues, a limitation of other expenditures, a source of aid or raising of the debt stock is required. Furthermore, those definitions suggest borrowing as a proper option on condition that primary surplus would be increased in the future but this condition itself is an issue due to feasibility of fiscal sustainability analysis aimed at fulfilling it. His second fundamental criticism is about defining the targeted objectives. In sum he argues that fiscal space notion is offering nothing new for resolving existing challenges. Roy, Heuty and Rodríguez (2009), acknowledges the validity of these arguments, but they argue that their definition differs by the way they approach to the fiscal sustainability. They emphasis that their fiscal sustainability notion takes into account the institutional structure and the policy implications. Thus, the difference arises from the long term view on sustainability and financing alternatives. Under the fiscal space approach, four financing options are mainly focused on creating resources for a specific purpose. These options include efforts to increase revenues, creating space by improving spending efficiency and decreasing spending, making more use of foreign aid and financing by borrowing. Within the scope of the study, the number of students who are included in the scope of the CCTE program will be estimated based on the current data and projections regarding the population projections of the TURKSTAT, including the 2022-2026 period, and the education attendance rates. will be calculated under the scenario (continuation of the current situation, improved 1 and improved 2). A public net debt sustainability analysis will be conducted to examine the impact of policy costs on debt sustainability. The following method based on the consistency of macro variables will be used. In this way, the relationship between the composition of macro variables and the debt stock is shown and the effect of the decreasing primary surplus as a result of the expansion of public expenditures on the public debt stock is to be examined under two additional scenarios. The basic logic that the analysis built on is that the change in debt stock is the difference between interest expenditure and primary balance plus seniorage (Burnside 2005a, 12): Bt - Bt-1 = It - Xt - (Mt - Mt-1). With dividing both sides of the equation with GDP we obtain the dynamic equation below in which variables are external, under the assumptions that the maturity of the debt is 1 year, interest rates are not constant and average exchange rate equals end of period exchange rate (Burnside 2005b, 63): b̄_t^D+b̄_t^F=((1+R_(t-1)^D)/(1+z_t)) b̄_(t-1)^D+S_t/S_(t-1) (1+R_(t-1)^F)/(1+z_t) b̄_(t-1)^F-x̄_t-σ̄_t Hereb̄_tis domestic currency denominated total public debt to GDP, St is average exchange rate,R_tis nominal interest rate of domestic and foreign debt, z is nominal GDP growth rate, and x is primary surplus to GDP. This analysis makes it necessary to make estimations of domestic and international real interest rates, exchange rate, primary balance, real growth, inflation and GDP deflator. For sustainability analysis, 2022-2026 data will be used by revising the IMF data system (WEO), medium-term programs and Central Bank Expectation surveys. After two alternative policies developed according to the findings obtained at the end of the study, the financial burden created by the increased public expenditures over the budget according to the current situation will be analyzed within the framework of the sustainability of debts.

Keywords: Cash Transfer for Education, Fiscal Space and State Budget, Debt Sustainability

JEL Codes: E 62, H 61, H 63

PREPARATION OF SOCIAL STUDIES TEACHERS FOR SOCIAL STUDIES LESSON FOR SECONDARY SCHOOL TAX EDUCATION: UNDERGRADUATE EDUCATION AND EVALUATION OF MATERIALS USED FOR PREPARATION

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Abstract

One of the United Nations sustainable development goals is quality education. One of the sub-goals of qualified education is to significantly increase the supply of qualified teachers. In order to ensure the increase of qualified teachers, first of all, the current qualifications of the teachers and the document/materials for the education they will give should be evaluated. The aim of this study is to examine the undergraduate education curriculum of social studies teachers for secondary school tax education and to examine the document/materials provided to these teachers via Republic of Turkey Ministry of National Education Education Informatics Network. For this aim the sample was determined as 23 research universities in Turkey, primarily to examine the social studies teaching department course packages. Afterwards, the document/materials offered via Republic of Turkey Ministry of National Education Education Informatics Network for social studies course teachers were examined in the categories of definition, content, justification, presentation and design specific to tax education. No study has yet been found that examines the undergraduate education curriculum of social studies teachers for secondary school tax education and the Republic of Turkey Ministry of National Education Education Informatics Network that they use to prepare for the lesson, with a specific focus on tax education. The course information packages of the universities with social studies teaching departments were examined and it was determined that the public finance course was not included in the undergraduate education. The absence of a course on public finance in the undergraduate course packages of social studies teachers is an obstacle for them to become qualified teachers for tax education. The document/materials provided to these teachers via Republic of Turkey Ministry of National Education Education Informatics Network offers enough document/materials to become a qualified teacher in tax education.

Keywords: Quality Education, Tax Awareness, Tax Education, Tax Compliance, Public Expenditure
JEL Code: 019, H29, H52, I20

1. Introduction

The duty of fulfilling public services is entrusted to the state. As it is known, the state fulfills this duty through its organs and provides most of its financing needs for these services with tax revenues. It is important to collect the tax revenues foreseen in full and on time for the full and timely delivery of public services. Successful collection of the foreseen tax revenues depends on the high tax awareness in the country and the taxpayers being compliant taxpayers. States enact practices such as rewards and financial amnesty/tax amnesty in order to increase tax awareness of taxpayers and to fulfill their tax obligations fully and on time without any intervention. In addition, there are sanctions for taxpayers who show non-compliance. Despite these no state has been able to ensure tax compliance of all taxpayers. With the Law No. 5345, which entered into force in 2006, the tax administration was modernized and tax compliance increased afterwards in Turkey. On the other hand, although there is a decrease in the frequency of its by month in Turkey, amnesty is applied frequently. The frequent use of amnesty shows how difficult it is to change the behavior of adult taxpayers. For this reason, it can be said that it is important for taxpayers to start education at an early age in order to create and increase tax awareness.

It is known that over the last 50 years and more in developed countries, evidence has accumulated that only about 10% of school achievement can be attributed to schools and teachers (Detterman, 2016: 1). 10% may be perceived as a small rate, but it can be said that it will affect the future taxpayer's tax compliance by 10% or more.

One of the United Nations sustainable development goals is quality education (https://sdgs.un.org/goals). One of the sub-goals of qualified education is to significantly increase the supply of qualified teachers. In order to ensure the increase of qualified teachers, first of all, the current qualifications of the teachers and the document/materials for the education they will give should be evaluated. The aim of this study is to examine the undergraduate education curriculum of social studies teachers for secondary school tax education and to examine the document/materials provided to these teachers via Republic of Turkey Ministry of National Education (MEB), Education Informatics Network (EBA).

It is known that in previous studies (Sağbaş & Başoğlu, 2005: Taytak, 2010: Çelik & Eroğlu, 2014: Demir & Ciğerci, 2016: Kandak & Mertol, 2021), studies measuring the tax awareness and perception of secondary school students in Turkey were carried out. In addition, studies on tax education were also found in the social studies textbook. Tax awareness is given to children in Turkey by 6th grade social studies teachers. However, no study has yet been found that deals with the preparations of social studies teachers for this education, which will bring tax awareness to students and directly affect their tax perceptions, with the education they received in the undergraduate period. In addition, no study has yet been found that deals with the resources that these teachers use while preparing for the lesson, in particular tax education. For this reason, it can be said that this study will fill a gap in the literature and thus contribute to the related field.

For this aim, the sample was determined as 23 research universities in Turkey, primarily

to examine the social studies teaching department course packages. These; Middle East Technical, Istanbul Technical, Boğaziçi, Izmir High Technology, Yıldız Technical, Ankara, Istanbul, Erciyes, Hacettepe, Gebze Technical, Ege, Istanbul University-Cerrahpasa, Marmara, Bursa Uludağ, Dokuz Eylül, Atatürk, Gazi, Cukurova, Fırat, Karadeniz Technical, İhsan Doğramacı Bilkent, Sabancı and Koç universities. Afterwards, the document/materials offered via Republic of MEB, EBA for social studies course teachers were examined in the categories of definition, content, justification, presentation and design specific to tax education.

The scope of this study has been determined as the Republic of Turkey Research Universities course information packages and the EBA of the MEB.

2. LITERATURE

2.1. Studies Directly Related to the Study

Only one study directly related to the study was found. According to that study one of the most effective methods of raising tax awareness and ethics is to initiate a process from students and teachers. Because a teacher's tax awareness and moral perception are especially important as they must instill these values in their students who will be potential taxpayers of the future. Therefore, the selected target group was teachers and the focus was their tax perception and awareness. In addition, another important issue is teachers' awareness and moral perception of tax, as they are expected to educate students on the concept of tax (Uzunali et. al., 2021: 132).

In the study examining the tax awareness and moral perceptions of 124 secondary school teachers, it was determined that the tax awareness of the teachers who gave training to increase tax awareness and morality was not sufficient. It has been stated that it would be beneficial to train teachers who receive tax awareness training in this field and to add the subject of tax morality to the education curriculum of the students of universities that are candidates to train teachers on tax awareness (Uzunali et. al., 2021: 145).

2.2. Studies Indirectly Related to the Study

Definition, content, justification, presentation and design categories were used in a study in which textbooks were examined using document analysis (Yılar & Çam, 2020). In another study, the design category was added to these categories (Arıman, 2022).

During the Covid-19 process, applications such as Zoom, WhatsApp, Microsoft Teams were used to continue education remotely. Another preference of teachers is EBA. In the study, which aimed to determine the opinions of social studies teachers about the emergency distance education process implemented in the 2020 epidemic period, it was determined that the distance education process was positive and productive (Yıldırım, 2022: 250-252).

In the study carried out to examine the place and development of Turkey among OECD countries in terms of teacher profile, it has been determined that there are more students per teacher in Turkey at all levels, except for secondary education, compared to the OECD average (Yazıcı & Cemaloğlu, 2022: 37).

In the study, which aims to identify the vital problems of primary and secondary schools and the solution proposals for these problems and the authorized system(s), it has been determined that the professional inadequacies of the teachers are in the seventh place according to the "Pareto Analysis Results Regarding the Vital Problems of Schools" (Aslan, 2021: 242).

In the study, in which the problems encountered in social studies education at primary school level were examined based on the opinions and experiences of social studies teachers who have just started their profession, it was determined that the teachers thought that their theoretical knowledge was sufficient and that they were insufficient in the practice part (Yılmaz & Tepebaş, 2011: 172).

3. METHOD

Qualitative Research Document Analysis was used in this study. Course contents of social studies teaching departments of research universities were examined. Permission was obtained from the MEB to conduct the study. The document/materials offered via MEB EBA for social studies course teachers were examined in the categories of definition, content, justification, presentation and design specific to tax education.

Documents/Materials evaluation in definition, content, justification, presentation and design categories means is below (https://sozluk.gov.tr/):

Definition: To specify or explain the qualities of a concept in full, to describe it. Content: The whole of what is in something, content, mazruf. Justification: Necessary reason, cause of necessity. Presentation: The work of presenting. Design: The principles of integrity, closeness, balance, emphasis and continuity and elements of line, color, texture, form and dimension.

4. FINDINGS

It has been examined whether Middle East Technical, Istanbul Technical, Boğaziçi, Izmir High Technology, Yıldız Technical, Ankara, Istanbul, Erciyes, Hacettepe, Gebze Technical, Ege, Istanbul University-Cerrahpasa, Marmara, Bursa Uludağ, Dokuz Eylül, Atatürk, Gazi, Cukurova, Fırat, Karadeniz Technical, İhsan Doğramacı Bilkent, Sabancı and Koç universities have social studies teaching departments. It has been determined that not all of the research universities have a social studies teaching department. There are social studies teaching departments in Yıldız Technical (https://sbt.yildiz.edu.tr/sosyalbilgiler/), Ankara (http://sbteb.education.ankara.edu.tr/), Erciyes (https://trsos.erciyes.edu.tr/), Ege (https://egitim.ege.edu.tr/tr-7731/sosyal_bilgiler_egitimi_ad.html), Istanbul University-Cerrahpasa (https://ebs. istanbul.edu.tr/home/dersprogram/?id=1143&yil=2016), Marmara (http://isb.aef.marmara.edu.tr/en), Bursa Uludağ

(http://uludag.edu.tr/sosbilegtabd), Dokuz Eylül (https://bef.deu.edu.tr/sbe/?lang=en), Atatürk (https://birimler.atauni.edu.tr/sosyal-bilgiler-egitimi-anabilim-dali/#), Gazi (https://gef-sosyalbilgiler.gazi.edu.tr/), Cukurova (https://egitim.cu.edu.tr/cu/bolumler/turkce-sosyal-bilimler-egitimi/turkce-ve-sosyal-bilimler-egitimi-bolumu), Fırat (http://sbeabd.egitimf.firat.edu.tr/en) universities. It has been determined that a course such as Public Finance in the Social Studies Teaching Undergraduate Curriculum is not an elective course beyond being a compulsory course.

EBA headings and subheadings step by step are as follows (https://mebbis.meb.gov.tr/):

6th Grade Social Studies:

I. Textbooks
II. Helpful resources
III. EBA TV Broadcasts
IV. Practices
V. Written Questions
VI. Unit Tests

6th Grade Social Studies Helpful Resources:

I. 6th Class 1. Theme/Unit Study Fascicles (MEB)
II. 6th Class Study Questions (MEB)
III. Social Studies 6 - 5th Unit Study Fascicle (MEB)
IV. Social Studies 6 - 5th Unit-1 Study Fascicle (Afyonkarahisar)
V. Social Studies 6 - 5th Unit-2 Study Fascicle (Denizli)
VI. Social Studies 6 - 5th Unit-3 Study Fascicle (Uşak)

6th Grade Social Studies, Production, Distribution and Consumption/ "To a Bright Tomorrow with Our Taxes":

I. Topic Lecture,
II. Summary
III. Practice Screening Test,
IV. Teacher Special

Special for Teacher:

I. Subject Test,
II. Practices,
III. Study Questions

Table 1. 6th Class 1. Theme/Unit Study Fascicles (MEB)

Definition	Content	Justification	Presentation	Design
(-)	Responsibility	Responsibility	Invoice	Integrity: Yes Closeness: Yes Balance: Yes Emphasis: None Continuity: Yes

Source: MEB, EBA, (https://mebbis.meb.gov.tr/) 2022.

Table 2. Social Studies 6 - 5th Unit Study Fascicle (MEB)

Definition	Content	Justification	Presentation	Design
"It is the money that the state collects from the citizens according to their income within the framework of the law".	Indirect tax Customs duty Civic duty Government policy Tax rate Purpose, benefits and types of tax	Civic duty Government policy Growth for the state to survive. Providing funds to the state	It is presented based on superficial and plain information. • Student photos, • Dam road bridge tunnel visuals, Table and diagram were used.	Integrity: Yes Closeness: Yes Balance: Yes Emphasis: Yes Continuity: Yes

Source: MEB, EBA, (https://mebbis.meb.gov.tr/) 2022.

Table 3. Social Studies 6 - 5th Unit-1 Study Fascicle (Afyonkarahisar)

Definition	Content	Justification	Presentation	Design
"The money that the state collects from the citizens, either directly or indirectly by adding to the prices of some good or services, according to the law, to be spent on public services. Giving some of their income to the state is called tax. Taxation is a civic duty."	Indirect tax. Civic duty. Government policy. The purpose, benefits and types of tax. T.R. Constitution 73.art.	Civic duty. Government policy. T.R. Constitution 73.art. For the development of the state.	It is presented based on superficial and plain information. • Table and child image were used.	Integrity: Yes Closeness: Yes Balance: Yes Emphasis: Yes Continuity: Yes

Source: MEB, EBA, (https://mebbis.meb.gov.tr/) 2022.

Table 4. Social Studies 6 - 5th Unit-2 Study Fascicle (Denizli)

Definition	Content	Justification	Presentation	Design
"Direct or indirect money collected by the state from its citizens is called tax. Money that the state has taken from citizens in various ways to meet public needs.	Indirect/direct tax Civic duty. Government policy. The purpose and types of tax. Budget. T.R. Constitution 73.art.	Civic duty. Government policy. Contribution to the state treasury. T.R. Constitution 73.art.	It is presented based on superficial and plain information. • Teacher visuals, tables and posters were used.	Integrity: Yes Closeness: Yes Balance: Yes Emphasis: Yes Continuity: Yes

In our country, the money taken from the citizens to provide public services, that is, to meet the needs of the people in matters such as education, road, health, security and justice, is called tax."				

Source: MEB, EBA, (https://mebbis.meb.gov.tr/) 2022.

Table 5. Social Studies 6 - 5th Unit-3 Study Fascicle (Uşak)

Definition	Content	Justification	Presentation	Design
"The money that the state receives from individuals and institutions in order to perform public services is called tax."	Government policy. The purpose and types of tax.	Government policy. Expanding the service area of the state. Development of our country.	It is presented based on superficial and plain information.	Integrity: Yes Closeness: Yes Balance: Yes Emphasis: None Continuity: Yes

Source: MEB, EBA, (https://mebbis.meb.gov.tr/) 2022.

Table 6. Topic Lecture, Summary, Practice Screening Test

Definition	Content	Justification	Presentation	Design
"…. This financial resource is tax." "Just as military service is a national debt, tax is a debt that must be paid by the citizen."	Government policy. The purpose and types of tax. Civic duty.	Government policy. T.R. Constitution 73. Art. Civic duty.	It is presented based on superficial and plain information. • Video • Receipt	Integrity: Yes Closeness: Yes Balance: Yes Emphasis: Yes Continuity: Yes

Source: MEB, EBA, (https://mebbis.meb.gov.tr/) 2022.

Table 7. Special for Teacher

Definition	Content	Justification	Presentation	Design
"Tax is an economic obligation imposed by the state on its citizens in order to meet the expenditures of infrastructure services such as	Government policy. Benefits and types of taxation. Civic duty.	Government policy. Civic duty.	It is presented based on superficial and plain information.	Integrity: Yes Closeness: Yes Balance: Yes Emphasis: None Continuity: Yes

roads, electricity, water and health." "Tax is a strong bond between the state and the citizen."				

Source: MEB, EBA, (https://mebbis.meb.gov.tr/) 2022.

The MEB study fascicle was found to be missing in the definition category, but was better in the presentation category compared to other fascicles. It has been determined that Afyonkarahisar Assessment and Evaluation Center Study Fascicle is better in the definition category compared to other fascicules. Afyonkarahisar Assessment and Evaluation Center Study Fascicle and Denizli Assessment and Evaluation Center Study Fascicle were found to be better than other fascicles in terms of content and justification. 6th Class 1. Theme/Unit Study Fascicles (MEB) All Courses: It has been determined to be insufficient in the categories of definition, content, justification, presentation and design. It was determined that the previous textbook was used in Lecturing, Summary, Subject Test, Practices and Teacher Specific: Definition category, but it was not sufficient in all categories except for lecture.

Tables 1, 2, 3, 4, 5, 6 and 7 were evaluated together and it was seen that the document/materials provided to social studies teachers through MEB EBA were sufficient for qualified tax education.

4. Conclusion

One of the United Nations sustainable development goals is quality education (https://sdgs.un.org/goals). One of the sub-goals of qualified education is to significantly increase the supply of qualified teachers. In order to ensure the increase of qualified teachers, first of all, the current qualifications of the teachers and the document/materials for the education they will give should be evaluated.

The aim of this study is to examine the undergraduate education curriculum of social studies teachers for secondary school tax education and to examine the document/materials provided to these teachers via MEB EBA. For this aim the sample was determined as 23 research universities in Turkey, primarily to examine the social studies teaching department course packages. Afterwards, the document/materials offered via MEB EBA for social studies course teachers were examined in the categories of definition, content, justification, presentation and design specific to tax education.

- The course information packages of the universities with social studies teaching departments were examined and it was determined that the public finance course was not included in the undergraduate education. The absence of a course on public finance in the undergraduate course packages of social studies teachers is an obstacle for them to become qualified teachers for tax education.

It was suggested to include the public finance course for undergraduate education.

- The document/materials provided to these teachers via MEB EBA offers enough document/materials to become a qualified teacher in tax education.
- Another suggestion is the Revenue Administration, vergibilinci.gov.tr. the web page is added to the MEB EBA as a link where teachers can access directly.

References

Journals/Periodicals;

Aslan, G. (2021). "İlkokul Ve Ortaokulların Hayati Sorunları Ve Çözüm Önerileri: Okul Yöneticilerinin Görüşlerine Dayalı Nitel Bir Analiz", *Journal of Qualitative Research in Education*, 25, pp. 204-242.

Çelik, E. & Eroğlu, O. (2014). "İlköğretim Çağında Vergi Algısının İncelenmesi: Zonguldak İli Örneği", *Çankırı Karatekin Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 4 (2), pp. 301-326.

Demir, İ. C. & Ciğerci, İ. (2016). "Vergi Bilincinin Oluşumunda Eğitimin Rolü: İlköğretim Öğrencileriyle Amprik Bir Çalışma", *Yönetim ve Ekonomi*, 23 (1), pp. 127-143.

Detterman, D.K. (2016). "Education And Intelligence: Pity The Poor Teacher Because Student Characteristics Are More Significant Than Teachers Or Schools", *The Spanish Journal of Psychology,* 19, e93, pp. 1–11.

Kandak, M. & Mertol, G. (2021). "Eğitim Düzeyi ile Vergi Gelirleri İlişkisi: İlkokul ve Ortaokul Öğrencileriyle Ampirik Bir Çalışma", *Eğitim Bilim ve Araştırma Dergisi*, 2(1), pp. 9-24.

Sağbaş, İ. & Başoğlu, A. (2005). "İlköğretim Çağındaki Öğrencilerin Vergileri Algılaması: Afyonkarahisar İli Örneği", *Afyon Kocatepe Üniversitesi İİBF Dergisi*, 7 (2), pp. 123-144.

Taytak, M. (2010). "İlköğretim II: Kademe Öğrencilerinde Vergi Bilincinin Tespiti: Amprik Bir Araştırma", *Maliye Dergisi*, 158, pp. 496-512.

Uzunali, E. & Y. Oğuz & V. Olca & M. Dağ & K. Kumaş & A. Güngör (2021). "Tax Awareness and Morality in the Effectiveness of Tax Revenues: Secondary School Teachers' Tax Perception Analysis in Manavgat, Antalya", *Sosyoekonomi*, 29(50), pp. 131-147.

Yazıcı, S.D. & Cemaloğlu, N. (2022). "Türkiye'nin Öğretmen Profilinin OECD Ülkeleri İle Karşılaştırmalı Olarak İncelenmesi", *Manisa Celal Bayar Üniversitesi Sosyal Bilimler Dergisi,* 20 (3), pp. 15-40.

Yılar, M. B. & Çam, İ. D. (2020). "20. Ve 21. Yüzyilin Başlarina Ait Ders Kitaplarinda Vergi: Karşilaştirmali Bir Değerlendirme", *Tokat Gaziosmanpaşa Üniversitesi Sosyal Bilimler Araştırmaları Dergisi*, Aralık, pp. 503-514.

Yıldırım, Y. (2022). "Salgın Döneminde Acil Uzaktan Öğretim Kapsamında Işlenen Sosyal Bilgiler Dersine Yönelik Öğretmen Görüşlerinin Değerlendirilmesi", *Erzincan Üniversitesi Eğitim Fakültesi Dergisi*, 24(2), pp. 244-256

Yılmaz, K. & Tepebaş, F. (2011). ". İlköğretim Düzeyinde Sosyal Bilgiler Eğitiminde Karşılaşılan Sorunlar: Mesleğine Yeni Başlayan Sosyal Bilgiler Öğretmenlerinin

Görüşleri". *Çankırı Karatekin Üniversitesi Sosyal Bilimler Enstitüsü Dergisi,* 2(1), pp. 157- 177.

Edited Books;

Arıman, Y. (2022). "*Current Issues and Empirical Studies in Public Finance", Tax Education for Students in Turkey: The Case of Secondary School"* (Ed.) Bozdoğanoğlu, B. & Gerçek, A.), Peter Lang GmbH: Berlin, pp. 337-356.

Internet Sources:

Ankara University, Department of Turkish and Social Sciences Education, http://sbteb.education.ankara.edu.tr/, (17.08.2022).

Atatürk University, Social Studies Education, https://birimler.atauni.edu.tr/sosyal-bilgiler-egitimi-anabilim-dali/#, (17.08.2022).

Bursa Uludağ University, Social Studies Education, http://uludag.edu.tr/sosbilegtabd, (17.08.2022).

Çukurova University, Department of Turkish and Social Science Education, https://egitim.cu.edu.tr/cu/bolumler/turkce-sosyal-bilimler-egitimi/turkce-ve-sosyal-bilimler-egitimi-bolumu, (17.08.2022).

Definition, content, justification, presentation and design https://sozluk.gov.tr/, (01.09.2022).

Dokuz Eylül University, Social Studies Education, https://bef.deu.edu.tr/sbe/?lang=en, (17.08.2022).

Ege University, Turkish and Social Sciences Department, https://egitim.ege.edu.tr/tr-7731/sosyal_bilgiler_egitimi_ad.html (17.08.2022).

Erciyes University, Department of Turkish and Social Sciences Education, https://trsos.erciyes.edu.tr/ (17.08.2022).

Fırat University, Department of Social Studies Education, http://sbeabd.egitimf. firat.edu.tr/en, (17.08.2022).

Gazi University, Division of Social Sciences Education, https://gef-sosyalbilgiler.gazi.edu.tr/, (17.08.2022).

Republic of Turkey Ministry of National Education, Mebbis, (https://mebbis.meb.gov.tr/), (26.10.2022).

İstanbul University-Cerrahpaşa, Social Studies Teaching Undergraduate Program https://ebs.istanbul.edu.tr/home/dersprogram/?id=1143&yil=2016, (17.08.2022).

Marmara University, Social Studies Teacher Education, http://isb.aef.marmara. edu.tr/en, (17.08.2022).

United Nations, Sustainable Development Goals, https://sdgs.un.org/goals, (05.09.2022).

Yıldız Technical University, Social Science Education, https://sbt.yildiz.edu.tr/sosyal bilgiler/ (17.08.2022).

SEMANTIC ANALYSIS OF HORIZONTAL AND VERTICAL EQUALITY PRINCIPLES IN TAXATION: A CONCEPTUAL DISCUSSION

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Abstract

The principle of equality has been evaluated based on justice and has always maintained its popularity due to the changing nature of justice according to place and time. The division of the principle of equality into absolute and relative corresponds to horizontal and vertical equality in tax law. However, the definitions made in the literature have problems regarding the distinction between horizontal and vertical equality. This study aims to reveal the true meaning of horizontal and vertical equality concepts by using the semantic analysis method and contributing to correctly using these concepts in the literature. In this context, this study has tried to reveal the distinction between horizontal and vertical equality by using literature review and semantic analysis methods related to the subject.

As a result of the study, attention was drawn to using the concepts of horizontal and vertical equality with their correct meanings. In addition, it has been determined that the most appropriate taxes for horizontal equality are expenditure taxes, where the understanding of absolute equality is adopted. The most appropriate taxes for vertical equality are income and wealth taxes based on relative equality.

Keywords: Equity Principle, Horizontal Equation, Vertical Equation, Semantic Analysis.
JEL Classification: H2, H21, H30.

1. Introduction

In the public finance literature, it is debatable whether horizontal and vertical equality concepts essentially describe the same or different situations. In this context, a conceptual discussion was made by Richard Musgrave and Louis Kaplow about what horizontal and vertical equality mean. Musgrave defined the levying of the same tax from those with the same ability to pay as horizontal equality and the levying of different taxes from those with the different ability to pay as vertical equality. Kaplow, on the other hand, emphasized that there is no normative aspect of horizontal equality, and there is no difference between the horizontal and vertical equality defined by Musgrave. According to Kaplow, if the same amount of tax should be levied on those in the same situation, then different amounts of tax on those in other situations mean the same thing, and this is a requirement of vertical equality. This study aims to reveal the true meaning of horizontal and vertical equality concepts by using the semantic analysis method and contributing to the discussion of how to use these concepts correctly in the literature. In this framework, first of all, the historical development and legal evaluation of the principle of equality were made. The discussion between Musgrave and Kaplow was included, and finally, the semantic analysis of horizontal and vertical equality was tried to reveal its correct meaning.

2. The Principle of Equality and Its Historical Development

It can be said that the foundations of the principle of equality, which has been the subject of serious debate from past to present, were laid at the beginning of human society (Keskin, 2015:5). According to written sources, the origin of the principle of equality goes back to the Stoics (322 BC). By equating reason and god, the Stoics advocated that everyone is equal as human beings. With the Roman conquest of Greece, the idea of Stoicism developed. As an indicator of this development, the general decree of Caracalla in 212 is shown. This decree granted all free persons the right to general citizenship. According to Lipson, today's modern European countries have not yet reached the general right of citizenship recognized by the decree of Caracalla. The birth of Stoicism and the period up to the order of decree of Caracalla was the first important leap in the principle of equality in western history. The second significant leap took place as a result of the revolutions. The process started with the Magna Carta in England in 1215 until the Great Revolution of 1688. In the USA, the process that began with independence in 1776 was followed by ratifying the Bill of Rights in 1791. In France it represents the process from the 1789 Revolution to the present day (Lipson, 1986:141-146).

3. Legal Evaluation of the Principle of Equality

Since equality cannot be mentioned in absolute terms, legal equality becomes concrete in terms of equality before the law. On the other hand, equality before the law is divided into two distributive and compensatory justice, the foundations of which go back to Aristotle. Distributive justice is based on the differentiation between individuals. As a result of the distributive justice understanding, the fact that those in the same situation are subject to the same process is called relative or substantive legal equality. According to Aristotle, compensatory justice is absolute equality between people (Guriz, 2001: 31-32). In this context, absolute equality refers to the equal process of laws to everyone due to the understanding of compensatory justice. Relative equality, on the other hand, is that as a result of the distributive justice understanding, those in the same situation are subject to the same procedures, and those in different situations are subject to different procedures. In this context, within the scope of relative equality, different rules should be applied to those in different situations. In the connection between the concepts of horizontal equality and vertical equality and the concepts of compensatory and distributive justice, horizontal equality corresponds to compensatory justice, and vertical equality corresponds to distributive justice (Gözler, 2014: 213; Şenyüz, 2013:5-10; Bakar et al., 2013:67).

In light of these explanations, horizontal and vertical equality principles contain conceptual gaps. It can be logically obtained that if individuals in the same situation are subject to the same rules, those in different situations are also subject to additional regulations. In this framework,horizontal equality, as a result of the compensatory justice, and absolute equality principle, apply of tax laws to everyone equally and the collection of the same tax regardless of the situation of individuals. Vertical equality, on the other hand, means that as a result of the principle of distributive justice and the principle of relative equality, the same amount of tax is collected from those with the same financial power and different amounts of tax from those who are different. Musgrave made a similar interpretation to the inference given above (Musgrave, 1990:114).

4. Musgrave and Kaplow's Discussion on the Principles of Horizontal and Vertical Equality in Taxation

Although there is conceptual discussion, horizontal equality in tax systems is generally thought to mean that individuals with the same income should pay the same tax, and vertical equality is that people with higher incomes should pay higher tax rates. However, academics have engaged in an active and lively debate about whether

horizontal equity has an independent significance in designing a tax system. This discussion took place between two economists, Richard Musgrave and Louis Kaplow (Repetti & Ring, 2012:136). While Kaplow claimed that horizontal equality is not independent of vertical equality, Musgrave argued the opposite (Repetti & McDaniel, 1993: 607).

Repetti and McDaniel stated that Kaplow was right in the discussion. As a result, with the Musgrave/Kaplow conceptual discussion, Musgrave stated that vertical equality does not have an independent infrastructure. Then Kaplow stated that horizontal equality should be evaluated within the scope of vertical equality. Musgrave also agrees with Kaplow's views on the first best (market) economy (Repetti & McDaniel, 1993: 613). According to Musgrave, the principle of vertical equality, while Kaplow argues that the principle of horizontal equality is controversial. However, in the interpretation made from general to specific, the principles of horizontal and vertical equality are controversial in terms of their basis because the concepts of equality and justice are controversial. However, in terms of the meanings of horizontal and vertical equality, as expressed by Kaplow, the two concepts cover each other. In this sense, new definitions need to be made.

5. Semantic Analysis of the Principle of Equity in Taxation

5.1. Semantic Analysis Method

The word semantic is derived from the Greek word ‘sema’, which is of sign origin and is connected to the word ‘semaino’, which is expressed as ‘to mean’. In this context, semantic analysis pertains to the meaning. It is a technical term used in the semantic research of signs such as words and terms (Guiraud, 1999: 11). Today; semantic analysis is expressed as ‘the teaching of the meaning of linguistic units’ (Kılıç, 2009: 17).

According to linguists, the semantic analysis method should be used at the stage of establishing a meaning connection. While establishing a meaning connection, each word has a single meaning, and it is requested to interpret this meaning, but in real life, almost every word has more than one meaning. For this reason, words and the meanings of sentences formed by combining words are investigated with semantic analysis (Grünber, 2006: 68). In other words, semantic analysis constitutes the scientific research of language (Palmer, 2001: 15).

5.2. Semantic Analysis of Horizontal and Vertical Equality Concepts

It is useful to use the semantic analysis method to establish a meaningful connection between the words of horizontal and vertical equality. According to TDK, the term 'horizontal' means 'parallel to the ground' and 'perpendicular to the vertical'. The word 'vertical' has two different uses. The first is an adjective used to express a straight line forming a right angle with another line when it intersects with it. Its other use is an adverb denoting the use of 'upright'. The concept of 'equality'has three different uses. These are 'the state of two or more things being equal, equivalence', 'no distinction between people in terms of laws', and 'no distinction between people in terms of social and political rights, regardless of their physical and spiritual differences' (TDK,2022).

In this context, in the analysis for horizontal equality, absolute equality is understood as being parallel to the same ground or perpendicular to the vertical. Therefore, horizontal equality should be evaluated within absolute equality and interpreted as treating everyone the same in taxation. In this framework, it is possible to see the application area of horizontal equality in expenditure taxes. On the other hand, in the analysis of vertical equality, the difference comes to the forefront rather than absolute equality. In this context, legally, vertical equality is equivalent to relative equality. Therefore, vertical equality should be evaluated within the relative equality framework and interpreted as different taxation according to the financial power of individuals. However, we believe that horizontal and vertical equality concepts in the finance literature essentially describe the same situation. In terms of legal evaluation, horizontal equality means the equal application of tax laws to everyone as a result of the principle of absolute equality. Vertical equality, on the other hand, means that as a result of the principle of relative equality, the same amount of tax is collected from those with the same financial power and a different amount of tax from those who are different.

When the discussion between Musgrave and Kaplow about the principles of horizontal equality and vertical equality is evaluated, it can be said that there is a difference in conceptualization, although both have the same meaning. At this point, we believe that Kaplow's definition and claim are more accurate, taking into account the semantic analysis of these concepts and Musgrave's claims that horizontal equality and Kaplow's vertical equality have more solid foundations. For this reason, the concept of horizontal equality should be used to describe the same taxation for everyone regardless of the financial power of the individuals. On the other hand, the concept of vertical equity should be used to describe the same amount of tax from those with the same financial power and a different amount of tax from those who are different.

6. Conclusion

The principle of equality is a controversial and up-to-date phenomenon by its nature. This controversial nature of the principle of equality was also reflected in tax law and showed itself in the principles of horizontal and vertical equality. As it is known, horizontal equality is when individuals with the same income pay the same tax. At the same time, vertical equality is individuals with different abilities to pay taxes at different levels. However, it means that individuals with the same income should pay the same amount of tax, and those with different levels should also pay tax at different levels. In this context, when the principle of legal equality is examined, it is seen that the laws should be applied equally to everyone within the framework of absolute equality (horizontal equality). Expenditure taxes are where the laws are applied equally to everyone, and there is no discrimination in terms of rate.

On the other hand, in the analysis carried out within the framework of relative equality (vertical equality), it is seen that those in different situations should be taxed differently. In other words, the taxes in which progressive taxation is applied, income and wealth taxes, are suitable for vertical equality. The results of the semantic analysis and the legal evaluation also overlap.

References

Bakar, F., Gerçek, A. & Mercimek, F. (2013). "Vergilemede Adalet Normunun Çeşitli Ülke Anayasalarındaki Görünümü", *Hukuk ve İktisat Araştırmaları Dergisi*, No: 5(2), ss.62-77.

Gözler, K. (2014). *Anayasa Hukukuna Giriş*, 22. Baskı, Bursa, Ekin Yayınevi.

Guiraud, P. (1999). *Anlam Bilim*. (Çev.) Vardar B., İstanbul, Multilingual Yayınları.

Güriz, A. (2001). "Adalet Kavramının Belirsizliği", *Adalet Kavramı*, (Ed.) Güriz A., Ankara, Türkiye Felsefe Kurumu, ss.7-38.

Grünberg, T. (2006). *Anlam Kavramı Üzerine Bir Deneme*, İstanbul, Yapı Kredi Yayınları.

Hanağası, E. (2016). *Medeni Yargılama Hukukunda Silahların Eşitliği*, Ankara, Yetkin Yayınevi.

Keskin, Z. (2015). *Kamu Hizmetinde Eşitlik İlkesi*, İstanbul, On İki Levha Yayıncılık.

Kılıç, V. (2009). *Anlambilime Giriş Temel Kavramlar*, İstanbul, Papatya Yayıncılık.

Lipson, L. (1986). *Politika Bilimin Temel Sorunları*, (Çev.) Karamustafaoğlu T., Ankara, Birlik Yayıncılık.

Musgrave, R.A. (1990). "Horizontal Equity, Once More", *National Tax Journal*, Vol. 43(2), 113-122.

Palmer, F.R. (2001). *Semantik Yeni Bir Anlam Projesi*, (Çev.) Ertürk R., Ankara, Kitabiyat Yayınevi.

Repetti, J.R. & Ring, D., (2012). "Horizontal Equity Revisited", *Florida Tax Review*, Vol. 3(13), 135-155.

Repetti, J.R. & McDaniel, P.R. (1993). "Horizontal and Vertical Equity: The Musgrave/Kaplow Exchange", Florida Tax Review, Vol. 1(10), 607-622.

Şenyüz, D. (2013). "Eşitlik İlkesinin Vergi Yaptırım Hukuku Bakımından Anlamı", Vergi Yaptırım Hukuku Sisteminin Sorunları ve Yeniden Yapılandırılması Sempozyumu, 20-21 Mart 2013, İstanbul.

Türk Dil Kurumu (TDK), https://sozluk.gov.tr/ (04.10.2022).

DETERMINATION OF THE TAX BASE AND THE EVALUATION OF THE ASSESSMENT PROCESS IN THE TAXATION OF THE WEALTH DUE BY INVESTMENT IN THE TURKISH TAX SYSTEM

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Abstract

In the taxation process, which begins with the realization of the taxable event, the "tax assessment" phase is important. Based on the tax bases declared by the taxpayers, in terms of calculating the tax completely and accurately, the realization of the assessment procedures differs in terms of tax types. Determining the "net income" or "net wealth" declared by taxpayers is a relatively complex and comprehensive process in the Turkish tax system, especially in taxes on income and wealth. In other words, appraisal and determination procedures are required for the calculation of the inheritance and gift tax base. This process is called “valuation” in tax terms. According to the regulations in force, valuation transactions are made in terms of assets and wealth included in economic enterprises. In the Turkish tax system, when the legal and administrative regulations being applied regarding the determination of the tax base and the assessment process in the taxation of the inherited wealth are evaluated, the issues related to the determination and appraisal of the net wealth constituting the tax base and the assessment of the tax should be reviewed in accordance with today's conditions. and needs to be updated. In this context, it is an important issue to discuss the valuation criteria used in the taxation of inherited wealth elements, the problems caused by the assessment system applied due to the said transactions, and the suggestions for the solution of these problems. In the statement; In the Turkish tax system, the problems that arise in the determination of the tax base in the taxation of the inherited wealth and in the "two-stage assessment" process, the first and the final, are discussed in comparison with the foreign country practices and with the solution proposals for the current problems.

Keywords: Turkish Tax System, Inheritance and Gift Tax, Wealth valuation, Tax base, Tax examination
JEL Code: H20, H24, H29

1. Introduction

The taxation of wealth inherited by inheritance is included in most of the tax systems and is an issue with a long history. This has brought many controversial issues, both in theory and in practice, from the past to the present. These discussions start with the tax subject of the wealth inherited and continue with the questions of how the complex and detailed regulations for the calculation of this tax should be resolved.

When the foreign country practices regarding the taxation of inherited wealth are examined, it is seen that different methods and techniques are used in each country. The history of legal regulations regarding inheritance and gift tax in our country goes back to very old times. However, due to the complexity of the assessment process and the legal regulations of the calculations of the tax in question, the lengthy of the taxation process and the necessity of applying the methods that require expertise at the same time, it continues to maintain its importance.

In the declaration, the special situations that arise in the taxation process of the inherited wealth are examined and the importance of the subject is emphasized with the evaluations about the problems that arise.

2. Taxation Of Wealth Due By Investment

Inheritance and gift tax is a tax that is widely applied in almost all countries where private property and inheritance rights are valid (Arıca, 1981: 15). Inheriting wealth also perpetuates the inequality of effortlessly earning and exploiting wealth. In this respect, the irregular and uncontrolled transfer of wealth through inheritance after death causes the fair distribution of wealth to deteriorate. In addition, as well as the effect of inheritance, gifts and donations given while alive, that is, other unrequited transfers, have an increasing effect on wealth inequality. Therefore, it is aimed to regulate and tax inheritance and other unrequited wealth transfers with inheritance and gift tax.
(Akkaya & Oğhan, 2020: 15).

It is possible to divide the history of inheritance and gift tax in Turkey into two as pre-republic and post-republic periods. It is seen that collections were made under the name of waiver, transfer and registration fees before the Republic, that is, during the Ottoman Empire. In the post-republic period, the first inheritance and gift tax was the Law No. 797 in 1926. The basis of today's form of inheritance and gift tax was the Law No. 7338, which was started to be implemented in 1959 (Şafak & Yurtsever, 2015: 34). In our country, in accordance with the Inheritance and Gift Tax Law No. 7338, which has a long past, taxation of gratuitous transfers between the way of inheritance and the beneficiaries is made. According to Article 2 of the aforementioned Law, “The concept of inheritance is defined as testamentary disposition such as inheritance testament and inheritance contract”.

The subject of inheritance and gift tax is the transfer of goods belonging to Turkish citizens and goods within the borders of Turkey from one person to another by inheritance. It is seen that wealth, which is the economic element on which the defined tax will be collected, is handled in an extremely comprehensive way. On the other hand, whether the wealth inherited to the heirs is realized by the testator's will or inheritance contract has no effect in terms of taxation. In addition, the tax rates applied to the tax base in the transfers realized by inheritance are lower than the gratuitous transfers between the donors.

According to the inheritance and gift tax regulations, the taxpayer of this tax is the person who acquire goods[1] (wealth) In this context, the taxpayer can be a natural person as well as a legal person.

Due to the different structure and functioning of the tax assessment process in inheritance, the concepts of "tax-generating event" and "valuation day" show different characteristics from other taxes. The taxable event is the unrequited acquisitions through inheritance or between individuals (Turhan, 1998: 371). In other words, in the case of inheritance, the heirs have the right to reject the inheritance within 3 (three) months following the date of death. If the heirs do not reject the wealth inherited or do not take any action, the taxation process begins. In this context, if the heirs reject the inheritance, the inheritance tax liability does not arise in such cases.
Another special issue regarding the taxation of inherited wealth is the statute of limitations. In the Inheritance and Gift Tax Law No. 7338, there is a special regulation regarding the statute of limitations. Accordingly, in the 20th article of the said Law, the obligation of inheritance and gift tax;

a) If the declaration is submitted, on the declaration date for the goods shown in the declaration,

b) On the date when the goods not shown in the declaration submitted and the goods transferred in cases where no declaration is made are determined by the administration,

c) on the date of the completion of these proceedings by the court in the cases of certification of the estate, bookkeeping or official liquidation,

begins." formatted. Accordingly, the starting date of the 5 (five) year limitation period, which starts from the taxable event, may change, as is the case with other tax types. Thanks to this regulation, the possible tax losses of the wealth that the heirs have left

[1] According to Article 2 of the Inheritance and Gift Tax Law, the concept of "Property includes movable and immovable things that can be the subject of property, and all kinds of rights and receivables that can enter into assets".

incomplete or not declared in their declarations submitted to the tax offices in terms of inheritance and gift tax are prevented.

3. Assessment Process In The Taxation Of Wealth Due By Investment

The taxation process begins with the realization of the taxable event and ends with the payment of the tax. The tax assessment process is a process for calculating the tax to be paid by the taxpayers and is an administrative procedure that must be carried out by the tax office. Notifying or informing the taxpayer of the tax levied by the tax administration constitutes the notification stage of the tax. At this stage, the tax levied and notified comes to the stage of accrual. In terms of a significant part of the taxes in the Turkish tax system, the taxation process works in this way. One of the exceptions to this situation is the motor vehicle tax, which is accrued by the tax administration collectively for all taxpayers.

There are 2 (two) different methods in tax regulations for "assessment transactions", which is defined as the calculation of tax receivables by the tax office over the bases and proportions indicated in the relevant laws. These methods are expressed as “accrual slip basis”[1] and “notification basis”.[2]

The basis of declaration, which is one of the contemporary taxation methods, is the determination and calculation of the tax base by the taxpayer himself. In this case, the assessment and accrual process of the tax is realized with the accrual slip issued by the tax office for the tax base declared by the taxpayer to the tax office. The process of starting the tax with the declaration of the taxpayer and performing the assessment process can be expressed as the "ordinary assessment method". In assessments made on the basis of a notice, measures other than the taxpayer's declaration are taken into account. The taxes levied on the basis of the notice are notified to the taxpayers with a notification and the taxpayer is informed about the assessment process made in relation to him. For this reason, since this process takes place without considering the taxpayer's

[1] According to Article 25 of the Tax Procedure Law No. 213, "Taxes collected on the declaration according to tax laws are assessed and accrued with an "Accrual slip". According to this principle, an accrual slip is issued upon receipt of the tax return by the tax office and a copy of it is given to the taxpayer or the person who submits the tax return on behalf of the taxpayer. In this way, tax is incurred. The copy of the accrual slip given to the taxpayer also replaces the receipt of the declaration. When deemed necessary, notification can be made with a notification instead of a tax accrual voucher based on the declaration. In certain cases by law, notification is made by the announcement of the proposal table.”

[2] According to Article 34 of the Tax Procedure Law No. 213, "Taxes levied by replenishment and ex officio are notified to those concerned with a "Notification". Separate notices are used for taxes of different nature and origin.”

declaration, it will be possible to define this type of assessment as the "extraordinary assessment method".

For a significant part of the taxes in the Turkish tax system, assessment procedures are carried out on the basis of declaration. However, in inheritance and gift tax, there are different imposition procedures than other taxes. In this context, heirs (taxpayers) must first submit a declaration to the tax office in the case of inheritance. After this process, which is expressed as the first or preliminary assessment, the inheritance and gift tax is accrued. However, in other taxes, while the tax assessment process ends at this point, there is a different assessment stage, which is expressed as final or second assessment in inheritance and gift tax. In the second or final assessment stage, which is a method specific to inheritance and gift tax; The wealth and wealth elements included in the tax declaration submitted by the heirs to the tax office should be re-evaluated by the tax administration. There are some procedures and principles specific to the operation of the final assessment process made by the tax administration.

In the final assessment procedures made by the tax administration, primarily the components and structure of the wealth transferred by the testator to the heirs are important. The wealth passed on to the heirs by inheritance can be personal (private) assets or commercial assets. Apart from this, both personal and commercial assets can be transferred to the heirs by the testator.

The final stage of the final assessment process made by the tax administration is the determination of the tax base related to wealth by the valuation commission. However, in case some conditions are fulfilled before the valuation procedures to be carried out by the valuation commission, tax inspections are required by the tax inspectors. In these circumstances, it is closely related to whether the wealth transferred to the heirs is commercial or personal wealth or whether the wealth is above certain legal amounts.

If the wealth inherited to the heirs by inheritance consists only the personal assets of the testator, there is no need to conduct a tax examination before the appraisal procedures to be carried out by the appraisal commission. However, if the asset transferred to the heirs is a commercial asset or consists of both personal and commercial assets, a tax examination must be made before the appraisal procedures in order for the final assessment to take place.

The determination of the inheritance and gift tax base, which consists of wealth elements that are made by tax inspectors and transferred to heirs, is a process that requires highly technical calculations and researches. “Tax technique reports” are prepared as a result of tax inspections made by tax inspectors regarding the determination of the inheritance and gift tax base. Tax technique reports are different

from tax inspection reports, and they are reports that are prepared in some cases as required by tax laws, but do not suggest tax assessment. The tax technique reports prepared as a result of the examination made regarding the inheritance and gift tax mainly aim to reveal the data for the wealth appraisal transactions by the valuation commissions.

It is important to determine the value of the assets such as stocks (commodities), machinery and equipment, fixtures and vehicles, which constitute the "commercial asset" inherited by the testator, as of the date of death, which is the "valuation day"[1]. This requires a detailed and specialized research for the final assessment stage. It is possible to make these calculations and researches only by tax inspectors who are competent in tax inspection.

In the first assessment transactions made due to the commercial asset transferred to the heirs by inheritance, accrual transactions are made on the basis declared in the tax return submitted to the tax office by the taxpayers. At this stage, some determinations are made according to the regulations based on the transactions that should be made before the appraisal transactions according to the size of the transferred commercial asset. Accordingly, the authorization given in Article 20 of the Decree Law on the Organization and Duties of the Ministry of Finance No. 178, and the provisions of the "Regulations"[2] regarding the scope and details of tax inspections are taken as basis. According to the 24th and 25th articles of the said Regulation, some principles are defined for the tax examinations that should be made according to the size of the commercial wealth inherited in the inheritance and gift tax examinations. Accordingly, tax inspection is not required for the taxpayers whose commercial asset amounts are below certain limits and who are subject to the operating account principle in the transfers made by inheritance, and it is regulated that direct appraisal procedures are carried out without being subject to the examination. For the heirs outside this scope, a tax examination is required before the appraisal procedures. However, with the amendment that entered into force by being published in the Official Gazette dated 07.04.2021 and numbered 31447, Articles 24 and 25 regulating the legal boundaries were repealed. In this case, there is no legal limitation regarding the tax examinations made before the valuation procedures.

4. Determining The Tax Base In The Taxation Of The Wealth Due By Investment

[1]The “valuation day” regulated in Article 259 of the Tax Procedure Law No. 213 is defined as follows: *“The valuation of economic assets on the days and times indicated in the tax laws is based on”.*

[2] "Regulation on the Procedures and Principles to be Followed in Tax Reviews", which was published in the Official Gazette dated 31.10.2011 and numbered 28101.

The most important reason why the taxation process of the wealth inherited is different from other taxes is that the assessment of the inheritance and gift tax consists of two stages. Due to the wealth inherited, the tax base declared by the heirs to the tax office and the tax base determined as a result of the transactions made within the tax administration are usually not in the same amount. The reason for this situation is that the base is determined by the heirs in the first assessment stage and by the administration in the final assessment. In addition, the valuation measures used in the determination of the tax base are not the same for both stages.

In the inheritance and gift tax declaration submitted by the heirs to the tax office at the first assessment stage, the valuation measures specified in Article 10 of the Inheritance and Gift Tax Law No. 7338 are taken as basis. However, if the valuation measure is not specified in the said article, the heirs must determine their bases according to the provisions of the Tax Procedure Law No. 213 on the valuation of wealth.

If the wealth or commercial property inherited to the heirs is the balance sheet of the calendar year corresponding to the death date of the inheritor or as of the date of death, it is required to calculate the equity corresponding to the inheritance shares.

Elements of wealth inherited by heirs; In the case of commercial capital, real estate, movable goods, ships, bonds and bonds, foreign currencies and rights, which valuation measure will be used in determining the tax base is specified in the Inheritance and Gift Tax Law. However, if the elements of wealth inherited are not among the assets, then the valuation measures specified in the Tax Procedure Law must be used by the heirs.

In the first assessment phase regarding the commercial asset[1] transferred to the heirs; With regard to the valuation of the assets included in the economic enterprises of the Tax Procedure Law, the base is determined with the valuation measures included in the articles 269 to 298. At the final assessment stage, the assessment is made by using the "important value" measure in Article 292 of the Tax Procedure Law for the valuation of the commercial capital inherited. Accordingly, for "commercial goods", which is one of the assets that make up the commercial capital corresponding to the share of the inheritor, the tax base is determined based on the "cost value" measure in the first assessment and the "important value" measure in the final assessment. Similarly, the valuation measures used for other assets, such as fixtures or machinery, that make up the commercial capital, may vary in terms of assessments.

[1] According to Article 10 of the Inheritance and Gift Tax Law No. 7338, “Commercial capital; It is the equity capital to be found according to the balance sheet of the calendar year preceding the date of death in those who keep books on the basis of the balance sheet”.

There are some special cases in the valuation of the inheritance and gift tax base, which is determined by using the valuation measures in the Second Chapter of the "Valuation" book of the Tax Procedure Law, at the initial assessment stage, with the "precedent value" measure at the final assessment stage. Accordingly, the methods used to determine the precedent value may also vary at the final assessment stage of the inherited economic asset. The main point to be determined in the determination of the imputed value is the actual value of the asset as of the valuation date. Although the methods for determining the imputed value have been determined in accordance with the tax regulations, there is no unity of practice regarding the calculation of these in the tax examinations made. After the initial assessment stage, especially before the appraisal procedures regarding the commercial asset, in some cases, valuation transactions are carried out according to the statements and statements of the related parties or by using average rates in order to determine the imputed value.

The reason why the inheritance and gift tax consists of a double assessment stage is the need to calculate the reasonable value of the transferred wealth as of the valuation day. The complexity of this calculation, especially for those subject to the balance sheet basis, and the fact that it requires expertise, led to the solution of this problem by conducting a tax inspection.

In the tax audit process, the scope of tax examinations carried out with the aim of determining the equity capital of the deceased is also important. Accordingly, the tax inspection that starts with the aspect of inheritance and gift tax can also turn into a tax inspection with the aspect of income or corporate tax.

The initial assessment process on the tax base declared by the heirs to the tax office is completed more easily and faster than the final assessment process that takes place afterwards. However, if the element of wealth inherited is commercial capital, the assessment process takes place in a longer period of time. The most important reason for this is that the calculations for the determination of the tax base of the commercial capital and the valuation processes require expertise, so the tax examination is carried out. During these examinations, different valuation measures regulated by tax laws are applied to the equity capital of the deceased, and audits are carried out on the books and documents.

The valuation measures regulated in the Tax Procedure Law are determined differently for the assets and wealth included in economic enterprises. The tax examinations carried out with the aim of transferring data for the transferred wealth in order to carry out the appraisal processes at the final assessment stage mainly result in the determination of the actual status of the transferred commercial asset on the books and

documents and the valuation of the imputed value of this asset. On the other hand, there is no standard procedure determined for the determination of the arm's length value of the economic assets that constitute the commercial asset. In order to determine the imputed value of the asset inherited as wealth, the declarations of the heirs can be applied.

In the event that the inheritance inherited is a commercial asset, making a tax inspection before the appraisal procedures is a reason for the prolongation of the assessment process. Tax inspections are completed within the periods determined in accordance with the Tax Procedure Law. Accordingly, the durations may vary depending on the “full” and “limited” examination types. These periods can be determined up to 1 (one) year, and in some cases, they may exceed this period. On the other hand, it is noteworthy that the period of filing a declaration given to heirs in inheritance is longer compared to other taxes (the period of filing a declaration is between 4 months and 8 months).

5. Conclusion

Inheritance and gift tax liability, which arises due to the wealth inherited, has a different structure and characteristics when compared to other taxes in the tax system. In particular, the dual stage of the tax assessment process and the transactions made by the tax administration are closely related to the structure of this tax.

If the wealth inherited is a "commercial asset", tax examinations are added to the tax assessment process. This situation results in the fact that the determination of the equity and tax base inherited by the heirs requires complex and detailed research. The valuation measures used to determine the tax base in the declaration given by the heirs at the first stage of the tax assessment and the valuation measures used in the tax inspection made at the final stage are different measures. As a result of this, wealth differences emerge between the bases determined as a result of the initial assessment and the final assessment. In addition, uncertainties regarding the application of the arm's length measure used in the final stage of valuation of commodities, ships, vehicles, machinery, fixtures and other movables, which are among the elements of commercial capital included in the wealth to be taxed, are also important.

It is important both for the taxpayers and the administration to review the assessment procedures regarding the determination of the inheritance and gift tax base of the inherited wealth, especially the commercial asset, and to make arrangements to carry out in a shorter time.

References

Akkaya, Ş. & Oğhan, V. (2020). "Küreselleşme Sürecinde Servet Dağılımı Açısından Veraset ve İntikal Vergisi", Maliye Çalışmaları Dergisi, 63, ss. 1-17.

Arıca, N. (1981). *Veraset ve Intikal Vergisi Kanunu ve Beyanname Düzenleme Rehberi*, Ankara, Yayını.

Şafak, H. & Yurtsever, H. (2015). "Servet Vergilerinden Veraset ve İntikal Vergisi Üzerine Değerlendirmeler", Ege Akademik Bakış, 15(1), ss. 27-37.

T.C. Hazine ve Maliye Bakanlığı. (2011). *Vergi İncelemelerinde Uyulacak Usul ve Esaslar Hakkında Yönetmelik,* (31.10.2011 tarih ve 28101 sayılı Resmi Gazete'de yayımlanmıştır.)

Turhan, S. (1998). *Vergi Teorisi ve Politikası*, 6. Baskı, İstanbul, Filiz Kitabevi.

THE EFFECT OF INCOME TAXES ON POVERTY: PANEL DATA ANALYSIS

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Abstract

The purpose of the state's taxation of individuals or institutions is not only to finance public expenditures. As in public spending, the state can pursue social goals such as reducing income inequalities and thus ensuring income distribution justice through public revenues. Tax policy is one of the main tools that states can use against income inequality. In this context, personal income tax on the earnings of real persons; Corporate tax is levied on corporate earnings, which is a legal entity. Poverty is a complex concept, and it is a phenomenon that cannot be explained only as having a low income. Poverty can be defined as low income and deprivation of various elements such as employment, housing, health, education, and social life. The study's main purpose is to examine the effects of income taxes on poverty. The scope of the study consists of OECD countries. In this context, panel data analysis was carried out based on 24 OECD countries and the period between 2004-2017. According to the results obtained from the analysis, while personal income tax has no statistically significant effect on the poverty rate, corporate tax contributes positively to the fight against poverty.

Keywords: Income Taxes,Personal Income Tax, Corporate Tax, Poverty
JEL Code: H20, I38, P46

1. Introduction

Personal income tax is on the earnings of natural persons; corporate tax is on corporate profits. Due to the subjective character of the income tax, taking into account the ability to pay and complying with the taxation principles, it constitutes an appropriate tax for reducing income inequalities and, therefore in the fight against poverty. The effect of corporate tax on income inequality may vary depending on reflection, profit distribution, tax expenditures, and incentive practices.

This study was conducted to examine the effect of taxes on income on poverty. The scope of the study consists of OECD countries. This study aimed to examine the effect of income taxes on poverty. Firstly, taxes on income will be discussed in the study, and then the results of panel data analysis will be included.

2. Taxes on Income

The state's primary function is to follow tax policies in a way that will bring less burden to low-income people and ensure justice in income distribution, in addition to the public expenditure policies carried out for low-income people. Income redistribution effect of the tax policies to be implemented; Whether the ability to pay is taken into account in taxation depends on factors such as the tax rate, the distribution of direct and indirect taxes, and the presence of tax reflection opportunities (Yüce, 2002: 12-13). The subject of income taxes is income, and the taxpayer is individuals or institutions. Earnings of natural persons take into account in personal income tax, and corporate profits take into account in corporate tax. (Demir, 2015: 122).

2.1. Personal Income Tax

Income tax levied on natural persons is an applicable tax in reducing income inequalities and, therefore, in the fight against poverty, due to its subjective character, enabling it to reach taxpayer power and taxation by taxation principles (Akdoğan, 2017: 268). Various factors, such as income tax's ability to pay, its progressive nature, minimum living allowance, tax credits, and the method of assessment, affect the role of personal income tax in fighting poverty.

Ability to pay principle in taxation emphasized by economists such as J.J. Rousseau, J.B. Say, and J.S. Mill. according to this approach, which is the most settled today, everyone should pay taxes in proportion to their ability to pay taxes to ensure a fair tax system. The primary purpose of the ability to pay principle approach is to distribute the tax burden fairly. In this context, horizontal justice is tried to be achieved by taxing individuals with the same ability to pay in the same transactions and

conditions, and vertical justice is tried to be achieved by taxing individuals with different abilities to pay in different transactions and situations (Arslantaş, 2021: 25-26).

Personal income tax is a levy on income, which is the essential indicator of the ability to pay. Therefore it constitutes a tax more suitable for ensuring horizontal and vertical justice than other taxes. The progressive application of personal income tax will increase its effectiveness in the fight against poverty. With progressive taxation, low taxation from low-income groups and high taxation from high-income groups can significantly affect social justice. Progressive taxation can produce an effective result in both the distribution of the tax burden socially and, in this way, supporting the fight against poverty (Sağbaş & Şen, 2016: 194-196).

In addition to the minimum living allowance and progressive taxation, tax credits are another essential application that can be used to ensure tax justice in income tax and significantly reduce the number of working poor. Tax credit or deduction is a system with some characteristics of negative income tax application, which allows them to deduct a certain amount from tax liability or to increase the earnings they earn in return for their work by transferring income to disadvantaged groups (Günaydın & Yıldız, 2016: 93-94).

2.2. Corporate Tax

Another type of income tax is corporate tax, which includes corporate earnings within the scope of taxation. Unlike income tax, corporate tax constitutes a tax with an objective character. The fact that the incentive mechanisms are too high in corporate tax may affect income distribution against low-income groups (Aydın & Türgay, 2011: 255). On the other hand, corporate tax is complementary to personal income tax. Corporate incomes not subject to tax with personal income tax are subject to tax and act as a back door in the economy. In this context, it constitutes an essential tax to reduce income inequalities in high-income economies. However, the fact that capital owners do not bear the tax burden and remain on labor will contribute to increasing inequalities and poverty (Hines, 2020: 1).

Corporate tax affects income inequalities through reflection, profit distribution mechanisms, tax expenditures, and incentive practices. The effect of corporate tax on income distribution may occur depending on the extent to which this tax is reflected (Sağbaş & Şen, 2016: 427). Corporate tax remains on the capital owners in the short term and becomes difficult to reflect. In this case, the tax will remain on capital owners in the upper-income groups and contribute to reducing poverty by reducing income inequalities (Bilgiç, 2015: 76).

The negative effect of corporate tax on income inequalities and poverty can also occur through harmful tax competition. Tax competition can be briefly expressed as the race to apply the lowest tax (Stiglitz, 2021: 210). In this context, attempts by large companies to reduce their tax burdens by shifting their capital or investments to countries with lower rates or no taxation will increase wealth and income inequality. This situation may adversely affect poverty by reducing the tax burden on low-income groups.

3. Methodology of Studies

This study aims to examine the effect of income taxes on poverty in OECD countries. The study sample consisted of 24 OECD countries with data suitable for analysis. The period of the study consists of the years 2004-2017. Panel data analysis was used as a method in the study. The hypotheses determined within the scope of the study are as follows:

H_1: Personal income tax has an effect on poverty.

H_2: Corporate tax has an effect on poverty.

The studies on poverty inspired the variables in the model used in the study and added the share of income taxes in total tax revenue to the factors affecting poverty. In this context, the models and variables used to examine the effect of income taxes on poverty are as follows:

$$PHR_{it} = \beta_{0it} + \beta_1 GDP_{it} + \beta_2 Inf_{it} + \beta_3 Gini_{it} + \beta_4 Log(IPC)_{it} + \beta_5 UR_{it} + \beta_6 (PIT)_{it} + \beta_7 (CT)_{it}$$

PHR: *Poverty Rate (5.50$ Head Count Rate)*

GDP: *Gross Domestic Product Growth Rate*

Inf: *Consumer Price Index (2015 Base Year Index)*

Gini: *Gini Coefficient*

IPC: *Income Per Capita*

UR: *Unemployment Rate*

PIT: *Personal Income Tax (%Total Tax Revenue)*

CT: *Corporate Tax (%Total Tax Revenue)*

Before analyzing the effect of taxes on income on poverty, F, LM, and Hausman tests conduct to decide on the model selection. As a result of these tests, it concludes that the fixed effects model (FE) is consistent against the random model (RE).

After the model determination tests, heteroscedasticity, autocorrelation, and cross-section dependency tests carry out. As a result of the Wald test, it concluded that there is a heteroscedasticity problem in the model. Durbin-Watson and Baltagi-Wu tests were applied to test for autocorrelation. As a result of the tests, it determined that there is also an autocorrelation problem in the model. Finally, Pesaran-CD, Friedman, and Frees tests carry out to test the cross-sectional dependence in the model. As a result of these tests, it concluded that there is a cross-section dependency in the model. Therefore, in addition to the fixed model estimator (FE), the estimation was carried out with the Driscoll-Kraay (DK) method.

4. Results and Conclusion

The estimation results of the effects of income taxes on the poverty rate are given in Table 1.

Table 1. Effects of Income Taxes on Poverty

DEPENDENT VARIABLE PHR (5,50$) Unit=24 Time=14 Number of Observation=336							
Variables	1	2	3	4	5	6 (FE)	7(DK)
C	3,639	47,597	36,540	131,325	112,372	118,291	118,291
GDP	0.026 *** (0,70)	-0,053** (-2,09)	-0,053** (-2,14)	0,015 (0,64)	0,019 (0,82)	0,023 (1,01)	0,023 (0,89)
Inf		-9,720*** (-13,21)	-9,233*** (-12,66)	-4,178*** (-4,84)	-5,456*** (-5,28)	-5,381*** (-5,10)	-5,381*** (-6,46)
Gini			0,0279*** (3,94)	0,022*** (3,55)	0,019*** (3,08)	0,187*** (2,90)	0,187*** (3,78)
Log (IPC)				-11,322*** (-8,93)	-8,899*** (-5,33)	-9,342*** (-5,34)	-9,342*** (-3,52)
UR					0,091** (2,22)	0,065 (1,49)	0,065*** (2,99)
PIT						-0,072 (-1,92)	-0,072 (-0,76)
CT						-0,215** (-1,92)	-0,215** (-2,55)
R^2	0,212	0,361	0,391	0,516	0,524	0,530	0,530

Statistical Significance Levels: **0.05<p<0.10 **0.01<p<0.05 ***<0.01. The values in parentheses show the t statistic*

According to the results of two different estimation methods, all variables except GDP and PIT gave significant results. Poverty rate; The Gini coefficient is statistically significant at the 1% level with UR and Log(IPC), and the coefficient signs of these significances are in line with the expectations. Accordingly, a one-unit increase in the GİNİ coefficient will increase the poverty rate by 0.18%; a one-unit increase in UR would

increase it by 0.065%. A 1% unit increase in log (IPC) reduces the poverty rate by 9.34. The coefficient sign between Inf and poverty rate is negative, which is not in line with expectations, and is statistically significant at the 1% level.

It is expected that there will be a negative correlation between the poverty rate due to reasons such as the IPT taking into account the personal and familial situations of the taxpayers, is difficult to reflect, and takes into account their ability to pay. According to the analysis results, there is no statistically significant difference between the poverty rate and IPT. On the other hand, according to the analysis results, the coefficient sign between CT and poverty rate is negative and 5% statistically significant following the expectation. Accordingly, as the share of CT in GDP increases by one unit, the poverty level decreases by 0.21%. Therefore, while the first hypothesis (H1) was rejected, the second hypothesis (H2) was accepted. CT, whose taxpayers are high-income people, has a curative effect on poverty. In addition, it is thought that using the revenues from corporate tax for services that will improve the welfare of poor people will increase the effectiveness of this tax in fighting poverty.

References

Akdoğan, A. (2017). *Kamu Maliyesi*, Ankara, Gazi Kitapevi.

Arslantaş, S. (2021). "Türk Vergi Sisteminde Ücret Gelirlerinin Vergilendirilmesinin Vergilemede Adalet İlkesi Açısından Değerlendirilmesi ve Bir Model Önerisi", (Yayımlanmamış YL Tezi). İstanbul Arel Üniversitesi: İstanbul.

Aydın, M. & Türgay, T. (2011). "Yoksullukla Mücadele Vergi Politikası ve Türkiye", *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi,* 16(1), pp. 249-274

Bilgiç, A. (2015). "Türkiye'de Uygulanan Vergilendirme Politikalarının Gelir Dağılımı Üzerinde Etkileri: 1990-2013", (Yayımlanmamış YL Tezi). Osmangazi Üniversitesi, Eskişehir.

Demir, İ.C. (2015). *Kamu Maliyesi,* Afyonkarahisar, Limit Yayınları.

Günaydın, İ. & Yıldız, B. (2016). "Vergi Politikası ile Yoksulluk Azaltılabilir Mi?", *Küresel İktisat ve İşletme Çalışmaları Dergisi,* 5(9), pp. 90-104.

Hines, J. (2020). Corporate Taxation and The Distribution of Income. *NBER Working Paper,* 27939, pp. 1-43.

Sağbaş, İ. & Şen, H. (2016). *Vergi Teorisi ve Politikası,* Ankara, Kalkan Matbaa.

Stiglitz, J. (2021). "*Eşitsizliğin Bedeli: Bugünün Bölünmüş Toplumu Geleceğimizi Nasıl Tehlikeye Atıyor* (Çev: O.İşler)", İstanbul, İletişim Yayınevi.

Yüce, M. (2002). "Türkiye'de Gelir Dağılımı Bozukluğunun İzlenen Kamu Gelir ve Harcama Politikaları ile Bağlantısı", *Bilig,* 23, pp. 1-38.

A POLİCY PROPOSAL FOR EXCISE TAX IN TURKEY: NUDGING IN PUBLİC POLİCY*

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Abstract

It is aimed to evaluate the burden of the excise tax on consumers, which has been implemented since 2002 on alcoholic beverages, tobacco products, coke and sugar-sweetened beverages (SSB) in Turkey in the study. For this purpose, the development of excise taxation on demerit goods in Turkey; GDP is evaluated by considering total tax revenues and income distribution. It is aimed to measure the excise tax (ET) burden on demerit goods in Turkey with the ratio of the total ET amount on these products to total tax revenues, its ratio to GDP, and the gini coefficient indicators. In addition, the reasons for limiting the consumption of these products are discussed in terms of public health. It is observed that the share of the total excise duty on the central government budget between the years 2006-2021 showed an uneven development and even decreased in recent years. In addition, it is determined that the ratio of total excise tax revenues to GDP decreased in the same period. According to the development of the Gini coefficient in Turkey, it is seen that there was no significant improvement in income distribution and purchasing power in the same period. For this reason, it is concluded that the tax burden is higher in low and middle income groups. In terms of public health, it is seen that the ET implementiation in Turkey is ineffective on consumption-related diseases, especially the excise duty on alcoholic beverages. For this reason, it is concluded that the excise duty policies should be alleviated, the ET burden should be reduced and public nudging policies should be implemented within the framework of libertarian paternalism instead of strict paternalist policies.

Keywords: Libertarian Paternalism, Excise Tax, Health Taxes, Nudging, Public Health, Demerit Goods

Jel Codes: H3, H23, I18

Analysis of Taxpayer Behaviors from the Perspective of Behavioral Economics

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Abstract:

Economics is a social science that studies the economic behavior of individuals and firms that arise against the problems that arise in the process of meeting unlimited human needs with scarce resources. These behaviors have a structure that develops around the mutual interaction between the individual, society and the state and changes depending on psychological factors. Psychology and sociology with economics, neo-classical economists and decision makers in all circumstances of mathematics has been ignored by the weighted models are under the assumption that rational models have been created. The concept of unlimited rationality is considered together with the full information that decision-makers have and the process of using all available data, and it is accepted that the process of maximization is always provided from the point of view of decision-makers. In this case, effectiveness will be achieved in all cases in terms of all markets. In particular, criticism of the concept of unlimited rationality and opinions that decision-makers make decisions by processing the limited information that exists under limited rationality have shown that maximization is not always possible from the point of view of economic decision-making units. Economics is a social science. However, with the beginning of using the methods used in other branches of science in their own analysis, the use of experimental methods used in the natural sciences has also been in question. Mathematics, econometrics, and biology as well as physics and economics of the relationship between these different methods that are used to re-discover supported(Toigonbaeva and artifacts, 2011). The use of experimental methods adopted in economic models of behavior differs from the behavior of people with that is could be seen the importance of psychological and sociological factors that determine this behavior has ensured that more apparent. Along with the use of experimental methods used in the field of psychology and sociology in economic science, the field of research of the concept of behavioral economics has also expanded. The popularization of the relations between psychology, sociology and economic science and the use of methods used in the field of psychology and sociology in economic science has become widespread over the past few Decades. However, it Dec seen that the relationship between these branches of science has been intensively revealed by thinkers such as Adam Smith, David Hume and Jeremy Bentham who are involved in the classical economic thought system. Although the definition of tax has changed in the historical process, it is accepted as the most important source of income of the state in all different economic models. The relations between the tax creditor state and the taxpayer cannot be evaluated around rationality and limited hypotheses. The fact that the state does not have all the information about the taxpayer and the need for tax revenues to finance the services undertaken by the state increases the importance of the behavior of the taxpayers in the face of taxes. Investigating the taxpayers' behavior towards taxes is within the

research field of behavioral economics. The fact that the state has incomplete information about the behavior of the taxpayer increases the importance of the process of learning the reaction of the taxpayers against all tax practices and laws. The survey method, which is one of the experimental methods used in behavioral economics, has been determined as the main method of the research in order to see the reactions of the taxpayers against the tax and tax applications. The target audience of the research consists of taxpayers who own a workplace and work as a paid employee within the borders of Turkey. The questionnaire was presented as a single section. After the demographic characteristics, 35 questions were asked to the taxpayer and the options were given according to a 5-point Likert scale. Strongly Disagree, Disagree, Undecided, Agree, and Strongly Agree. The research was delivered to the participants as an online survey on 08.03.2022 and the collection of answers was terminated on 31.03.2022. 419 people participated in the research. Survey data were obtained from the internet. The statements in the completed questionnaires were coded and uploaded to the SPSS program (Statistical Package for Social Sciences), and analyzed and interpreted. The data obtained for the study were carried out online due to the Covid-19 outbreak. The online questionnaire was reached to the participants via the internet. With this research, it is aimed to reveal the taxpayers' behaviors towards tax and tax practices and their perceptions that lead to these behaviors.

Keywords: Behavioral Econmics, Taxpayer Attitudes

JEL Codes: D91, H21

The Role of Tax Ethics as A Way to Legitimize Taxpayers' Tax Evasion Behavior in Turkey

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Abstract:
Economics is a social science that studies the economic behavior of individuals and firms that arise against the problems that arise in the process of meeting unlimited human needs with scarce resources. These behaviors have a structure that develops around the mutual interaction between the individual, society and the state and changes depending on psychological factors. Psychology and sociology with economics, neo-classical economists and decision makers in all circumstances of mathematics has been ignored by the weighted models are under the assumption that rational models have been created. The concept of unlimited rationality is considered together with the full information that decision-makers have and the process of using all available data, and it is accepted that the process of maximization is always provided from the point of view of decision-makers. In this case, effectiveness will be achieved in all cases in terms of all markets. In particular, criticism of the concept of unlimited rationality and opinions that decision-makers make decisions by processing the limited information that exists under limited rationality have shown that maximization is not always possible from the point of view of economic decision-making units. Economics is a social science. However, with the beginning of using the methods used in other branches of science in their own analysis, the use of experimental methods used in the natural sciences has also been in question. Mathematics, econometrics, and biology as well as physics and economics of the relationship between these different methods that are used to re-discover supported(Toigonbaeva and artifacts, 2011). The use of experimental methods adopted in economic models of behavior differs from the behavior of people with that is could be seen the importance of psychological and sociological factors that determine this behavior has ensured that more apparent. Along with the use of experimental methods used in the field of psychology and sociology in economic science, the field of research of the concept of behavioral economics has also expanded. The popularization of the relations between psychology, sociology and economic science and the use of methods used in the field of psychology and sociology in economic science has become widespread over the past few Decades. However, it Dec seen that the relationship between these branches of science has been intensively revealed by thinkers such as Adam Smith, David Hume and Jeremy Bentham who are involved in the classical economic thought system. Although the definition of tax has changed in the historical process, it is accepted as the most important source of income of the state in all different economic models. The relations between the tax creditor state and the taxpayer cannot be evaluated around rationality and limited hypotheses. The fact that the state does not have all the information about the taxpayer and the need for tax revenues to finance the services undertaken by the state increases the importance of the behavior of the taxpayers in the face of taxes. Investigating the taxpayers' behavior towards taxes is within the research field of behavioral economics. The fact that the state has incomplete information about the behavior of the taxpayer increases the importance of the process of learning the reaction of the taxpayers against all tax practices and laws. The survey method, which is one of the experimental

methods used in behavioral economics, has been determined as the main method of the research in order to see the reactions of the taxpayers against the tax and tax applications. The target audience of the research consists of taxpayers who own a workplace and work as a paid employee within the borders of Turkey. The questionnaire was presented as a single section. After the demographic characteristics, 35 questions were asked to the taxpayer and the options were given according to a 5-point Likert scale. Strongly Disagree, Disagree, Undecided, Agree, and Strongly Agree. The research was delivered to the participants as an online survey on 08.03.2022 and the collection of answers was terminated on 31.03.2022. 419 people participated in the research. Survey data were obtained from the internet. The statements in the completed questionnaires were coded and uploaded to the SPSS program (Statistical Package for Social Sciences), and analyzed and interpreted. The data obtained for the study were carried out online due to the Covid-19 outbreak. The online questionnaire was reached to the participants via the internet. With this research, it is aimed to reveal the taxpayers' behaviors towards tax and tax practices and their perceptions that lead to these behaviors.

Keywords: Behavioral Econmics, Taxpayer Attitudes
JEL Codes: D91, H21

"PRINCIPLE PURPOSE TEST" IN PREVENTING THE ABUSE OF TAX TREATIES

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Abstract
The Principle Purpose test is a general tax avoidance rule introduced to prevent the abuse of tax treaties in international tax law. In this respect, it has been included in both the OECD Model Agreement and the MLI. This test is also very important, especially since it is regulated as a minimum standard in MLI. However, despite this importance, the conditions of this rule are quite uncertain, just like the principle of economic approach in Turkish Law. In the simplest terms, even the "contract benefit" is quite vague and cannot be understood from the regulations. This situation gives the administration quite wide powers at the point of applying this rule and it will probably cause serious application differences between countries. The main purpose of this study is to try to determine exactly under which conditions the main purpose test should be applied. In this paper, first of all, the conditions required for the principle purpose test to find an application area will be examined. Then, the strengths and weaknesses of the principle purpose test will be evaluated, the problems and problematics that the provision contains will be evaluated, and how useful the provision can be in preventing the abuse of tax treaties will be interpreted.

Keywords: International Tax Law, OECD Model Agreement.
JEL Code: K, K3, K34

1. Introduction

The OECD/G20 Base Erosion and Profit Shifting Project in its Final Report on Action 6 "Preventing the Granting of Treaty Benefits in Inappropriate Circumstances" mostly focalize on abuse of tax treaties as one of the biggest concerns of international tax law. In this respect Action 6, planned to provide general anti-avoidance rules to prevent entitlement of taxpayers to tax treaty benefits in un-solicated status.

With this aim, action 6 established the principal purpose test to counter the abusive transactions with purpose of tax benefits. The report highlighted that the rule has both strengths and weaknesses and is incompatible with the domestic legislation of some jurisdictions. However, the BEPS Action 6 Final Report recommended that OECD countries apply the PPT rule in their tax treaties.

This article examines the subjective and objective elements, procedural aspects, and relevance of the Principle Purpose Test.

2. The Rule and the Developments That Prepared the Rule

The OECD/G20 BEPS Project "Preventing the Granting of Treaty Benefits in Inappropriate Circumstances" in its Final Report on Action 6 focused on the abuse of tax treaties as one of the major concerns of the BEPS initiative. The action plan aimed to provide effective anti-avoidance principles and rules to prevent taxpayers from utilizing tax treaty benefits in inappropriate circumstances.

To this end, the report established the Principle Purpose Test as a general anti-abuse rule to prevent abuses aimed at obtaining improper tax benefits. The report noted that the rule has the ability to prevent some situations where the person exceeds the limitations provided by the tax treaty. However, the BEPS 6th action Final Report recommended OECD countries to apply this rule in their tax treaties.

The BEPS project Action Plan No. 7 on A Preventing the Artificial Avoidance of Permanent Establishment Status has also proposed the Principle Purpose Test to combat contract splitting, similar to the suggestions above.

A few years after the BEPS Final Reports were published, the Rule for Principle Purpose Testing was included by the OECD in the Model Agreement Text and Preventing the Artificial Avoidance of Permanent Establishment Status (MLI) as a general anti-avoidance provision . The Principle Purpose Test rule has become one of the minimum standard rules under MLI. The executive provision, which aims to harmonize the Principle Purpose Test with the covered bilateral tax treaty, stated that the relevant provision will be applied "in lieu of the existing provision in the covered tax treaty or if there is no provision in the covered tax treaty". The meaning of this provision is that the relevant provision will apply in all circumstances, whether or not the covered tax treaty contains a similar provision, or whether or not the parties declare that such a clause is present or absent in a covered treaty. However, it is possible for states not to choose the Principle Purpose Test rules by choosing to apply the "benefit limitation" provision to meet the minimum standard, and in this context, they are only included in the

Principle Purpose Test as an interim transitional measure. In addition, states may continue to apply the existing treaty provision by making a reservation to continue to apply the general tax avoidance provision in the covered tax treaties, if any.

The rule is as follows:

“Notwithstanding any provisions of a Covered Tax Agreement, a benefit under the Covered Tax Agreement shall not be granted in respect of an item of income or capital if it is reasonable to conclude, having regard to all relevant facts and circumstances, that obtaining that benefit was one of the principal purposes of any arrangement or transaction that resulted directly or indirectly in that benefit, unless it is established that granting that benefit in these circumstances would be in accordance with the object and purpose of the relevant provisions of the Covered Tax Agreement.”

3. The Background of the Rule

The concept of the Principal Purpose Test rule is not new; It builds on the principles already established in paragraphs 9.5, 22, 22.1 and 22.2 of Article 1 of the Commentary on the 2014 OECD Model (OECD Model Tax Convention 26 July 2014; Models IBFD [OECD Model (2014)] and OECD Model Tax Convention: Commentary on Article 1 para 9.1. 26 July 2014). The 2014 Model Commentary included a principle called the "guiding principle" to clarify when benefits can be denied. The guiding principle is “ …A guiding principle is that the benefits of a double taxation convention should not be available where a main purpose for entering into certain transactions or arrangements was to secure a more favourable tax position and obtaining that more favourable treatment in these circumstances would be contrary to the object and purpose of the relevant provisions.”

Guiding principle is different than Principle Purpose Test; “More favorable tax position " is not included in the current Principal Purpose Test provision. Also for tax authorities, the burden of proof of abuse appears to be reduced from "clear evidence " to a "reasonable" burden of proof to reach a conclusion. Therefore, it would be misleading to claim that the provisions of the Principle Purpose Test rule fully embrace the concepts recommended in the commentary on item 1 of the OECD Model: 2014).

However, the guiding principle has not been deleted from the 2017 Model commentary. The 2017 update of the OECD Model stipulates that the guiding principle can be applied where a tax treaty does not include the Principle Purpose Test rule (Para 57 and 61 OECD Model: Commentary on Article 29(9) 2017). Also included in the 2017 commentary is a special note stating that "the guiding principle will be applied independently of the provisions in paragraph 9 of Article 29 that only confirm it" (Par 169 OECD Model: Commentary on Article 29(9): 2017).

It is observed that the aim of the OECD is to equate the impact of the guiding principle with the Principle Purpose Test provision, and to provide a unilateral approach to combating abusive practices by countries, regardless of whether tax treaties include the Principle Purpose Test or are based solely on the guiding principle. However, these

concepts contain different criteria for their application and may not lead to the same result.

In summary, the OECD clearly states that the Principal Purpose Test was developed on the guiding principle and reflects and merely confirms the guiding principle. More precisely, if the Principal Purpose Test provision only confirms the guiding principle, but does not expand, change or amend it, the question arises as to whether the Principal Purpose Test can be broader in scope than the guiding principle. It would seem that the answer to such a question should be in the negative. If this is the case, a restrictive interpretation of the Principal Purpose Test provision is appropriate.

4. Tax Avoidance Situations Targeted by the Principle Purpose Test

The OECD distinguishes two situations in which a taxpayer tries to obtain improper tax advantage(s):

(i) a person tries to circumvent the limitations provided by an agreement itself, and

(ii) a person is trying to circumvent local tax law provisions by using treaty benefits (Action 6 Final Report, 2015: para. 15)

The Principal Purpose Test rule is designed as a general anti-avoidance rule to prevent situations in the first category from succeeding. Specifically, but not exclusively, the Principal Purpose Test is intended to target treaty shopping situations. At the same time, it is stated that the Principle Purpose Test can prevent cases of abusive restructuring.

There are different forms of treaty exchange, such as creating direct "channels" and "stepping-stone" channels to which the Principal Purpose Test clause is applied; Channel states refer to abusive practices where a person who is a resident of a state unable to utilize the benefits of a tax treaty establishes an organization in another state to obtain those treaty benefits that he or she cannot directly utilize. Direct channel states refer to plans that only include channel companies established in two jurisdictions, while stepping-stone channels, a variant of the direct channel structure, may include more jurisdictions.

Abusive restructuring cases also include rules exchange structures, where a regulation or transaction could lead to the application of a different provision of the same tax treaty that would not otherwise apply.

The main example of this is the abuse of permanent establishment provision.

In order to better understand the subject, the following example given in the BEPS Action Plan has been added to the commentary.

"*Example E: RCo is a company resident of State R. It has successfully submitted a bid for the construction of a power plant for SCO, an independent company resident of State S. That construction project is expected to last 22 months. During the negotiation of the contract, the project is divided into two different contracts, each lasting 11 months. The first contract is concluded with RCO and the second contract is concluded with SUBCO, a*

wholly-owned subsidiary of RCO resident of State R that is incorporated for that purpose. The contracts with RCO and SUBCO provide that both companies are jointly and severally liable for the performance of the contract concluded with SUBCO. In this example, in the absence of other facts and circumstances showing otherwise, it would be reasonable to conclude that one of the principal purposes for the conclusion of the separate contract under which SUBCO agreed to perform part of the construction project was for RCO and SUBCO to each obtain the benefit of the rule in paragraph 3 of Article 5 of the State R-State S tax convention. Granting the benefit of that rule in these circumstances would be contrary to the object and purpose of that paragraph as the time limitation of that paragraph would otherwise be meaningless."

How accurate this example is debatable? Because, in addition to other similarities, the two contracts are the same for the customers. Therefore, it is possible to say that the projects are commercially compatible. Likewise, it is seen that the construction site is the same place for both contracts, although it is not fully emphasized in the example. Therefore, it can be said that the projects are geographically compatible. For this reason, there is no doubt that these contracts would be evaluated within the scope of a single project even if the Principal Purpose Test did not exist.

For the Principal Purpose Test in this example, the issue is whether one of the key goals behind splitting the project into two contracts is to gain the advantage of avoiding permanent establishment status. Because each separate project will be subject to a 12-month condition. The burden of proof of the tax office will therefore be deemed to have been fulfilled. Therefore, the taxpayer is obliged to prove the contrary. Considering the J example, it would be difficult for the RCo to prove this, as the current situation strongly suggests that this is a project split into two contracts, not two projects covered by two contracts.

5. Required Conditions for the Application of the Principal Purpose Test

The wording of the Principal Purpose Test rule sets out the criteria for applying the rule. These criteria can be divided into two groups: (i) those that identify elements of abuse (ie which situations are considered abuse from the standpoint of tax treaty enforcement); (ii) and those that provide procedural standards for the application and legal consequences of the Principal Purpose Test rule.

These conditions can be divided into objective and subjective conditions.

- The purpose of obtaining tax advantages for a transaction or arrangement must be the primary purpose or one of the primary purposes of a scheme or transaction. According to the objective test, gaining a benefit due to this arrangement or transaction must be contrary to the aims and objectives of the relevant tax treaty provisions.
- The subjective aspect of abuse under the Principal Purpose Test can be broken down into three elements: the taxpayer's action - "any arrangement or action", the result of the action - the "Benefit under the Covered Tax Treaty" and the

nature of the result - the benefit must be contrary to the intent and purpose of the relevant tax treaty provisions.

Principal Purpose Test distinguishes several procedural steps to be followed by tax authorities to detect objective and subjective elements of abuse:

(1) Assessing all relevant facts and circumstances of the case (determining the transaction or arrangement in question and the interest under the tax treaty and determining the link between the act and the interest);
(2) denying a benefit if one of the primary purposes of a transaction or arrangement is to obtain that benefit; and
(3) providing this advantage if it is determined that the provisions of the relevant tax treaty comply with the aims and objectives;

5.1. An Arrangement or Action (" Any ") arrangement or transaction ")

Commentary on Article 29(9) of the OECD Model (2017) states that the expression "any arrangement or transaction" should be interpreted broadly and includes "any agreement, understanding, plan, transaction or set of transactions, whether legally enforceable or not".

A broad approach to the definition of the scheme or transaction is important to circumvent plans, including the development of new schemes to override more specific prohibitions contained in tax treaties. At the same time, the absence of any specific criteria for transactions that should be considered abusive may give tax authorities greater discretion in denying benefits under tax treaties. Potentially, tax authorities may investigate any scheme or any transaction because the Principal Purpose Test does not provide any specific additional criteria (eg artificiality, lack of economic substance, etc.) for identifying schemes or transactions.

5.2. A Benefit Under the Tax Agreement

The concept of benefit is important for detecting abuse and determining the result of the Principal Purpose Test. As soon as a transaction or arrangement is identified, the tax administration must decide whether the transaction or arrangement gives rise to a tax benefit. In addition, there must be a link (direct or indirect) between the arrangement or transaction made and the benefit obtained. The benefit doesn't need to have actually been obtained, but the taxpayer must have been entitled to it.

The term "benefit" under the Principal Purpose Test rule includes all rights "related to an item of income or capital." In particular, "a benefit" means "all limitations on taxation (for example, tax relief, exemption, deferral or refund) imposed on the State of origin under Articles 6 to 22 of the Convention, the avoidance of double taxation provided for by Article 23, and a Contracting State under Article 24. It refers to the protection or other similar limitations afforded to residents and citizens of the State" (Action 6 Final Report, 2015: p. 56, para. 7).

The term "benefit" refers to a taxpayer receiving more favorable tax treatment as a result of the application of one or more tax treaty provisions. Examining the existence of an benefit is essential to understanding the subjective intent of a taxpayer. If there is no improvement in a taxpayer's tax conditions, it should be assumed that obtaining tax benefits is not the primary objective and the Principal Purpose Test should not be applied.

However, the main issue for the application of the rule is how to identify a benefit. The first step in detecting the existence of a benefit is to find a suitable benchmarking tool for analysis, ie the taxpayer's tax position should have improved relative to another taxpayer in a similar situation. A taxpayer's tax position may be comparable to one that would apply under local tax law or that which would apply under other tax treaty provisions.

The first goal and purpose of tax treaties is to prevent legal double taxation or economic double taxation resulting from the parallel exercise of financial rights on the same income or capital item by two or more countries in cross-border transactions. To this end, a tax treaty provides benefits that can be seen as a voluntary waiver by the contracting parties. Accordingly, the term benefit, as it is generally understood, means an improvement in the tax situation of a taxpayer compared to that applicable under domestic law. This option is compatible with treaty shopping situations where, without a disputed transaction, a taxpayer would not fall within the personal scope of the relevant tax treaty and therefore the provisions of the internal tax law would be the only relevant provisions. However, this interpretation of the term "benefit" is less clear when it comes to rules-exchange arrangements.

In the case of a rule-exchange arrangement, a treaty benefit derived from that arrangement or transaction may be compared to a tax treatment under a different treaty provision than would otherwise apply. For example, a taxpayer may enter into an arrangement or transaction to be covered by Article 11 of the OECD Model (2017) on interest instead of Article 10, or to be subject to the dividend rule in Article 10 (2) instead of the rule in Article 10(1). The Principal Purpose Test provision and Model commentary (2017) do not seem to explicitly address these situations when defining the term "benefit". This may be because determining the tax treatment that would otherwise be applied requires creating a legal fiction that a transaction that has not actually taken place has taken place. Moreover, the creation of such legal constructs will require a choice among a variety of situational options that can take place without contentious action. The question, therefore, is how far one can go in creating such a fiction, and what will happen in the future if economic reality (for example, ownership of assets) moves in a completely different direction from the legal regulation.

However, there may be two differing views on the definitions of "benefit" that are particularly important to the outcome of the application of the rule. If, in the Principal Purpose Test, a Convention interest is argued to have a general meaning as an improvement in the tax position compared to that under domestic law, the rejection of

that interest must result in the application of a relevant domestic law provision. At the same time, the draft public debate expresses the view that "a benefit under this Convention" may exist if that benefit arises not only in comparison to the application of domestic law, but also in comparison to an otherwise arguably enforceable treaty provision. Accordingly, the term "benefit" may also mean advantageous tax treatment over that which would otherwise apply. Similarly, the second approach may be more appropriate to provide evidence as to whether the primary purpose of a taxpayer's regulation is to circumvent treaty provisions. However, the first approach is better suited to provide clearer legal implications for the implementation of the Principal Purpose Test.

The second issue is whether the Principal Purpose Test refers to taxation in one of the contracting states, or to the general assessment of taxes payable in the contracting states under a tax treaty, or to the general tax burden in all jurisdictions involved in an arrangement or transaction. The answer to this question is not clearly understood from the Principal Purpose Test item. For example, if the taxpayer's transaction is intended to trigger a deduction under the agreement, this will reduce the tax burden for the taxpayer in the source state, but not the overall tax burden in the state of residence. In this scenario, the taxpayer is not considered to be trying to obtain more advantageous tax treatment. However, the source state can still claim that the transaction was abused because a tax advantage was obtained in that state. At the same time, a taxpayer may take a transaction or adjustment not to lower the overall tax rate applicable to him, but to use, for example, previous year losses in one jurisdiction that are not available in another. In this case, the question will be whether these benefits arise from the tax treaty in question or are they derived from the tax treaty benefits.

5.3. Subjective Aspect – One of the Main Purposes

The commentary on Article 29(9) of the OECD Model (2017) emphasizes that obtaining benefits under a tax treaty need not be the sole or dominant purpose... It is sufficient that at least one of the main purposes is to obtain benefits.

It is our opinion that if a taxpayer can also present important economic reasons unrelated to tax treaty benefits, treaty benefits should not be denied simply because obtaining such benefits is one of the main grounds. Any transaction with a "significant non-tax link" must be considered legitimate and not deprived of any deal benefits.

With this arrangement, if a tax authority assumes that one of the primary purposes of a scheme or transaction is to obtain tax benefits, the Principal Purpose Test rule can be applied even if a taxpayer manages to prove the existence of other primary objectives. It appears that the Principal Purpose Test does not attempt to separate abuse cases from non-abuse cases to combat tax avoidance, and as a result it targets all transactions that are potentially abusive but are not always abuses. If a taxpayer can prove that benefiting from one or more treaty provisions is not one of their primary purposes, there is no chance of self-defense, and the existence of other purposes does not help much. This can actually make tax planning inapplicable.

The Principal Purpose Test is designed as a general anti-abuse rule that applies where a person is trying to circumvent the limitations provided by the agreement itself (Action 6 Final Report, 2015: 17-19). Therefore, interpretation of the provision based on the context in which it was developed requires that the subjective test of the Principal Purpose Test be narrowly interpreted to only address regulations and transactions where the purpose is to circumvent tax treaties. In other words; As an anti-avoidance rule, principal purpose testing should only target abusive applications and should not create additional burdens for the normal operation of things. However, the subjective element is not capable of determining which transaction is abuse. It is difficult to prove a taxpayer's intent. Not every transaction whose main purpose is to gain tax advantage constitutes abuse.

Circumvention of the terms of the agreement means avoiding the application of the distribution rule in favor of a different article of the Agreement (exchange of rules) or circumventing the clauses determining access to the agreement by revealing the personal scope (exchange of agreements). However, it would be wrong to argue that a taxpayer should be deemed to be circumventing treaty or domestic law provisions if the aims and objectives of the relevant provisions provide the taxpayer with alternatives to their behavior and the taxpayer chooses the most beneficial option based on tax reasons. At the same time, even in this scenario, the goals and objectives of the relevant tax treaties are decisive in examining whether a transaction or regulation has been abused.

Relying on the vague criterion of "one of the main purposes" as a key element of abuse makes it easier to apply the rule to any transaction. It is extremely difficult and sometimes impossible to prove the subjective intent of a taxpayer. Secondly, there are always objective factors that may indicate that the purpose was due to tax reasons. Indeed, obtaining a benefit under a transaction or arrangement already provides grounds for such an assumption.

5.4. Purpose and Objective of the Relevant Provision

Benefit provided by the agreement in terms of a particular element of income or wealth is not granted, unless it can be demonstrated that granting that benefit is in accordance with the purpose and objective matter of the relevant provision of the covered tax treaty.

Regarding the context of the objective and purpose element, OECD Model Agreement Commentary states that the last part of the paragraph gives the person who would otherwise be deprived of the benefit the opportunity to demonstrate that in these circumstances, obtaining the benefit would be in accordance with the purpose and objectives of the relevant provisions of this Convention (OECD Model: Commentary on Article 29, 2017: Para.278).

As can be seen, the Annotation clearly states that the Principal Purpose Test divides the burden of proof between taxpayers and tax authorities. Thus, the current rule shifts the

burden on taxpayers to demonstrate that their transactions or arrangements are fit for the purpose and objective of the benefits of the treaty.

It should be noted, however, that it is also difficult to imagine how tax authorities could apply the Principal Purpose Test or any other provision of the treaty without reference to the object and purpose of the treaty. It is clear that when interpreting a legal provision, the purpose and objective of the provision must always be taken into account.

OECD Model (2017) is to prevent the granting of benefits in inappropriate situations and to provide those benefits where appropriate. The provisions of the agreement are intended to be applied in bona fide transactions, not in abusive transactions. To find out what conditions are appropriate, reference should be made to the specific provision of the treaty that provides a benefit to taxpayers.

For example, article 10 of the OECD Model (2017) aims at apportioning taxation rights between contracting states, especially in cross-border transfers of dividends. Pursuant to Article 10(2)(a), the reduced tax rate is only available in cases of direct shareholding, while the general rate applies in all other cases. In this way, countries provide tax incentives for taxpayers to attract foreign direct investment rather than portfolio investment. This provision gives the taxpayer a choice as to the type of investment.

Therefore, the purpose of a particular provision of the treaty must be determined whether the treaty deliberately induces taxpayers to take certain actions or arrangements. The tax authorities' disregard for the purpose and purpose of the relevant tax treaty provisions will essentially, in any case, impose an obligation on the taxpayer to prove to himself that he is entitled to the benefits. From a policy perspective, if the sole purpose of the OECD is to avoid tax avoidance altogether, the result of the rule certainly helps tax authorities in their mission. If the OECD's purpose is also to encourage cross-border business activities, it seems unreasonable to create tax incentives for a taxpayer who encourages a particular behavior while at the same time requiring him to prove that he is entitled to the benefit resulting from that behavior.

6. Conclusion: Procedural Considerations Regarding the Application and the Legal Consequences of the Application of the Principle Purpose Test

Standard of Proof;

The Principal Purpose Test determines the legal requirements for implementation as well as the procedural requirements. The wording of the Principal Purpose Test provides tax authorities with a standard of proof for the subjective element of the rule. According to this It must be reasonable to conclude that the provision of that benefit is one of the principal purposes of any arrangement or transaction that provides, directly or indirectly, for the benefit in question.

The practical application of the "reasonable" standard in the application of the rule by tax authorities can raise several concerns. In particular, it is recognized that the current anti-avoidance provision significantly lowers the threshold of proof for tax authorities and, in addition, allocates the burden of proof to taxpayers. When the threshold of proof

is lowered, there is a risk that the interests that the agreement aims to achieve are potentially damaged by excessive administrative discretion.
At this point, it is observed that the "reasonableness" requirement sets a very low standard of proof for the tax administration and increases the discretion given.
In practice, tax authorities will not make any substantial effort to provide clear evidence of abuse, with the intent of increasing tax revenues and bearing in mind their heavy duty. In this context, where the tax authority applies the Principal Purpose Test rule solely on the basis of the fact that there is a tax benefit, the application of the rule must be rejected by the national court. However, it is impossible to predict how completely different jurisdictions with different levels of economic development, legal cultures and different rule of law indices will interpret and apply the reasonableness test.
The additional question is whether the tax authorities' presumption is rebuttable under the Principal Purpose Test provision. A taxpayer always has a chance to evade the application of the Principle Purpose Test only by providing evidence that the tax purpose of the transaction is either not a substantive purpose or that it complies with the purpose and objective of the relevant provision of the tax treaty.
It should be noted that if the taxpayer presents evidence that benefiting from one or more treaty provisions is not one of their primary purposes, they have no chance of warding off the abuse charge because they are already fighting a losing battle.
However, as noted earlier, the current Principal Purpose Test requires only the subjective element of the Principal Purpose Test to be fulfilled, significantly lowering the threshold for tax authorities' burden of proof. The subjective element can be refuted only if it is determined that providing benefits in these circumstances will be in accordance with the purpose and of the relevant provisions, and the burden of proof falls on the taxpayer. Accordingly, it is much easier for tax authorities to take the first step under the Principal Purpose Test than for a taxpayer to provide sufficient evidence to demonstrate that the Principal Purpose Test should not be applied. As a result, the burden of proof of all subjective and objective elements of tax fraud should remain with the tax authorities. However, it is necessary to compel the taxpayer to cooperate with the tax authorities and to provide reasons for the contested transaction or arrangement. Otherwise, it may be difficult for tax authorities to gather information outside their jurisdiction, given the cross-border element of transactions covered by the provision. In this context, a taxpayer should only be allowed to present counter-arguments that refer to both subjective and objective factors.

Consequences of the Judgment;
In the first stage, the Principal Purpose Test rule stipulates that the benefit should be denied. However, at the next stage, the rule does not answer the question of what treatment will be applied instead of the denied benefit. At this point, we have two options: none of the treaty provisions apply (ie local tax provisions apply) or a different tax treaty provision may apply.
The first option applies where the taxpayer is not entitled to any tax treaty benefits prior to processing and therefore no other provision other than domestic law is deemed appropriate to replace the denied advantage. However, the situation becomes more

complicated in rules-exchange arrangements that fall under the same tax treaty or where the taxpayer is entitled to treaty benefits under a different tax treaty before the arrangement takes place.

The answer to this question may depend on the interpretation of the concept of “benefit”. If a benefit is expressed as an improvement in the taxpayer's tax situation, under a country's domestic law, the denial of that benefit must result in the application of the relevant domestic tax law provisions. If the benefit in question is claimed to mean an improvement in tax treatment compared to what would have otherwise been applied, then the benefit should only be denied to that extent and accordingly other tax treaty provisions may apply.

References

Buriak, S. (2015). Chapter 2: The Application of the Principal Purpose Test under Tax Treaties in Tax Treaty Entitlement, M. Lang et al. eds, Books IBFD.

Yaltı, B. (2021). Vergi Anlaşmalarının Kötüye Kullanmasının Önlenmesi- Çok Taraflı BEPS Anlaşmasında Başlıca Amaç Testi, The Multilateral Instrument and Its Prospective Effects on the Turkish-German Double Tax Treaty, Edt: Leyla Ateş, Joachim Englisch, On İki Levha, İstanbul, 2021, pp.67-85

Danon, R.J. (2018). Treaty Abuse in the Post-BEPS World: Analysis of the Policy Shift and Impact of the Principal Purpose Test for MNE Groups, "72 Bull. Intl. Taxn. 1," p. 43 (2018), Journals IBFD; Action 6 Final Report (2015).

M. Lang, M. (2014) BEPS Action 6: Introducing an Anti-Abuse Rule in Tax Treaties, "74 Tax Analysts 7," pP. 658-665.

Taboada, C.P. (2015) OECD Base Erosion and Profit Shifting Action 6: The General Anti-Abuse Rule "69 Bull. Intl. Taxn." 10, pp. 604-605.

Participation On Tax Crimes in Republic of Turkey and Turkish Republic of Northern Cyprus

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Abstract:

The first general regulation in the tax procedure law of Northern Cyprus is the 1977 Tax Procedure Law (VUY), which was adopted by the Turkish Cypriot Federation Assembly. This regulation was transferred from Turkish law to Northern Cyprus law brought along implementation problems in Northern Cyprus law that is regulated by the Anglo-Saxon law model. One of these differences is the participation of tax crimes.

Participation in crime refers to the upper concept that is divided into perpetrating and complicity, depending on whether a value that has an interest in protection is violated or not. Complicity in Turkish law is divided into two as aiding and abetment. At this point, these people, who cannot dominate the actions included in the definition of tax crimes, are punished in accordance with the status of complicty in both legal systems. However, when examining the appearance of these participation cases in terms of tax evasion, what can be observed is the benefit criterion. In case the persons who participate in tax evasion do not have an interest in committing the crime, it is possible to reduce the prescribed penalty. In the case of fraudulent tax crime, which is the appearance of tax evasion in Northern Cyprus law, this situation is regulated as "monetary benefit".

In this research, participation in tax crimes and the benefit criterion will be examined in terms of tax evasion and their appearance in Turkish law and Northern Cyprus law. These will be discussed using the comparative law methodology.

Keywords: Tax Crimes, Compolicty, Monetary Benefit, Aid and Abetment, Offender

Outlook of Reactions to Tax Pressure: Cases in Criminal Courts and Tax Courts by Years

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Abstract

Taxes are the payments that are received as mandatory, final and gratuitous, to meet the needs of the public, to reach the goals determined in the context of the public economy, to realize the economic and social goals, and to other economic units in the society through public legal entities without any special purpose. Tax is the most important element in the financing of public services. In order for the public services to continue uninterruptedly, to realize the goals in the economy and to spread the economic development throughout the country, tax revenues must be collected accurately, on time and completely. The developing public services in the world have led to an increase in the demands of the societies at the stage of public services. In order to meet the increasing demand for public services, naturally, it is necessary to increase tax revenues. However, at this stage, taxpayers can develop certain psychological and taxation reactions during the payment of taxes. With the effect of the final and unrequited payment characteristics of taxes, taxpayers intervene legally or illegally in transactions that may create costs in tax payment and taxation processes. These reactions, manifested within the framework of tax pressure, cause tax losses and evasion on public revenues. The main and final reflections of the reactions in this context appear at the administrative stage and before the judiciary. Cases in tax and criminal courts, which are the final proof of the reactions resulting from tax pressure, appear as a result of the economic and psychological pressure created by taxes. In this context, the main purpose of the study is to examine the reactions that occur within the scope of tax pressure and their appearance in criminal and tax courts.

Keywords : Tax Pressure, Reactions Against Tax, Tax Evasion, Tax Court, Criminal Court
JEL Codes : H39, H30, H26

1. Introduction

Taxes are free, final and material resources in order to meet the needs that arise in the form of public service demands from the individuals who make up the society within the framework of the sovereign right of the state. They are monetary values received to be used in financing the requested services. Tax is an essential element of political, social and economic life, and in line with these features, it is an effective tool on the market and income distribution, with a dynamic structure that constantly renews itself according to the requirements of the day, providing financing to the public . Developments in the fields of science and technology, public services that differentiate in the light of social perspective, transformations in politics and economy cause significant changes in tax systems and administrations. The use of technological developments in information systems both in the taxation process and in tax collection, while reducing tax losses and evasion, has also led to the formation of different behaviors in the taxpayer's reactions to tax. In this context, the fact that tax is unrequited and compulsory within the scope of its characteristics naturally creates a feeling of coercion for taxpayers. Current developments in taxation and collection processes have prevented taxpayers from avoiding taxes and have increased the pressure on them. Because, tax is a cost element for all taxpayers in terms of its appearance in the economy. Obliged parties want to reflect the tax they have paid unilaterally and gratuitously to the extent permitted by law. However, if the amount of tax that can be reflected is less than the tax paid, a tax burden arises for the taxpayer. Therefore, it creates both a cost and a pressure on the taxpayer that cannot be reflected or deducted sufficiently. Due to the cost factor of the tax, taxpayers have developed some behavior styles against the financial and psychological pressure of the tax. These; tax avoidance, tax evasion, tax recovery, tax planning, tax arbitrage, tax dumping, tax strike and tax denial. Different levels of reactions can also be realized by deviating from the legal processes from the aforementioned reactions to tax pressure. The reflection of the reactions that arise as a result of tax evasion and non-compliance with the procedures and principles in tax laws will naturally be transferred to the tax and criminal courts. The reflections that arise within the framework of this situation bring along many litigation processes, naturally causing the formation of a different level of data pool in the courts.

In this respect, the main purpose of our study is to give information about the legal and illegal consequences of the pressure on the taxpayer, which is a cost factor for the taxpayer, and about the status of the cases in the courts within the scope of the dispute processes.

2. The Concept of Tax Pressure

One of the powers of the state in the form of sovereignty is to impose taxes on the citizens who make up the society. It is essential that these transactions are carried out within the framework of the law in order to avoid any arbitrariness in the taxes it collects in order to meet the public finances with the authority it receives from the public power. At the beginning of these legal regulations is the Constitution, and there is a legal basis

based on the law in all taxation processes (Gözler, 2015: 28). One of the main regulations in this direction is that the Republic of Turkey is a state of law, as stated in Article 2 of the Constitution. In addition, tax justice is stated in the second paragraph of Article 73 of the Constitution as follows: “A fair and balanced distribution of the tax burden is the social goal of fiscal policy” (2709, 1982:73/2). However, even the fact that tax collection from the taxpayer is on a legal basis , primarily the Constitution, and is within the scope of ensuring tax justice does not change the negative perspective of the taxpayer on tax. The taxpayer's view of tax not as a public financing tool but as a cost element creates an uneasiness in the eyes of the taxpayer and creates a significant tax pressure on the taxpayer. Tax pressure is the psychological effect of tax, which is a mandatory, final, unrequited and monetary value, that occurs on taxpayers while paying them in the context of these qualifications (Pehlivan, 2021: 164). In this process, taxpayers may have difficulty in accepting the tax and adapting to the tax due to the effects of the characteristics of the tax. Within the framework of this situation, the force of tax has a significant negative effect on taxpayers, and this issue is shaped as tax pressure (Gerçek, 2018: 35). Since tax is an indispensable public financing tool in the performance of public services, it also has a continuous quality. It can cause different social behaviors in the context of financial, economic, political and legal effects within the framework of developments in the country's economy (Demirli, 2011: 7). This concept, which is also referred to as tax pressure or, in other words, tax pressure, can also be expressed as the reaction of taxpayers who have to pay taxes due to obligations. On the other hand, tax compliance is the taxpayers' fulfillment of their tax duties in a timely and complete manner, and the correct implementation of all obligations in the legal legislation. Taxpayers who develop such an attitude fully comply with the tax voluntarily (Pehlivan, 2021: 165). However, due to the situation created by tax pressure, taxpayers can react to tax in different ways and these reactions can manifest individually or collectively . While such reactions may occur on legal and illegal grounds, it creates a perception of cost and burden on individuals and society. Therefore, with this point of view, taxpayers see taxes as a factor that significantly hinders their activities (Gerçek, 2018: 37).

3. Appearance of Reactions Against Tax Pressure In Criminal And Tax Courts

In meeting the financial needs within the scope of financing the public services or in reaching the goals set within the framework of the public economy, the effect of the compulsory and unrequited tax on the society in order to achieve the economic and social goals can occur at different levels (Çiçek & Herek, 2012: 313). While a certain part of taxpayers comply with the tax voluntarily, another part may react at different levels. The basis of these reactions is the pressure of paying taxes on individuals. The economic and psychological pressure created by the tax causes taxpayers to react in various ways. These reactions appear as tax avoidance, tax evasion, tax recovery, tax planning, tax arbitrage, tax dumping , tax strike and tax denial. (Pehlivan, 2021: 165) .

Tax avoidance can be expressed as taxpayers' minimization of their liabilities to the extent permitted by law and the legal methods they have applied within this framework . Obligations apply some methods in the tax avoidance process, which are the leading ones to implement practices that do not cause taxable events and to use gaps in the law

(Edizdogan et al., 2013: 202). Another method of reaction against tax is tax evasion. Tax evasion, which is an individual reaction against taxation, can be characterized as acting in ways contrary to tax laws, not paying taxes by opposing the measures taken by the administration responsible for enforcing the laws, or paying less tax than it should be (Omercioglu et al., 2018: 57). Some attempts to compensate for the tax are also among the reactions to tax pressure. In the tax recovery process, the taxpayer's ability to pay weakens. There are some ways that taxpayers organize so that they can reach their opportunities within the framework of pre-tax payment. These are the taxpayer's revision of consumption, investment and savings practices and making some changes in the aforementioned titles. These stages, also called the declaration effect, appear in the form of income and substitution effects for the taxpayer (Pehlivan , 2021: 165) . Another type of response is tax planning. Tax planning is a method that all taxpayers can perform to the extent permitted by law. It is the planning of individuals and institutions to minimize tax levels. Obliged parties benefit from the advantages and structures of exemption, exemption, discount, choice of legal status and double taxation agreements in the legislation that will benefit them (Gerçek, 2018: 36). Tax arbitrage is the use of price differences by making some changes in the legal framework in the markets where a certain good is sold. In other words, it can be called as making a profit by buying a certain good or financial asset from the market where it is cheap and then selling it in another expensive market (Edizdoğan et al., 2013: 216). With this method, differences in taxation or gains for income or capital gains, changes in tax rates are used (Pehlivan, 2021: 167). Tax dumping is the reduction of tax rates in order to attract foreign capital to the country and to make the country more attractive in these matters (Edizdoğan et al., 2013: 210). Tax strike can be expressed as the collective resistance of taxpayers to tax due to the excess of factors increasing tax burdens. Tax refusal, on the other hand, is the rejection of the tax liability brought by a tax law enacted within the scope of the legal framework, by large circles of society, and the social demonstrations held in this direction (Pehlivan, 2021: 168).

While the reactions against tax raids take place on a legal basis from time to time, they sometimes occur outside the legal boundaries (Pehlivan, 2021: 166) . Even taxpayers who voluntarily comply with the tax fall into conflict with the administration and their reactions in this process are shaped within the scope of tax lawsuits. If the hostilities between the taxpayer and the administration cannot be resolved at the administrative stage, the lawsuits may occur at various levels (Armağan, 2009: 202). These lawsuits may arise during the assessment, accrual and collection stages and within the framework of taxation procedures for public revenues such as taxes, duties, fees, and customs revenues. By means of tax litigation, taxpayers aim at some results such as the cancellation of the relevant transaction, the cancellation of the tax that is the subject of dispute, the refund if the relevant tax has been collected before, the precautionary lien and the elimination of them if the lien has been applied . In order to realize these goals, taxpayers can apply to annulment and full remedy actions, which should be filed in tax courts within the scope of administrative jurisdiction (Gözler, 2015: 29). However, on the other hand, reactions due to tax pressure can also occur under the title of tax evasion. In this context, the submission of the reactions to the judiciary is not evaluated

within the framework of the tax court, but is interpreted within the scope of crimes against the state. Crimes occurring in the context of this situation are accepted as tax crimes and they are prosecuted in a way that is subject to criminal jurisdiction (Ömercioglu et al., 2018: 54). As a result of tax evasion, which is an illegal behavior from the reactions in the context of tax pressure, a crime against society emerges. In other words, this crime is evaluated within the scope of a crime committed against the state's national accounting and budget. Tax crimes can be defined in a broader context as "the violation of the duty and duty obligations specified in the Tax Procedure Law (VUK) and other tax laws, by taxpayers or taxpayers in a way that requires a penalty". On the other hand, tax crime can also be expressed as "acts that are committed by responsible persons in violation of tax laws, that pose the risk of tax loss to the state, disrupt public order and comply with the legal tariff for which sanctions are envisaged". Tax crime occurring in this manner disrupts public order, jeopardizes tax security and receivables, and causes tax losses and evasion (Öz & Armağan, 2018: 2). In this context, the reflection of the reactions against taxation in the judicial process is manifested in different ways in criminal and tax courts over the years. In this context, the effects of the judicial consequences, which are the result of the reactions in question, in Turkey over the years can be seen in the tables below.

Table 1: Number of Tax Courts Files (Incoming), TURKEY, 2014-2021

Years	Incoming From Last Year	Opened During the Year	Income by Corrupted	Total	File count change (*)
2014	47.382	96.036	5.240	148.658	100
2015	46.531	98.667	5.476	150.674	101
2016	42.432	104.410	5.729	152.571	103
2017	4.253	95.749	5.345	143.147	96
2018	4.934	90.973	7.483	147.490	99
2019	31.447	101.804	7.698	140.949	95
2020	39.542	128.063	5.927	173.532	117
2021	55.723	130.482	5.961	192.166	129

(*): Number of files change (Base year 2014=100).
(**): Cleaning rate=((Number of files released during the reference year)/(Number of files opened during the reference year+ Files that were corrupted within the reference year number))*100.
Note: The inconsistencies in the transfers are due to the data updates in the UYAP system and the fact that all the files in the closed units are treated as newly opened files in the transferred units during the year.
Source: Adalet B. , http://www.adlisicil.adalet.gov.tr Access: It was created from the data of 26.10.2022.

The lawsuits filed over the years during the resolution process of tax disputes in tax courts, and the lawsuits that were transferred from the previous year and overturned are given in Table 1. Within the scope of the lawsuits brought within the framework of the aforementioned information, it is observed that the file accumulation transferred from 2014 to the previous year has decreased relatively in 2021. However, the cases filed during the year increased regularly from 2014 to 2021.

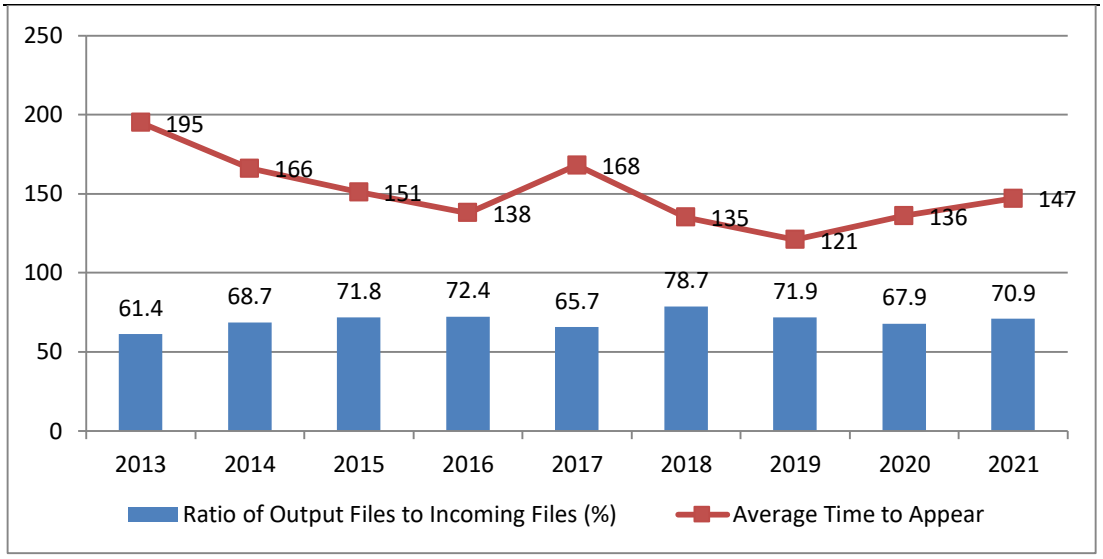
Table 2: Number of Files of Tax Courts (Output), TURKEY, 2014-2021

Years	Released During the Year	File count change (*)	Transferred to Subsequent Years	Cleaning Rate % (**)	Ratio of Output Files to Incoming Files %	Average Viewing time-Day
2014	102.128	99	46.530	100,8	68,7	166
2015	108.242	105	42.432	103,9	71,8	151
2016	110.519	107	42.052	100,3	72,4	138
2017	94.112	91	49.035	93,1	65,7	168
2018	116.042	112	31.448	117,9	78,7	135
2019	101.411	98	39.538	92,6	71,9	121
2020	117.809	114	55.723	87,9	67,9	136
2021	136.249	133	55.917	99,9	70,9	147

(*): Number of files change (Base year 2014=100).
(**): Cleaning rate=((Number of files released during the reference year)/(Number of files opened during the reference year+ Files that were corrupted within the reference year number))*100.
Note: The inconsistencies in the transfers are due to the data updates in the UYAP system and the fact that all the files in the closed units are treated as newly opened files in the transferred units during the year.
Source: Adalet B. , http://www.adlisicil.adalet.gov.tr Access: It was created from the data of 26.10.2022.

On the other hand, the view of the lawsuits filed in tax courts by years is included within the framework of the information in Table 2. From 2014 to 2021, the number of lawsuits increased, and the average percentage of lawsuits was 70%.

Table 3: Average Time to Appear in Tax Courts, Days and Ratio of Outgoing Files to Incoming Files, %, 2013-2021

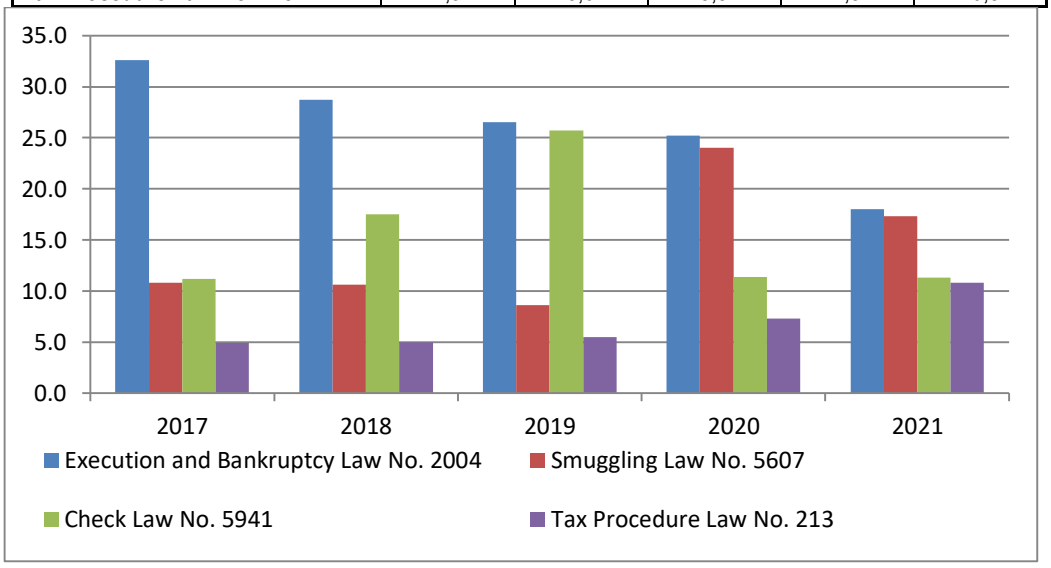


Source: Justice B. , http://www.adlisicil.adalet.gov.tr Access: It was created from the data of 30.10.2022.

The ratio of the files coming out of the tax courts to the incoming lawsuits and the average duration of the lawsuits are given in Table 3. Accordingly, the average duration of cases has been in a decreasing trend since 2013.

Table 4: Analysis of Major Offenses in Criminal Courts Files Opened Under Special Laws, 2017-2021

Laws	2017	2018	2019	2020	2021
Execution and Bankruptcy Law No. 2004	32,6	28,7	26,5	25,2	18,0
Smuggling Law No. 5607	10,8	10,6	8,6	24,0	17,3
Check Law No. 5941	11,2	17,5	25,7	11,4	11,3
Tax Procedure Law No. 213	4,9	5,0	5,5	7,3	10,8



Source: Adalet B. , http://www.adlisicil.adalet.gov.tr Access: It was created from the data of 30.10.2022.

The appearance of cases within the framework of tax evasion in criminal courts is given in Table 4 by years. Since 2017, there has been a significant increase in the rate of lawsuits in criminal courts, which will constitute a basis for tax evasion. The share of cases in special criminal courts, which was 4.9% in 2017, reached 10.8% in 2021.

As a result of tax pressure, the manifestation of the reaction of taxpayers to tax is shaped as a litigation resort for the resolution of disputes. On the other hand, another way of reaction against tax pressure emerges as tax evasion and the results of this reaction are reflected in the cases in criminal courts (Şenyüz, 2020: 437). In other words, the increase in tax pressure increases the reaction of the taxpayer to the tax. The degree and rate of increase of the said reaction can be controlled from the cases in tax courts and criminal courts. In the above-mentioned tables, the details and development of the cases over the years show us the reflection of tax pressure in a sense, and the developments in the judicial process as a proof. Due to the intensity of the criminal courts of first instance as a result of the reactions against the tax, a new structure was made, and the tax crimes court was evaluated with the status of a special court that requires expertise. In this context, the determination of the specialized courts before the courts that will deal with the cases to be opened regarding the crimes regulated under the VUK was taken with the Decision of 1227 dated 25.11.2021 of the First Chamber of the Council of Judges and Prosecutors (HSYK, 2021: 1227).

4. Conclusion

Taxes are at the forefront of the financial resources needed in order to provide uninterrupted public services to citizens. Features such as the collection of taxes from public financing instruments by force, which is final, gratuitous and originating from the sovereign authority of the state, cause some problems between taxpayers and public power. These reasons arising from the nature of the tax make it difficult for the taxpayers to comply with the tax voluntarily and cause reactions against taxation and taxation at certain times. These reactions occur as a result of taxation and tax pressure caused by taxation. After these reactions, tax reactions occur in different ways and applications. The main reactions to tax pressure are; tax avoidance, tax evasion, tax recovery, tax planning, tax arbitrage, tax dumping, tax strike and tax rejection. The reflection of the reactions of the individuals who pay taxes by means of tax pressure is manifested by the disputes in the administration and the judiciary. In this context, cases in tax courts and criminal courts can actually be defined as the final result of the reactions to tax pressure.

Tax is included as a cost element in the taxpayer understanding. When taxes increase and new taxes are imposed, tax pressure will increase and reactions to taxes will occur in different ways depending on the taxpayer's tax situation. In this case, naturally, tax losses and evasion will increase, and disruptions in public services will come to the fore. In order to avoid the aforementioned problems, a tax system should be established as a priority, in which tax justice is ensured, the taxpayer will react at least with the awareness of citizenship while paying his tax, and legal assurance is provided. In addition, necessary legal measures should be taken against tax reactions that damage

the awareness of liability, cause tax losses and evasion, disrupt the social order and eliminate social justice . In this way, the effect of tax penalties should be increased, and legal gaps should not be left in tax crimes and misdemeanors, and improvements in the judicial system should be realized.

References

Armağan, R. (2009). "Vergi Uyuşmazlıklarının Yargı Sürecinde Çözümü: Isparta İli Özelinde Bir Değerlendirme", *Maliye Dergisi*, 156, 199-218.

Çiçek, G. H.,Z. & Herek, H. (2012). "Türkiye'de Vergi Suç ve Cezalarının Değerlendirilmesi: Antalya İli Örneği", *Marmara Üniversitesi İ.İ.B.F. Dergisi*, 32(1), 311-342.

Demirli, Y. (2011). *Gelişmekte Olan Ülkelerde Vergi Reformları Ve Türkiye'de Gelir Üzerinden Alınan Vergiler Açısından Değerlendirme*, Ankara: T.C. Maliye Bakanlığı Strateji Geliştirme Başkanlığı Yayını.

Edizdoğan, N., Çetinkaya, Ö. & Gümüş E. (2013). *Kamu Maliyesi*, 5. Baskı, Bursa, Ekin Basım Yayın Dağıtım.

Gerçek, A. (2018). "OECD Ülkelerinde Agresif Vergi Planlamasını Önlemeye Yönelik Tedbirlerin Değerlendirilmesi", *Vergi Sorunları Dergisi*, 360, 34-49.

Gözler, T. & Demir, A. (2015). "Vergi Uyuşmazlıkları ve Vergi Yargılaması Usulü", *Uluslararası Yönetim ve Sosyal Araştırmalar Dergisi*, 2(4), 28-41.

Ömercioğlu, A., Dayıoğlu, M.R., & Arslan, C.B., (2018). "Vergi Suçlarının Türkiye'deki Adli Görünümü", *Kırıkkale Üniversitesi Sosyal Bilimler Dergisi*, 8(1), 51-70.

Öz, E. & Armağan, A. (2018). "Yargı Organları Kararlarına Göre Vergi Kaçakçılığı Suçlarını Önlemede Adli Vergi Cezalarının Rolü", *TADD*, 9(33), 1-38.

Pehlivan, O. (2021). *Kamu Maliyesi*, Bursa: Ekin Yayınevi.

Şenyüz, D. (2020). *Vergi Ceza Hukuku*, 11. Baskı, Bursa: Ekin Yayınevi.

2709 Sayılı Kanunu Türkiye Cumhuriyeti Anayasası, (1982, 18 Ekim), Resmi Gazete (Sayı 17863).

1227 Sayılı Hâkimler ve Savcılar Kurulu Birinci Dairesinin Kararı, (2021, 25 Kasım).

TAXATION OF DIGITAL SERVICES IN TERMS OF COUNTRY PRACTICES

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Abstract

Today, technology is integrated with most parts of our lives which continues to develop. Forms of activities have changed that are carried out in different areas, such as economy, health, security. Especially developments in information and communication technology caused new business models to form which are unusual and do not require physical presence. While these changes affected and overimpressed global economy, new concepts and institutions are constituted as a need in taxation. Companies maintain their economic activities on digital platforms by using internet which helps companies to cross borders and get in contact with more customers, countries and other companies much easier. On the other hand, present tax rules started to become insufficient since states were devoid of taxing digital economy. At this point, OECD's Base Erosion and Profit Shifting (BEPS) provides basis to find some solutions. Defining and detecting significant economic presence have importance in order to determine taxable income. Since states could not come up with a common solution which requires international cooperation, they started to apply different kinds of taxes as precautions in order to prevent loss in tax. The idea of taxing digital services was put forward to tax activities that companies carry out via digital platforms in terms of digital economy. In this study, digital economy and the relevant concepts will be explained which are related with digital services. Then determined country practices about taxation of digital services will be mentioned.

Keywords: Digital service tax, digital economy, equalization tax, physical presence, economic presence
JEL Code: K33, K34

1. Introduction

Developments in data processing and communication technologies make it easier to get in contact with others and to reach information when needed. Today, many activities are being carried on internet, such as education, health and economy which brought up new senses to our lives.

People adapt to technological improvements and get benefit from tools more than ever. Especially there is a significant increase in number of internet users. Thus, activities are shifted to online platforms in order to reach more people. In the aspect of economy, companies went through a process of digital transformation as well as individuals. In the end, there are many companies who can maintain their economic activities internationally without any physical presence in the countries where they create an economic value and earn revenue. This event caused states to be destitute of various taxes since current tax rules are not efficient to identify and determine economic value created via activities performed in digital environment in different countries. Since there is no common solution which requires international agreements, countries began to take unilateral actions to prevent tax loss. One of them is adopting a new concept called 'digital services tax' as an equalization tax in terms of ensuring equal treatment between domestic and foreign companies.

In this study, it is aimed to mention digital economy as a term and its effects to clarify digital services and their taxation in the scope of country practices. Organization of Economic Co-operation and Developments' and European Union's view will be covered.

2. Digital Economy

By means of digital transformation, advanced technologies have been integrated into many areas of our lives. Digital transformation is a holistic transformation of people, business processes and technology elements within the developments of information and communication technologies by organizations which aim to meet needs of societies and individuals more effectively (Dijital Akademi-Tübitak, 2020). In addition to the developments in internet technologies, this change also includes phenomena, such as artificial intelligence, virtual reality, internet of things and cloud technologies (Bakırtaş & Ustaömer, 2019: 4).

Factors such as rapid technological developments, instant communication, and widespread use of internet in daily life bring digitalisation of economy by evolving its formation. Businesses have gone through dramatical changes in their organizational and management structures as a result of digitalisation which caused competitive pressure to increase in terms of commercial activities that have changed. In addition, digital

economy is gradually growing as a result of improvements and increased use in technological tools, such as tablets, computers and mobile smart phones besides population growth. Technological developments and knowledge generation play a fundamental role in the formation of current state of economy which are also driving force of globalization (Kılıçer & Peker,2020: 30-31).

The economic aspect of globalization can be defined as, which has social, political and cultural meanings, is the inclusion of national economies in world markets by ensuring economic integration due to the fact that goods, services and capital become more mobile through technological developments that provide instant communication and interaction between societies and states living in different parts of the world (Kıvılcım, 2013: 221). Today, goods and services can be bought and sold in the virtual environment via digital platforms apart from their physical circulation. Thus, interaction between societies and states increases at internation level and in this context, it can be said that digitalization process in the economy accelerates globalization.

2.1. Effects of Digitalisation in Economy

Digital transformation has brought up some new issues in many areas, such as privacy, security, education, health, work, and skills as well as changing the way people relate to each other and society. Reducement of entry barries to an activity is important for entrepreneurship in terms of influencing business environment by decreasing transaction cost, increasing price transparency and improving productivity. By dint of internet based tools, it has now become easier and faster for businesses to make contact with producers, customers and employees. Furthermore, information and communication imrpovements give rise new business models to emerge (OECD, 2018: 12).

As a result of digitalisation in economy, while the share of physical goods and services in the global market decreases, high value added inventions increase efficiency of economy. Moreover, because of the fact that information is more prominent in new business models of digital economy, there is a significant increase in need for qualified workforce. As customer demands differ and increase, understanding of competition between enterprises also gets better which provides an increase in the quality of the goods and services (Mert & Bayar, 2020: 74-75).

While digital economy contributes to globalization, it causes an increase in the knowledge gap between countries depending on the differences in development levels. As a matter of fact, it is possible to say that underdeveloped and developing countries have less ability to follow and integrate digital improvements compared to developed

countries. Thus, the gap in technology and income levels between developing and develop countries is widening (Mert & Bayar, 2020: 75).

2.2. Taxation Challenges In Digital Economy

Since selling goods and providing services has become possible in the virtual environment, these economic activities may easily cross borders of the countries. The taxation of corporations by their income is made according to the principles determined by the concept of 'permanent establishment'. However, concepts related to taxation are insufficient against the system changes that occur in line with technological developments (Çelener, 2019: 33).

The current international tax understanding consists of rules that are prepared based on traditional functioning of economy. For example, corporate tax aims to tax corporates in the country where economic value is created through profits. In this context, new methods in terms of value creation, intangible assests are not taken into consideration which require less or no physical presence (Europen Commission, 2018: 2). Taxation of non-resident international companies depend on the existence of establishments in the countries where they carry out their economic activities. On the other hand, traditional tax rules are insufficient to explain and distinguish the concept of permanent establishment in digital economy since activities may be carried out in virtual environment (Peng, 2016: 347).

Since digital activities are mostly based on intangible assests with high circulation capacity, it is a problem to measure the amount of these activities and determine their values. As a matter of fact, a clear definition about the concept of 'value creation', which was put forward for the taxation of digital economy, has not been made yet. States are deprived from taxation of companies that do not have a physical presence within their borders but generate income by creating economic value as a result of the services they provide for users. This causes public income of countries to be less than the actual value which needed to maintain public services (Çolak, 2020: 276-277). Additionaly, it becomes very difficult to accurately detect transactions, parties and place where they are made in virtual environment, due to possibility of using misleading information (Organ & Çavdar, 2012: 75).

3. Digital Service Tax and Country Practices

Base Erosion and Profit Shifting considers three possibilities about the taxation of companies that they have significant economic value without any presence in the country where they operate. The first one is that identification of the taxable source by conceptualizing the issue of 'significant economic value'. Second possilibity is about the

application of the withholding method in order to detect and tax the transactions carried out in the digital environment. The last one is application of an equalization tax in order to ensure justice by treating domestic and foreign service providers equally in terms of taxing digital services (Kofler & Sinnig, 2019: 179).

The concept of 'significant economic value' has been developed in order to tax companies that perform digital economic activities across borders and make profits in the relevant countries. Various criteria are put forward and being considered in order to talk about significant economic value. These criteria are existence of user base and relevant data entry, the size of the digital content produced in relevant country, the payment or collection in local currency, the existence and maintenance of a website in the local language, delivery of goods or after sales support services and finally, ensuring continuity in marketing and sales with various promotional methods (OECD, 2019: 16).

The subject of digital service tax is digital goods and services. Various products such as e-books, pictures, movies and videos which are called audio, visual or audio-visual products, as well as software, platforms, websites, internet service providers, online advertisements and social media are considered as digital goods (Kılıçer & Peker, 2020: 100).

European Commission accepts some activities as digital services which are subject to digital service tax. These activities are advertising services targeting users, intermediary services offered within the scope of digital platforms that enable users to communicate with each other and facilitate the exchange of goods and services, and data transmission services that include the transmission of data generated by transactions performed by users on digital platforms. With the new taxation approach evaluated under the title of digital services tax, it is aimed to tax international companies by eliminating taxation problems in the digital economy (Çolak, 2020: 309-310).

3.1. Turkey

The legal regulation of the digital service tax was made with the Law No. 7194 called The Law on Digital Service Tax and Amending Some Laws and Decree Law No. 375. This legal regulation was adopted on December, 5, 2019. In Article 1 of this law, digital services that constitute the subject of the tax are specified. In this context, all kinds of advertising services provided in digital environment, sale of any voice, visual or digital content and digital services provided for these contents for listening, watching, playing or recording on electronic devices or for the use in these devices. Additionally, services as providing and operating digital platforms where users can interact with each other and intermediary services provided in the digital environment for all services mentioned above are subject to digital service tax. According to article 3 of relevant legal regulation,

digital service providers are the tax payers. Digital service providers being full tax payers or having limited liability who carry out their activities via establishments or representatives in Turkey has no affect on taxation. Also, service providers who earns revenue less than 20 million Turkish lira in Turkey or less than 750 million Euros or equivalent of Turkish lira are free of digital service tax. The digital service tax rate is 7.5%. If the revenue is calculated in foreign currency, the foreign currency is converted into Turkish currency at the foreign exchange buying rate of the Central Bank of the Republic of Turkey valid on the date of receipt. Moreover, the taxation period in digital service tax is one-month periods of the calendar year and assessment gets done upon the declaration of the tax payer.

3.2. Italy

Italy is among the countries that are working hard to collect taxes from digital services. With the 2019 Budget Law (Law No. 145/2018) published in Official Gazette on January 1, 2019, the digital service tax has started to be applied. Companies which earn revenue of 750 million Euros in worldwide and 5.5 million Euros in Italy from digital services of digital advertisements, digital platforms that enable users to buy or sell goods and services by bringing them together in the digital environment, and the transmission of user data obtained through these platforms. Since date of January 1, 2020, within the scope of digital economy activities listed in the law, companies have started to be charged digital service tax with 3% rate of their revenues (Kılıçer & Peker, 2020: 103-104).

3.3. France

France is the first state to implement digital services taxation among the European Union countries. The tax was accepted in September 2019 but operated backwards with the effective date of January 1, 2019 which is also known as ‘Tax of the 21. Century’ (Kılıçer & Peker, 2020: 105).

This tax is also called the 'GAFA' tax because in the beginning, large companies which are Google, Apple, Facebook and Amazon affected most. They are located in the USA and make profits by providing digital services. It can be said that the companies mentioned are more affected by the digital service tax due to the size of their earnings and the types of services they provide, but the relevant legal regulations cover all international companies. Companies are required to pay 3% digital services tax on their earnings in France if their global earnings in the previous year exceeded €750 million and their earnings from digital services in France exceeded €25 million (Demirhan, 2020: 80).

Direct sale of digital goods and services and those offer digital interface as a primary means for providing digital content, communication services and payment services are excluded from the tax. On the other hand, digital intermediary services that enable users to communicate and interact with others, sale of data for aimed advertising on digital interfaces and advertising services based on user data, including data services and the sale of data collected or generated from users located in France are in the scope of digital services tax. In this regard, only one French company was affected from digital services tax. In terms of France legal regulations, there is a method to determine the amount of digital services provided in France. The representative share of digital services is determined with dividing the number of transactions that involves at least one French user by total number of transactions or dividing the number of French accounts by the total number of accounts. A different method is accepted to detect the representative share in advertising services which is calculated as dividing the number of online advertisements targeting users located in France by total number of advertisements or dividing the number of French users on who data was created or collected by total number of users on who data was created or collected (Kılıçer & Peker, 2020: 105-107).

3.4. Hungary

Hungary adopted a legal regulation to tax digital advertising services in 2014. Then in 2015, some revisions were made and state started to collect taxes from printed and online advertising activities. Tax payers are companies that their revenues exceeds 100 million Hungarian Forint. Until the year of 2017, tax rate was 5,3% but after that year, the tax rate was increased to 7,5%. Resident and non resident businesses are in the scope of this tax. However, tax rate is decreased to 0% from July 31, 2019 to December 31, 2022 (Çolak, 2020: 314-317).

4. Conclusion

As a result of digitalization, shape of economic activities has changed which is based on intangible assets. Thus, existing tax rules are not adequate in terms of taxation of those online activities which causes states to become deprived from various taxes. If all countries accede to international treaties about taxing digital economy, tax loss might be prevented but maintaining the participation of all countries will not be easy. Therefore, countries started to take unilateral actions and adopt digital service tax. However, there are still some problems. For example, significant economic value has not been clarified as a term and there is no common way to measure its amount. On the other hand, users may hide their identities or IP addresses which will make difficult to locate users' country. According to current tax rules, companies are being taxed on the

basis of their permanent establishments. Since companies are able to sell and buy goods and services in digital platforms and carry out cross border transactions, the concept of permanent establishment might be revised and can be made more suitable for today's conditions.

References

Bakırtaş, T. & Ustaömer, K. (2019). "Türkiye'nin Bankacılık Sektöründe Dijitalleşme Olgusu", *Ekonomi, İşletme ve Yönetim Dergisi*, 3 (1), ss. 1-24.

Çelener, B. (2019). "Dijital Ekonomiyi Vergilendirme Yolunda Somut Bir Adım: Dijital Hizmet Vergisinde Fransa Örneği", *Yeditepe Üniversitesi Hukuk Fakültesi Dergisi*, 16 (2), ss. 31-54.

Çolak, M. (2020). *Elektronik Vergileme Hukuku*, Ankara, Seçkin Yayıncılık.

Demirhan, H. (2020). "Dijital Hizmet Vergisinin Dünyadaki Uygulamaları ve Türkiye ile Karşılaştırmalı Analizi", *The Journal of Social Sciences*, 4 (7), ss. 73-86.

Dijital Akademi-Tübitak. (2020). Dijital Dönüşüm, https://dijitalakademi.bilgem.tubitak.gov.tr/dijital-donusum-nedir, (14.10.2022).

European Commission, (2018). *Council Directive – Proposal for laying down rules relating to the corporate taxation of a significant digital presence, COM(2018) 147 final,* Brussel.

Kılıçer, E. & Peker, İ. (2020). *Dijital Ekonomide Vergilendirme*, Ankara, Seçkin Yayıncılık.

Kıvılcım, F. (2013). "Küreselleşme Kavramı ve Küreselleşme Sürecinin Gelişmekte Olan Ülke Türkiye Açısından Değerlendirilmesi", *Sosyal ve Beşerî Bilimler Dergisi*, 5 (1), ss. 219-230.

Kofler, G. & Sinnig, J. (2019). "Equalization Taxes and the EU's Digital Services Tax", *Intertax*, 47 (2), pp. 176-200.

Mert, H. & Bayar, E. (2020). "Dijital Ekonominin Vergilendirilmesine Yönelik Ülkemiz Uygulamalarının Bazı Avrupa Birliği Ülkeleri ile Karşılaştırmalı Analizi ve Sorunlara Yönelik Çözüm Önerileri", *Mali Çözüm Dergisi*, 30 (160), ss. 71-99.

OECD, (2018). *Tax Challenges Arising from Digitalisation – Interim Report 2018: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project*, Paris. http://dx.doi.org/10.1787/9789264293083-en , (17.10.2022).

OECD, (2019). *Addressing the Tax Challenges of the Digitalisation of the Economy* – Public Consultation Document, Paris.

Organ, İ. & Çavdar, F. (2012). "Elektronik Ticaretin Vergilendirilmesinde Uluslararası Alanda Yaşanan Sorunlar", *İnternet Uygulamaları ve Yönetimi Dergisi*, 3 (1), ss. 63-84.

Peng, W. (2016). "Multinational Tax Base Erosion Problem of Digital Economy", *Modern Economy*, 7 (03), pp.345-352.

Concept of the Permanent Establishment in Taxation of Social Media Institutions with Non-Residence

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Abstract:

The permanent establishment concept is utilized in numerous articles of tax legislation, which has great importance in the fields of not only labor law and the law of obligations, but also tax law. This concept, which holds different meanings within different branches of law, has a determining characteristic in international taxation, particularly within the framework of Treaties for Preventing Double Taxation provisions, regarding the taxation of commercial income. As a matter of fact, within the framework of Treaties for Preventing Double Taxation, in the first paragraph of Article 7, titled "Commercial Incomes", of the OECD Model Convention, to which Turkey is also a party, was arranged as "The profits of an enterprise of a Contracting State shall be taxable only in that State unless the enterprise carries on business in the other Contracting State through a permanent establishment situated therein," which underlined the determinative characteristic of the permanent establishment regarding the determination of the taxation authority of the Contracting State. The permanent establishment definition also takes part in the OECD Model Convention. In Article 5 of the Convention, a permanent establishment is defined as: "the fixed place of business through which the business of an enterprise is wholly or partly carried on" as a fixed/physical permanent establishment or in lieu of a fixed/physical permanent establishment on behalf of an enterprise, in the manner of including the existence of a permanent representative in forming a contract. Treaties for Preventing Double Taxation, United Nations Model Conventions, along with the OECD Model Convention, also define the permanent establishment concept on the basis of fixed/physical place features, and necessary conditions for establishment varies depending on the country's implementations. The general definition of the permanent establishment concept in the tax law is provided by Article 156 of the Tax Procedure Law No. 213 and a permanent establishment in the fixed/physical sense is indicated in the relevant definition. With the liberalization of business operations on a global scale, technological advancements, and the digital transformation of the economy, the concept of permanent establishment as the foundation of tax law and the tax law norms established within the framework of this concept are no longer adequate to address existing problems. Indeed, international tax law, which bases the use of taxation authority on the existence of a fixed/physical permanent establishment by the source country, has allowed those operating through digital tools and social media platforms to avoid paying taxes, as digital transformation does not require a physical presence. Regarding the taxation of the revenues of multinational companies that operate in the digital environment without a physical presence (without establishing a fixed permanent establishment) and are expanding, becoming pervasive, and increasing their market share in other countries, this issue has sparked some debate over the current definition of permanent establishment and its scope. The solutions to the problems arising within this framework have required organizations such as especially OECD and UN to conduct international studies in the field of international tax law as well as some national regulations. In this context, the OECD has published the Action Plan on Base Erosion and Profit

Shifting (BEPS) to identify the taxation issues caused by the digitalization of the economy and to propose a global solution. In addition, the permanent establishment was included in BEPS Action 7 under the heading "Prevent the Artificial Avoidance of Permanent Establishment (PE) Status." Moreover, in the Addressing the Tax Challenges of the Digitalisation of the Economy Policy Note published on January 23, 2019, OECD gives place to "significant economic presence", "economic digital presence" and "changes to the permanent establishment threshold" within the scope of the long-term solution target regarding the digital economy. In addition, numerous studies have been conducted by the United Nations, such as the Model Taxation Convention 2021, as well as by the European Commission, in order to conform the concept of permanent establishment to the needs of the digital economy. The increasing prevalence of information and communication technologies, the emergence of new forms of commerce, and the fact that the incomes obtained by multinational corporations through social media platforms represent a significant taxable area for our country necessitate the modification of our tax system. In this context, in addition to the regulations made in several tax laws, effective regulations such as the establishment of digital service tax were made, and finally the OECD-proposed global minimum corporate tax, which provides a global solution, was agreed upon. Nevertheless, legal regulation has still not been included, which is essential in terms of international tax law and that will serve as the basis for the definition of a permanent establishment, including virtual platforms. In this study, which is about the permanent establishment concept within the context of non-residence taxpayer of social media institutions, primarily the definition of permanent establishment within the scope of national and global regulations will be analyzed conceptually. In addition, the study evaluates the significance and function of the concept of permanent establishment considering tax laws pertaining to the taxation of non-residence taxpayer of social media institutions, as well as other tax laws, various rulings, judicial decisions, and identifies and proposes solutions to a number of associated issues.

Keywords: The permanent establishment, Social media institutions, Taxation.

JEL Codes: H25, K33, K34.

EVALUATION OF THE TAXATION OF SOCIAL MEDIA CONTENT PRODUCERS FROM THE POINT OF VIEW OF THE TURKISH TAX SYSTEM

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Abstract
In today's world, digitalization is underway and technological developments are taking an even faster course than before. In this sense, the digitalization of economic activities is also on the agenda. The subject of our study is the taxation of digitized economic activities, as well as commercial activities carried out in a digital environment. In this sense, taxation of income from virtual advertising and marketing / promotional activities conducted on the Internet has a special place. There are different views about social media content production in the doctrine . The Ministry of Finance also has its own point of view on this issue. The Ministry of Finance predicts that social media content producers will tax their earnings by counting commercial earnings. There is also a General Communique on Income Tax Serial Number 318 on the subject. In the doctrine, there are also authors who include social media content production in the group of self-employed earnings, or other earnings and will. In our study, the characteristics of these income elements, as well as what social media content production is based on, will be explained within the framework of various opinions. The purpose of this study is to explain the general nature of the exception for social media content production and application development for mobile devices, which has recently started to be applied in our tax system.

Keywords: Social Media Content Producers, Exception, Influencer, Freelancer

JEL Codes: E62, K30, K34

1. Introduction

The use of social media platforms has increased with the internet access becoming widespread. Today, social media allows people to communicate, share ideas and obtain new information. Some users have started to pursue the purpose of earning income while sharing their daily lives through social media. Social media users generate income by producing content such as photos, videos, texts, and audio on various social media channels such as Instagram, YouTube, and TikTok. The fact that the revenues of social media content producers have reached significant levels has made it necessary to follow up the said revenues. Due to reasons such as the emergence of a new revenue area and the inadequacy of existing regulations, the necessity of adjusting in tax laws has arisen.

In this context, repetitive article 20/B has been added to 193 numbered Income Tax Law. In our study, it is explained that with the relevant regulation, up to a certain amount of income generated by social content producers through social network providers will be exempted from income tax in the presence of certain conditions. The procedures and principles regarding the implementation of the aforementioned provision are explained in the General Communique on Income Tax serial No. 318. In this case, the scope of the exception, procedural rules and the problems encountered in practice will be discussed.

2. Social Media Content Producers Exception

With the rapidly developing technology, the use of electronic communication tools has become widespread and social networks, also called social media, have gained an important place in our daily lives. With the use of social media, people have found the opportunity to reach large audiences and earn various incomes. Especially on social media platforms such as YouTube, TikTok, Instagram, it is seen that social media users earn income by sharing content, promoting products and cooperating with various brands.

As a result of the increasing use of social media, it has become necessary to determine the nature and scope of the revenues earned by those who produce content on these platforms.

In order to ensure the efficiency and security of taxation, the second part of the Law on Amendments to the Tax Procedure Law dated 14.10.2021 and numbered 7338 and Some Laws article 20/B has been added to the Income Tax Law No. 193 with its repeated article. With the regulation made, the earnings of social content producers who share

content such as text, images, audio, and video via social network providers on the internet due to these activities are included in the scope of income tax exemption.

According to the repeated Article 20/B of the Income Tax Law No. 193, taxpayers who can benefit from the exception are social content producers who share content through social network providers on the Internet and those who develop applications for mobile devices such as smartphones or tablets. Within the scope of our study, social content producers who share content through social network providers will be discussed.

A social network is the name given to networks that are a means of communicating with other users on the Internet (Wikipedia, 2022). YouTube, Instagram, TikTok can be cited as examples of these. A social network provider, on the other hand, is a natural or legal person who allows users to create, view or share content over the Internet. Content, on the other hand, is the text, images or videos that form the basis of the Internet. Social media content production is also defined as producing content according to the technical dimensions and rules of the media (Erol, 2022: 96). A social content producer, on the other hand, can be defined as those who earn income by promoting products on social media or sharing recommendations in order to impress other users. Social content producers are called by various names according to the type of their activities. Influencer, blogger, vlogger, youtuber can be given as an example.

The procedures and principles regarding the exception of social media content production are regulated by the General Communique on Income Tax serial No. 318. According to the communique, income taxpayers have been included in the scope of the exception, regardless of whether they are narrow or full taxpayers. It is stated both in the justification of the Law and in the Communique that the income obtained such as sponsorship, donations, gifts, tips are included in the scope of the exception. The income of social content producers who earn income through third-party service providers who provide services to social media content producers in areas such as reaching wider followers, content programming, content producer collaborations is also covered by the exception. Activities offered on platforms that do not contain an interactive nature, such as personal Internet sites, electronic commerce sites, news sites that are not considered social network providers, are not included in the scope of the exception.

3. Tax Duties Related to the Exception

The Ministry of Treasury and Finance published the Income Tax Law General Communique serial no. 318 by using the authority to make regulations about Article 20 / B-7 of law, on January 12, 2022. Thus, the controversial issues related to the application

within the scope of the Law were answered, although not literally, and the taxpayer was guided by examples.

Within the scope of the Communique explains the obligations related to the relevant taxpayers and the banks to be opened accounts. For this reason, the duties related to the exception should be examined in terms of the taxpayers, the social content producer, and the bank where the account will be opened.

3.1. Tax Duties of The Social Content Producer

It can be said that the communique describes in detail how to identify the relevant taxpayers and in which cases the title of social content producer has been acquired. In addition, the problems that social content producers and application developers for mobile devices may face, Communique in Article 4, 13 examples are stated and embodied. Therefore, the impression appears to be that the general communique will prevent controversial issues in regard to taxpayers and tax administrations.

A sample of an ”Exemption Certificate regarding the Application of Article 20/B of the Code numbered 193" was presented in supplement of Communique. It is accepted that the exemption conditions will start by means to open a bank account or to specify existing accounts, and then submission to the tax office to which he is attached by the taxpayer.

In general, the taxpayer creates a bank account specific to his earnings and consolidates all social media activity income in the relevant account. If the taxpayer receives his earnings in cash or from different accounts, it will not be possible to benefit from the exception conditions for the calendar year. In addition, if the taxpayer acquires goods or services qualified as gifts or donations in exchange for social media activities, not depositing their cash equivalent to his/her bank account will also constitute a violation of his/her obligations. A similar situation applies to the upper limit determined within the scope of the exception. If the earnings of the social media content producer as a result of its activities exceed the fourth tranche of the income tax bands (880 000 TL for the year 2022), it will not be possible to apply these exception conditions and the obligation to submit a declaration will arise.

Although the exception is optional, it is not applied on the basis of the calendar year. Communique Article 7 clarifies that it is possible for the taxpayer to benefit from the exception as of the notification date. Also, the taxpayer who leaves the application during the year will need to certify his books within ten days, comply with the book

entries, fulfil withholding and VAT obligations to third parties. This regulation, which has led to unclear document order applications during the year, is open to criticism. Moreover, it is sufficient for taxpayers to choose to apply an exception once, and it is stated that cases where the application cannot be used, such as exceeding the earnings limit or violating obligations, will only apply for the relevant calendar year. The determination of these situations requires examination or other work and operations from the point of view of the administration.

3.2. Tax Duties of Banks

The application of the exception imposes an obligation on banks to withhold 15% as of the date of entry of earnings into the taxpayers' account. The Bank has two obligations: to notify the administration of the specified bank accounts and to carry out withholding. In fact, the bank is not even obliged to check whether the taxpayer exceeds the exception limit. In this aspect, it can be summarized by mentioning a system in which banks will establish a new and exception-specific deduction procedure and declare deductions.

4. Implementation Problems within the Scope of the General Communique

We can classify the problems that may arise in the application related to the subject in the form of headings below:

4.1. The Feature of the Gain

General explanations will be made within the scope of self-employment earnings and commercial earnings from the elements of income related to the subject.

The related earnings are considered as commercial earnings within the scope of the Communique. However, there are opinions that it can also be included in the scope of self-employment earnings in teaching, and evaluation should be made according to the current situation of the taxpayer.

The nature of the earnings of social media content producers is specified in Article 6/2 of the General Communique on Income Tax with Serial Number 318. In the relevant provision “social content producers who share content through social network providers on the internet with the profits they receive from this activity of real people …it is taxed within the scope of commercial earnings and” it is stated. Considering the elements of commercial earnings (the purpose of providing income, independence, continuity,

exceeding the limits of artisan activity), we can evaluate the earnings of these people in this context. In addition, it is seen that this gain is evaluated within the scope of commercial gain in the private assets issued by the Ministry.

However, in the teaching, it is discussed that this gain cannot be considered as commercial gain in any case, it can also be counted as self-employment gain in the case when conditions occur. Since these people work on their own behalf and account and can be carried out in the form of a job based on personal overtime (Article 65 of the Income Tax Code), it should be considered as self-employment earnings in cases where legal conditions arise. In our opinion, it is not appropriate for the earnings of social media content producers to be evaluated only within the scope of commercial earnings.

4.2. The Subject of Earnings are Goods and Gifts in Kind

Article 4/15 of the General Communique on Income Tax with Serial Number 318 is regulated as follows: "If the income related to the excluded activities is collected in kind, the fair price of the goods or services subject to collection on the date of collection was received within the month in which the income was received, and if the income collected in kind was received within the last seven days of the current month, the exception conditions will not be violated if it is deposited to the bank account no later than the end of the second business day of the following month." When the relevant law provision is examined, the will of the administration is not fully understood here. First of all, it should be noted that the fair price of the goods or services subject to collection on the date of collection is not completely certain how to determine. The administration has not introduced a specific rule for determining the fair price. That is, it is debatable whether the taxpayer will determine the fair price according to what and whether he will be able to act objectively in this regard. In addition, it is observed that after this price has been determined by the administration, no inspection mechanism has been introduced regarding compliance with the determined price.

5. Conclusion

The “exception for social content producers and application development for mobile devices” is a new income tax exception that started to be applied as of 1.1.2022. The exception appeals to a wide audience in today's conditions, where almost everyone has a social media account. Though, only taxpayers, who influence purchasing decisions of people through social network providers, are called as social content producers within the scope of the exception.

When the justification of the law and the provisions of the general communique are considered, it is necessary to accept that the earnings excluded from income tax is commercial earning. However, it will not be fair to consider the earnings of taxpayers who produce social content with their personal knowledge and labour, which can be qualified as self-employed earnings, directly commercial earnings. Finally, the provisions of the communique on the deposit of the cash value of goods and gifts to the bank account cause various problems related to valuation, the payer's solvency, and the obligation to notify. In conclusion, for the type of exception that has not yet been implemented for a whole year, it is considered necessary and recommended to review the provisions that have been found to be problematic, such as the nature of earnings, gifts, and donations and to make arrangements that will not create a loss of rights for the taxpayer.

References

1. Justification of Law No. 7338, https://www2.tbmm.gov.tr/d27/2/2-3854.pdf.

2. Erol, A. (2022). "Sosyal Medya İçerik Üreticiliğinde Elde Edilen Kazançların Vergilendirilmesi", Vergi Dünyası, No: 41 (486), pp. 93-100.

3. Wikipedia, Social Network, https://tr.wikipedia.org/wiki/Sosyal_a%C4%9F, (15.10.2022)

The Moral Hazard Issue in the Automobile Insurance Sector: Empirical Findings

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Abstract:

Insurance assures possible risks that individuals may face in the future. Individuals agree to pay a certain premium in return for this assurance on a specific subject and for a certain period. There are many branches in the insurance sector. One of them is automobile insurance in the non-life insurance branch. Like other insurance branches, the automobile insurance sector contains intense risk and uncertainty. This situation causes asymmetric information to be seen frequently in the sector. In the auto insurance sector, asymmetric information mainly causes market failure in two ways. The first is that the insurance company cannot distinguish between high-risk drivers and low-risk people when issuing an auto insurance policy. The situation where the insurance company applies a lower price to high-risk drivers and a higher price to low-risk drivers is expressed as adverse selection. As a result, the insurance company suffers. If the insurance company charges an average price to drivers in both risk groups, this price will be higher for drivers with lower risk levels, and these drivers will suffer. Another problem arising from asymmetric information in the automobile insurance sector arises after issuing the policy. It is a moral hazard if there is a change in the initial attitude and behavior of the driver during the policy period, and the insurance company suffers from this. Driving more carelessly in traffic after the driver's vehicle has motor insurance is an example of a moral hazard and causes damage to the insurance company. In addition, uncertainty about the driver's interactions with other drivers during the policy period also causes the sector to fail, even when the insurance company obtains complete and accurate information about the driver. Therefore, market failures due to asymmetric information arise in the automobile insurance sector, which imposes various costs on both insurance companies and drivers. The first studies on asymmetric information in the literature were the studies of Akerlof, Spence, Rothschild, and Stiglitz. In the study of Akerlof (1970), He stated that asymmetric information is the basis of the problems that arise in the used car market, labor market, and insurance market. Spence (1973) analyzed the labor market and pointed out that asymmetric information that causes market disruption can be reduced by signaling. On the other hand, Rothschild and Stiglitz (1976) pointed out that the market failed due to individuals hiding their risk levels in their analysis of the insurance market. In 2001, Akerlof, Spence, and Stiglitz were awarded the Nobel Prize in economics for market analysis involving asymmetric information. This study aims to measure whether there is a moral hazard problem in the Turkish automobile insurance sector and determine the factors that may affect moral hazard. Since there are 12 branches in the insurance sector, the study is limited to the automobile insurance sector. The data to be used in the study were collected using a survey technique with 408 policyholders in the three provinces (Ankara, Izmir, and Istanbul) where the most traffic and

motor insurance policies are issued. Three survey statements represent the moral hazard arising from the policyholders among the collected data (1- I cover the damage that will occur when I have an accident with my vehicle from the traffic insurance. 2- I will cover the damage that will occur when I have an accident with my vehicle. 3- If I have an accident with my vehicle, I do not report the accident to the insurance company because my insurance premium will increase.) was combined to form the dependent variable. OLS (Ordinary Linear Square) regression analysis was performed with the established regression models. As a demographic factor in the analysis; vehicle age, engine displacement, license plate code, market value; Variables such as the vehicle owner's gender, age, marital status, education level, occupation, industry, and the number of kilometers and accidents in a year were used. In addition, twenty-three expressions coded as adverse selection, insurance awareness, motor insurance reason, consumer awareness, and insurance perception among the Likert scale expressions were used as independent variables. According to the findings obtained from the analysis, it has been observed that there is a moral hazard problem arising from policyholders in terms of people working in the industrial sector. The moral hazard level of workers is higher than other occupational groups. It can be claimed that policyholders who use winter tires during winter tire application do not cause a moral hazard. The moral hazard level of people who think that the authorized services cause the moral hazard problem is lower. It has been estimated that people who do price research before taking out insurance and buying the most affordable policy have lower moral hazard levels than other people.

Keywords: Asymmetric information, moral hazard, automobile insurance sector

JEL Codes: D82, G22, L10

Contribution of Kırklareli University Students to Urban Economy

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Abstract:

In addition to the educational services they provide, higher education institutions emerge as an economic actor that supports development in the regions where they are established. Theoretically, universities have direct, indirect, and stimulated contributions to income and employment in the region where they are located. While the expenditures made by the university on its own personnel as an institution constitute the direct income effect, the number of personnel employed by the university constitutes the direct employment effect. The indirect income effect refers to the non-personnel expenditures and student expenditures made from the budget of the university and the working capital enterprise affiliated to the university. In order to achieve the indirect employment effect, the service level per labor force is used. The indirect employment effect emerges by dividing the indirect income effect by the level of service production per capita. Another contribution of universities to the local economy in which they are located is expressed by stimulated effects. In this study, the direct and related contributions of Kırklareli University, which was established in 2007, to the economy of Kırklareli were discussed. The aim of the study is to determine the total expenditures made by Kırklareli University, the expenditures made by the students who are a part of higher education and the economic value of the personnel employed in the economy in general. Kırklareli University was established in 2007 and has a total of 1299 staff, 827 of which are academic, 296 administrative and 176 are workers. Personnel expenditures from the university budget are approximately 130 million Turkish Liras. Within the scope of these data, Kırklareli University has a direct income effect with a personnel expenditure of 130 million liras and a direct employment effect with 1299 people. In order to determine the indirect employment effect, it is calculated by the number of people employed in the service sector and the contribution of the service sector to the local national income and the service production value per person. According to the relevant calculations, the indirect employment effect arising from the budget of Kırklareli University is 542 people. As a component of the indirect revenue effect offered to the city by the budget of Kırklareli University, it is seen that the expenditures made outside the personnel are approximately 70 million. To fully reveal the indirect income effect, it is necessary to determine the expenditures made by the students. In this context, a survey was conducted to 400 students to determine the expenditures of Kırklareli University students. In the survey, it was requested that the students' expenses be shared in a classified way. In addition to the fact that the expenditures made are found in terms of the total total, it is one of the findings to be included in the study whether the expenditures differ according to demographic factors. As a result, the effects of Kırklareli University on the local economy in the 2021-2022 academic year were revealed from a static perspective. According to the results obtained, Kırklareli University is an important

stakeholder in the city economy with the expenditures it makes from its own budget and student expenditures and the employment data it has created.

Keywords: Kırklareli's economy, university, economic impact, student expenditures

JEL Codes: I23, O10

Trust in Public Institutions and Ideology: How Do Ideological Orientations of Incumbent Parties and Individuals Affect Trust in Public Institutions?

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Abstract:

Individuals must have confidence in the government, parliament, political parties, judiciary, police force, and the armed forces for the continuity of the legitimacy of democratic systems and public institutions. This trust is also an essential element for the success of the decisions made by the relevant public institutions and organizations, as well as for the policies they put into practice. The confidence of individuals in public institutions determines the economic values of public projects, tax ethics and, accordingly, tax revenues. From a political point of view, insufficient trust in public institutions will reduce the problem-solving skills of governments, reduce the political leaders' ability to implement policies beneficial to the society and act freely, and in case of further distrust, the desire for social change will increase and may bring radical transformations. Although there are many factors affecting trust in public institutions, ideological preferences undoubtedly have a special importance among these factors. As a matter of fact, institutions such as governments, parliaments and political parties are directly related to politics and are driven by voter behavior and also have economic consequences. Differences between left-wing and right-wing voters have the potential to affect trust in the judiciary, police, armed forces, media, religious institutions, unions, public services, as well as education, health and social security systems. Inspecting the studies examining the trust of individuals in public institutions, we encounter a wide spectrum. There are many studies examining the effect of corruption on trust in public institutions, the dynamics of trust and political participation in public institutions, the relationship of trust in public institutions within the framework of ethnicity, minority rights and refugees, and the effects of economic crises on trust in public institutions. However, the most prominent topic in the literature is the decreasing trend of trust in public institutions and especially in the government. In these discussions, the ideological preferences of the people or the ideological tendencies of the incumbent parties are either partially addressed or ignored. It will not be possible to fully explain trust in public institutions without including partisanship or ideology in analyses. For this reason, it is necessary to clarify whether the ideological orientation of the incumbent party of the period and the ideological preferences of individuals influence their trust in the government, parliament, political parties, judiciary, police force, and armed forces. In this context, the 1981, 1990, 1999, 2008 and 2017 waves of the European Values Survey (EVS) were used and the ideological orientation statistics of the incumbent parties from the Database for Political Institutions (DPI) were

integrated into the relevant surveys. Here, for each EVS wave, depending on the country and the year the survey was conducted, the ideological orientation of the incumbent party in the relevant country and year was transferred from the DPI dataset. EVS asks the participants of the survey on how much trust they have in the government, parliament, political parties, judiciary, police force, and armed forces, and the answers given to these questions were used as the dependent variables. In addition, participants were also asked how they position themselves on the political scale, their income, age, gender, life satisfaction and whether they are interested in politics or not. Furthermore, their post-materialist values were also included, and these answers and data were used as independent variables. Due to the data structure and to obtain robust results, ordered probit was preferred as the method. In general, four models were preferred. In the first model, the whole sample is used, the second model includes countries where right-wing parties are in power, the third model includes countries where centrist parties are in power, and in last model includes countries with left-wing parties in power. According to the findings, generally, right-wingers are more likely to trust the government compared to left-wingers, and this effect increases especially in countries where right-wing and centrist parties are in power, but reverses in countries where left-wing parties are in power. Similar findings were obtained for trust in parliament, in which right-wingers are more likely to have more confidence than left-wingers in countries where the right-wing and centrist parties are in power, and similarly this effect is reversed in countries where the left-wing parties are in power. The empirical results are partially meaningful for trust in political parties; however it seems that right-wingers generally have more trust in political parties compared to left-wingers. Although the regression for trust in the judiciary system in countries where left-wing parties are in power did not yield significant results, it was seen that right-wingers were more likely to trust the judiciary system compared to left-wingers in the first three models. Finally, it has been revealed that right-wingers are more likely to have higher trust values compared to left-wingers in all models for trust in the police and armed forces. When all the results are evaluated together, it has been seen that right-wingers have more trust in the relevant public institutions compared to left-wingers when right-wing and centrist parties are in power.

Keywords: Confidence in Institutions, Ideology, Europe

JEL Codes: D72, P16, P48

OBSTACLE TO LEGAL PROTECTION PROVIDED BY THE INSTITUTION OF STAY OF EXECUTION: COLLATERAL REGULATION INTRODUCED BY LAW NO. 7351

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Abstract

Within the framework of the regulation introduced by Law No. 7351, even if the conditions specified in Article 27 of the Administrative Procedure Act are fulfilled in order to issue a stay of execution decision, a stay of execution decision cannot be issued in the cases filed regarding the taxes for which refund is requested, unless a collateral of fifty percent of the amount subject to the lawsuit is deposited. In this context, the purpose of this study is to evaluate the effect of the introduced regulation on the collateral on the administrated parties' utilization of the legal protection provided by the stay of execution, the freedom to seek rights and the right to property. The introduced collateral regulation has prevented taxpayers who do not have the financial ability to deposit collateral from benefiting from the legal protection provided by the stay of execution. In this context, since the plaintiffs could not benefit from temporary judicial protection, their filing of a lawsuit became irrelevant. Therefore, the said regulation has prevented taxpayers' right to effective access to the court. Moreover, the aforementioned regulation interferes with the right to property, as taxpayers who do not have the financial capacity to deposit a collateral of fifty percent of the amount subject to the lawsuit (in case the conditions for issuing a stay of execution decision are met) cannot receive their refund receivables until the lawsuit is concluded. The said rule was also contrary to Article 35 of the Constitution as it imposed an unreasonable restriction on the right to property. The rule introduced by Law No. 7351 was annulled by the Constitutional Court as contrary to Article 125, paragraph 5 of the Constitution.

Key Words: Stay Of Execution, Collateral, Right to Legal Remedy, Right Of Access To Court, Right To Property
Jel Classification: K_{23} , K_{34} , K_{38}.

1. Introduction

Pursuant to paragraph 2 of Article 27 of the Administrative Procedure Act, a stay of execution may be granted in the event of a clear violation of the law and the occurrence of irreparable and impossible damages. However, with the Article 2 of the Law No. 7351, on 19/01/2022, the provision *"In the lawsuits filed in relation to the taxes for which refund is requested in accordance with the tax laws, a stay of execution cannot be granted without obtaining a collateral of fifty percent of the amount subject to the lawsuit"* was added to paragraph 4 of Article 27 of the Administrative Procedure Act. Even if the conditions specified in the law are fulfilled in order to issue a stay of execution decision, a stay of execution decision cannot be issued in the cases filed regarding the taxes for which refunds are requested, if fifty percent of the amount subject to the lawsuit is not deposited as collateral. Therefore, the purpose of this study is to evaluate whether the collateral regulation introduced by Law No. 7351 prevents taxpayers from benefiting from the stay of execution, which is very important for the protection of their fundamental rights and freedoms, and whether it interferes with the freedom to seek rights and the right to property. In this context, firstly, the collateral regulation introduced by Law No. 7351 will be discussed and then the issue will be analyzed within the framework of the right to legal remedy and the right to property. Finally, the decision of the Constitutional Court regarding the annulment of the ta introduced by Law No. 7351 will be evaluated.

2. Collateral Regulation Introduced By Law No. 7351

Law No. 7351[1] stipulates that "In lawsuits filed in relation to taxes for which refunds are requested pursuant to tax laws, a stay of execution cannot be granted without obtaining a collateral of fifty percent of the amount subject to the lawsuit"[2]. It is understood from the justification of the said bill that the administration makes the refund transaction based on the stay of execution decisions in the lawsuits filed regarding the refund receivables, but in the event that the administrative action is decided to be in accordance with the law in the final decision, it is difficult to ensure the transfer of the refunded amounts to the treasury for reasons such as the destruction of the taxpayer's assets (TBMM, 2022: 9). In the event that the administrative act subject to the lawsuit, which is subject to a stay of execution, is not canceled in the future (Gözübüyük & Tan, 2017: 976; Aslan, 2019: 251; Akyılmaz, Sezginer & Kaya, 2019: 947), in order to prevent the administration from incurring losses, a collateral is regulated in paragraph 6 of

[1] "Law on the Amendment of the Individual Pension Savings and Investment System Law and Certain Laws and the Decree Law No. 375 (Law no. 7351)", Official Gazette, 31727; January 22, 2022.
[2] Law No. 7351 was annulled by the Constitutional Court. This issue will be addressed in the following chapters.

Article 27 of the APA (Candan, 2020: 781; Aslan, 2019: 251). Therefore, as stated in the justification, in a case where there is a possibility of damage to the administration in the lawsuits filed against the taxes requested to be refunded, the judge could have given the stay of execution decision in return for collateral within the framework of paragraph 6 of Article 27 of the Administrative Procedure Act, and without such a regulation (the collateral regulation introduced by Law No. 7351), the damage to the administration could have been prevented in these cases. Therefore, for the aforementioned reasons, we do not agree with the justification of the bill.

3. Evaluation of the Issue within the Framework of the Right to Legal Remedy and the Right to Property

With the regulation introduced by Law No. 7351, we are of the opinion that the right of taxpayers to file a lawsuit against the taxes requested to be refunded has turned into an emptied right in practice (Aslan, 2017: 33). Because the execution does not stop automatically in the annulment lawsuits to be filed regarding the taxes requested to be refunded. In addition to the taxpayers' request for a stay of execution for this purpose, the said regulation imposes the obligation to deposit a collateral of fifty percent of the amount they are suing for. In this context, even if the taxpayers have filed a lawsuit against the taxes requested to be refunded, but they do not have the financial power to deposit the collateral amount and there is a clear violation of the law and irreparable harm, the execution of the administrative action will not be suspended, and the negative effects of the administrative action will continue until the lawsuit is concluded. Therefore, taxpayers who cannot afford to deposit a collateral of fifty percent of the amount sued will not be able to benefit from the legal protection provided by the stay of execution. In this case, it becomes irrelevant for the plaintiffs to file a lawsuit since they cannot benefit from temporary judicial protection. We believe that without the legal protection provided by the stay of execution, which constitutes an integral part of annulment lawsuits (Ülgen, 1976: 8; Özdes, 1979: 9) and makes annulment lawsuits effective (Yenice, 1980: 15), it would not be meaningful to say that access to the court is effectively provided. The right to apply to the court also includes the effective exercise of this right (İnceoglu, 2013: 116). In this context, we agree with the decision of the Samsun Tax Court that the collateral regulation introduced by Law No. 7351 prevents the right to effective access to the court (Samsun Tax Court, M.N: 2021/1500).

The issues regarding the existence of interference with the right to property can be evaluated as follows. Due to the regulation introduced by Law No. 7351, we are of the opinion that taxpayers who do not have the financial ability to deposit a collateral of fifty percent of the amount subject to the lawsuit in the lawsuits filed regarding the taxes demanded to be refunded are deprived of the right to property because they cannot

receive their refund receivables until the lawsuit is concluded (in case the transaction is clearly against the law and the conditions of irreparable and impossible damages are realized). In addition, the fact that the plaintiffs who requested a stay of execution in the lawsuits filed regarding the taxes demanded to be refunded had to deposit a collateral of fifty percent of the amount subject to the lawsuit was an interference with the right to property since it caused a decrease in their assets.

Pursuant to Article 13 of the Constitution, in order for the interference with the right to property to be in conformity with the Constitution, the regulations imposing restrictions must be based on law, have a public interest purpose and be proportionate (Constitutional Court, M.N: 2021/119 D.N: 2022/48 D.D: 21/04/2022). In this context, it is understood that the purpose of the public interest in the relevant regulation is to prevent the administration from incurring damages in case the case is rejected by granting the stay of execution decision in the lawsuits filed regarding the refund receivables with a fifty percent collateral condition. When evaluated in terms of proportionality, the fact that the collateral stipulated for the issuance of stay of execution decisions in lawsuits filed regarding refund receivables was determined as a very high and fixed rate could have forced the plaintiffs to bear an excessive burden. Moreover, the regulation introduced by Law No. 7351 abolished the discretionary power of the judge regarding the security for the stay of execution in such cases. There was a disproportion between the public interest in preventing the administration from incurring losses in case the case was rejected and the burden imposed on the taxpayers by making the decision to stay the execution of the stay of execution in cases related to refund receivables conditional on the requirement of a collateral of fifty percent of the amount subject to the lawsuit. Therefore, we are of the opinion that the rule in question constitutes a violation of Article 35 of the Constitution as it imposes an unreasonable restriction on the right to property.

4. Evaluation of the Constitutional Court's Decision on the Collateral Arrangement Regarding the taxes to be Refunded

Samsun Tax Court requested the annulment of the provision added to paragraph 4 of Article 27 of the Administrative Procedure Act by Article 2 of the Law No. 7351 through concrete norm review, claiming that it is contrary to Articles 2, 10, 13, 35, 36 and 125 of the Constitution (Constitutional Court, M.N: 2022/14, D.N: 2022/70, D.D: 1/6/2022). The Constitutional Court evaluated the allegations of contradiction only within the framework of Article 125 of the Constitution and annulled the rule subject to the objection as contrary to Article 125.

In the decision, it was stated that the Law No. 7351 regulated a procedural limitation reason for the issuance of a stay of execution decision and that this limitation should be

evaluated in terms of the conditions in paragraph 5 of Article 125 of the Constitution. In this respect, it is emphasized in the decision that the procedural limitation should not make it difficult to issue a stay of execution decision and should not render the institution of stay of execution meaningless and dysfunctional in the event of a clear violation of the law and irreparable and impossible damage. The Constitutional Court has stated that even in the event of irreparable and irrecoverable damage in cases filed against taxes for which refunds are requested, the courts may not order a stay of execution without a collateral of fifty percent of the amount subject to the lawsuit. In this context, the court stated that this provision regarding the guarantee renders the requirements on the merits, which are explicitly regulated in the Constitution, ineffective, reduces the effectiveness of the stay of execution and prevents the realization of the purpose expected from the stay of execution (Constitutional Court, M.N: 2022/14, D.N: 2022/70, D.D: 1/6/2022). We believe that the provision introduced by Law No. 7351, even if the conditions set forth in the Constitution are met, prevents the plaintiffs who do not have financial power from benefiting from the legal protection provided by the stay of execution in the absence of a deposit of fifty percent of the amount subject to the lawsuit. In this respect, we agree with the decision of the Constitutional Court that the regulation in question is contrary to Article 125, paragraph 5 of the Constitution.

5. Conclusion

Under Law No. 7351, taxpayers can file a lawsuit against the taxes for which refunds are requested, but they are required to deposit a collateral of fifty percent of the amount subject to the lawsuit in order for a stay of execution to be granted. Therefore, plaintiffs who did not have the financial means to deposit collateral could not benefit from the legal protection provided by the stay of execution, in which case their filing of a lawsuit would become irrelevant as they could not benefit from temporary judicial protection. We believe that without the legal protection provided by the stay of execution, which makes annulment proceedings effective, it would not be meaningful to say that access to the court is effectively ensured. In this context, we are of the opinion with the decision of the that the collateral regulation introduced by Law No. 7351 prevents the right to effective access to the court, which is one of the most important elements of the right to legal remedy regulated in Article 36 of the Constitution.

Due to the regulation introduced by Law No. 7351, we are of the opinion that taxpayers who do not have the financial ability to deposit a collateral at the rate of fifty percent of the amount subject to the lawsuit in the lawsuits filed regarding the taxes demanded to be refunded, cannot receive their refund receivables until the lawsuit is concluded (if the conditions specified in the law are met). In addition, the fact that the plaintiffs, who

requested a stay of execution in the lawsuits filed regarding the taxes demanded to be refunded, deposited collateral at the rate of fifty percent of the amount subject to the lawsuit, caused a decrease in their assets, which meant interference with the right to property. The fact that the security foreseen for the issuance of stay of execution decisions was set at a very high and fixed rate would have forced taxpayers to bear an excessive burden. Therefore, we can state that the rule in question also contradicts Article 35 of the Constitution as it imposes an unreasonable restriction on the right to property.

The Constitutional Court annulled the rule of law, which may cause violation of the fundamental rights and freedoms of the administered in many respects, by evaluating it in terms of paragraph 5 of Article 125 of the Constitution.

References

Constitutional Court, Merits No: 2021/119 Decision No: 2022/48, Decision Date: 21/04/2022 Official Gazette Date: 02/08/2022 Official Gazette Number: 31911. https://www.anayasa.gov.tr/tr/anasayfa/ (30/05/2022).

Constitutional Court, Merits No: 2022/14, Decision No: 2022/70, Decision Date: 1/6/2022, Official Gazette Date: 7/7/2022, Official Gazette Number: 31889. https://www.anayasa.gov.tr/tr/anasayfa/ (08/07/2022).

Akyılmaz, B., Sezginer, M. & Kaya, C. (2019). *Explanatory and Judgmental- Turkish Administrative Procedure Act*, 1st Edition, Ankara, Savaş Publishing House.

Aslan, Z. (Ed.). (2019). *Explanatory and Judgmental Administrative Procedure Act*, Ankara, Seçkin.

Aslan, Z. (2017). *Stay of Execution in Administrative Jurisdiction*, 3rd Edition, Ankara, Seçkin.

"Law on the Amendment of the Individual Pension Savings and Investment System Law and Certain Laws and the Decree Law No. 375 (7351 S.K.)", Official Gazette, 31727; January 22, 2022.

Candan, T. (2020). *Explanatory Turkish Administrative Procedure Act*, 8th Edition, Ankara, Yetkin.

Gözübüyük, A.Ş., Tan, T. (2017). *Administrative Law Volume II Administrative Trial Law*, Updated 9th Edition, Ankara, Turhan Publishing House.

İnceoglu, S. (2013). *The Right to a Fair Trial in the Decisions of the European Court of Human Rights*, 4th Edition, Istanbul, Beta.

Özdeş, O. (1979). "Administrative Judicial Stay of Execution and its Qualification", *Journal of the Council of State*, No: 9 (32-33), pp. 3-21.

Samsun Tax Court, Principal Number: 2021/1500. (Personal archive)

TBMM, "Giresun Deputy Cemal Öztürk and 77 Deputies' Bill (2/4058) on the Amendment of the Private Pension Savings and Investment System Law, Certain Laws and the Decree Law No. 375 and the Report of the Plan and Budget Commission", No:301, https://www5.tbmm.gov.tr//develop/owa/sirasayi_sd.sorgu_baslangic (20/02/2022).

Ülgen, I. H. (1976). "İsmail Hakkı Ülgens' 1976 State Council Day Opening Speech", *Journal of the Council of State*, No:6 (20-21), pp. 5-20.

Yenice, K. (1980). "Freedom to Seek Rights and the Council of State", *Journal of the Council of State*, No:10 (38-39), pp. 5-16.

Evaluation of Decisions in the Field of Taxation in the Individual Application Decisions of the Constitutional Court

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Abstract:

In the case of a violation of the fundamental rights and freedoms protected by the Constitution by a law, executive, administrative actions and actions that lead to the violation of fundamental rights and freedoms are unconstitutional and such laws are canceled with the decision of the constitutional court. Decisions rendered in case of violation of fundamental rights and freedoms may also be overturned by legal means such as appeals and appeals, and the public power may face the sanction of compensation against criminal acts that violate fundamental rights and freedoms, and in the event that no benefit can be obtained from all these remedies, the importance of the constitutional court individual application emerges. Individual Application has been accepted in our country with the "Constitutional amendment made by the Law No. 5982 on the Amendment of Some Articles of the Constitution of the Republic of Turkey". Article 148/3 of the Constitution In its article, it is defined as follows*: "Everyone may apply to the Constitutional Court for alleged violation of his fundamental rights and freedoms guaranteed in the Constitution by the public power of any person under the European Convention on Human* Rights." For the application, "Law No. 6216 dated 30.3.2011 on the Establishment of the Constitutional Court and Judicial Procedures" 45. The same definition is given in the article. Turkey became a party to the ECHR in 1954. The ECHR accepted the right of individual application in 1987 and accepted the mandatory jurisdiction in 1990. In 2004, the Constitution was amended and a value above international conventions and the law was attributed to the fundamental rights and freedoms to which Turkey is a party. The last amendment to these values was made in 2010 and the Constitutional amendment paved the way for an Individual Application to the Constitutional Court. Despite the rights violations caused by the people using public power with the transition to practice, the constitutional judicial review started as of September 23, 2012 and as of this date, everyone can make an individual application with the alleged violation of the rights under the contract by the public power.

Individualapostasy is not a path of appeal or appeal. In the regulation made in this regard, it is possible to apply individually only against the violation of the rights specified in the constitution, not to any kind of violation arising in the law, to prevent the violation of rights in general, but to eliminate the consequences of the violation even if such a violation has occurred and to eliminate the consequences of the violation ' It is a way of seeking rights for the violation of the rights contained in the Constitution and as a result it is separated from other means of seeking rights, Individual abatim is made against

public power. In order to be able to pursue the Individual Application, the power that commits the violation of the rights in the constitution is the public power and it is a criminal legal remedy. If there is a violation of rights, it is primarily the duty of all administrative and judicial authorities to prevent these violations. The administrative and judicial authorities are in a more effective position and these violations should not go to the individual application route until these remedies are exhausted. Law No. 6216 45/3. According to the article, legislative and regulatory proceedings and decisions of the constitutional court are excluded from the scope of individual application. Law No. 6216 46/2. According to the article, public legal entities do not have the right of individual application and private law legal entities can only apply with the violation of the rights of the legal entity. According to Article 46/3, the right of individual application is granted only to Turkish citizens.

Rights and freedoms that may be the subject of individual application; Right to Life, Right to Liberty and Security, Right to Respect for Private and Family Life, Right to a Fair Trial, Legality of Crimes and Penalties, Freedom of Thought, Conscience and Religion, Prohibition of Torture, Prohibition of Discrimination, Freedom of Expression, Right to Effective Recourse , Prohibition of Slavery and Forced Labor and Freedom of Assembly and Association.

The state has the authority to collect taxes under legal obligation in order to finance the needs of the family. The concept of sovereignty is at the core of the taxation authority of the state. The state, on the basis of its sovereign power, is able to collect tax, which is a mandatory and unrequited obligation from individuals, and the source of this sovereign power is the Constitution. The duty of tax is regulated in Article 73 of the Constitution. According to this regulation, the tax is subject to the law in order to finance public expenses and is takenfrom all individuals according to the financial power of the taxpayer. The taxation power of the state has certain limits and these limits also constitute the limit of the fundamental rights and freedoms of the persons and it is within the scope of fundamental rights and freedoms to prevent the arbitrary exercise of this taxation authority should be examined. Rights allegedly violated in tax matters; The Right to Property is in the form of the Right to a Fair Trial, the Prohibition of Discrimination and the Right to Effective Remedy.

In this study, it is seen that in the decisions taken in individual applications to the Constitutional Court, especially the property rights and fair trialrights of individuals are violated . In this context, the rights violated in the individual application decisions given by the Constitutional Court will be examined within the framework of the court decisions.

Keywords: Tax Disputes, Individual Application, Constitutional Court, Property Right, Right to Fair Trial

Jel Codes: K10, K34, K41

Carbon Tax as an Environmental Tax

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Abstract:

A statistically significant change in climate that lasts decades or more is defined as "climate change." Changes in the climate are caused by the natural process or human-induced factors in the climate system, andwith the increasing human activities after the industrial revolution, the destruction of the natural environment, deforestation, wrong land use increase the emission of greenhouse gases and cause climate change. The effects of global climate change are increasing day by day and the main reason for this is again the human factor. Although climate change is a global problem because its effects exceed the borders of countries, all countries need to act together to combat it. The first step was taken with the "United Nations Framework Convention on Climate Change" in the fight against climate change, and then new policies were determined in the fight against climate change with the "Kyoto Protocol" and the "Paris Climate Agreement". At this point, it is important that all countries that are party to these agreements fulfill their obligations and take measures against the negative effects of climate change locally. Since the environment is a global public good and its benefits can affect everyone and in case of harm, it is important to take a common step in this situation all over the world and Carbon Taxes are of great importance at this point Carbon taxes are one of the important tools among the importance taken globally due to the increase in increasing emission gases. Based on a taxation based on the content of fossil fuels that cause k-arbon emissions, producers and organizations are obliged to pay the amount of tax determined as compensation for environmental pollution caused by their activities, and here the tax The carbon intensity of fossil fuels is taken as the basis for determining the amount. From this point of view, the amount of the tax to be levied is determined in proportion to the amount of carbon emissions per unit. In addition to all these, since the taxpayer will know that he will pay a pricein return for this if he carries out activities that will harm the environment, it is expected that the taxpayer will turn to emission reduction, the use of renewable energy sources and technologies that will not harm the environment. When the carbon tax is examined as a type of tax, the taxpayer of the carbon tax is a unit or individual that emits carbon dioxide gas into the environment while consuming fossil fuel. the subject of the carbon tax is greenhouse gases. The event that gave rise to the carbon tax is that the ceiling limit on the carbon dioxide rate set by law has been exceeded . In the calculation of the tax, the base can be determined on the basis of the type and amount of waste material causing pollution. When examined in terms of its characteristics, carbon tax is an excise tax levied on the amount of emissions, it is a specific tax because it is levied on the amount per unit, it is a source of income for states, it has an increasing effect on the prices of related goods and services, it is a policy tool based on the market mechanism, It is a type of tax that is considered as pigovian taxation application because it has a reducing effect on environmental pollution and acts according to the polluter pays principle. The carbon tax was first discussed in the UK in the 1970s and could only be implemented in the 2000s due to

somedifficulties in the regulation . Finland was the first country to introduce a carbon tax. In 1990, in order to reduce the increase in energy consumption and eliminate its harmful effects, the karbon tax was introduced for the first time in Finland. Finland is responsible for 0.3% of world emissions. With this carbon tax, Finland includes fuels such as gasoline, diesel and other energy sources (coal, oil, etc.). Carbon tax accounted for 55% of Finland's total environmental tax revenues for 2001 . When all these are taken into consideration, the carbon tax prevents environmental pollutionand at the same time increases the revenues of the state. A carbon tax that is jointly implemented in the world has not yet been implemented. However, the environment is a global public good and everyone can benefit from the benefit to be obtained from the environment, and everyone will be affected by the effects of the damages that occur in the environment. For this reason, carbon taxes are an important step towards taking a common step globally. As of 2019, carbon tax is diverse, in 24 countries and local regions around the world, and is being applied in different ways. Countries that impose carbon taxes nationally; Iceland, Denmark, Switzerland Estonia, Ireland, Norway, Latvia, Slovenia, Portugal, United Kingdom, Mexico, Colombia, Chile, India Finland, Japan Poland, Sweden; for regions that practice locally, the provinces of British Columbia and Alberta are examples. Although carbon tax is not applied in Turkey, there is only "Environmental Cleaning Tax" as an environmental tax, and there are taxes such as MTV and SCT that indirectly affect the environmental order, and it is seen that the share of ÇTV in total tax revenues is quite limited, for example, with the rate of 2.11% in 2021. r. In order to benefit the environment by reducing emissions and to provide revenue to the budget, it is essential to implement a carbon-based tax in Turkey.

Keywords: Environmental Tax, Carbon Tax, Carbon Emission

JEL Codes: H21, H23, Q5

Green Buildings in Turkey and Tax Policies for Ensuring Energy Efficiency in Buildings

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Abstract:

In recent years, with the increasing effects of global warming, environmental problems such as greenhouse gas-induced climate changes, deterioration of ecological balance, reduction of clean water and natural energy resources have made it essential for countries to provide sustainable and safe energy. The problem of deterioration of the ecological balance has increased the interest in sustainable and environmentally sensitive production models in many countries. These environmental problems have led to the prominence of the environmentally friendly/sustainable/green building concept for ensuring energy efficiency. The fact that about 40% of the world's energy consumption and about 30% of water consumption are caused by buildings, as well as 90% of human life is spent in buildings, reveals the importance of the requirements for green buildings. Therefore, green buildings have started to have an significant shares in the construction sector and governments have started to strengthen their support mechanisms for green buildings to increase energy efficiency. Green buildings, eco-frinedly or sustainable building is expressed as compared to traditional buildings and designed in consideration of incorporating human health and environmental problems and high technology, transportation. Green buildings are basically evaluated from the perspective of three areas: environmental quality, economic quality, and social/functional quality. From an economic point of view; green buildings are considered to be more costly in terms of project and construction costs compared to traditional buildings. However, as a result of the researches, it was calculated that green buildings are only 2% more costly. In addition, when considered as an investment in the long term; the energy savings resulting from green buildings needing less energy have the property of paying off the extra costs incurred at the beginning. In addition, with the energy savings it provides, there may be decreases in energy imports and it will affect the current account balance. In terms of environmental quality; the waste separation system plays an active role in the fight against environmental pollution by being responsible for the effective management of wastes. In addition, it is important to take advantage of natural amenities such as daylight and rainwater, to require low energy, and to provide this energy from renewable energy sources to improve environmental quality. In terms of quality of life; factors such as natural lighting, humidity and temperature control and indoor air quality, which are taken into account in the design of green buildings, have a positive affect on the health and working performance of individuals. The fact that Turkey has an energy cost of approximately 50 billion dollars every year and that the foreign dependency ratio is high in terms of the supply of said energy causes severe damages on the current account balance and foreign trade balances. In this context, the attractiveness of tax policies that support energy efficiency in a way that does not cause a decrease in the level of quality of life in buildings and the level of production quality and quantity in industrial enterprises comes to the fore. In order to spread green buildings, tax incentives are offered by many countries for this area. Especially in the tax incentives offered for green buildings, the USA is a prominent country among the country examples. In addition, many countries such as England, France, Netherlands and

Germany apply green building incentives. However, there is no special legal regulation regulating the support and incentives offered for green buildings in Turkey. The Energy Efficiency Law No. 5627, which became law in 2007, is a legal regulation applied to prevent waste by using energy effectively, to reduce environmental problems, and to alleviate the burden of energy costs on the economy. This legal regulation has a guiding nature in the green building process in Turkey. Other legal and institutional arrangements made in this context are; Energy Efficiency Strategy Document, Energy Performance Regulation in Buildings and Green Certification Regulation for Buildings and Settlements. Energy is intensely needed in three main sectors: industry, transportation and building. Support policies to ensure energy effiency are generally more prominent in the industrial sector. As in the rest of the world,policies aimed at ensuring energy effiency in the industrial sector are higher in Turkey. However, it has been determined that the incentives for energy saving in buildings are insufficient. Especially in Turkey, the absence of legal regulations specific to green buildings and the fact that the country does not have its own green certification system reveals the need for regulations to be made in this area. The aim of the study is to analyze the tax incentives offered to increase energy efficiency in Turkey and some selected EU countries and to offer suggestions for Turkey.

Keywords: Green Building, Energy Efficiency, Tax Incentive

JEL Codes: Q48, H2

Analysis of the Twin Deficits Hypothesis: Southeastern European Countries

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Abstract:

The relationship between chronic budget deficit and current account deficit in developed and developing countries is seen as the cause of macroeconomic instability in the long run. The twin deficits hypothesis, which emerged in the 1980s, refers to the coexistence of both a budget deficit and a current account deficit in an economy. The twin deficits hypothesis is the coexistence of both budget deficit and current account deficit in an economy. The concepts of the budget deficit and current account deficit constitute important indicators of macroeconomic balance. The relationship between these two variables is important for the policies to be determined in the country's economy. If the worsening of the budget deficit in the economy causes the current account deficit, policymakers will develop policies to reduce the budget deficit. Thus, they will be able to improve the current account deficit. If the budget deficit does not affect the current account deficit in the economy, policymakers should use different tools than the government budget to balance the current account deficit.

Two main opposing views in the literature explain the twin deficits hypothesis. The first of these, the traditional view, is explained by the Keyneysen approach. According to this view, an increase in the budget deficit causes an increase in the current account deficit. There is a unidirectional causality running from the budget deficit to the current account deficit, and there is no feedback effect. Besides, an increase in the budget deficit means an increase in government expenditures or a decrease in revenues, and in this case, it affects imports and causes the current account deficit balance to deteriorate. Another view is the Ricardian approach. According to this approach, there is no causal relationship between the budget deficit and the current account deficit, unlike in the first approach. Because interest rates and investment amounts that affect the current account deficit do not affect the budget deficit. In this view, households know that in the period when the government increases public expenditures, if government does not increase taxes, there will be a budget deficit. Therefore, households who know that the budget deficit will be financed by borrowing that there will be an increase in taxes if this debt is repaid (Chowdrury and Saleh, 2007, pp. 4-5; Lau and Baharumshah, 2006, pp. 214-215; Ratha, 2011, pp. 2-3).

In this study, the relationship between budget deficit and current account deficit existence has been tested by using Kónya bootstrap Granger causality covering the 2002-2021 periods for Southeastern European countries (Albania, Bosnia and Herzegovina, Bulgaria, Montenegro, Greece, North Macedonia, Croatia, Romania, Serbia, Slovenia, and Turkey). The most important reason for choosing these countries is because these economies have with high current account deficit problems and it is important for the country's economy to eliminate this problem. Budget deficit and current account deficit data are taken from the IMF's database. The Kónya (2006) test used in the study has several advantages. First, unit root and cointegration tests are not required for variables. Therefore, all variables are used at the level. The use of variables in different forms than levels may cause the loss of trend dynamics in the series. Second, this test acknowledges the existence of simultaneous

correlations between countries. Kónya's (2006) bootstrap Granger causality test, which gives causality results for each country separately, was applied for our panel data since there is a dependency between the data in our model and the slope coefficients are heterogeneously distributed between the horizontal sections. The results of the study show indications of the sign and direction of causality in these countries. According to the Keynesian view, the countries with the twin deficits hypothesis are Bulgaria, Montenegro, Greece, North Macedonia, Croatia, Romania, Serbia and Turkey. Countries with bidirectional causality between budget deficit and current account deficit are Montenegro, Greece, and Romania. If an improvement in the current account deficit is desired in these countries, which is also supported by the Keynesian view, policies should be made to reduce the budget deficit. The variables determining the current account deficit differ for each country's economy. Factors such as economic and political factors, level of foreign direct investment, technology, changes in exchange rates, interest rates, and human capital are effective. The countries that support the Ricardian view of the twin deficits hypothesis are Albania, Bosnia Herzegovina, and Slovenia. According to the approach, policymakers in these countries should not see the budget deficit as the cause of the current account deficit. Therefore, to improve the current account deficit, it should give priority to different policies besides the policies related to the budget deficit. In addition, the reason for the lack of a causal relationship between the budget deficit and the current account deficit can be said to be the large share of the private sector in the economy.

Key Words: Twin deficits hypothesis, Southeastern European countries, Konya bootstrap causality test

Jel Codes: C01, E60, C33

The Effect of Fiscal Rules and Fiscal Councils on Primary Budget Balance in EU Countries: Panel Data Analysis

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Abstract:

Discretionary fiscal policies were widely implemented from the 1930s to the 1970s. Budget deficits grew dramatically because of the significant increase in government spending following World War II. With stagflation in the 1970s, many countries' public debt stocks and budget deficits reached dangerously high levels. As a result, rule-based fiscal policies gained importance. Since the 1980s, worldwide budget deficits and debt stocks have continued to increase, and macroeconomic instability has been experienced. Fiscal rule implementations, followed by fiscal councils, emerged and spread in countries seeking permanent solutions to ensure fiscal discipline. After the global economic crisis of 2008 and the European Union debt crisis, EU countries faced high budget deficits and debt stocks. It was critical to strengthen the fiscal framework during this period of growing concern about fiscal sustainability. Fiscal rules and fiscal councils stepped forward to help strengthen the fiscal framework. Fiscal rules, in a narrow sense, are numerical restrictions on fiscal variables such as the budget deficit, borrowing, public expenditures, and tax revenues. Fiscal rules are concerned with how the financial decision-making process is governed and how the rules are applied in a wide sense, which includes institutional arrangements. The primary goals of fiscal rules, which are determinants of financial performance, are to ensure fiscal discipline and macroeconomic stability, control the tendency to excessive deficits, and strengthen public financial management. The fiscal councils are nonpartisan independent public bodies that examine fiscal policies and fiscal performance, provide recommendations as needed, work in the field of budget policies, and are funded with public funds. A complementing policy approach is the establishment of fiscal councils to improve fiscal governance. The financial councils' main goals are to ensure fiscal discipline, fiscal transparency, and macroeconomic stability, as well as to strengthen public financial management. Fiscal councils, established for public finance sustainability and stability, are at the forefront of institutional arrangements made to find solutions to problems encountered. Every EU country has at least one financial council, but their tasks are not the same. Financial councils' tasks include monitoring fiscal rules compliance, evaluating long-term sustainability issues, providing, or evaluating macroeconomic forecasts used for budget projections, conducting positive or normative analyses, presenting binding intra-budget forecasts, costing policies, and preparing public reports on their activities. Fiscal discipline requires the continuation of stable economic growth and macroeconomic sustainability. Excessive budget deficits and borrowing should be avoided in this context. Fiscal discipline is the key to macroeconomic stability. Fiscal rules and fiscal councils are also critical components of fiscal discipline. When budget deficits and public debt stocks increased in the 1990s, causing macroeconomic instabilities and raising concerns about fiscal discipline, fiscal rules incremented in EU countries to overcome these issues. Supranational fiscal rules were implemented with the EU's Maastricht Agreement in 1992 and the Growth and Stability Pact in 1997. Following the 2000s, particularly after the global economic crisis of 2008, the number of fiscal councils in the relevant countries increased.

Countries strive for long-term fiscal discipline, macroeconomic stability, and an efficient public finance management system. In line with the specified objectives, it is critical to make policy recommendations by analyzing the impact of the fiscal rules applied in the EU countries and the formed fiscal councils on the primary budget balance of the countries. Within the framework, this study aims to determine whether the fiscal rules in place in EU countries, as well as the fiscal councils established, are effective in achieving the determined goals. Panel data analysis is used in the study, which utilizes annual data from 28 EU countries from 1996 to 2019. The impact of fiscal rules and fiscal councils on the primary budget balance is analyzed using the fixed effects model and the results are evaluated. The primary budget balance is a fiscal performance indicator that is used as an independent variable. As a fiscal rule indicator, the fiscal rule index is used. Fiscal councils exist, in EU countries, that perform multiple functions. For fiscal councils that provide or evaluate macroeconomic forecasts used for budget projections, monitor compliance with fiscal rules, and analyze long-term sustainability issues, three separate dummy variables are created, and these variables are included in the analysis as fiscal council variables. The analysis also includes control variables affecting the primary budget balance. The findings show that both fiscal rules and fiscal councils have a positive impact on the improvement of the primary budget balance. Evaluations and policy recommendations are included considering the study's findings.

Keywords: European Union, fiscal discipline, fiscal rule, fiscal council

JEL Codes: E61, E62, H62

Financial Sustainability: Country Examples Based on Economic Indicators

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Abstract:

Sustainability means meeting the needs of the current period with the effective use of existing resources, as well as the ability to use these resources by transferring them to future generations. Today, this concept is related to each other; It has different dimensions such as environmental sustainability, economic sustainability and social sustainability. Come into prominence the concept of sustainability; Many factors such as the increase in commercial activities, increases in production and consumption, population growth, industrialization, globalization and the increasing environmental pollution due to these are effective. Although has not definition of the concept of fiscal sustainability, it can be said that it means ensuring a macroeconomic balance for world economies and a sustainable balance in fiscal indicators. According to another definition, fiscal sustainability is the ability of states to meet their current expenses with their own revenues without the need for any borrowing or transfer. From a theoretical point of view, fiscal sustainability means the consistent use of targeted monetary and fiscal policies and the long-term coordination of the balance between public expenditures and public revenues.

Sustainability of both debts and budget deficits is of great importance in ensuring fiscal sustainability in countries aiming to achieve macroeconomic stability. Although there are various approaches explaining financial sustainability, some of these approaches are as follows; accounting approach, intertemporal budget constraint approach, Bohn sustainability approach, Ricardian and non-Ricardian approaches to financial sustainability and indicators approach. It is frequently used in the study, especially in financial sustainability studies; Public Expenditures/GNP, Public Revenues/GDP, Primary Surplus/GDP and Public Borrowing/GDP indicators will be discussed and evaluations will be made on the basis of the indicators approach.

While examining the financial sustainability of the countries, the first indicator to be mentioned within the scope of the study is the share of public expenditures in GDP. The importance of public expenditures in terms of financial sustainability emerges when the budget balance cannot be achieved. That is, in countries with public expenditures far above the potential public revenues they can obtain, public deficit and borrowing also increase, and as a result, the macroeconomic balance, which is important for fiscal sustainability, is adversely affected. Another indicator to be examined in terms of financial sustainability is the share of public revenues in GDP. Public revenues enable states to make expenditures, and countries that cannot obtain sufficient income may face budget deficits after their expenditures. Maintaining a balance in public revenues as well as in public expenditures is of great importance for fiscal sustainability. Primary surplus is another important indicator for fiscal

sustainability. This concept expresses the amount between expenditures and revenues as a result of deducting interest expenditures from the state budget. In other words, it is the case of a budget surplus if the expenditures made are excluded from the budget, excluding interest expenditures. Primary surplus is an indicator that countries should take into account, especially in terms of debt sustainability. Because giving a deficit (primary deficit) instead of a primary surplus will require borrowing for the interest payments of the debt, which may create negative effects in the long term in terms of debt management. The size of the primary surplus; It varies depending on various indicators such as debt interest rate, debt stock, public expenditures, public revenues, macroeconomic conditions, budget deficit and interest expenditures. From this point of view, primary surplus is effective on debt management, and debt management is of great importance in terms of financial sustainability. While examining the financial sustainability of countries, the last indicator to be mentioned within the scope of the study is the share of public debts in GDP. Borrowing has become a financing tool that almost all countries frequently resort to today. The concept of public debt stock refers to the sum of both domestic and foreign debts realized by the public sector. Today, increasing public services increase expenditures, and in this case, public revenues may be insufficient to meet public expenditures. In this case, borrowing becomes inevitable for countries.

From this point of view, the aim of the study is to present and evaluate financial sustainability in a comparative way, based on economic indicators for the years 2000-2020, in countries to be selected among developed and developing country groups. Evaluation to be made as a result of the study; public revenues, public expenditures, primary surplus and the share of public borrowing in GDP will be taken into account. Evaluations to be made based on the economic indicators of the countries are important in terms of the stable execution of the fiscal policies implemented in today's economies and thus ensuring fiscal sustainability.

Key Words: Fiscal Sustainability, Fiscal Policy, Public Borrowing, Primary Surplus.

Jel Codes: H63, E62, H60

Public Financial Auditing in The Open Government Understanding: Armchair Audit

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Abstract:

In democratically governed countries, voters delegate the power to spend and collect taxes through the budget to their elected representatives. The principal-agent relationship that emerged as a result of this devolution of authority expresses the fiscal incompatibility caused by the representation relationship between the deputies and the citizens. For this reason, after the devolution of authority, those who are in charge and authorized in the use of public resources should be held accountable to voters for the effective, economic, efficient and legal use of resources. Transparency is critical to ensuring accountability. Transparency; it refers to the presentation of fiscal indicators and information on the method of obtaining them in an accessible and understandable way by the society, subject to reasonable limits that protect security and privacy. The concept of open government, which emerges as an umbrella concept for establishing transparency and accountability in public administration and ensuring cooperation with the participation of the public, refers to unhindered access to and use of government data. It is seen that open government,data, which has been the basis of open government, practices since the 2010s, is one of the most emphasized issues in terms of developing democracy mechanisms. The reflection of open government data in public financial management is seen in the fact that data on public expenditures and public revenues are made accessible to everyone, and can be directly audited by the public, apart from internal and external audits. This unofficial and voluntary audit of government data is called armchair audit, after a speech by David Cameron in 2009. The concept of armchair audit was first used to refer to websites and databases that make open government data accessible. However, over time, the term "armchair auditor" has been developed to describe people who use these websites and databases to evaluate government policies. The fact that the word Armchair means "who does business from his armchair, tries to carry out business with theory without experience" in English shows that this concept implies an amateur effort. However, the value attributed to armchair auditors goes beyond professional auditing to the exercise of democratic rights. Armchair auditors do not need to issue any reports or even say they are auditing armchairs. What is meant by auditing is that open government data is visible and processable. Armchair audit is based on the idea of involving citizens to ensure transparency in public finances by disseminating the analysis of open government data through the use of information technologies. However, for the presence of armchair auditors to have a potential preventive role in the improper use of public resources, not only numerical data but also value for money must be visible. For this, it is important that the documents related to expenditures and incomes and the official audit reports made by public institutions are regularly disclosed to the public. Especially with the widespread use of the performance-based budget system, it is seen that the forecasts and realizations regarding the budget process in many countries are announced to the public at regular intervals. In addition, reports of external audits carried out by supreme audit institutions are published annually on the basis of institutions. These documents are essential for citizens to be able to interpret open government data.

At this point, the importance of the performance-based budgeting system and the program-based performance budgeting system implemented in our country for the open state understanding will be one of the points emphasized in the study. In the study, first of all, the effects of the open government and open government data concepts on public fiscal audit will be examined, then the seat auditing activity, which is a new audit concept in establishing transparency and accountability, will be discussed. What kind of opportunities should be provided for the armchair auditing to show the expected benefits from it will also be tried to be revealed in the study. In addition, it is aimed to evaluate the steps taken depending on the open state understanding in Turkey and the civil society projects carried out to monitor and make clear the open government data. In this direction, it is aimed to examine the blog pages and websites that can be evaluated in the context of armchair auditing. In the Turkish literature, it is seen that the academic interest in open government and armchair auditing is limited. The aim of the study is to create a discussion environment for these issues.

Keywords: Open government, Public financial auditing, Armchair audit, Principal-agent relationship

JEL Codes: H60, H72

Options for Fiscal Consolidation in Western Balkans 6

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Abstract

Sustainability of public finances remains one of the biggest challenges that constantly face governments of different nations including Western Balkans 6 (WB6) region. Different crises represent situations that cause unprecedented deficits which can lead to high levels of public debt but this does not happen just because of a crisis. Governments sometimes intentionally run deficits in order to stimulate economic growth and in these situations things can get out of control, therefore continual fiscal policy measures are a must. Bearing in mind the importance of fiscal policies for a country, the main objective of this paper is to propose a restructuring of public finances in order to achieve fiscal sustainability in the region of WB6. There is an urgent need for interventions in fiscal policies in this region, first to address challenges from the post pandemic period, second to respond to the energy crisis and high prices of basic goods caused from the war in Ukraine and third to manage in better ways the level and use of public debt. Using VAR models that measure impact of various taxation and public spending categories in GDP we will propose the best options for a successful fiscal consolidation process in this region. While literature shows that fiscal consolidation tends to be more successful if they are oriented through expenditure cuts, in the case of WB6, tax reforms are not excluded either. The recipe for a successful fiscal consolidation in this region seems to be a combination between revenues and expenditures reforms.

Keywords: Fiscal Policies, Fiscal Sustainability, Tax Optimization, Expenditures Cut, VAR.

JEL Codes: H12, H20, H50, H62, H63.

Omniscience Government and Ordoliberalism in the Case of Public Intervention

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Abstract:

The purpose of this title is to give acknowledge as regarding the terms of Omniscience Government and Ordoliberalism. Omniscience Government and Ordoliberalism can help in providing with skills needed to meet the challenges of sustainable development in a society in raising public investments and public intervention preconditions for economic development and modernization. Omniscience Government and Ordoliberalism may be considered to have been regarded as key approaches in processes of social change and development. Hereby, we can ask different questions on it to explain of aim of the tirle; which expectations have the societies regarding the contributions of the Omniscience Government and Ordoliberalism? And Which structural conditions must societies create to make development engagement successful? Which forms/organizational models of interaction existed in the terms of Omniscience Government and Ordoliberalism? The title is based on highlighting the role of terms bringing out economic, political, social and cultural transformation in the society from legal point of view as well and study aims to gather feedback from economic development in relation to the integration of people and the governments. The impact of Omniscience Government and Ordoliberalism institutions for transformation of society is also discussed. Moreover, I do explain Omniscience Government and Ordoliberalism are still important for us today. Consequently, one of the key points of the terms of Omniscience Government is how it deals with the ideas of private property and freedom. And also, this title does consider to outline the economic conditions of omniscience government and ordoliberalism. I do argue a system of free trade and using natural resources in the public intervention.

My research will primarily be based upon “descripted method”. I have extensive database on line has helped me to collect a massive amount of information on Ordoliberalist Institutions as well as on economic growth. I have also been aided by the European Union, a depository library for all of the publications from the European Union.

In addition to publications, reports, and statistics from the Commission, I will use scholarly articles from different journals, and to compare my new policy proposal to what the "experts" have to say about the subject.

The Relationship Between Public R&D Expenditures in the Field of Energy and CO2 Emissions: The Case of OECD Countries

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Abstract:

Energy is a vital resource due to its strong economic and social effects. It affects many issues such as transportation, communication, security, politics, health, agriculture, and international relations. Therefore, governments structure even their most basic policies, such as the economy and defense, on the axis of energy, which has emerged as diplomacy's most powerful weapon. National energy policies, on the other hand, are determined by taking into account or being influenced by many factors such as energy security, environmental security, energy efficiency, energy prices, foreign relations, globalization, free market, and international organizations. Due to its importance, energy policies are guided by many international organizations and a consistent strategy is being attempted to build in order to assure global energy security. These organizations focus on providing cooperation between countries on issues such as energy efficiency, access to energy, air pollution, sustainability, and energy technologies. Therefore, modern energy policies are designed to achieve energy security, effective and efficient use of energy, diversification of energy resources, and environmental protection.

The world energy system has been based mainly on fossil fuels and partially on nuclear energy for many years. However, the sustainability of energy policies was called into question due to problems such as the oil crisis in the 1970s, increased air pollution in the atmosphere, and large-scale nuclear accidents. Owing to the fact that, it is required a transformation in the energy system and the strengthening of renewable energy technologies. Innovation is a key tool in attaining respective alteration and one of the most important indicators of innovations in the energy field is R&D activities (Bointner, 2014, s. 733-734). The private sector refrains from investing in R&D due to the risky nature of R&D investments, the failure of R&D investments to come up with results in the short term, and the need for large capital. Therefore, governments are obliged to make R&D investments, and expenditures and/or create mechanisms to stimulate private sector R&D investments.

In addition, the requirements of the competitive market cannot be met due to externalities and natural monopoly in the field of energy. In addition, due to social and economic issues, equality and security-related problems, governments cannot leave the energy field entirely to the free market, and conversely implement regulatory policies. The states, which maintain their interventionist position in the field of energy, use many controlling, regulating, and directive tools. These tools can be classified as regulatory policies, financial incentives, and privatization. In these study, regulatory policies are divided into seven categories as feed-in tariffs, premium feed-in tariffs, renewable portfolio standards, tender systems, net metering, emission trading systems, and other regulations; financial incentives are classified as investment/production incentives, R&D incentives, waste management incentives, energy taxes and other financial incentives.

R&D incentives are the most essential of these tools for our study because one of the main goals of current energy policies is to reduce emissions. The most effective and fastest way to achieve this goal is to increase energy efficiency. Necessary devices, machines, and tools to increase energy efficiency require high technology. Due to the advanced technology required, these devices are costly, and so the necessary investments cannot be made by the private sector. Therefore, financial incentives are required to encourage the manufacturing and marketing of these devices, as well as to extend their use (Markandya, Ortiz, Mudgal, & Tinetti, 2009). Another way to reduce emissions is to expand the use of renewable energy sources. However, since the production of renewable resources requires high technology, especially the initial investment costs are quite high. Due to the fact that financial incentives are crucial in order to encourage the private sector. Countries that want to improve energy innovation capacity prepare special financial incentive programs for R&D activities. The mechanisms used by the governments in this respect are generally in the form of direct R&D activities, providing incentives to companies operating in the energy field through loans and grants, or providing indirect financing with tax incentives. In accordance with this purpose, the state carries out R&D activities in public laboratories and universities, supports companies for certain technological projects that it considers to have high social returns, or provides tax incentives such as the deletion of current R&D expenditures of enterprises and deduction of depreciation allowances from taxable income. It has been seen that the states mostly focused on developing fossil fuel or nuclear energy technologies in the past R&D expenditures. With the transformation in the energy policies, R&D expenditures mainly focused on renewable energy technologies.

In this study, the environmental impact of public R&D expenditures in the field of energy in OECD countries between 2000 and 2020 was examined by panel data analysis method by creating an econometric model. According to the results obtained in the analysis, a long-term negative relationship was determined between public energy R&D expenditures and emissions. It has been concluded that the increase in energy consumption and national income, which are other variables used in the study, increases emissions, while the increase in environmental taxes reduces emissions. As a result of increased R&D expenditures in the field of energy, innovative activities, processes, and products become widespread, and so, energy efficiency increases and resource consumption decreases. Achieving the same output by consuming fewer resources reduces emissions due to energy consumption. In addition, R&D expenditures play a key role in the development and expansion of alternative energy sources such as renewable energy. The budget allocated by the public for energy R&D is an important indicator of the direction of greenhouse gas emissions.

Keywords: Public energy policies, public R&D expenditures, CO2 emissions, environmental security, panel data analysis

JEL Classification: Q48, Q53, O32

Deduction Of Losses of Joint Ventures in Relation to Turkish Corporate Tax

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Abstract:

The process of financial development requires new methods of venturing. As a result, new organisational forms emerge. Joint ventures have been developed in this context and became a chapter of the Turkish Tax System as a legal entity in 1985. Joint venture is the partnerships of entities that are experienced in different areas of activities in order to complete a specific job. According to Turkish Law of Obligations ("TBK"), joint ventures are ordinary partnerships and article 1 of the Corporate Tax Law ("KVK") designates them as corporate tax payers. Article 2/(7) of KVK describes joint ventures as the partnership of different entities jointly undertaking a specific job and sharing the earnings of that undertaking. The same article rules that the partners of the ordinary partnerships are able to decide to become a corporate taxpayer. The income of joint ventures is taxable in terms of corporate tax and the profit after tax is paid in accordance with partnership shares. An important issue on the tax application concerning joint ventures is the deduction of the loss of partners. The deduction of the loss of companies due to their participation in joint ventures is not regulated within KVK. In addition, the loss of the corporate taxpayer cannot be deducted by its partners as per No.1 General Communique of Corporate Tax ("KGVT") and the same rule is applicable to the losses of joint ventures. According to the same KVGT article, it is not possible to deduct the losses of joint ventures from the income of its partners. This should be evaluated as a major obstacle in establishing joint ventures. As joint ventures are able to deduct their losses while they remain ordinary partnerships, they are not allowed to deduct their losses as corporate taxpayers. On this matter, the Council of State ruled ("Danistay" VDDK, Case No. 2009/259, Decision No. 2010/199) that No.1 KVGT's regulation concerning the deduction of losses in joint ventures is not against the law. Article 9 of KVK only allows the deduction of losses in the instance that the loss occurs during the acquisition or demerger of the company, as the same ruling outlines. Therefore, the regulation brought by the communiqué is not against the law since KVK does not allow the deduction of joint ventures' losses by its partners. With reference to the aforementioned decision of Danistay, it is clear that a solution for the matter requires an enactment of a law. Also, the losses due to taking over businesses in liquidation and the losses due to participating in a joint venture are of the same character. Therefore, the application of tax law on the losses due to taking over other corporate taxpayers and the losses due to participating joint ventures should be same. According to the tax rulings drafted by the Ministry of Treasure and Finance in this regard it is possible for the participator of liquidator companies to deduct their losses due to the liquidation of the participated companies from their tax assessment. (Revenue Administration, 14.04.2006, B.07.4DEF.0.34.11/KVK-14; Istanbul Tax Office, 20.12.2006, B.07.1.GİB.4.34.16.01/KVK-14-7026). Furthermore, several Danistay decisions found the deduction of the losses by the participating company due the liquidation of the participated company results in loss in compliance with laws. (Danistay 9th Court Case No.2016/20721, Decision No.2019/6986; Danistay 4th Court Case No.2012/6305, Decision No.2016/1337). The losses of joint ventures should be deducted by its

partners as a consequence of these Danistay decisions. Fundamentally, the losses of joint ventures are the result of the joint activities of the corporate and other partners of the joint ventures. It is indisputable that the income of the joint ventures is taxable under corporate tax. On the other hand, it should be admitted that the loss arising from joint venture for the participants is within the context of generating income or carrying out business activity. Therefore, the partners of the joint ventures should be allowed to deduct their losses from their corporate tax assessment. The legal character of joint ventures will be discussed in this article. Secondly, the relevant KVK articles, communiques and tax rulings will be examined. In this regard, the judicial decisions concerning the deduction of the losses due to the dissolution of joint ventures will be addressed. Finally, the importance of allowing the partners of the joint ventures to deduct their losses due to their participation will be emphasized.

Keywords: Corporate tax, joint ventures, participation, loss, deduction

JEL Codes: K.34, H.20, H.25

The Effect of Syrians Residing Under Temporary Protection on Tax Compliance: A Provincial Quantitative Research

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Abstract:
Tax perception is defined as the meaning or idea formed in the mind of individuals about the tax phenomenon or judgment formed by the influence of internal and external stimuli. The perception created by the concepts of tax and taxation on people has a significant impact on the shaping of attitudes and behaviors towards tax. Individuals may develop a feeling of hatred, dislike, apathy and sympathy for taxes and taxation. They may reject the tax and rebel, actively reacting with hatred. Antipathy, on the other hand, can react passively, reflecting the tax, avoiding/evading tax, giving up on investment or reducing consumption. If there is apathy or sympathy for the tax, there is voluntary compliance. Voluntary tax compliance is defined as the full disclosure of tax liability in accordance with the tax laws, regulations and judicial decisions applied at the time of filing, submitting the declaration to the relevant authorities on time, and making the payments on time and in full. Factors determining voluntary compliance with tax are individual factors (income level and ability to pay, education level, occupation, age, gender, marital status and tax payment habits), moral factors (tax morale, culture and religious belief), economic factors (inflation, national income, unrecorded economy and free market conditions), psychological factors (tax awareness, taxpayer's perspective on tax and thoughts about other taxpayers), political factors (confidence and loyalty to the state administration, perspective on political power and perspective on public expenditures), factors arising from the administrative and tax system (tax rate and tax burden, probability of auditing, complexity and frequent changes of tax legislation, etc.) and social and demographic factors (social environment and racial characteristics of the taxpayer).
In this study, it will be tried to analyze how the Syrians residing under temporary protection affect voluntary tax compliance in the provinces where the Syrians under temporary protection densely live.

The events that developed with the effect of the Arab Spring on Syria have increased the number of Syrians coming to Turkey every year since 2011, and according to the data announced by the

Presidency of Migration Management, this number has been determined as 3.724.240 as of 6.16.2022. Registered Syrians under temporary protection constitute 4.26% of Turkey's population (84.680.273- 31 December 2021). According to the data announced by the same administration, the provinces with the highest number of persons under temporary protection are Istanbul, Gaziantep, Şanlıurfa, Hatay, Adana, Mersin, Bursa, İzmir, Konya, Ankara, respectively. When considered in terms of population density, Kilis takes the first place (38.46%), followed by Hatay, Gaziantep, Şanlıurfa, Mersin, Adana, Kahramanmaraş, Osmaniye, Bursa and Konya. The provinces with the lowest number of registered Syrians under temporary protection are Artvin, Tunceli and Iğdır. The province with the lowest density is Iğdır. According to the data of the Ministry of Labor and Social Security, the total number of foreigners granted work permits from 2011 to the end of 2020 is 757,758. 202,679 of them are Syrian nationals, which corresponds to 26%. Considering that the number of Syrians under temporary protection in 2020 is 3,559,041, it is seen that approximately 5% of the total Syrian population under temporary protection is subject to a work permit. These data give an important clue that Syrians are working / are employed informally. Labor legislation and tax legislation do not introduce a separate regulation specific to Syrians who have obtained a work permit. In this respect, it is obvious that it has a negative effect on premium payments and potential tax collection arising from compulsory insurance. On the other hand, it has been recorded that Syrians in Turkey since 2011 have opened more than 10 thousand businesses. In 2011, Syrian businesses made up only 2% of foreign-owned enterprises in Turkey, while this ratio increased to 20%. According to the Building Markets Turkey-Syria business partnerships report, 53.2% of the companies operate in Istanbul, 20.1% in Mersin, 6.7% in Bursa, 5.4% in Gaziantep and the rest in other provinces. Likewise, the tax legislation has not brought a separate regulation for companies.

It is obvious that Syrians residing under temporary protection have demographic, economic, psychological and sociological effects for Turkey. In addition, in Turkey, which hosts as many refugees as a small country population, it is expected that the financial effects of this situation will have an impact on tax revenues in particular. In the academic literature, the impact of Syrians on Turkey has been frequently discussed and evaluated from different perspectives. In economic terms, its effect on the labor market and unregistered employment has been discussed and studied. In terms of tax revenues, it is noteworthy that two different studies were written. One of the studies, while approaching the subject in terms of tax justice, is aimed at estimating the income loss due to untaxed wage income and premium payments due to unregistered employment (İlteş Gülşen, M. Türkiye'de Yaşayan Geçici Koruma Altındaki Suriyelilerin Vergi Adaleti Üzerine Etkileri, Uluslararası Afro-Avrasya Araştırmaları Dergisi, V.4/7, Jan.2019). In the other study, the effects of those living under temporary protection who took refuge in Turkey on their "tax obligations" were analyzed based on the information obtained using a survey. In the study, it was concluded that immigration and the consequences of immigration affect the tax perception negatively.

In our study, our starting point is the assumption that "the individual, social, cultural and racial differences of those under temporary protection adversely affect the voluntary tax compliance of the society they live in". As a matter of fact, the interim notes of previous studies, albeit very few, confirm this idea. On the other hand, it is a preliminary information that province-based accrual/collection rates, announced by the General Directorate of Public Accounts and the Revenue Administration, have been in a general downward trend since 2011 in provinces where Syrians are densely populated. The accrual/collection ratio, which is a measurable and important indicator of voluntary compliance in paying the tax, decreased from 78.3% in 2011 to 18.8% in 2021 in Kilis, which has the highest Syrian

population concentration (38.46% as of 2022). This data leads us to examine the relationship between demographic indicators (population, number of Syrians under temporary coma, gender, education, migration) / work permit data / number of taxpayers / number of Syrian companies / tax revenues (and related Other socio-economic indicators considered) and the accrual/collection ratio as an indicator of compliance for provinces of Turkey. The inadequacy of some data is our limitation. For this purpose, statistical analysis will be made using the statistics of the Ministry of Treasury and Finance, Revenue Administration, Presidency of Migration Management of the Ministry of Internal Affairs, Turkish Statistical Institute, Ministry of Labor and Social Security. The analysis technique that is planned to be applied with these data is panel data analysis.

It is known that studies have been carried out to increase voluntary tax compliance for years in Turkey. It is thought that the social and economic environment in which the taxpayer lives affects tax awareness and morality along with cultural elements in provinces where the number and/or density of those under temporary protection are high. A determination will be made with the findings obtained in the study, and asylum-seeker policy proposals will be developed in the context of voluntary tax compliance.

Keywords: Tax compliance, Temporary protection, Syrian, Accrual/collection rate.
JEL Codes: K34, K37, C10, H20.

Implementation of "TRT Banderole Fee" in Import and Problems in Implementation

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Abstract:

Taxes and other financial obligations paid by the importer during import are quite complex and varied in terms of our current legislation. Some of the tax and financial obligations, which are quite high and complex, are collected by the customs administrations during the import of the goods, and some of them are paid by depositing them into the accounts opened on behalf of the relevant administrations before the declaration is made to the customs administrations. One of the financial obligations during import is the Turkish Radio and Television Corporation (TRT) Banderole Fee. The banderole fee, whose legal basis is the Turkish Radio and Television Corporation Revenues Law No. 3093, must be paid before the sale for those who import the devices specified in the law for commercial purposes, and before the import procedures for those who bring them to the country for non-commercial purposes. Banderole fee, from radio, television, video and combined devices that can receive TRT broadcasts, for once over the Value Added Tax base in the Customs Entry Declaration (excluding the special consumption tax) during the importation of the products, pursuant to the provision of Article 4 of the Turkish Radio-Television Agency Revenues Law No. 3093. to be taken. However, it is observed that there are hesitations in practice in determining the base of the banderole fee to be paid and inclusion in the base of special consumption tax and value added tax.

Although a number of circulars have been issued by the Ministry of Commerce, General Directorate of Customs on the subject, lawsuits have been filed in the Council of State regarding the regulations in these circulars and the issue has been brought to the judiciary.
Then, with regard to TRT Banderole Fee, significant changes were made in Law No. 3093 with Law No. 5904 dated 16.06.2009, Law No. 6552 dated 10.09.2014 and Law No. 7033 dated 18.06.2017. The most important of these changes is related to the base on which the banderole fee will be calculated.

In this paper, the results of the expression of Value Added Tax base in the Law No. 3093 in terms of TRT Banderole fee in practice and the administrative regulations and judicial decisions regarding the TRT Banderole Fee in imports will be evaluated and the problems experienced in practice will be discussed.

Political Economy of Sharing Tax Burden an Empirical Analysis of Turkish Provinces

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Abstract

This paper investigates, at the province level aggregation, the relationship between the political attitudes and tax effort of the cities with the Turkish data. Political attitudes of the cities are measured by the vote shares of different political parties, governing conservative right wing party and the main opposition party respectively. Tax revenue effort is usually defined as the tax revenue as a percentage of the gross domestic product of the aggregation unit like a country, region, or a city. Our tax effort variables,however, are number of tax returns per capita, tax base as a percentage of GDP, and accrued tax as a percentage of GDP. We include both personal income tax and corporate tax into the analysis. Empirical strategy To investigate the relationship between ruling Justice and Development Party (AKP) vote shares and tax indicators (tax return, tax base, accured tax for both personal income tax and and corporate tax), following models are estimated using panel data of 81 provinces in Turkey for the period of 2012-2019. This period is chosen for a few reasons. First, the availability of the data set. Data is available for these years. Second, the years after 2010, political spectrum has changed. Different equations to estimate is as follows ⟦TaxR⟧_it=α_it V_it+x_it β+δ_i+θ_t+ϑ_it (1) ⟦TaxB⟧_it=α_it V_it+z_it β+δ_i+θ_t+ϑ_it (2) ⟦AccTax⟧_it=α_it V_it+z_it β+δ_i+θ_t+ϑ_it (3) ⟦TaxR⟧_it,⟦TaxB⟧_it and ⟦AccTax⟧_it denote the tax return per capita, ratio of tax base per capita to GDP per capita and the ratio of accurate tax per capita to GDP per capita for the province i in period t. Each analysis is conducted for both personal income tax and corporation tax separately. The main independent variable, V_it, represents the ratio of AKP votes to CHP (Republican People's Party ,main opposition). However, we replicate the entire analysis replacing V_it with number of AKP votes, number of AKP plus Nationalist Movement Party (MHP) votes, ratio of AKP plus MHP votes to CHP votes. All other potential control variables are included in x_it and z_it respectively. Ratio of high school graduates, a categorical variable for tax incentives, gdp per capita are controlled in all regressions. In addition, z_it involves the dependent variable of model 1 (tax return), as the independent variable. This is the reason for the use of different notations. Furthermore, δ_i denote a full set of province dummies and θ_t denotes a full set of year dummies. ϑ_it is an error term, capturing all other omitted factors, with E(ϑ_it) = 0 for all i and t. Moreover, following model is estimated to see how AKP vote shares effect the ratio of income tax return to corporation tax return. ⟦IT_CTret⟧_it=α_it V_it+x_it β+δ_i+θ_t+ϑ_it (4) Logarithmic transformation of variables is used in all models. Initially, models are estimated using pooled-OLS technique which excludes province and year dummies, δ_i. However, the unobserved cultural, social and political factors which are unobservable, province-specific and time invariant, can influence both voting and tax behaviour. The fixed effect estimator can remove this source of bias Our

findings Our basic findings are as follows. For the personal income tax, tax returns per capita is smaller in the cities with relatively high vote shares of governing party, however tax base as a percentage of GDP is higher in the cities with relatively high vote shares of governing party. This means that in the cities with relatively high vote shares of governing party, smaller number of people file tax return, however, the ones who file tax return report higher tax base. It means that relatively small number of people got relatively richer and take the burden of personal income tax payment in the cities. We also find that, for corporate tax, in the cities with relatively high vote shares for overning party, tax base as a percentage is bigger. It means either there are more corporates in the cities with relatively high vote shares for governing party or corporates earn more income. In the last regressions, we find that in the cities with relatively high votes for right wing parties, there is more corporate tax returns compared to personal income tax returns. This might mean that the speed of being organized as an institution or being corporate tax payer is higher in the cities with relatively high vote shares for right wing parties.

Keywords: Tax Effort, Political Parties, Turkish Cities

JEL Codes: D78, H1

How to Enhance the Fiscal Performance of Municipalities: A Nonlinear Examination of the Turkish Metropolitan Municipality Experience

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Abstract

The measurement of financial performance is important in terms of maintaining a sustainable economic structure. Therefore, countries employ various methods to measure their budget performance in order to plan their medium- and long-term fiscal policies. The fiscal structure and sustainability of local governments is one of the foremost topics under discussion in the literature over the past 15-20 years, with particular emphasis on the issue of their increasing budget deficits and debts. The theoretical background of these discussions on the fiscal performance issue is twofold: firstly, the fiscal autonomy of the local municipalities with regard to their dependency to the central government; and secondly, the current budget balance dynamics. The discussions on fiscal autonomy can be traced back to the decentralization issue, which is essentially the sharing of expenditures and resources between central and local governments. It has long been held by Tiebout (1961), Musgrave (1969), and Oates (1972) that the efficient allocation of resources reveals the importance of local government in terms of decentralisation. More specifically, fiscal decentralisation involves giving taxing and spending powers to local governments. In this case, the degree of decentralisation depends on both the number of resources delegated and the management of these resources. For example, sovereignty is greater if local governments can make decisions on taxation and allocation of funds, and if they can have some level of discretionary power when using grants that have been allocated to them (IMF 2019, 20). Fiscal decentralisation provides greater policymaking power to local governments, with its impact on the provision of public goods depending on the quality and nature of local institutions (Pal and Wahhaj 2017, 384). There exist different approaches to fiscal transfers from central government to local administrations as well as different effects of said transfers. The widely recognized flypaper effect highlights the increasing dependence of local administrations on financial transfers from central administrations, thus negatively affecting any efforts to consider other sources of income. Consequently, many studies have focused on how fiscal transfers can be made to local administrations

without creating undue burden on the central government's budget. The main motivation of our study lies in the evaluation of fiscal performance and solvency in metropolitan municipalities of Turkey, which have huge investment expenditures together with revenue dependency on the central authority. Turkey restructured the local government system by adopting the new metropolitan municipality model for 30 provinces in 2014. Municipalities are public legal entities with administrative and fiscal autonomy and whose decision-making bodies are elected by constituents in Turkey. Their primary purpose is to satisfy the local common service requirements of the inhabitants of a county. There are five different types of municipalities in view of their respective duties and areas of responsibility; these are metropolitan municipalities, metropolitan district municipalities, city municipalities, district municipalities, and town municipalities. Regarding the new Law no. 6360, approved in 2012 and put into effect in 2014, metropolitan municipalities are responsible for providing local services to the entire area within the province boundaries – an area (including rural settlements) that had previously been served by the now abolished Special Province Administration. With the new law, the number of metropolitan cities has increased from 16 to 30 and the metropolitan municipal border has been re-established as the provincial border. Within the scope of our study, which aims to examine the fiscal performance of metropolitan municipalities through the impact of expenditure and revenue components, we employ panel models for both the linear and nonlinear analysis. It is important to note that in the literature, total debt and budget balance series are considered the main indicators of fiscal performance. In our study, we prefer to define the budget balance as a proxy for fiscal performance in order to maintain a consistency between the dependent variable (bb) and the regressors in the model, which are also current variables. The methodological approach of our study has two grounds, one of which is linear and the other nonlinear. In the first step, which is the linear estimation, the structural equation of interest is specified as follows: $y_{it}=\mu_i+ \alpha X_{it}+e_{it}$,$e_{it}\sim iid(0,\sigma^2)$ where Xit includes the vector of explanatory variables, which are cbb, the components of municipal total expenditures (opexp, invexp, trexp), and the municipal total revenues composed of the share from central government tax revenues and total own-source revenues (share, ownsource). In brief, we use 6 regressors in the linear model to estimate the municipal budget balance. In the second step of the methodological procedure, we proceed with the nonlinear approach in light of both the linear model findings and the theoretical discussions to define the municipal budget balance dynamics at different levels of the variables indicated. In this framework, we utilize the panel threshold model of Hansen (1999) to determine the municipal expenditure and revenue effects on municipal fiscal performance by considering certain thresholds. Using this approach, we estimate two models which are differentiated according to our research questions regarding the expenditure (Model 1) and revenue (Model 2) aspects of the issue at hand. The threshold regression models can be presented as: Model 1: $y_{1it}=\mu_1+ \alpha_1 X_{1it}+\beta_1 ⟦invexp⟧_{it} I(cbb\leq\lambda)+\beta_2 ⟦invexp⟧_{it} I(⟦cbb⟧_{it}>\lambda)+e_{1it}$ Model 2: $y_{2it}=\mu_2+ ⟦\alpha_2 X⟧_{2it}+\beta_3 ⟦ownsource⟧_{it} I(share\leq\lambda)+\beta_4 ⟦ownsource⟧_{it} I(⟦share⟧_{it}>\lambda)+e_{2it}$ where I(.) denotes the indicator function. In the specification of panel threshold model in (2), the slope parameters (β_1,β_2), identifying the impact of regime dependent variable, that is metropolitan municipal investment expenditure on the fiscal balance is differentiated between the regimes determined upon the threshold level (λ). Regarding to the linear fixed effect model, we will look at all components of municipal expenditure whether have a significant effect on budget balance, which is the defining indicator of fiscal performance. However, the impact of investment expenditure might be particularly notable when compared to operational and transfer spending. From the revenue side, we try to find

evidence supporting the corrective effect of the components of the municipal total revenues classified as total own-source revenues and municipal revenue share from the central government taxes on the budget balance.

Keywords: Fiscal Performance Of Local Authorities, Metropolitan Municipality, Municipal Expenditure And Revenue, Panel Threshold Model
JEL Codes: H 71, H 72, C 33

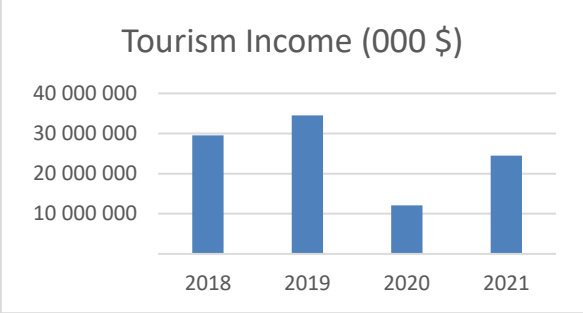
The Effect of Covid-19 Pandemic on Tax Revenues in Touristic Provinces: Evidence from Turkey

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Introduction

Several studies have investigated the effect of the Covid-19 pandemic on economic variables such as employment and economic growth; however, its impact on tax revenues through tourism channel have been neglected in the literature. For instance, Clemens and Veuger (2020) assess the Covid-19 pandemic's implications for state government sales and income tax revenues. They find that economic declines will lead to roughly 106 billion in states' sales and income tax revenues for the 2021 fiscal year in the United States. This paper endeavors to reveal this fact by focusing on touristic places in Turkey. Furthermore, we compare provinces in Turkey, which are the leading destination for foreign tourists, with others geographically located in the middle of Turkey, before and after the Covid-19 pandemic. By doing so, we will be able to show the possible effect of the pandemic that causes the number of foreign tourists visiting Turkey to fall during the pandemic. Considering this fact, our hypothesis to be tested is that the tax revenue in touristic provinces is reduced more than in non-touristic provinces in Turkey, since most companies and workers in those provinces are more dependent on touristic activities. Table 1 below shows Turkey's tourism income in dollar terms for 2018-2021, covering the pandemic period. As clearly seen from the table, tourism income dramatically fell by %65 in 2020 compared to the previous year. Although some Covid-19 restrictions were lifted in 2021, tourism income could not reach pre-Covid levels in Turkey and the world.

Table 1: Tourism Income in Turkey 2018-2021



Source: TurkStat,2022

Data and Method

The data used in regression models were collected from the Turkish Statistical Institute and the Republic of Türkiye Ministry of Treasury and Finance between 2018 and 2021. The primary variable that we are interested in is the total budget revenues at the province level. We deflate fiscal variables to obtain real terms using the consumer price index (CPI). This adjustment is used to make the predictions based on the regression models more accurate.

Two regression models are estimated for provinces: fixed effect model and differences in differences model. The Difference-in-Difference (DID) approach is a research design for estimating causal effects. It is popular in empirical economics, for example, to estimate the effects of certain policy interventions

and policy changes that do not affect everybody at the same time and in the same way (Lechner, 2011). To use diff-in-diff, we need observed outcomes of people (or group) who were exposed to the intervention (treated) and people (or group) not exposed to the intervention (control), both before and after the intervention.

We can write the observed outcome equation in terms of the group (g) and time (t) period indicators to obtain the standard DID estimating equation:

$$Y_{gt} = \beta_0 + \beta_1 T_g + \beta_2 P_t + \beta_3 (T_g * P_t) + \epsilon_{gt} \quad (1)$$

Research Results

OLS results of equation (1) provide us the research results of our paper. The findings are presented in Table 2.

Variables	(1) Budget Revenue
Covid2020	-257,495***
	(60,026)
2019year	-90,521***
	(17,693)
2020year	-63,795***
	(18,077)
2021year	-5,884
	(17,693)
Constant	536,959***
	(12,511)
Observations	324
Number of provinces	81
R-squared	0.206

According to Table 2, we can affirm some arguments as follows. Firstly, our hypothesis that touristic provinces were more negatively affected by COVID-19 restrictions in 2020 is supported. Considering DID estimation, we show that budget revenue in touristic provinces is 257,495 TL less, compared to non-touristic provinces in Turkey. Secondly, total budget revenue in all provinces decreased in years 2019 and 2020 compared to 2018.

Conclusion

In summary, touristic provinces were more negatively affected by COVID-19 restrictions in 2020. DID estimation reveal that budget revenue in touristic provinces was 257,495 TL below than non-touristic provinces in Turkey during the pandemic period. All things considered, the governments should closely follow and predict the possible impacts of future pandemics on state budgets so that they could develop more useful policies to mitigate economic recessions.

Keywords: Tax Revenue, Covid-19, Türkiye

JEL Codes: H20, H70

Towards State Capitalism? The Case of Turkey's Sovereign Wealth Fund

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Abstract:
State capitalism is a recently popularized term that denotes the growing influence of states in capitalist economic system. The term encompasses a broad range of phenomena including the resonance of mercantilist-nationalist ideology in policymaking, rediscovery of the role of state in development through the Beijing Consensus, revitalization of decades-old policies such as industrial policy, growing use of public-private partnerships, as well as formulation of new formations such as sovereign wealth funds. State capitalism has become especially pertinent in the aftermath of 2008 global financial crisis that challenged the conventional neo-liberal belief in the markets. Given the divergent practices across various geographies of capitalist development, the concept state capitalism tends to share the ambiguity of the concepts like neo-liberalism, globalization, and financialization. Moreover, the concept suffers from a major weakness by posing a false dichotomy between the state and the market, hence overlooking the constitutive role(s) of the state in the formation of markets. There is a need to theorise the internal relationships between politics and economics to come up with a holistic account of the contemporary functioning capitalism. Governing the contradictions of financialized capital accumulation in the context of 21st century has brought the growing modalities and tools of state intervention. Signs of state capitalism in Turkey became apparent in this context: establishment of Turkey's sovereign wealth fund, circulation of an economic nationalist and developmentalist discourse, large scale public-private partnership infrastructure projects, a major state-led public housing and construction drive, and a reorientation of foreign policy away from the Western neo-liberal pioneers towards Eastern state capitalist countries.
Among these practices, Turkey's sovereign wealth fund (Turkey Wealth Fund / Türkiye Varlık Fonu / TVF hereafter) is selected in this study as a case to question the dynamics of state capitalism in Turkey in the context of late 2010s. Turkey possesses none of the conventional justifications to establish a sovereign wealth fund; neither a trade surplus, nor a budget surplus. TVF is nevertheless established in 2016 with the motto to provide equity to the strategic investments. Therefore, it is a case that needs to be explored in detail. It is an exceptional company chaired by the President of the Republic of Turkey. The company is exempt from various taxes and laws as well as annual public audit of the Court of Accounts. TVF commands some 27 companies, licenses, and properties with a total worth of 33,5 $ billion in various sectors including finance, energy, transport, mining, technology, and agriculture. The portfolio includes major enterprises such as Ziraat Bank, Halkbank, Vakıfbank, Borsa Istanbul, Türkiye Sigorta, Turkish Airlines, PTT, Turkcell, Turksat, Türk Telekom, Çaykur, and Eti Maden. The transfer of these companies from the Privatization Administration portfolio to TVF indicates a sea change from a neo-liberal understanding towards state capitalist views. Indeed, a neo-liberal view prefers to reduce the role of the state in the economy through privatization. After their transfer, the profitability of some

of these large state-owned enterprises has declined significantly. This phenomena raised the concerns over good corporate governance. A cursory look at TVF's activities reveal a handful but crucial interventions into Turkey's political economy. First is the rescue of numerous construction companies in Istanbul international financial center project -a large-scale construction activity. Another key activity has been the purchase of Türk Telekom shares to resolve a privatization failure.
This study seeks to analyze TVF's formation, structure, activities, and key interventions in the financial markets from its establishment in 2016 up to today. This exploration will rely on publicly available annual activity reports, financial statements, and a media archival research on the relevant news. The question whether TVF represents a movement towards state capitalism in Turkey's political economy is attempted to be answered.

Keywords: Sovereign Wealth Fund, State Capitalism, Turkey
JeL Codes: H11, H39, H81

Fiscal Democracy and Tax Expenditures

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Abstract

Budgets are not only technical texts that present the assumptions on the future spending and possible resources of revenue collection of a country but also political documents that show us how and in which direction the budget decisions are made. Although every new government seems to be preparing a budget of its free will, budgets bear traces of the decisions of the past governments. The generation of budgetary pressure and loss of policy flexibility stemmed from expanded governmental commitments by past administrations have been asserted by previous studies. Even it has been described as ¨dead men rules over us¨ to emphasize how past legislators' rules restrict the budgetary decisions of today, and this situation allows almost no discretion or flexibility to move in response to new challenges and opportunities without having to break previous public promises. In this context, the term' fiscal democracy' is firstly used by Eugene Steuerle and as stated by Steuerle, equal voting rights and having our elected representatives vote on the nation's current issues are vital to democracy. However, since past legislators have already committed the majority of today's revenue increases mostly to cover the rising expenses of today's pre-committed expenditure programs, many recent laws attempt to take away our ability to set our priorities. In this respect, Eugene Steuerle and Timothy Roeper have developed the fiscal democracy index to evaluate how much current revenues of a country's budget are pre-committed to programs that do not require Congressional approval or, in technical terms, to mandated spending programs. The main distinction proposed by Steuerle-Roeper fiscal democracy index is between mandatory and discretional government spending. Mandatory expenditures are rarely voted on because they are considered to be influenced by circumstances beyond the control of current legislators, such as the frequency of claims for social security or unemployment insurance or the expenditure on medical care under government health care programs. In other words, rather than being regulated by periodic appropriations, mandatory spending is governed by the formula or criteria laid down in the legislation. As a result, unless otherwise stated, the spending bill from the prior year applies to the current year. Moreover, they discovered that increases in mandatory expenditure (including interest on the debt) and tax cuts reduce fiscal democracy since they decrease revenues allocated for discretionary public expenditures. In this context, Steuerle-Roeper counts tax expenditure as a mandatory expenditure. However, mandatory spending may vary according to the countries' budgeting and legislative system. Creating a valid fiscal democracy index for any country requires the determination of mandatory expenditures for that country. On the other hand, discretionary spending is spending that is not constrained by yearly or other periodic allocations. Due to Turkey's tax regulation, a tax expenditure is identified as the loss of tax revenue that comes into effect solely based on a legal provision, and tax expenditures can be re-evaluated and determined throughout each budget year. The law-based nature of tax expenditure means that it requires parliamentary approval. Moreover, re-determination of tax expenditures within the year, like annual or periodic appropriations, allows us to count tax expenditures among discretionary public expenditures in Turkey's context. According to the fiscal

democracy index calculation method, compulsory expenditures and debt interests are subtracted from the total public revenues. The result shows us the remaining public revenues that can be used to finance discretionary public expenditures. The ratio of the remaining public revenues to the total public revenues constitutes the fiscal democracy index. However, tax expenditures are always a possible fact that can occur throughout the budget year. This study aims to discuss fiscal democracy for Turkey by adding tax expenditures to the picture. For this purpose, the existence of fiscal democracy will be questioned and re-assessed by looking at the share of tax expenditures in the remaining public revenues that can be used for financing discretionary government expenditures in years when the fiscal democracy index is calculated positively.

Keywords: Fiscal Democracy, Tax Expenditures, Discretional Expenditures

JEL Codes: E02, E60, H20, H72

MACROECONOMIC POPULISM IN ACTION: THE REMAKING OF THE TERM-A COMPARATIVE ANALYSIS UPON LATIN AMERICAN AND TURKISH EXPERIENCES

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Abstract

The proposed study aims to shed light on the remaking of macroeconomic populism on a global scale with reference to the reemergence of the term in Latin American and Turkish cases in a comparative perspective with a particular focus on the novice forms of a forementoned populism underlining the need to reveal and elaborate different policy discourses. The effort shall tackle the need to redefine the concept in a more contemporary manner whereby global economic recession and crisis impose and dictate themselves upon the international capitalist system that has never been more than fargile. In this regard, the pursuit of the study will heavily draw from Chilean, Argentinian, Bolivian, and Brazilian cases that have been the arch-inspiration for the very first coining of the term macroeconomic populism in the early 1990s by scholars like Rudi Dornbusch and Sebastien Edwards whose seminal work is titled identically with the term itself. In undertaking the task, the work dwells upon narrative of historical development of varieties of capitalism with emphasis upon how these historical cases present themselves as hegemonic projects as the zeitgeist of eras

Whilst macroeconomic populism was originally formulated as a particular economic approach dwelling upon growth and income distribution coupled with a de-emphasis upon the risks of inflation and deficit financing external constraints and the reactions of economic agents to aggressive economic agents happened to be trivialized rendering the factors totally irrelevant in the policy-making processes. Given the context and the content of the term the study shall make use of a discourse analysis of terms including inflation and deficit financing.

Keywords: Macroeconomic Populism, Turkey, Latin America, Inflation, Deficit Financing
JEL Code: E60, E61, E62, E63 E64

1. Introduction

The proposed study aims to shed light on the remaking of macroeconomic populism on a global scale with reference to the reemergence of the term in Latin American and Turkish cases in a comparative perspective with a particular focus on the novice forms of a forementoned populism underlining the need to reveal and elaborate different policy discourses. The effort shall tackle the need to redefine the concept in a more contemporary manner whereby global economic recession and crisis impose and dictate themselves upon the international capitalist system that has never been more than fargile. In this regard, the pursuit of the study will heavily draw from Chilean, Argentinian, Bolivian, and Brazilian cases that have been the arch-inspiration for the very first coining of the term macroeconomic populism in the early 1990s by scholars like Rudi Dornbusch and Sebastien Edwards whose seminal work is titled identically with the term itself. In undertaking the task, the work dwells upon narrative of historical development of varieties of capitalism with emphasis upon how these historical cases present themselves as hegemonic projects as the zeitgeist of eras

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2. A Literal Definition of Macroeconomic Populism within a Broad Perspective of Economic Populism

It has been more than three decades since Rudiger Dornbusch and Sebastian Edwards coined the term macroeconomic populism in their seminal book entitled “The Macroeconomics of Populism”. The effort was based upon an American-neoclassical-theory-oriented critique that concluded at the time was that economics policies were tainted with myopia and irresponsibility of populist leaders. Attempting to undertake the alleviation of socioeconomic inequalities with no emphasis laid upon budget constraints or foreign exchange crisis, the economic populism took its toll with the bankruptcy of the system. As the idea and paradigm of macroeconomic populism came to be defined by Dornbusch and Edwards (1990) the problematization solely got to be equated with Latin American economic policy experiences. In their own words, macroeconomic populism became a buzz-term to refer to “…a policy perspective on economic management that emphasizes economic growth and income redistribution and less emphasizes the risks of inflation and deficits, external constraints, and the response of economic agents to aggressive non-market policies.” (Dornbusch and Edwards, 1990:247)

In a nutshell, macroeconomic populism is to be reckoned as an indispensable component of economic populism. Short-termism and distrust of the liberal mainstream

economy and its institutions came onto the stage to characterize economic populism, a phenomenon coupled with a pathological sense of nationalism and distrust of openness and globalization (Gnan and Masciandaro, 2020). At the political level, "an extreme form of electoral focus with consequent neglect of minorities" becomes the modus vivendi of political processes whereby political leaders lose the touch of reality leading to the "neglect of facts and analysis" (Cortés, 2010). In such respect, there exists a wide range of factors that contribute to making of economic populism that yields moves to attain the support of "significant part of the population feel disadvantaged, left behind, and insecure" (de la Torre, 2017). Whilst the culprits for the shift to economic populism may be identified with the impact of globalization characterized by immigration and fiscal austerity coupled with eradication of social safety nets along the requisites of neoliberal retrenchment, global financial crises exacerbate the ongoing rise of economic populism all around the world in this new brave world populism on a global level (Gnan and Masciandaro, 2020; Guriev and Papaioannou, 2020).

The fundamentals of neoclassical school of economics do not appear to be shared sentiments of both left or right wing of economic populist political parties in a moderate or an extreme fashion (Goodhart and Lastra, 2018). Heterodox economic thinking becomes less than a point of reference in the process of appealing the masses for political support whether be it from any dimension of political spectrum with the aim of vilify opposition of any kind (Franko and Witko, 2017). This phenomenon renders the economics populists to be left in full contradiction the very assumptions of neoclassical economic thinking stating that free movements of factors of production would essentially be both advantageous and attractive (Kaltwasser, 2018).

Central bank independence as matter of example deserves attention. Indeed, central banks guarantee that excessive money printing for the sake of short-terms interests and detrimental inflation rates choking society will not be longer taken for granted as policy instruments for policymakers. Henceforth, the object of affection for policy in the sense of monetary veto player become two components namely central bank independence and central banks mission of commitment to price stability (Masciandaro and Passarelli, 2019); leading to the reactionary moves of populist discourses (Edwards, 2019). In the meantime, budgetary restrictions of public finances cease to function as effective control mechanism were often financed by the central bank (Gnan and Masciandaro, 2020). Globalization and global financial control mechanism also contribute to the making of control and constraints which facilitate the very functioning of international capitalism along with the neoliberal rationale. Trade liberalization supposedly narrows down the initiative of populist leaders to pursue rent-seeking activity along with other key economic actors within labor and product markets. (Goodhart and Lastra, 2018) The position gets to be exacerbated also within the confines of financial globalization and capital markets rendering domestic workers and social security mechanisms unprotected vis a vis the newly incoming free movement of workers (Bethell, 2013) .

Protectionism happened to be pronounced more and more in terms of its association with economic sense of populism. (Gnan and Kronberger, 2018). The European experience of foreign investors has gained a great deal of attention Against this

background, it is not surprising that economic populism is often associated with protectionism . One area that has attracted particular attention in Europe in recent years is the protection of foreign investors has been of substantial debates as the independent arbitral tribunals, geared to shelter foreign investors from protectionist measures by nation states attempted to be surpassed. The economist populist measures created the codes and the discourses handling colossal resistance to Transatlantic Trade and Investment Partners (Kronberger, 2016). In the very mean processes, the undertaking of multilateral trade agreements came to a sudden halt along the revocation of the US government from mechanisms like TTIP and the World Trade Organization (WTO). All these developments render the inevitable fact that anti-globalist economic populism has assumed to dominate policy discourses (Hopkins and Blyth,2018).

Institutions located in the very heart of liberal capitalist economies have become preys to the macroeconomic populist mechanisms as economic populists have considered the actors in action that could potentially confine their zone of behavior. Domestic public economic actors to dwell upon stability, expertise and trust have become targets of attack leaving the protection of property rights and the rule of law mechanisms more than problematic. International economic actors assuming coordination and cooperation including International Monetary Fund, World Bank and UNO along with the World Trade Organization (WTO) handling open economic exchanges also got their shares in terms of different attacks of domestic economic populists, leaving the long-term sustainability of public finances (e.g., the EU fiscal rules) more than fragile (Hartwell, 2022).

Narratives of both right wing and left-wing economic populism opposing globalism do converge on their discourses of anti-globalism. In such regard, macroeconomic populism is argued to have devastated financial performance of the Latin American countries by the hand of left-wing economic populists. Yet the very experience of contemporary right wing economic populists has not been more different than its left-wing counterparts in the light of policies implemented in most parts of Europe in some Central, Eastern and Southeastern European (CESEE) countries along with those projects that opted for disintegration and protectionism crystalized impact of Trump's trade wars in the USA and Brexit in the United Kingdom. The ramifications of such a polarizing setting remain to be seen. Remedies to oppose populism call for the reversal of the culprit factors shaping populism (Guriev and Papaioannou,2020). While antidote to economic populism may vary on different grounds, left-wing economic populist vow for measure to minimize neoliberal policy procedure including "ending austerity, reducing inequality, and strengthening social safety nets". On the other hand, right-wing economic populists will opt for those discourses targeting to "restricting openness to achieve protection for domestic workers, businesses, and citizens in general (Rodrik, 2017)."

Populism cannot be specified to a certain ideological outlook as dichotomies between the conventional right and left versions of economic populism come to be substituted by the term's "globalism" versus "nationalism" (Kaltwasser etal, 2017). Economic populists find themselves at odds with systematic of liberal capitalist market economies characterized by checks and balances and other constraining actors e.g., central banks,

rendering a continuous tension between the mentioned actors. The ideals of conventional neoclassical economics blended by scientifically sealed liberal doctrines with their globalist discourses and targets of long-term based price stability get to evaluated as wicked and hatred components of economic populists. Central banks begin to be constrained with the tensions inherent in processes as they face challenging demands in an era of global economic crises. It will be a matter of time how these tensions will shape the new policy discourses surrounding the retrenchment process of central bank policy and governance (Gnan and Masciandaro, 2020). As institutions of contemporary market economies and international global economic policy players become the victims of the new Zeitgeist, it remains to be seen the assaults in question will take its toll in long-term macroeconomic performance of economic development.

3. A Comparison of Latin American and Turkish Macroeconomic Populism

When discussing the history of macroeconomic populism in Latin America, three waves of the phenomenon can be of high importance (Kaltwasser 2014a; Kaltwasser 2014b; Mudde & Kaltwasser 2017). The initial era corresponds the period extending from 1940s to 1960s characterized with the rise of populist leaders in geographies including Brazil (Getulio Vargas), Ecuador (Jose Mara Velasco Ibarra) and Argentina (Juan Domingo Pern) (Absher etal, 2017). The nationalization of economy and the implementation of a protectionist trade policy became two distinctive traits of the first period in question along with an overwhelming migration to urban centers and realization of social program with the aid of corporatism (Cortes, 2010). This first wave of macroeconomic populism comes to a halt with the installation of the military regimes of the 1960s and 1970s (Edwards, 2010; Edwards, 2019)

The Making of Turkish Capitalism throughout the Republican Era has been problematic due to the historical legacy standing behind populism, that came to be associated with “a “distributional compromise between the working and capitalist classes. Indeed, the very nature one one-party nature of political system attempted to consolidate political regime on a balanced system of capitalist economy with a great deal of level of leverage on the behalf of the State (Boratav, 1981; Okyar, 1965). However, the systematic came to be moderated through parliamentary democracy to handle the regime of accumulation from the end of the World War II to the late 1970s (Boratav,1983). A compromised form of populism arising from the political economy context of Turkey sought for the funding primarily from external debt not to be backed with corporate taxes (Boratav,1983). In all these cases including Latin American and Turkish cases, a developmental narrative within a hegemonic project comes to dominate the rationale of economic development whereby right and left-wing of populisms interact with each other.

The second wave of populism emerges in an age of neoliberal ideology and policies. The era kicks off in the early 1990s featuring C. Salgado and P. Sandrin Alberto Fujimori in Peru (1990–2000), Carlos Menem in Argentina (1989–1999) and Fernando Collor de Mello in Brazil (1990–1992) (Salgado and Sandrin, 2021:266). In a context marked on the

one hand by the debt crisis and hyperinflation in Latin America in the 1980s and on the other hand, by the end of the Cold War, the transition to democracy and the Washington Consensus emphasizing upon the merits of privatization, deregulation, liberalization and fiscal discipline imposes a new populist regime of governance. These leaders conformed along the consensual mantra of the Zeitgeist that liberal democracy and a market economy were the only sole political and economic remedies to deal with the ramifications of left-wing macroeconomic populism.

The elites of ante-status-quo were equated with defenders and putative beneficiaries of state-led development, blamed for disastrous economic management. (Salgado and Sandrin, 2021:265) As for the Turkish case of macroeconomic populism in question, neoliberal policies were geared to handle the problems of import substitute industrialization by the usual suspect remedies.

As Turkey's relationship with international capital came to be moderated through trade and financial liberalization, neoliberal governments eliminated several protectionist price subsidies and demobilized the insurgent Labor movement through the criminalization of unions (Keyder, 1987). Moreover, markets were deregulated along with privatization of state-owned enterprises and the model of governance shifted the balance of power in favor of the wealthy Istanbul bourgeoisie at the expense of small and medium-sized provincial enterprises (Boratav, 2016; Boratav etal, 2000).

The Pink Tide Movements in Latin America in the early 21st century, notably those of Venezuela, Bolivia, and Ecuador presented their populist platforms to increase democratic accountability and contribute to a more inclusive political system through mobilization, voice, representation, inclusion, and integration of marginalized layers of society (Mudde & Kaltwasser 2017:83 quoted by Salgado and Sandrin, 2021:264-8). Benefiting significantly from the global natural resource boom fueled by China’s economic growth in the first decade of this century; the left-leaning governments, as well as governments of other political leanings in Latin America presented themselves as critics of neoliberalism and imperialism.

Nevertheless, the global financial crisis of 2008 commenced to impact Latin America a few years later through the collapse of natural resource prices. Along with the erosion of growth, many of those who had been lifted out of poverty became worse off through the process. This frustration and dissatisfaction eroded support for “Pink Tide” governments, and as of 2015, conservative politicians espousing a neoliberal ideology returned to power in many Latin American countries. (Kaltwasser 2014b:160 quoted by Salgado and Sandrin, 2021:264-8)

Concrete examples include Mauricio Macri in Argentina in 2015, Michel Temer in Brazil in 2016, Sebastin Piera in Chile in 2017 and Ivan Duque in Colombia in 2018. The election of Jair Bolsonaro in Brazil in 2018 and the overthrow of President Morales in Bolivia in 2019 all of which would signal the move to the right on the political spectrum (Salgado and Sandrin, 2021:267). This new de ja vous situation, a combination of neoliberalism themes entails economic policies along neoliberal retrenchment and more authoritarian and repressive forms of political rule.

The third wave of macroeconomic populism in the Turkish was quite short-lived along with the turbulent socioeconomic setting characterized by crises-driven processes. The crisis of the 1990s, like the crisis of the 1970s, was shaped by the international context characterized by the Washington Consensus forged and promulgated by the IMF, the World Bank, the World Trade Organization, the US Treasury Department and the US Federal Reserve, with its emphasis on monetary restraint, fiscal austerity, privatization, and trade and financial liberalization (Öniş, 1998; Öniş and Şenses, 2022; Celasun etal, 1999). Attempts to expand redistributive policies increased government debt and further constrained subsequent governments' fiscal capacity. Meanwhile, the decade was also marked by the protracted development of the export-oriented sector, offset by growth in energy and intermediate goods imports, resulting in a structural trade deficit (Yaman-Öztürk and Ercan 2009). The Justice and Development Party-JDP's coming into office marked a new era of mixed economic populism.

Characterized by new populist blends, the neoliberal project of JDP in Turkey succeeded in attracting foreign capital however it remained increasingly fickle. On the other hand, maintaining the electoral support that kept JDP emphasized credit-financed, domestic, demand-driven growth had to be kept going (Bargu,2018). The late 2010s can be characterized as the gradual unraveling of neoliberal populism's hegemonic project from spasm to spasm. Beginning with the decision on central bank policy, Erdoğan gradually dismantled the neoliberal regulatory architecture. This paved the way for a dirigiste presidential system to be eventually established after a highly controversial constitutional referendum in 2017 (Ertekin,2019).

4. Concluding Remarks

Historical discourses of hegemonic developmental projects manipulated by guardians of international capitalist systems came dominate the making of economic populism i.e., the old and the novel forms of macroeconomic populism. States indeed mere forms of power networks accommodate different interests along with the subliminal retrenchment policy discourses by means of making and remaking of macroeconomic populisms from any dimension of political spectrum. The Turkish Latin American experiences embedded in different forms of economic populism reveal certain similarities in the sense that different versions of macroeconomics of populisms should be located and elaborated in a historical policy discourse with social classes struggling and pushing each other to a sort of consensus on the formation of a power bloc. Henceforth, development of different sorts of economic populisms is to be read in terms of every country's capitalist development trajectory.

References

Absher, S., K. Grier, & R. Grier (2020). The economic consequences of durable left-populist regimes in Latin America. Journal of Economic Behaviour & Organization, 177, 787- 817.

Bethell Leslie (2013) Populism, Neo-Populism and the Left in Brazil. In: de la Torre Carlos, Arnson Cynthia (eds) Latin American Populism in the 21st Century. Baltimore, MD: John Hopkins Univeristy Press, pp. 179–202.

Boratav, K. (1981). "Kemalist Economic Policies and Etatism", in Kazancigil, A. &E. Ozbudun eds., Ataturk: Founder of a Modern State, London: C. Hurst Company, pp. 165-190.

Boratav, K., E. Yeldan, and A. H. Köse. (2000)."Globalization, Distribution and Social Policy: Turkey, 1980-1998,". CEPA Working Paper Series I: Working Paper No: 20.

Boratav, K. (2016) 1980'li Yıllarda Türkiye'de Sosyal Sınıflar ve Bölüşüm Ankara: İmge

Celasun, O., C. Denizer, and D. He. (1999)," Capital Flows, Macroeconomic Management, and the Financial System: The Turkish Case, 1989-97," World Bank Working Paper: WPS2141.

Cortés, R. O. (2010). The Danger of Populism. Macroeconomic Populism In Latin America, Is Colombia The Exception?. Prolegómenos. Derechos y Valores, 13(26), 99-122.

Edwards, S. (2010). Left behind: Latin America and the False Promise of Populism. University of Chicago Press.

Edwards, S. (2019). On Latin American Populism, and Its Echoes Around the World. NBER Working Paper 26333October, Cambridge, MA.

Ertekin, Orhan Gazi. 2019. "The Rise of Caesarism, or Erdoğan's Way." South AtlanticQuarterly 118, no. 1: 61–80

Frank, W., & Witko, C. (2017). The new economic populism: How states respond to economic inequality. Oxford University Press.

Gnan, E., and R. Kronberger (2016), Schwerpunkt Außenwirtschaft 2015/2016: Transatlantische Handels- und Investitionspartnerschaft zwischen der EU und den USA (TTIP), facultas.

Gnan, E., and R. Kronberger (2018), Schwerpunkt Außenwirtschaft 2017/2018: Protektionismus: Ursachen, Erscheinungsformen, o konomische Effekte, facultas.

Gnan, E., and R. Kronberger (2019), Schwerpunkt Außenwirtschaft 2018/2019: Brexit. facultas.

Gnan,E. and Masciandaro D. (2020)SUERF Policy Note, Issue No 131

Goodhart, Ch, and R. Lastra (2018), Populism and Central Bank Independence, in: Open Economies Review, Vol. 29, Isue 1, pp. 49-68, February.

Guriev, S., & Papaioannou, E. (2020). The political economy of populism. CEPR Discussion Paper No. 14433, London: CEPR.

Hartwell, C. (2022). Populism and financial markets. Finance Research Letters, 46, Part B,102479. https://doi.org/10.1016/j.frl.2021.102479.

Hopkin, Jonathan & Blyth, Mark, 2018. "The global economics of European populism: growth regimes and party system change in Europe (The Government and Opposition/Leonard Schapiro Lecture 2017)," LSE Research Online Documents on Economics 100094, London School of Economics and Political Science, LSE Library.

Kaltwasser, C. R. (2014a). Latin American populism: Some conceptual and normative lessons. Constellations.

Kaltwasser, C. R. (2014b). From right populism in the 1990s to left populism in the 2000s—And Back again? In J. P. Luna & C. R. Kaltwasser (Eds.), The resilience of the Latin American right. Baltimore: Johns Hopkins University Press.

Kaltwasser, C. R., Taggart, P., Ochoa Espejo, P. and Ostiguy, P. (2017) (eds),'Populism: An Overview of the Concept and the State of the Art', in The Oxford Handbook of Populism (Oxford: Oxford University Press): 1–24.

Kaltwasser, C. R (2019). Populism and the Economy: An Ambivalent Relationship. International Policy Analysis, Friedrich Ebert Stiftung. March 2019.

Kaltwasser, C.R. (2018). Studying the (Economic) Consequences of Populism. American Economic Review Papers and Proceedings, 108, 204– 207.

Keyder, Çağlar (1987)State and Class in Turkey: A Study in Capitalist Development

London: Verso,

Masciandaro, D., and F. Passarelli, (2019), Populism, Political Pressure and Central Bank (In)Dependence. Open Economic Review, 10 September. Morelli, M. (2019), A Fiscal Theory of Populism and the Paradox of Endogenous Nationalism, presentation given at SUERF-BAFFI Carefin conference "Populism, Economic Policies and Central Banking", 8 November 2019.

Mudde, C. (2004). The populist zeitgeist. Government and Opposition, 39(4), 541–563.

Mudde, C., & Kaltwasser, C. R. (2017). Populism: A very short introduction. Oxford: Oxford University Press.

Okyar, O.(1965). "The Concept of Etatism." The Economic Journal, 75:297, pp. 98-111.

Önis, Z.(1998). State and Market: The Political Economy of Turkey in Comparative Perspective. Istanbul: Bogaziçi University Press.

Öniş, Z., & Şenses, F. (2022). Turkey's Encounter with Neoliberal Globalization and the Logic of Washington Consensus, 1980–1990. In Political Economy of Development in Turkey (pp. 197-226). Palgrave Macmillan, Singapore.

Rodrik, D. (2017), 'Populism and the Economics of Globalization', NBER Working Paper 23559, http://www.nber.org/papers/w23559.

Salgado, C., Sandrin, P. (2021). A "Pink Tide" Then a "Turn to the Right": Populisms and Extremism in Latin America in the Twenty-First Century. In: De Souza Guilherme, B., Ghymers, C., Griffith-Jones, S., Ribeiro Hoffmann, A. (eds) Financial Crisis Management and Democracy. Springer, Cham. https://doi.org/10.1007/978-3-030-54895-7_17

AN ECONOMETRIC INVESTIGATION ON INCOME INEQUALITY IN TURKEY

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Abstract

In this study, income inequality will be tested econometrically for Turkey. For the years 1987-2019, the data of which are accessible, the Gini coefficient used to measure the inequality in income distribution was chosen as the dependent variable. The independent variables are gross domestic product per capita, the ratio of interest expenditures to gross domestic product, the ratio of public social expenditures to gross domestic product. The data of the dependent variable were obtained from the Turkish Statistical Institute, Standardized World Income Inequality Database. Among the independent variables, income per capita and data on social expenditures made by the public were obtained from the Organization for Economic Development and Cooperation (OECD) database, and data on interest expenditures were obtained from the statistics of the Presidency of Strategy and Budget and the Ministry of Treasury and Finance. It is expected that social expenditures made by the public will reduce income inequality and interest payments will increase income inequality. The long-term relationship between the data will be tested and the mutual causality relationship will be analyzed with econometric tests.

Keywords: Income Distribution, Income Inequality, Time Series Analysis
JEL Code: O15, D63, C22

1. Introduction

It is important for the welfare of the whole society to be able to interpret the positive and negative consequences it will create on the economy by focusing on the causes of inequality. The price formation process within the market mechanism may cause inequality, as well as the policies implemented by the government directing the market or the government itself taking part in the market. Therefore, the state itself affects the market dynamics, but beyond that, the state can be the main actor that creates inequality with the policies it implements. Likewise, the state has alternatives such as distributing income in favor of the poor or implementing policies that will cause resource transfer from the poor to the rich. Therefore, more than one factor is at play in the increase of income inequality.

Among the factors of production, the balance between labor and capital also changes depending on these factors. The fact that capital takes a larger share of income than labor deepens income and wealth inequality. In addition, factors such as globalization, technological progress and education can also affect inequality. Among these elements, income inequality is tried to be eliminated by the public through social expenditures, which are counted as transfer expenditures. In this way, resource transfer takes place from the wealthy sections of the society towards the poor. Therefore, the state can produce policies in favor of the poor through its intervention. While the supply and demand-side determinants of social expenditures increase the share of social expenditures in the gross domestic product, this situation is also considered as a result of the welfare state understanding. On the other hand, debt interests are also included in transfer expenditures, and these transfers increase the injustice in income distribution by causing consequences against the poor in the society. Through debt interest payments, the state transfers resources to the wealthy segments of the society. The explanatory power of empirical analyzes differs according to the selected variables and method in studies on the country or country groups where income inequality is the subject. In this study covering the years 1987-2019 in Turkey, income inequality was chosen as the dependent variable. This variable has been empirically tested to understand the dynamics of income distribution along with per capita income, interest payments and social expenditures.

2. The Concept of Income Distribution

Income distribution, which is among the topics discussed in economics (Samuelson ve Nordhaus, 2009:229), is related to social tolerance against inequality (Adelman and Robinson, 1989: 951-952). In addition, it is a tool used in policy making in terms of future income distribution (Tinbergen, 1956:156). In the post-World War II period, the interaction between economic growth and development and income distribution went

through several different stages. In the period after the Second World War, the focus of countries emerged as rapid growth and industrialization (Rosenstein-Rodan, 1943; Mahalanobis, 1963). While this choice expresses a political choice, it also laid the groundwork for how the income distribution will be shaped. In times of crisis, tolerance for social difficulties and multidimensional inequality (Dibo, 2022:1-2) increases, provided that the crisis is perceived as being dependent on external events. Other extraordinary circumstances, such as war, epidemic, drought, and the foreign debt crisis may, for a time, elicit a national response that justifies individual hardship and sacrifice. On the basis of social legitimacy, inequality, poverty and their prevalence are affected by religion, culture and history (Adelman and Robinson, 1989: 951).

3. Literature Review

Since the main indicators focused on in accordance with the scope of the study are social expenditures and interest expenditures made by the public, current studies conducted in recent years that directly address the impact of these variables on income inequality are presented here. Likewise, it is indispensable for states to create human capital by using public expenditures for a more equal society. Long-term distribution in human capital is also the most important factor that determines income distribution (Tanzi, 1998:21). Interest expenditures, on the other hand, are expected to adversely affect income distribution. Because interest rates have distorting effects on income distribution as resources shift to financial investments instead of real investments (Güven, 1983:107). It is possible to aggregate the analyzes carried out in the relevant field as studies conducted within the scope of country groups and studies conducted at the level of individual countries. In this framework, first of all, the studies carried out on the basis of the country are mentioned, and then the details of the studies carried out within the scope of country groups are presented. Kozuharov ve Petkovski (2017), analyzed the effect of social transfer expenditures on socioeconomic inequality for Macedonia between 2002 and 2014, and as a result of correlation analysis, a significant link was found between inequality and social expenditures (Kozuharov ve Petkovski, 2017). Dayar and Akıncı, investigated the effect of public social transfer expenditures on income distribution in Turkey with FMOLS method. As a result of the analysis, it has been determined that the increase in public social transfers reduces the income distribution inequality (Dayar and Akıncı, 2020). Alamanda, investigated the effect of different types of public expenditures on income inequality and poverty with panel data analysis, using data from the 2005-2017 period for 33 regions in Indonesia. Social benefits, subsidies and donations did not have a significant effect on reducing income inequality, while infrastructure investments were negatively correlated with income inequality. (Alamanda, 2020). İlgün, examined the period between 1995 and 2012 for 17 OECD

countries and found that social transfers were effective in reducing income inequality (İlgün, 2015). Bergh, Kolev, and Tassot examined the period between 1980 and 2010 for OECD member and non-OECD countries and found an inverse relationship between social protection expenditures and income inequality (Bergh, et al., 2017). Kalkavan and Ersin analyzed the period between 1980 and 2015 for OECD countries and found a long-term, significant and linear relationship between social expenditures and income distribution (Kalkavan and Ersin, 2020). Considering the studies in the literature, it is seen that the studies examining the effect of social expenditures on income distribution are not sufficient. In addition, it is seen that the elements determined in the study results differ from each other due to methodological and periodic differences. The relationship between interest income distribution is a rarely studied subject in the literature. In the studies, the effects of the interest phenomenon on income and savings were generally investigated. Therefore, this study, which analyzes the interest rate income distribution relationship, is expected to make an important contribution to the literature in terms of the method and scope of the study. Altuğ states that as borrowing increases in Turkey, interest rates and accordingly inflation increase and ultimately income inequality increases (Altuğ, 1999: 14). Bülbül, Ejder, and Şahan (2006: 116) show that interest payments are a burden on low-income and wage-earning groups as they take up space in the budget. Gruner (2001) examined the relationship between interest rate and wealth distribution in different time periods for the United States and found a positive relationship between real interest rates and income inequality. Demir and Sever analyzed the relationship between domestic borrowing, interest rate and income distribution for 1987-2007 in Turkey. According to the results of cointegration and causality analysis, they found that domestic debt principal and interest payments increase income inequality (Demir and Sever, 2008). Maraşlı analyzed 77 countries for the period 2004-2011 and found that real interest rates for countries had significant effects on income distribution injustice (Maraşlı, 2016). Sugözü, Erdoğan and Ulaşan (2017) examined the relationship between interest rates and income distribution for the 2002-2015 period in Turkey. In this study, in which the TOPSIS method was used, they found that domestic debt interest payments and interest rates distorted the income distribution justice (Sugözü, et al., 2017).

3. Data, Methodological Analysis and Finding

In this study, the dynamics affecting income inequality for Turkey between 1987-2019 will be tested. The Gini coefficient (GINI) [1], which is used to measure the inequality in income distribution for the years whose data are available, was chosen as the

[1] GINI katsayısı vergi ve transferler sonrası harcanabilir gelir olan gini disposable verisi kullanılmıştır.

dependent variable. Dependent variable data was obtained from the Standardized World Income Inequality Database. The independent variables were chosen as income per capita (GDP) [1], the ratio of public social expenditures to GDP (SOC) and the ratio of interest expenditures to GDP (INT). Data for the first two independent variables were obtained from the OECD database. Data on interest is compiled from the statistics of the Presidency of Strategy and Budget and the Ministry of Treasury and Finance.

In the study, unit root test results are examined in order to determine the existence of long-term relationships between the variables. It is important to first determine the appropriate lag length in the VAR model established before the cointegration test to be carried out in line with the unit root test results. Akaike Information Criteria (AIC) and Schwarz Information Criteria (SIC) are generally used at this stage. In the estimations made with different lag values, the lag length that gives the smallest value is selected from the criteria. After determining the appropriate lag length with the help of the VAR model, the Johansen cointegration method is used to determine whether there is a cointegration relationship between the variables. In order to determine the number of cointegration vectors in the method, two likelihood ratio tests, namely maximum eigenvalue and trace statistics, are suggested. If there is no cointegration relationship between the variables, the impulse response functions of the VAR model are examined and the Granger Causality test is applied. The shock in a variable does not only affect the variable itself, but also can change all other internal variables thanks to the dynamic nature of the VAR model. Generalized impulse-response functions proposed by Pesaran and Shin (1998) also provide the opportunity to interpret all of these effects. The results are obtained regardless of the order of the variables in the VAR model created in the method. In addition, variance decomposition expresses how much of the change in each variable is caused by itself and how much of it is due to changes in other variables. The stationarity of the series of the variables used in the analysis is tested with Augmented Dicky fuller (ADF) and Phillips Perron (PP) unit root tests. The results of these tests are given in Table 1[2].

Table 1. Unit root test

Variables	Model	ADF		PP	
		Level	1st difference	Level	1st difference

[1] In the income variable, the base year 2010 and fixed prices and constant purchasing power parity were selected.

[2] EViews 10 program was used in the analysis. Throughout the study, ***, **, * indicate statistical significance at the level of 1%, 5% and 10%, respectively.

GINI	Intercept	-3.83390	-8.629916***	-3.833208	-21.82772***
	Trend and intercept	-5.081067	-8.502879***	-5.066435	-24.53632***
GDP	Intercept	1.187381	-4.918705***	1.513691	-4.918705***
	Trend and intercept	-1.567427	-5.224910***	-1.595428	-5.317465***
INT	Intercept	-1.789160	-3.874994***	-1.561685	-3.893029***
	Trend and intercept	-1.856505	-3.894176***	-1.392329	-3.894007***
SOC	Intercept	-1.361227	-5.041318***	-1.346571	-5.046160***
	Trend and intercept	-0.813408	-5.178182***	-0.949115	-5.178180***

Considering that the variables are stationary at the first difference, the Johansen cointegration test was used to investigate the long-run relationship between the variables. Therefore, it is necessary to test the existence of long-term relationships between the series that are stationary at the first difference. For this purpose, first the VAR model is estimated and the appropriate lag length is obtained as 2[1].

Table 2. Results of Johansen cointegration test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None	0.502153	36.92026	47.85613	0.3513

[1] This lag length is stable since there are no autocorrelation and varying variance problems and the roots of the predicted model lie within the unit circle.

At most 1	0.324756	15.99639	29.79707	0.7125
At most 2	0.123979	4.215957	15.49471	0.8853
At most 3	0.008134	0.245006	3.841466	0.6206

A VAR model was created for Johansen cointegration, the lag length suggested by the program was taken as 2, and the cointegration test was performed after the lag length was determined. According to the results, cointegration relationship could not be determined as the probability values show. The maximum eigenvalue statistic gives the same result as the trace statistic. Since there is no evidence of a long-term relationship between the variables; the analysis continues with the Granger causality test based on the VAR model using the stationary states of the variables.

The Granger causality test results conducted within the framework of the VAR model are given in Table 3. The results of the analysis show that there are relations between the related variables in line with the theoretical expectations.

Table 3. Results of Granger causality test

Null Hypothesis:	F-Statistic	Prob.
GDPPER does not Granger Cause GINI	275.933	**0.0819**
GINI does not Granger Cause GDPPER	0.04930	0.9520
INT does not Granger Cause GINI	0.75415	0.4804
GINI does not Granger Cause INT	0.12247	0.8852
SOC does not Granger Cause GINI	443.612	**0.0220**

GINI does not Granger Cause SOC	0.41498	0.6646
INT does not Granger Cause GDPPER	0.65967	0.5255
GDPPER does not Granger Cause INT	154.607	0.2320
SOC does not Granger Cause GDPPER	208.817	0.1442
GDPPER does not Granger Cause SOC	0.09717	0.9077
SOC does not Granger Cause INT	0.82603	0.4489
INT does not Granger Cause SOC	259.657	0.0937

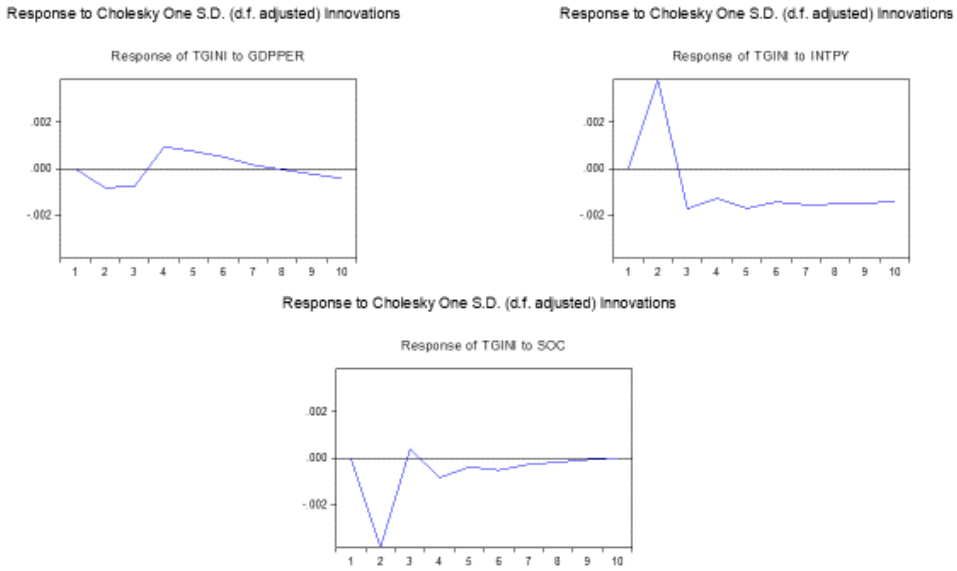
According to Granger causality results, per capita income is not the granger cause of income distribution, the hypothesis is rejected at 10%. Therefore, per capita income variable affects income distribution and there is a unidirectional relationship from income per capita to income distribution.

The hypothesis that social expenditures are not the granger cause of income distribution is also rejected at 5%. Therefore, social expenditures are also the granger cause of income distribution. This situation determines the existence of a one-way relationship from social expenditures to income distribution.

In addition, the hypothesis that interest expenditures are not the granger cause of social expenditures is rejected at the 10% level. In other words, interest expenditures are the cause of social expenditures and a one-way relationship has been identified.

The impulse-response analysis results regarding the obtained relationships are given in Figure 1. The graphs show the responses of other variables to a standard error shock in the relevant variable.

Figure 1. Results of impulse response functions



According to the impulse-response analysis, when a shock is applied to the income, the response that first decreases until the third period, then the increasing reaction continues its decreasing trend and converges to the average, catches the average with the eighth period, but the decreasing trend continues. The response of the income distribution to a shock to interest expenditures, on the other hand, seems to increase and decrease very rapidly, that is, the income distribution reacts more quickly. Then the same hardness decreases and becomes permanent. In the face of the shock to the interest rate, the income distribution does not converge to the average. Social expenditures, on the other hand, have the opposite view of interest. With the shock, the income distribution again reacts quickly and then decreases and then increases. And when viewed together with interest, there is a completely opposite view. After the 5th period, there is an average convergence.

Finally, variance decomposition analysis was performed to complement impulse-response functions. The variance decomposition analysis results given in Table 4 show that all of the prediction error variance of income inequality was determined by itself in the first period; At the end of the tenth period, approximately 10% is explained by interest expenditures and approximately 5% by social expenditures.

Table 4. Variance decomposition of GINI

Variance Decomposition of GINI:	S.E.	GINI	GDPPER	INT	SOC

Period					
1	0.016875	100.0000	0.000000	0.000000	0.000000
2	0.017754	90.51643	0.209586	4.609971	4.664011
3	0.017877	89.49569	0.389679	5.467738	4.646889
4	0.017987	88.63209	0.660391	5.902363	4.805156
5	0.018088	87.65774	0.824323	6.722287	4.795650
6	0.018161	86.97530	0.896612	7.290228	4.837856
7	0.018230	86.32555	0.898101	7.953929	4.822424
8	0.018294	85.72158	0.892249	8.588752	4.797415
9	0.018356	85.13986	0.902671	9.191530	4.765943
10	0.018414	84.60743	0.946231	9.710188	4.736148

If we look at what the deviation consists of at the end of 10 periods in the decomposition of variance, it has been determined that it consists of interest expenditures and social expenditures, respectively, according to their size. Income variable consists of income distribution and social expenditures; the interest variable is income and social expenditures after income distribution; social expenditures variable, on the other hand, is affected by interest expenditures and income, respectively, at the end of 10 periods.

4. Conclusion

According to the results of the analysis, it can be said that income and social expenditures made by the public have a significant effect on income inequality, in line with the theoretical expectations.

When all these results are evaluated together, a number of policy recommendations can be made regarding interest payments to ensure fairness in income distribution. The main objective should be primarily to increase the domestic savings rate and to keep the share of public debt in total income at a reasonable level. On the other hand, if the debt stock in the country is high, justice in income distribution can be achieved through tax rates; For this, direct tax rates on income, earnings and wealth can be increased rather than indirect tax. However, a policy should not only be implemented to increase tax

rates, but also measures should be increased for the control mechanism, corruption and informal economy should be prevented. In addition, short-term high-interest borrowing should be avoided, long-term low-interest borrowing should be preferred, and resources should be used in activities that increase investment and economic growth. It is foreseen that the implementation of such policies will contribute to the reduction of income inequality, albeit indirectly.

References

Adelman, Irma and Sherman Robinson (1989). *Income Distribution and Development in Handbook of Development Economics Volume II*, (Ed.) G. Chenery and T.N. Srinivason, Elsevier Science Publishers.

Alamanda (2020). The Effect of Government Expenditure. *Info Artha*, 4(1), pp.1–11.

Altuğ, O. (1999). Karsilikli Etkileşim (Ekosistem) Yaklaşımı İçinde Finansal Sorunlarımız ve Çözüm Yolları. Muhasebe Finansman Dergisi.

Bergh, A., Mirkina, I. ve Nilsson, T. (2019), *Can Social Spending Cushion the Inequality Effect of Globalization?, IFN Working Paper No. 1286*, Research Institute of Industrial Economics.

Bülbül, D. , Ejder, H. & Sahan, Ö. (2011). Türkiye'de Kamu Borçlarının Kaynakları, Yapısı ve Niteliklerinin Değerlendirilmesi (1990-2004 Dönemi Analizi). *İstanbul Üniversitesi Siyasal Bilgiler Fakültesi Dergisi*, 0(35), pp. 101-123.

Çalışkan, Ş. (2010). Türkiye'de Gelir Eşitsizliği ve Yoksulluk. *Sosyal Siyaset Konferansları Dergisi*, 59(2), pp. 89-132.

Dayar, H. ve Akıncı, A. (2020). Kamu Sosyal Transfer Harcamalarının Kişisel Gelir Dağılımına Etkisi. Maliye Dergisi, 179, pp. 172-185.

Demir, M. & Sever, E. (2008). Kamu İç Borçlanmasinin Büyüme, Faiz Ve Enflasyon Orani Üzerindeki Etkileri. *Elektronik Sosyal Bilimler Dergisi* , 7 (25) , pp. 170-196 .

Dibo, M. (2022). Kamu Sosyal Harcamaları ve Gelir Eşitsizliği: OECD Ülkeleri Kapsamında Bir Analiz. *Journal of Emerging Economies and Policy*, 7(2), pp.1-16.

Ergun, T. (2013). *Makroekonomiye Giriş*. Ankara: Detay Yayıncılık.

Grüner, H. P. (2001). Wealth Distribution and Interest Rates: Empirical Evidence for the Us. Available at SSRN: https://ssrn.com/abstract=296149

Guven S. (1983). Temmuz Bankacılığı'nın Toplumdaki Gelir ve Servet Dağılımı Üzerindeki Etkileri. *Amme Idareler Dergisi*, 16(2), pp. 87-107.

İlgün, M. F. (2015). Kamu Sosyal Harcamalarının Gelir Dağılımı Üzerindeki Etkisi: OECD Ülkelerine Yönelik Panel Veri Analizi. *Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 17(4), pp. 493–516.

Kalkavan, H., & Ersin, İ (2020). Sosyal Harcamalar ile Gelir Dağılımı Arasındaki İlişkinin İncelenmesi: OECD Üzerine Bir Uygulama. *Sosyal Güvence Dergisi*, (17), pp.265–282.

Kozuharov, S., & Petkovski, V. (2017). The Impact of Social Transfers on Inequality Measured by GINI Index: The Example of Macedonia. *UTMS Journal of Economics*, 9(1), pp. 46–61.

Mahalanobis, P. (1963). *The Approach of Operational Research to Planning in India* (Asia, Bombay).

Maraşlı, O . (2016). Interest and social justice: the impact of real interest rate on income inequality. *Journal of Islamic Economics and Finance (İEFD)*, 2 (1), pp. 77-118.

Rosenstein-Rodan, P. (1943). Problems of industrialization in Southern and Eastern Europe, *Economic Journal*, 53, pp. 202-211.

Samuelson, P. A. ve Nordhaus, W. (2009). *Economics* (19th ed.). Mc Graw-Hill Book Company.

Sugözü, İ. H., Erdoğan, S., & Ulaşan, E. (2017). The Impacts Of Interest Expenditure On Income Distribution and An Application On The Factors Distorting Income Distribution An Empirical Analysis For Turkey. *Journal of Turkish Studies*, 12(12), pp. 231–250.

Tanzi, V. (1998). Fundamental Determinants of Inequality and the Role of Government, IMF Working Paper.

Tinbergen, J. (1956). On the theory of income distribution. *Weltwirtschaftliches Archiv*, 77, pp. 155-175.

COMPARISON OF THE TAX BURDEN OF THE OECD COUNTRIES WITH THE CRITIC AND RAFSI APPROACH

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Abstract

The current paper examines the distribution, expenditures, and impacts of the taxation implementations of G20 countries in the OECD (Organisation for Economic Co-operation and Development). These countries are listed as Australia, Canada, France, Germany, Italy, Japan, Korea, Mexico, Netherlands, Spain, Switzerland, Turkey, the United Kingdom, and the United States (USA). The current study examines the share of the countries' tax incomes in their annual GDPs and each tax type's share in the sum of tax incomes. In the current study, an integrated decision-making model consisting of the CRITIC and RAFSI approaches is proposed to evaluate the taxation performances of the G20 countries.

Keywords: The total tax burden, OECD countries, Multi-criteria decision-making, RAFSI, CRITIC

JEL Code: C61, E60, H21, H50

1. Introduction

From time immemorial, although the aim of tax collection in various countries has been different, the fundamental rule is based on the fact that the collected tax should be spent on public expenditures. Nowadays, collecting taxes (i.e., direct and indirect taxes) by considering the taxpayers' ability to pay is essential in tax equity. According to the 73rd article of the constitution: each citizen has to pay taxes in compliance with the ability of payment. Also, it is mentioned that distributing the tax incidence equably and adequately is the social aim of the fiscal policy. As is understood from this expression, the main reason for tax collection is to create a source of income for public expenditures. The following paragraph of this article mentions tax equity. This article refers to the principles of equity and the ability of tax payment (Buyrukoğlu & Buzkıran, 2016: 2082-2084). In addition, the expression of equitable and balanced distribution of the tax burden is the leading indicator of the social state principle.

The tax burden is the rate of taxes paid in a year to the sum of income gained in the same year. In other words, while the tax burden can be computed by dividing tax incomes in the government budget by the Gross Domestic Product (GDP) in the strict sense, in a broad sense, it can be calculated by dividing the sum of incomes (i.e., budget incomes, taxes collected by local authorities, and parafiscal incomes) to the annual the Gross Domestic Products (GDP) (Çağdaş, 2020: 82-83).

The current paper examines the distribution, expenditures, and impacts of the taxation implementations of G20 countries in the OECD (Organisation for Economic Co-operation and Development). These countries are listed as Australia, Canada, France, Germany, Italy, Japan, Korea, Mexico, Netherlands, Spain, Switzerland, Turkey, the United Kingdom, and the United States (USA). The researchers decided to examine the taxation performances of these countries between the years 2018 and 2020 to comprehensively investigate the impacts of the global pandemics on the countries' taxation policies and implementations. In general, the rate of the sum of tax incomes to the annual GDP of these countries is given in Table 1 for three years.

Table 1. Countries' taxation rates and performances for three years

Countries	The share of income in the annual GDP		
	2020	**2019**	**2018**
Australia	..	27.7	28.5
Canada	34.4	33.8	33.5
France	45.4	44.9	45.9
Germany	38.3	38.6	38.4
Italy	42.9	42.4	41.7
Japan	..	31.4	31.6
Korea	28.0	27.3	26.7
Mexican	17.9	16.3	16.1
Holland	39.7	39.3	38.8
Spain	36.6	34.7	34.7

Switzerland	27.6	27.4	26.8
Turkey	23.9	23.1	24.0
England	32.8	32.7	32.9
USA	25.5	25.0	24.9
Average of OECD countries	**33.5**	**33.4**	**33.5**

Source: OECD. https://data.oecd.org/tax/tax-revenue.htm#indicator-chart

It has been observed that Turkey's taxation performance (General Budget Tax Revenues + Education Special Revenues + Special Budget Tax Revenues + Local Administration Tax Revenues + Fund and Tax-like Revenues + Parafiscal Revenues) / GDP) was 24% in 2018, %23.1 in 2019, and 23.6% in 2020. In 2019, tax incomes were reduced compared to the incomes in 2018 due to the global pandemic but closer to the level in 2018. The average value of the OECD countries has remained the same during this period, and taxation performance over the average value has been recorded in some countries, such as Canada, France, Germany, Italy, Netherlands, and Spain. In the current study, an integrated decision-making model consisting of the CRITIC and RAFSI approaches is proposed to evaluate the taxation performances of the G20 countries.

The basic procedure of the CRITIC (CRiteria Importance Through Intercriteria Correlation), introduced to the literature by Diakoulaki et al. (1995) (Aydın, 2020), consists of four implementation steps (Diakoulaki et al., 1995; Deng et al., 2000; Wang and Luo, 2010; Torkayesh et al., 2021). Besides, the RAFSI approach introduced by (Žižović et al. 2020) is a new methodological frame used to rank the alternative (Žižović vd.2020: 3-7).

2. Findings and outcomes of the paper

Taxes in the classification of the OECD are classified in the tax assessment. The classification is given below.

- 1000 Taxes on income, profits and capital gains
- 2000 Social security contributions (Mandatory social security contributions paid to the general government and accepted as taxes)
- 3000 Payroll and labour taxes
- 4000 Property (Property tax)
- 5000 Goods and services taxes
- 6000 Other

The current study examines the share of the countries' tax incomes in their annual GDPs and each tax type's share in the sum of tax incomes. The tax types indicated in the OECD tax classification are included in the scope of this study. Aside from identifying the country having higher performance on tax collection, the taxation performance of the countries is compared to the countries' central government expenditures, rate of tax per individual, working time for paying the taxes, and contribution of the tax to the social security expenditures. Thus, aside from the countries' taxation performances, the

transformation performance of countries these taxes to social welfare are evaluated. Performed analysis by considering the basic algorithm of the proposed approach was executed with the help of the collected data presented in Table 2.

Table 2 data used in the proposed model

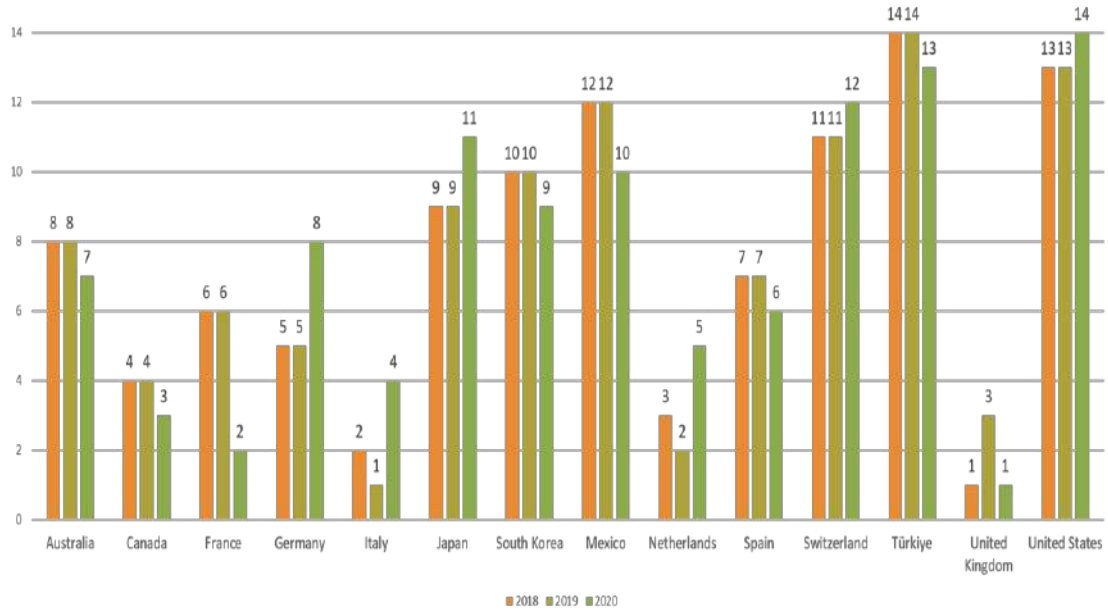
G20 Countries Within The OECD	Inflation Rate CPI %	Public Expenditures % of GDP	Gross Domestic Product, Growth Rates	Share of Total Tax Revenues in GDP %	1000 Taxes on income	1100 Of individuals	1200 Corporate	2000 Social security contributionas	4000 Taxes on property	5000 Taxes on goods and service	5111 Value added taxes	5121 Excises
Australia	1.90	39.0	2.77	28.5	17.1	11.7	5.4	0.1	2.7	7.3	3.3	1.3
Canada	2.30	40.0	2.01	33.5	16.5	12.0	4.1	4.6	3.9	7.8	4.5	1.2
France	1.90	55.6	1.81	45.9	11.5	9.4	2.1	16.0	4.0	12.3	7.1	2.7
Germany	1.70	44.4	1.30	38.4	12.6	10.5	2.1	14.5	1.1	10.3	7.0	2.0
İtaly	1.10	48.4	0.82	41.7	13.0	10.7	1.9	13.0	2.5	12.0	6.2	2.7
Japan	1.00	38.3	0.28	31.6	10.1	6.0	4.1	12.7	2.6	6.2	4.0	1.5
Kore	1.50	31.1	2.91	26.7	9.1	4.9	4.2	6.8	3.1	7.0	4.1	1.9
Mexico	4.90	25.7	2.20	16.1	7.1	3.4	3.4	2.2	0.3	5.9	3.9	1.5
Netherlands	1.70	42.2	2.32	38.8	11.5	8.0	3.5	14.0	1.6	11.7	6.8	2.7
Spain	1.70	41.7	2.43	34.7	10.1	7.7	2.5	11.7	2.5	10.2	6.6	2.2
Switzerland	0.90	32.5	3.04	26.8	12.8	8.2	3.0	6.4	2.0	5.5	3.1	1.2
Türkiye	16.30	35.0	2.96	24.0	5.8	3.7	2.1	7.2	1.0	9.7	4.8	3.6
United Kingdom	2.30	40.4	1.25	32.9	11.6	9.0	2.6	6.3	4.1	10.7	7.0	2.3
United States	2.40	37.9	3.00	24.9	11.4	10.1	1.3	6.1	2.9	4.4	2.1	0.8

Source: OECD. https://stats.oecd.org/Index.aspx?DataSetCode=REV

3. Conclusion (12 Pt.)

The acquired outcomes by applying the suggested model are given in Figure 1.

Figure 1 The acquired results for the last three years



As understood from Figure 1, the United Kingdom (UK) was ranked as the best country with the highest performance in collecting and using taxes for 2018 and 2020, and this country was ranked third in 2019. Turkey has remained in the last rank for 2018 and 2019; also it was ranked in the 13th rank in 2020. Besides, Italy is an exciting country concerning taxing performance. Its performance is satisfactory despite the troubled conditions of the global pandemic.

References

Aydın, Y. (2020). Bütünleşik CRITIC Ve MAIRCA Yöntemleri ile Kamu Sermayeli Bankalarının Performans Analizi. Finans Ekonomi ve Sosyal Araştırmalar Dergisi, 5(4), 829-841.

Buyrukoğlu, S. & Buzkıran, D. (2016). "Klasik Ve Modern Vergileme İlkeleri Çerçevesinde Uzlaşma Müessesesi", *İnsan Ve Toplum Bilimleri Araştırmaları Dergisi*, 5 (7), pp. 2077-2091.

Çağdaş, Y. (2020). "Türkiye'de Toplam Vergi Yükünün Oecd Ülkeleri ile Karşilaştırılması*", BAİBÜ Sosyal Bilimler Enstitüsü Dergisi*, 20 (1), pp.81-96

Deng vd., 2000; Deng, H., Yeh, C.H. and Willis, R.J. (2000). "Inter-Company Comparison Using Modified TOPSIS With Objective Weights", *Computers ve Operations Research*, 27(10), pp.963-973.

Diakoulaki vd., 1995; Diakoulaki, D., Mavrotas, G. and Papayannakis, L. (1995). "Determining Objective Weights in Multiple Criteria Problems: The CRITIC Method", *Computers and Operations Research*, 22, pp.763-770.

Torkayesh, A. E., Ecer, F., Pamucar, D. and Karamaşa, Ç. (2021). "Comparative Assesment of Socialsus Sustainability Performance: Integrated Data-drivenWweighting Systemand CoCoSo Model", *Sustainable Cities and Society*, 71, pp.1-14.

Wang ve Luo, 2010; Wang, S. and Wang, H. (2005). "The Mystification of Operational Competitiveness Rating Analysis", *Managerial and Decision Economics*, 26(8), pp. 535-538.

Žižović, M., Pamučar, D., Albijanić, M., Chatterjee, P. & Pribićević, I. (2020). "Eliminating rank reversal problem using a new multi-attribute model-the RAFSI method", *Mathematics,* 8, pp.1-16. https://doi.org/10.3390/math8061015

The Efficiency Problem in Tax Audit In Turkey: An Analysis In The Context of European Unıon and OECD Member States

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Abstract:

Taxes are indispensable for states because they are the main source of financing in the provision of public services. Response of taxpayers to tax, which is a compulsory payment, can take place in the form of complying by fulfilling their tax obligations on time, as well as paying the tax incompletely or not paying it illegally. It is necessary to raise the awareness of taxpayers that the tax system should be compatible with the country and world economy in a way that minimizes the negative reactions of the taxpayer, that paying taxes is not only a forced situation, but also a necessity in terms of public services. One of the most important factors in ensuring tax compliance of taxpayers is undoubtedly an effective tax audit. According to international data, the rate of informal economy in Turkey is well above developed countries. Although the tax burden rate in Turkey seems low when compared to the EU average and OECD average, the narrowness of the tax base increases the burden of existing taxpayers. In Turkey, unlike developed countries, the tax is largely hidden in the price, that is, it is indirect. With the withholding tax, this rate rises above 90%. This is a result rather than a cause. Reasons such as quantitative and qualitative deficiencies in auditing, low level of tax awareness, and proportional excess of the population in rural areas can be cited among the reasons for this high level. This situation also negatively affects the transparency of the state in general and the tax system in particular. While audit includes coercion, it also means the pertinacity of the state. Pertinacity is about deterrence and requires a legal-institutional infrastructure in which taxpayers constantly feel the threat of punishment and does not expect amnesty. Thus, the principle of "fair and balanced distribution of the tax burden" in the constitution will be implemented more effectively. The audit aims to ensure the effective provision of public services by making taxpayers comply with the legislation by eliminating tax loss with the sanctions imposed. The effectiveness of tax auditing is proportional to the success of the tax system. Efficiency in auditing, on the one hand, means performing the audit at a low cost, on the other hand, it requires the taxpayer to be at a satisfactory level in terms of service output. The first part is quantitative and the second part is qualitative. In the study, first the audit system implemented in Turkey will be discussed, and then the effectiveness of the audit in Turkey will be discussed by examining the developed country models. This activity will be compared quantitatively and qualitatively, and the problems and disruptions that arise in Turkey during the audit process will be determined. A comparative analysis will be made with these models, and new suggestions will be put forward on how a more effective tax system can be. Although it is not possible to measure efficiency

in tax audits, some parameters are used for this purpose. Considering the parameters of the audit rate, tax collection cost and the shadow economy as a result of the effectiveness in auditing, it was concluded that 2013 was the most effective year of tax auditing between 2012-2021. The fact that 2013 was the year with the lowest shadow economy rate between the 2003-2015 periods supports the information that the tax audit is effective. It is possible to summarize the factors that affect tax audit as institutional structure, numerical competence, automation usage rate, deterrence of tax penalties, peaceful solutions, tax amnesties and tax morale. These factors refer to the factors that are accepted in the literature. Therefore, these factors were taken into account in the study. In Turkey, as in many other countries, there have been various developments at the level of reform in terms of institutional organizational structure over time. However, the situation is different in terms of the number of supervisors. Although these developments have been experienced in terms of institutional infrastructure, the same development has not been achieved in personnel infrastructure. The tendency of the personnel to move to the private sector at a certain stage of the profession also has an effect on this. For this reason, the experience factor in the effectiveness of tax auditing is lacking, and it is thought that more studies should be done on this subject. It has been determined that the cost of tax penalties in our country on taxpayers is quite close when compared to other countries. However, the deterrence of penalties decreases with the institutions such as reconciliation, reduction in penalty and tax amnesty in the Turkish Tax system, unlike other countries. Although it is defended that these institutions should be in the tax system, it should be ensured that the effect it will create for the taxpayer is not more than a rare opportunity. The tax morale level is a factor that contributes to the successful functioning of the tax system. According to the information obtained from the World Values Survey, the tax morale level of our country is higher than most countries. However, assuming that there is a negative relationship between the informal economy and the level of tax morale, the accuracy of this situation cannot be tested according to the data used in the study. When we briefly summarize the situation, although there are some deficiencies in the necessary equipment, the differences in practice can negatively affect the effectiveness of tax auditing. Although the main purpose of the study is to examine the effectiveness of tax auditing, it should be emphasized that factors such as administrative structure, adequacy of legal regulations, adequacy of the number of supervisors, use of automation, tax morale, deterrence of tax penalties, reconciliation, tax amnesty cannot be used as an indicator alone in measuring the effectiveness of tax auditing. "This study was produced from the master's thesis titled " The Efficiency Problem in Tax Audit in Turkey : An Analysis in The Context of European Union and OECD Member States " completed at Afyon Kocatepe University Social Sciences Institute in 2018."

Keywords: Tax Audit, Efficiency, EU, OECD

JEL Codes: H20, H21, H26, K24, o57

Causality Relationship Between Economic Growth and Tax Collection/Accrual Rates: The Case of Turkey

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Abstract:

The relationship between tax revenues and economic growth, which is considered one of the important indicators of the size of government and has a very important share among public revenues, has been discussed for a long time in theory and practice by both academic and policy maker circles. The empirical examination of the relationship between the rates of payment of accrued taxes and economic growth is important both in terms of testing whether tax collection/ accrual rates have an econometrically significant effect among the factors that ensure and sustain economic growth, and to determine whether economic growth has a significant effect on tax collection/ accrual rates. It is thought that expectations for tax amnesty or restructuring of tax debts in taxpayers, especially during economic contraction periods, may change tax collection/accrual rates or a change in tax collection/accrual rates may have significant effects on economic growth. It is thought that tax compliance of taxpayers who did not or could not pay their taxes fully and on time can be increased by implementing regulations such as tax amnesty and restructuring of tax debts. Thus, it is assumed that the collection rates of accrued taxes can be increased. However, the possible negative effects of such tax advantages, which are thought to contribute positively to economic growth, on taxpayers who pay their taxes fully and on time, should not be ignored. When tax designers do not think multi-dimensionally and long-term while making the aforementioned regulations, they should consider that these practices that will contribute positively to economic growth by increasing the collection rates of taxes in the short term may not be sustainable and that some problems may arise in terms of tax psychology and even tax sociology in the long run. In particular, in modern tax systems where declaration-based taxes are widespread, the tax administration should take the necessary measures by making a distinction between the taxes that cannot be paid for economic reasons and the taxes that are not paid with the expectation of tax amnesty or restructuring of tax debts, and the taxpayers of these taxes; and accelerating its work on efficiency in tax auditing, may reduce the negative effects arising from the fact that the income tax based on declaration, which is the tax with the highest decrease in tax collection/accrual rates, cannot be collected even though it is accrued. The direction of the causality relationship between tax collection/accrual rates and economic growth, which will be investigated in this study, is also important in terms of the inferences to be made based on the findings of the study and the suggestions to be presented to policy makers in this direction, in terms of revealing target-oriented results and being realistic suggestions. With the change in economic growth rates causing an econometrically significant change in tax collection/accrual rates; the fact that a change in tax collection/accrual rates causes an econometrically significant change in economic growth rates or that both variables are in a mutually causal relationship with each other will affect the content of the interpretations to be made based on the results of the analysis. In the light of this information, for the period 1970-2020 in Turkey, the annual tax collection/ accrual rates obtained from the official website of the Revenue Administration and the annual percentage change in economic growth rates obtained

from the official website of the World Bank are used to determine economic growth. The causality relationship between the rates of payment of accrued taxes is analyzed by using the Toda-Yamamoto (1995) Causality test. The period examined by the study covers the widest time period in which the data to be used in econometric analysis can be accessed. According to the results of the analysis to be made, inferences and policy recommendations will be made based on the empirical findings about the causal relationship between taxes, collection accrual rates, and economic growth, which is one of the fiscal policy tools.

Keywords: Economic Growth, Tax Collection/Accrual Rates, Turkey

JEL Codes: H00, H2, C19, O40

The Impact of The Capital Tax Burden on The Process of Capital Accumulation in Turkey After 1980

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Abstract:

This paper examines the impact of the capital tax burden on capital accumulation after the neoliberal transformation in Turkey. We focus on the period from 1980-to 2019 and try to measure the contribution of the tax policies in favor of capital to the capital accumulation process by revealing the tax burden distribution among the factors of production in Turkey.

Capital accumulation is one of the prerequisites for the continuity of the capitalist system. At this point, tax policies are the most significant instrument. Taxes can affect capital accumulation in many ways: 1) Taxes increase the real income and the propensity to save, 2) Taxes affect the decision of investors who choose the investment area according to their after-tax rate of return; 3) Taxes affect the volume of foreign capital flowing into the country by changing the cost of capital. In this respect, taxes are capable of changing the cost, returns, supply, and demand of the factors of production in a country. Therefore, taxes have not only a fiscal function as public revenue but also an economic function for growth and development policies. This function is particularly more prominent in developing countries. In developing countries, the amount of saving is insufficient, therefore the contribution to the stock of capital goods remain low (Feldstein, 1987). At this point, the state can step in through tax policy and has to promote the capital accumulation of the private sector.

The neoliberal period of capitalism has resulted in a radical transformation in the role of the state in supporting capital accumulation. The role of the state after 1980 necessitated supporting capital through the tax system, and public revenues became a functional instrument in the capital accumulation process.

Taxes are undoubtedly the most significant instrument utilized by the government in Turkey as a developing country with scarce savings to achieve its growth target. The tax system has been restructured in accordance with Turkey's capital-based growth strategy, which has been articulated with neoliberal policies concurrently with the capitalist world. Many exemptions and exceptions were granted in favor of capital. These policies caused the tax burden on the factors of production to change against the labor. The reduction of direct tax revenues by the policies accomplished in favor of capital led to an increase in indirect taxes on consumption to compensate for the foregone tax revenue.

Therefore, after 1980, there has also been a tendency from direct to indirect taxes in the tax systems of both Turkey and the rest of the world. As a result of the growth in indirect taxes and the tax burden on labor imposed to support capital, low-income wage workers have been crushed by capital. This circumstance, which compromises taxation justice, poses the primary question of the study: Did the tax policies imposed in favor of capital achieve the capital accumulation target? The objective of the research is to give a response to this question and to assess the effect of the capital tax burden on the capital accumulation process after 1980. In this regard, "effective tax rates" were used to indicate the actual tax burden on the factors of production. Unlike the statutory tax rate, the effective tax rate is calculated by measuring the tax burden taking into account the effects of many factors such as inflation (Congessional Budget Office, 2006). The impact of effective tax rates that were calculated by Ünlükaplan and Arsoy (2011) for the years 1980-2006 and by Nacar and Karabacak (2022) for the years 2006-2019 through the calculation method, developed by Mendoza, Razin and Tesar (1994)[1], on the "fixed capital investments by the private sector", which represents capital accumulation, was investigated with the variance decomposition method. Gross national product and savings deposit interest rates were also included in the analysis as independent variables in the study covering the period between the years 1980-2019. The analysis shows that after 1980, the reduction of the capital tax burden had scarcely any share on the capital investments of the private sector.

Consequently, it is noticed that the reduction of the actual capital tax burden after 1980 did not contribute to the capital accumulation at the desired level. In such a circumstance, promoting capital through tax policy at the cost of adversely impacting low- and medium-income groups raises concerns about tax justice and social costs.

Keywords: Capital Accumulation, Effective Tax Burden, Neoliberal Transformation.

JEL Codes: H20, H71, H54

Buoyancy Effect of Total Tax Revenues in Turkey[1]

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Abstract:
According to Musgrave, taxes are the fiscal policy tool that states most frequently resort to in their duties such as ensuring efficiency in resource allocation, ensuring macroeconomic stability, ensuring justice in income distribution and regulation. Undoubtedly, taxes are the most important source of income for the state to maintain its continuity and finance public expenditures. Considering the share of revenues collected by the state through taxes in total public revenues, this share differs from country to country, but it is at a serious level. It is a matter of debate whether taxation, which is so important, causes a change in the behavior of economic units. An effective tax is a tax that minimizes the loss of social welfare, which causes the least behavioral change in the decisions of economic units such as investment, savings, consumption and production. The correct design of the tax system, which causes changes in the behavior of economic units, and the effectiveness of the applied tax policies are extremely important. The concept of tax buoyancy effect, which appears at the point of efficiency of the tax system, is an important issue in seeing the effect of discretionary regulations and how successful or not the implemented policies are in achieving their goals. Because the tax buoyancy effect is a criterion used to evaluate the efficiency of the tax system; It also includes changes in tax revenues caused by discretionary regulations together with automatic changes. Although the tax buoyancy effect is very similar to tax elasticity, tax elasticity is the sensitivity of tax revenues to the change in national income. The main difference between them is related to the source of the change in tax revenues. In tax flexibility, the change in tax revenues includes automatic changes in response to the change in national income; The tax buoyancy effect includes automatic changes as well as the change in tax revenues as a result of the measures taken by the administration. Therefore, tax buoyancy effect is a broader concept than tax flexibility. Tax buoyancy effect can be calculated for the entire tax system as well as on a tax basis. If the tax buoyancy coefficient is greater than 1, it means that the discretionary regulations are effective, and if it is lower than 1, the expected effect from the implemented policies is not realized or is weak.
Hausman test was used in the study to determine the buoyancy effect of total taxes in Turkey and the analyzes were made with the E-views 12 program. The Hausman test is a panel data analysis. Different linear models can be mentioned for panel data. At this point, the distinction is made between random

[1] "This study is derived from the doctoral thesis titled "Buoyancy Effect of Taxes in Turkey: Within the Scope of Incentive Zones in 2012" at Afyon Kocatepe University Institute of Social Sciences."

effects and fixed effects models. Hausman test was used to decide which of the fixed effects model or the random effects model is more effective and effective. The main difference between fixed effects and random effects model is based on the role of dummy variables. If the dummy variables are considered as part of the constant term, it is the fixed effects model, while if they are considered as the error term, it is the random effects model. The H_0 hypothesis established for the model is that the random effects model is effective; The H_1 hypothesis is that the fixed effects model is effective.

The research period for the estimation of the buoyancy effect of the total tax revenues for Turkey is 2004-2019, and 6 regions in Turkey constitute horizontal sections within the scope of incentive legislation. Within the scope of the said period, the leverage effect has been estimated by taking into account the Law No. 6111 on the Restructuring of Some Receivables and the Law on Social Insurance and General Health Insurance and on Making Amendments in Some Other Laws and Decree-Laws. The reason why this law is taken into consideration is that it contains debt restructuring and is the most important financial restructuring in the history of the Republic, which includes tax peace. The dependent variable used in the study is the total tax revenue collection amounts (TL); The independent variables are GDP, total tax tax effort coefficient, number of taxpayers for total tax revenues, population density and total loan amount (TL). Total tax revenue collection amount used in the study was obtained from the official website of the General Directorate of Public Accounts, GDP was obtained from TurkStat, the number of taxpayers for total tax revenues was obtained from the Revenue Administration, and total loans were obtained from the Statistical reports of the Banks Association of Turkey. The dependent variable used in the model is made real with the help of the deflator. The GDP variable is taken according to the chained volume index. We calculated the total tax revenues tax effort coefficient by dividing the tax revenue collection amount by the accrual amount, and the population density by dividing the total population by the surface area. Total tax revenues were analyzed by taking the logarithm of all variables except the tax effort coefficient and population density variables. In addition, while performing panel regression analysis, the aim of measuring the effect of law no. 6111 on the total tax revenue collection amount was coded as 1 for 2012 and after, and 0 for 2011 and before. Firstly, according to the Hausman test result, the probability value is less than 0.05 ($p=0.000$). The H_0 hypothesis, "The random effects model is more efficient than the fixed effects model" was rejected. For this reason, it was decided that the fixed effects model was more suitable. According to the findings obtained from the fixed effects estimation, when the f statistic of the model is checked, the value is less than 0.05 ($p=0.000$), therefore it is concluded that the overall model is significant. In addition, the leverage effect for total taxes in Turkey was found to be 0.65 in the model in which the dummy variable was included ($p<0.05$). This situation reveals that the discretionary change made in 2011 affected the total tax revenue collection. Accordingly, 1% increase in GDP increases total tax revenues by approximately 0.65%. In addition, other variables that are significant in the model are the total number of taxpayers ($p<0.01$), population density ($p<0.01$), and total loan amount ($p<0.01$). Total tax revenues tax effort variable is meaningless in the model. According to the results of the analysis, 1% increase in the number of taxpayers increases the total tax revenues by 1.59%. This situation is expected. Although there is a significant relationship between the population density variable, which is another significant variable, and the total tax revenues variable, this relationship is negative. 1% increase in population density reduces total tax revenues by 0.0003%. This effect is very low. The last significant variable, the 1% increase in the total loan amount, increases the total tax revenues by 0.42%. This effect is an expected effect. Because, considering that credit is a factor affecting consumption, the increase in the total credit amount will increase the indirect tax

revenue. Considering that the share of indirect taxes in total tax revenues is quite high, it can be expected that the total loan amount will increase the total tax revenues. As a result, considering that the tax buoyancy coefficient of total tax revenues is 0.65 and the purpose of Law No. 6111 is not only to increase tax revenues, it would not be wrong to say that the leverage effect of Law No. 6111 is partially realized in terms of total tax revenues.

Keywords: Total Tax Revenues, Tax Buoyancy Effect, Public Policies, Turkey.
Jel Codes: H00, H20, J18.

DEVELOPMENT AND IMPLEMENTATION OF THE TAX LITERACY SCORE (TLS) SCALE: THE CASE OF MARMARA REGION IN TURKEY

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Abstract

Literacy is the ability to read, understand, learn, interpret and apply knowledge, and it was used in several areas such as tax, economy, finance, law, fiscal, budget, etc. In order to compare and improve the level of literacy in these areas, it must first be measured. Tax literacy is a whole that includes people's knowledge and positive perceptions about tax and their fulfillment of tax liabilities. This study aims to develop an achievement test to measure the tax literacy score (TLS) and apply it in the Marmara Region in Turkey, evaluate its results, and offer suggestions for developing tax literacy.

A test to measure the TLS was developed in the study. Prepared scale questions covers subjects related to tax law, tax system, theoretical principles of tax, tax calculation, deductions and expenses. The prepared test was applied online in August 2022 in 5 cities of the Marmara Region, and 706 surveys were analysed. According to the results, the overall mean is 11,39 (59,9%) for 19 questions.

Parametric tests (t-test and ANOVA) were applied for analysis. According to the results, there was no significant difference in tax literacy scores regarding gender and age of participants. TLS was found to be higher for participants who take tax lessons, have higher education levels, have higher incomes, fill their tax returns and are self-employed earners. This situation shows the importance of education and practice in increasing the tax literacy score. In order to increase tax literacy, education and psychomotor practice should be expanded.

Keywords: Taxation, Tax Literacy, Tax Literacy Score (TLS), Parametric Tests, Tax Compliance
JEL Code: H2, K34, D91

1. Introduction

Beyond the traditional meaning of the concept of literacy; tax, economy, finance, law, fiscal, budget etc. its use in many areas requires the literacy level to be measured in order to compare and improve it. As a result of the achievement tests used as one of the measurement technics, values called scores or indexes are obtained. Instead of forcing taxpayers to increase their tax compliance, compliance strategies have been developed by revenue administrations. Tax literacy should be increased as one of these strategies because taxpayers with more information about the tax system and its functioning will reflect these positively on their transactions.

This study it is aimed to develop a test that can be used in score measurement for Turkey by using TLS scales in the literature. The developed test was applied to the people in the Marmara Region via the website, and the results were analyzed. The study was discussed under two main headings to achieve this aim. Firstly, the definition of tax literacy and literature review was explained, and the analysis stages and survey results were presented. The findings and recommendations of the research were included in the conclusion section.

2. Definition of Tax Literacy and Literature Review on Tax Literacy Score (TLS)

Tax literacy is briefly defined as having knowledge and skills on issues such as how taxpayers know how their income is taxed and how they should file a tax return (Teyyare, 2018: 317). It is the ability of individuals to fulfill their obligations as taxpayers in their financial environment and to calculate their financial risks independently (Cvrlj, 2015). The scope of tax literacy covered the basic elements of tax, the general structure and functioning of the tax system, the exemptions, exceptions and reductions in tax laws, tax advantages, penalties, and taxpayer rights, such as the knowledge and skill level of the taxpayers (Bardai, 1992; Kamaluddin & Madi, 2005; Çetin Gerger et al., 2019).

As a socio-demographic indicator, the relationship between tax knowledge level and the education status of the people and the tax lessons taken by them has been discussed in many aspects in the literature. For measurements of tax literacy, questions were used about basic tax concepts, tax rates, expenses, deductions, tax returns, tax systems and case studies, and tax literacy of people, taxpayers, students and various professions were measured. Using the concept of “tax literacy” and its measurement started with the study by Bardai in 1992. Latiff et al. (2005) calculated the tax literacy of 143 people in Malaysia over 60%, using seven questions. Bhushan & Medury (2013), using 13 questions, determined the tax literacy of 516 people in India as 57.08%. Blechova & Sobotovicova (2016), who measured 847 students in the Czech Republic with ten questions, calculated the mean as 2,96 (59%). In Australia, Chardon et al. (2016) used 31 questions and found the mean as 16,21 (52%) in their study on 604 people. In other studies, the means were determined by Genest-Grégoire et al. (2017) as 55% in Canada, Cechovsky (2018) as 64% in Austria, Nichita et al. (2019) as 57% in Romania, and Lyon & Catlin (2020) as 55,1% in the USA. The score was found to be 63% in the measurement

of Bakar Türegün et al. (2022) with 12 questions on university students taking tax lessons in Turkey. As a result, a success of at least 50% was calculated and an average level of knowledge was accepted in most countries.

3. Methodology

3.1. Purpose of The Study and Descriptive Statistical Results

This study aims to develop and apply an achievement test to measure the TLS of people living in the Marmara Region in Turkey, evaluate its results, and offer suggestions for developing tax literacy. The questionnaire which includes 20 tests and ten socio-demographic questions with a total of 30 questions, was prepared after examining national and international scales. The survey was applied via "vergiokuryazar.org" website to people in 5 cities (Balıkesir, Bursa, İstanbul, Kocaeli and Tekirdağ) of NUTS-2 statistical sub-regions of the Marmara Region, and 706 survey results were evaluated.

According to the results, 35,6% (251) of the respondents were female and 64,4% (455) were male. 37,3% (263) were between the ages of 18-30, 62% (438) were university graduates, 58,1% (410) were living in Istanbul, 57,2% (404) had not taken any tax lessons, 48,7% (344) have never been filed a tax return. According to income types, 45,8% (323) had wages, 24,2% (171) had commercial earnings, and 17% (120) had self-employment earnings.

3.2. Scale Development on Tax Literacy Score (TLS)

The steps to be followed while developing the scale are as follows (Erkuş, 2014): Determining the characteristics of the concept be measured, creating an item pool, presenting the item pool to expert opinion, preparing the trial measurement tool, pilot application and item analysis, finalizing the scale for application. In the first stage of the test development process, the studies measuring the TLS in the literature were examined, the achievements were evaluated, and a scale including 20 questions was prepared considering these. The scale questions cover subjects related to tax law, tax system, theoretical principles of tax, tax calculation, deductions and expenses. In the next stage, the question structure was examined by field experts in terms of distractors and suitability, and corrections were made in line with their feedback. The validity of the test was ensured as the questions were related to the situation to be measured.

Reliability analyzes are very important to evaluate the consistency of scale items. Item difficulty index and item discrimination index are used while determining the effectiveness of a multiple-choice item in the scale. The lower and upper groups method was preferred for item analysis, and the total scores of the lowest 27% (190 surveys) and highest 27% (190 surveys) were compared. The item difficulty index (pj), consisting of questions ranging from 0,32 (medium difficulty) to 0,92 (very easy), was found to be 0,59 on average. The item discrimination index (rjx) was calculated between 0,31 and 0,64, with an average of 0,48. At this stage, the third question with an item difficulty of 0,11 was removed from the scale and the other 19 questions were included in the scale

without being revised. The Cronbach's Alpha value, which shows the reliability of 19 questions was found as 0,823.

3.3. Analysis and Results

According to the results, the overall mean is 11,39 for 19, corresponding to 59,9%. It has been determined that the people correctly answered five questions about the tax system (67,6%) and three about deductions and expenses (65,3%) mostly. The least responded to questions with an mean of 43.3% were tax calculation questions. The summary can be seen in the Table 1. This situation shows that people have theoretical knowledge but have deficiencies in practice.

Table 1. The Summary of Analysis Results

Scope	Number	Tax Literacy Score (TLS)
Overall Mean	19 Question	11,39 (59,9%)
Tax System	5 q (2, 7, 11, 14, 18)	3,38 (67,6%)
Deductions and Expenses	3 q (4, 9, 16)	1,96 (65,3%)
Tax Law	6 q (1, 6, 8, 10, 13, 17)	3,59 (59,8%)
Theoretical Principles of Tax	2 q (12, 19)	1,16 (58,0%)
Tax Calculation	3 q (5, 15, 20)	1,30 (43,3%)

Parametric tests (t-test for two samples and ANOVA for more samples) were used to measure the variation of the calculated score according to socio-demographic variables. According to the parametric test results, no significant difference in tax literacy scores was found between groups for gender and age. There is a significant difference between participants who took and did not take tax lessons; participants who took tax lessons have higher means (t (706) = 10,286, p=0,000). It has been determined that there are significant differences in TLS means according to the participants' education level, income status, income types and declaration status. The tax literacy means of participants with higher education, higher income, and who file their tax returns are statistically higher. Participants who have self-employed income have a higher mean score than others.

4. Conclusion

Tax literacy is the sum of people's knowledge, perception and behavior related to tax and it is an indicator that positively affects the tax compliance of people. In this study, a scale consisting of 19 questions was developed to measure tax literacy, applied to people living in the Marmara Region in Turkey, and the results were analyzed.

According to the analysis results, no significant difference was found in the change in tax literacy scores according to the gender of the participants. In the literature, no difference was found according to gender in the tests administered to university students (Teyyare, 2018; Bakar Türegün et al., 2022). According to the findings, those who take tax lessons have a higher TLS than those who do not. There are similar results

in the literature (Blechova & Sobotovicova, 2013; Chardon et al., 2016; Tayyare, 2018). In addition, the general education level of the person also affects the test results. No significant difference was found according to age, and a significant difference has been determined according to the income status, the type from which the income is obtained and the status of filing tax returns. Participating in active business life and filing tax returns increase the level of knowledge about taxation.

As a result, TLS measurements should be repeated regularly, guides, brochures and training should be organized to increase the literacy level, and training should be encouraged, especially before starting the taxpayer liabilities. Thus, tax compliance will be positively affected by increasing tax literacy.

References

Bakar Türegün, F., Gerçek, A., Küçüksüleymanoğlu, E. R. ve Serbes, H. (2022). "Türkiye'de Vergi Okuryazarlığı Skorunun Ölçümü ve Demografik Değişkenlerle İlişkisinin Tespiti", *EUROASIA International Congress on Scientific Researches and Recent Trends 9*, (Eds.) Kardaşlar, A. & Kıdıryüz, M., Antalya, pp. 226-236.

Bardai, B. (1992). "Tax Illiteracy in Malaysia: Problems Solutions", *Journal of Accamadia*, 2(2), pp. 7-31.

Blechova, B. & Sobotovicova, S. (2016). "Analysis of Tax Education in a Business School: a Case Study", *Periodica Polytechnica Social and Management Sciences*, 24(2), pp. 113-118.

Brushan, P. & Medury, Y. (2013). "Determining Tax Literacy of Salaried Individuals - An Empirical Analysis", *Journal of Business and Management*, 10(6), pp. 76-80.

Cechovsky, N. (2018). "The Importance of Tax Knowledge for Tax Compliance: A Study on The Tax Literacy of Vocational Business Students", *Trends in Vocational Education and Training Research*, (Eds.) Nägele, C. & Stalder B. E., VETNET, pp. 113-121.

Çetin Gerger, G., Bakar Türegün, F. & Gerçek, A. (2019). "The Importance of Tax Literacy in Tax Compliance", *Critical Debates in Public Finance*, (Eds.) Gerçek A. & Taş, M. Berlin: Peter Lang.

Chardon, T., Freudenberg, B. & Brimble, M. (2016). "Tax Literacy in Australia: Not Knowing Your Deduction From Your Offset", *Australian Tax Forum*, 31(2), pp. 321-362.

Cvrlje D. (2015). "Tax Literacy as an Instrument of Combating and Overcoming Tax System Complexity, Low Tax Morale and Tax non-Compliance", *The Macrotheme Review*, 4(3), pp. 156-167.

Erkuş, A. (2014). *Psikolojide Ölçme ve Ölçek Geliştirme-I Temel Kavramlar ve İşlemler*, Pegem Akademi: Ankara.

Genest-Gregoire A., Godbout L & Guay, J. H. (2017). "The Knowledge Deficit about Taxes: Who It Affects and What to Do About It" Fiscal and Tax Policy, Commentary 484, https://ssrn.com/abstract=2998056, (14.10.2022).

Kamaluddin, A. & Madi, N. (2005). "Tax Literacy and Tax Awareness of Salaried Individuals in Sabah and Sarawak", *National Accounting Research Journal*, 3(1), pp. 71-89.

Latiff, A. R. A., Noordin, B. A. A., Omar, M. R. & Harjito, D. A. (2005). "Tax Literacy Rate Among Taxpayers: Evidence From Malaysia", *JAAI*, 9(1), pp. 1-11.

Lyon, E. & Catlin, J. R. (2020). "Consumer Misconceptions about Tax Laws: Results from a Survey in the United States", *Journal of Consumer Policy*, 43, pp. 807-828.

Nichita, A., Batrancea, L., Pop, C. M., Batrancea, I., Morar, I. D., Masca, E., Roux-Cesar, A. M., Forte, D., Formigoni H. & Silva A. A. (2019). "We Learn Not for School but for Life: Empirical Evidence of the Impact of Tax Literacy on Tax Compliance", *Eastern European Economics*, 57(5), pp. 397-429.

Teyyare, E. (2018). "Maliye Eğitiminin Vergi Okuryazarlığı Düzeyine Etkisi: Abant İzzet Baysal Üniversitesi Örneği", *Yönetim ve Ekonomi Araştırmaları Dergisi*, 16(4), pp. 315-333.

Sharing And Gig Economy: Opportunities and Threats with Respect to Tax and Social Security Systems

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Abstract:
The sharing economy refers to an economic model in which goods and services are shared, acquired, and provided through an online platform. On the other hand, the gig economy refers to business models such as crowd working and work on-demand via apps, where independent contractors and self-employed people are subject to flexible and short work. But then sharing and gig economy platforms go beyond traditional business models and form a type of multi-sided platforms that serve new business and transactions (OECD 2019). Individuals (including self-employer) who are sellers of goods and services are brought together with individual customers through a platform. In this respect, it differs from the models in which businesses that sell goods and services are brought together with individual customers (business-to-customer: B2C) or from models in which businesses that sell goods and services are brought together with businesses that sell goods and services (business-to-business: B2B) (OECD 2019).
Although there is no clear data on its size (OECD 2018), the shares of the sharing and gig economy in sectors are increasing day by day in our country, as in the whole world. For example, the discussions that took place after UBER, an online platform that brings together vehicle owners and passengers who want to commute, gained a significant share in the taxi industry very quickly. Armut.com, which brings together people such as self-employed painters, repairmen, cleaners, plumbers, Idemama.com, which brings together self-employed graphic designers, and GittiGidiyor, a trading platform, are other examples of the sharing and gig economy in our country (Ahi 2016). This increase in sharing and gig economy platforms actually offers several opportunities to the extent that tax and social security administrations are successful in taxing the purchase and sale of goods and services and integrating those who offer these goods and services into the social security system. These opportunities include the decline of the cash economy, the cheaper access of sellers to wider markets, the new economic activity opportunities to increase production and innovation (OECD 2019).
The inability to grasp this economy creates a risk of revenue loss for the state in terms of both tax and social security revenues. As a matter of fact, in order to eliminate this risk, countries have started to impose various procedural obligations on platform operators and sellers in their domestic laws. In our country, the Tax Procedure Law Communiqué No. 464 has introduced the specified taxpayers the obligation to provide continuous information about electronic commerce and some commercial

activities and the taxpayers who sell goods and services over the internet the obligation to switch to the e-Archive Application that the procedures and principles are determined by the Tax Procedure Law Communiqué No. 433 (OG: 24.12.2015, 29572). In terms of social security, there is no regulation on the subject in our country yet. When we look at the comparative law, in some countries, platform employees who meet certain conditions through legal regulations or case law are accepted as workers; whereas in some countries, it is seen that platform workers are started to be considered as a separate category between independent workers and workers, and social security solutions specific to this category are adopted (De Stefano 2016; Cherry 2019). For our country, the definition of employees as workers or independent workers within the scope of sharing and gig economy creates significant differences in terms of social security. While 22.5% of the social insurance premiums are covered by employers at the rate of 37.5% of the total earnings based on premium for workers, self-employed workers pay all social security premiums themselves and cannot benefit from unemployment insurance and the benefits provided by the Unemployment Insurance Fund as a rule. Determining the status of employees within the scope of sharing and gig economy also means determining the premium payer in terms of social insurance premiums. The acceptance of employees as workers and the relevant platforms as employers also creates various obligations within the scope of Laws No. 5510 and 4447 in terms of said platforms.

As a result, the full understanding of the sharing and gig economy, which is a part of the new economic order and increases its share in the sector day by day, by the tax and social security system is important for the efficient use of an important resource. The aim of this paper is to firstly determine to what extent the sharing and gig economy is understood in terms of tax and social security system in Turkey, and then to evaluate the possible legal arrangements related to the areas with gaps in the light of global developments.

Keywords: Sharing Economy, Gig Economy, Tax Law, Social Security Law, Public Income, Tax Information Reporting Requirement
JEL Code: K31, K34, E62, H83

Empirical Analysis of the Effect of Exclusion of Minimum Wage from Taxes on Economic Sizes in Turkey

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Abstract:

The minimum wage is expressed as the income that an employee must earn so that he and his family can live in dignity. In case of article 4/d of the Minimum Wage Regulation, the minimum wage is; It is defined as “the wage paid to the workers for a normal working day and sufficient to meet the compulsory needs of the worker such as food, housing, clothing, health, transportation and culture at the minimum level, at the prices of the day”. The minimum wage application, which is applied especially for the protection of unqualified workforce, is a reflection of the social state understanding included in our constitution. The minimum wage is not only a regulation on wage levels, but also a social variable in terms of raising the living standards of the society. For this reason, the minimum wage is considered an issue that concerns all wage earners. A significant part of our country's population earns an income by working at the minimum wage level or at least close to this wage. When the families of the minimum wage earners are also taken into account, the minimum wage level becomes an important issue that concerns more than half of Turkey's population. In addition, the minimum wage is a very important macro-economic indicator that concerns the entire economy, since it also affects the income level, consumption and savings trends. In our country, the taxes levied on the minimum wage determined by the Ministry of Labor and Social Security through the Minimum Wage Determination Commission have always been on the agenda of the political system. In this regard, with the 2nd and 4th articles of the Law No. 7349 on the Amendment of the Income Tax Law and Some Laws published in the Official

Gazette dated 25/12/2021, to be applied to the wage payments made as of 1/1/2022, the minimum wage is required. The portion corresponding to the wage is exempted from both income tax and stamp tax. Parallel to this, the minimum living allowance was also abolished. As a result of the said regulation, an income increase of approximately 193 to 407 TL was provided to the employees, depending on their marital status and the number of children. It is expected that the said application will impose a burden of 57.8 billion TL in total, with approximately 49.1 billion TL in income tax and 8.7 billion TL in stamp tax, on the central government budget for 2022. This amount corresponds to approximately 3.5% of 2022 central government budget revenues, 4% of tax revenues, 19% of income tax and approximately 20% of income tax withholding. In the coming years, these amounts and rates will change with the increase in the minimum wage, the number of registered employees and the number of unemployed. The exclusion of the minimum wage from the wages of the employees is important in terms of supporting employment. The decrease in the average labor cost will create an appropriate cost environment for the enterprises that plan to increase their capacity, and this will bring more worker employment. Depending on the legal and economic nature of the employment relationship between the employee and the employer, the economic benefit that the decrease in the tax burden will bring to the employee and employer may vary. In cases where the employment contract is based on the net wage and it is not possible to ensure that this contract is changed by the employee, the decrease in the tax burden will provide an economic advantage to the employer. The decrease in production costs, which will be provided by this decrease in labor costs, will create a pricing advantage and increase the competitiveness of enterprises. On the other hand, the decrease in the total financial burden on employment should be expected to reduce unregistered employment. Because the return on keeping employment unregistered falls significantly compared to the risk assumed. This will enable workers who were previously employed without insurance to attain their social rights. The decrease in informality in employment will also contribute to the decrease in other areas of informality. Because, with more registration of the workforce, which is an important production input, the follow-up of production activities will become a little easier. If the employee benefits from the reduction in the tax burden as much as the minimum wage, there will be results that will contribute positively to the country's economy in general. Considering that wage earners are also consumers in the economic structure, it is foreseen that the decrease in tax burdens will increase their disposable incomes, and thus an increase in consumption expenditures, in case their wages are exempt from tax as much as the minimum wage. Considering that the vast majority of wage earners belong to low-income groups with a high propensity to spend, it should be accepted that this expectation has a strong basis. In evaluating the regulation made in the context of anti-inflation measures, situations that have opposite effects should be taken into account. The decrease in the tax burden, on the one hand, contributes to the reduction of inflation by laying the groundwork for lowering prices to the extent that it turns into a decrease in production costs, on the other hand, it will increase the inflation rate by increasing the demand of employees to the extent

that it increases their net income. In the economic literature, there are arguments that there is no significant relationship between the increase in the (net) minimum wage and inflation in the short run. In the same framework, statistically significant findings have been found that increases in the (net) minimum wage indirectly cause a decrease in inflation in the long run (such as an increase in labor productivity through employee morale and motivation). In particular, the productivity phenomenon provides a direct or indirect link between minimum wage increases and inflation. If there is a parallelism between the minimum wage increases and the productivity increase, no increase in prices takes place. The decrease in the tax burden will provide a price advantage to companies in sectors operating in domestic and international markets, both through an increase in labor productivity and a decrease in production costs. Competitive prices brought by the increase in consumption expenditures and the decrease in production costs will positively affect economic growth. This situation may have a positive impact on exports and current account deficit. On the other hand, the increase in demand caused by the workers, increasing imports is a possible negative effect. In this study, the effects of excluding the minimum wage paid to employees from taxation on tax revenues, expenditures, inflation and other macroeconomic variables were investigated. For this purpose, data such as inflation, growth, employment, tax revenues, expenditures and minimum wage rates between 2000-2022 were studied on the effects of Turkey on the country's economy by using the time series analysis method and statistical analyzes were evaluated.

Keywords: Change in Minimum Wage, Inflation, Employment, Growth, Tax Revenues

JEL Codes:H53, H60, I38, J38

Foreign Currency-Denominated Government Domestic Debt: Is It a Major Risk Source for Turkey?

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Abstract:
Foreign currency-denominated government debt is a significant source of financing in debt management. These borrowings offer financing by reaching considerable levels within the total debt stock. However, it occasionally raises the issue of debt sustainability, putting debt management at risk. The inability of a country to borrow in the domestic market at long-term fixed rates in local currency is referred to as the original domestic sin. Domestic debt securities issued in foreign currency or linked to foreign currency help extend maturity. The fact that borrowing maturities in local currencies are shorter than in foreign currencies raises the cost of interest. The foreign currency-denominated government domestic debt also allows for a greater variety of debt instruments in terms of debt management. As a result, the investment base grows. Furthermore, various risks that the investors face are attempted to be mitigated. In circumstances when eliminating inflation is not possible, issuing government domestic debt instruments denominated in foreign currency is considered a solution to the problem of losing investors in terms of treasuries. Foreign currency-denominated government domestic debt ensures a fixed return independent of inflation for investors. The real interest rate in a credible foreign currency would be guaranteed to the investor from the beginning with this borrowing option. It should not be forgotten that increasing government debt denominated in foreign currencies would have inevitable negative consequences. The effects of currency rate changes on the structure and sustainability of debt, particularly in times of crisis, should be appropriately investigated. Market risk in debt management refers to the threat posed by increasing exchange rates. The exposure of government debt dynamics to market factors such as currency rates, interest rates, and inflation is known as market risk. Exchange rate changes have been shown to have severe consequences. The increase in exchange rates exposes public finances to exchange rate shocks. Increasing interest expenses harms the budget balance. Additionally, domestic borrowing's average interest rate rises. With an increase in the budget deficit and debt stock, a higher average interest rate results in even more significant interest expenditures. Major currency depreciation would also increase the country's risk premium, raising the cost of new government borrowing. Foreign currency-denominated government domestic debt also makes it difficult for the government to borrow again if the debt-to-GDP ratio rises. This situation, known as rollover risk, emerges due to currency risk. Foreign currency-denominated government domestic debt undermines confidence in the TL and in government stability measures. Foreign currency-denominated government domestic debt may lead market participants to believe that governments have begun to pursue a policy of living with inflation. Furthermore, this circumstance leads inflation to climb even further. As can be observed, a rise in domestic borrowing in foreign currency is a significant cause of instability. Debt and currency crises are probable because of excessive short-term borrowing, overvaluation of the real exchange rate, and inadequate reserves. It is critical to maintain a stable debt-to-GDP ratio, extend the average duration of debt, and protect foreign exchange reserves to avoid a crisis. Foreign currency risk in the total debt stock must be

measured and managed in government debt management. It is critical to mitigate the risks connected with currency fluctuations and potential debt costs. Furthermore, different borrowing methods should be used to ensure debt management sustainability. Implementing sound macroeconomic policies, particularly monetary policy, assuring adequate long-term returns, and broadening the investor base are critical to overcoming the domestic original sin. Policies targeting lowering inflation and broadening the investor base, in particular, would help minimize the risk of domestic debt rollover and enable safer, long-term, non-indexed domestic currency borrowing. The structure and risks of domestic borrowing in foreign currency in Turkey are discussed in this study. The study evaluated the share of foreign currency-denominated domestic debt stock in total domestic debt stock and various fiscal, macro, and financial variables. The direction of the correlation between the variables was explored using correlation coefficients. As fiscal variables, the ratio of central government total debt stock to GDP, central government total tax revenues, the average term of domestic borrowing, and the average cost of domestic borrowing were used. While this paper discovered that the share of the foreign currency-denominated domestic debt stock is positively related to the total debt stock, tax revenues, and the average cost of domestic borrowing, the percentage of the foreign currency-denominated domestic debt stock had a negative relationship with the average maturity of domestic borrowing. The inflation, the foreign trade deficit, the industrial production index, and the real sector confidence index are used as macro variables. The share of the foreign currency-denominated government domestic debt stock is positively related to inflation and the foreign trade deficit but negatively associated with the industrial production index. The study uses the financial variables of the CDS premium, $/TL rate, TRL deposit interest rate, international total reserves, and total domestic loan volume. The share of the foreign currency-denominated domestic debt stock is positively related to the CDS premium, the $/TL rate, the deposit interest rate opened on TL, and the total domestic loan volume, and negatively related to the total international reserves.

Keywords: Government Debt, Foreign Currency-Denominated Government Domestic Debt, Original Sin, Market Risk Management.
JEL Codes: H63, H12, H30, E62,

THE EFFECT OF TAX DAMAGES ON THE NEED BORROWING AND ITS IMPACT OF COST

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Abstract

The main source of financing of public expenditures that the state is obliged to make is taxes. In cases where public expenditures exceed public revenues, states that need additional income sources may resort to borrowing. It is not possible to earn permanent income from other methods other than these two main sources of income. Public borrowing can also sometimes be used as a fiscal policy.

Uncollectible taxes are one of the reasons why public revenues remain insufficient against public expenditures. Failure to collect taxes for various reasons causes tax damage. The state conducts tax audits in order to collect these taxes that it has lost. It also makes audit expenditures for these audits. However, these taxes are tried to be collected through tax structuring at various times. When the estimated and accrued taxes in the initial appropriations cannot be collected, the government resorts to borrowing. As a result of this borrowing, borrowing costs arise. The interest burden to be paid increases. Especially when indexed to foreign currency, the size of the costs becomes even more evident.

In our study, the years 2017-2022 were considered, taking into account the statute of limitations. With cross-data evaluation, it has been investigated how much tax collection is, what types of taxes are the most uncollectible, how much expense is made for tax auditing, and how much tax is collected against these expenses. It has been tried to determine how much borrowing was applied due to the taxes that could not be collected as a result of tax destruction and the cost of this borrowing.

Keywords: Debt Limit, Tax Revenues, Tax Loss, Budget Deficit

JEL Codes: H21, H63, K34

1.Introduction

Along with the social state understanding, the functional finance understanding has gained importance rather than the classical understanding in state finance. government debts have ceased to be an extraordinary source of income and have become a source of income that is constantly used for countries. Despite the increase in expenditure pressure, especially in underdeveloped and developing countries, these countries have resorted to borrowing because of the difficulties faced by traditional public revenues against these expenditures.

However, due to the increasing debt burden, certain limits have been imposed on government borrowing within the framework of fiscal rules. Although there are differences in implementation, the most common implementation is to limit the ratio of debt stock to GDP at a certain level.

The borrowing limit in Turkey was introduced with the Law No. 4749 on the Regulation of Public Finance and Debt Management, which was enacted in 2002. According to this law, net debt utilization can be made as much as the difference between the total initial appropriations specified in the budget law and the estimated revenues. However, in parallel with the needs and development of debt management, the borrowing limit of general budget institutions was allowed to be increased by five percent twice, once under the authority of the Minister of Treasury and Finance and the second at the discretion of the President.

A total of 1,893.89 billion Turkish liras appropriation has been allocated for public expenditures in the 2022 Central administration budget. The estimated own income within the scope of the central government is 1.478.63 billion Turkish liras. The net borrowing requirement, on the other hand, is 415.26 billion Turkish liras. Budget tax revenues have been estimated as net 1,253.60 Billion Turkish liras (After deducting 176.44 billion Turkish liras rejections and refunds from the estimated 1,430.04 billion Turkish liras). This amount constitutes 87.66 percent of the total budget revenues. Tax collection rates have been at the level of 80 percent in recent years. Due to these uncollected tax revenues, there is a risk that the net borrowing requirement will increase by approximately 60 percent.

In order to increase the level of cash reserves by the Treasury in order to meet the financing needs within the framework of the budget sizes and budget balance for 2019, the net debt utilization amount determined by the Budget Law at the beginning of the year was increased by 75 billion Turkish liras.

Public revenues that could not be collected are tried to be collected through methods such as tax base increase and structuring in the face of decreasing tax capacity under negative conditions and increasing income need. On the other hand, it is tried to obtain additional tax income by increasing the tax base. In 2018, a restructuring was carried out in this direction with the law numbered 7194 and the tax base increase law was enacted. However, 3 years later, a similar arrangement had to be made with the Law No. 7236 this time.

According to Article 73 of the Constitution, everyone has to pay taxes for the financing of public expenditures according to ability to pay. Voluntary tax compliance is one of the most important goals of tax psychology. However, the importance of analyzing the consequences of not paying the accrued taxes on time and in full becomes evident. In this study, the effects of tax base increase and restructuring, and the effect of the late fee abandoned on the financing of public expenditure and the measures that can be taken for the timely collection of tax revenues will be discussed.

In the period of time determined in the study, budget revenues, public expenditures, budget estimates and budget realizations, borrowing needs, tax collection realizations, base increase and restructuring implementation results will be analyzed together. The cost of uncollectible tax revenues to the public will be calculated and the data obtained will be evaluated with descriptive analysis.

2.Main Text

Governments need various sources of income to finance the public expenditures they have to make. Public expenditures are usually financed by tax revenues. In cases where public expenditures are more than public revenues, borrowing is one of the alternatives. However, government debts can also be defined as the prior use of tax revenues to be obtained in the future, since they will be paid with taxes to be collected in the future (Erdem, 2016: 2; Edizdoğan vd. 2021: 485).

Although the development levels of the countries differ, government borrowing is also important in public finance in developed, developing or underdeveloped countries. However, which type of obligations will be considered as government debt differs from country to country due to the political and administrative differences of the countries and the different legal status of central administration and local governments (Irwin, 2015: 12)

Tax collection rates in Turkey have been 80% in recent years. There is a risk that the net borrowing requirement will increase by approximately 60% due to uncollectible tax revenues. Uncollectible taxes cause tax damages.

Tax damage is the fact that the tax that the taxpayer does not pay voluntarily even though it is accrued based on the declaration or after the examination, cannot be collected by forced follow-up, and which does not benefit from the regulations similar to the tax amnesty that provides more advantageous payment conditions, cannot be collected in any case.

In our study, the 2017-2022 data were taken into account, taking into account the statute of limitations. Tax collection rates were around 80% in 2017. The collection rates have been gradually decreasing over the years. January is the month with the lowest collection rates every year. In the other months, it is seen that the tax collection and tax accrual rates are very close to each other. The problem with tax collection in January may have arisen from

the tax audit, or it is possible that taxpayers prepared documents that they had not fully prepared during the year at the end of December (Hazine ve Maliye Bakanlığı, Genel Bütçe İstatistikleri, 2017-2022).

In order to understand how much the tax audit has an impact on tax collection, the reports of the tax audit institution between 2016 and 2021 were examined. When the reports are evaluated together, it is seen that the tax assessment proposed after the tax inspection was 6 trillion in 2016, 4.5 trillion in 2017, 7.8 trillion in 2018, 9.5 trillion in 2019 and 22 trillion in 2021 (Vergi Denetim Kurulu Başkanlığı Faaliyet Raporları, 2016-2021).

Total tax damage between the years mentioned is 1.5 trillion. The tax assessment is around 67 billion. The ratio of total tax assessment to total tax damage does not exceed 5%. According to this information, it is seen that the effect of tax audit is limited on uncollectible taxes that cause tax damage. The taxes collected after the assessment is 1.6 billion Turkish lira. accordingly, the taxes collected cover approximately 30% of the audit expenditure (Hazine ve Maliye Bakanlığı, Genel Bütçe İstatistikleri, 2017-2022).

Structuring laws are often enacted due to uncollectible taxes. This undermines tax justice. Considering the last 5 years, a total of 180 billion taxes have been collected as a result of the restructuring laws.

When we consider the tax damage in terms of borrowing, the debt stock has been 3.7 trillion Turkish liras since 2017. The total of uncollectible taxes since 2017 is approximately 1.7 trillion. This is approximately half of the gross public debt. The cumulative interest cost of uncollected taxes is 237.8 billion Turkish liras (Hazine ve Maliye Bakanlığı, Kamu Finansmanı İstatistikleri, 2017-2022). When we index this amount to foreign currency, the size of the problem increases. The cumulative damage caused by uncollectible taxes since 2017 reaches approximately 260 billion dollars in foreign currency terms. The interest burden of the gross foreign debt is 30.6 billion dollars. The loss reached in the last 5.5 years due to tax damage is 290 billion dollars.

3.Conclusions

When the accrued tax, collected tax, budget balance and external debt statistics for the 2017-2022 (August) period are examined;

It is seen that only 80% of the levied taxes can be collected. This rate tends to decrease over the years. In terms of months, the month that cannot collect the most taxes is January.

This may be due to the tax audit or due to the previous year's unregistered documents being submitted in December. The tax assessments made as a result of tax inspections have remained around 10% of the tax damage. It was concluded that most of the taxes and tax penalties levied after the tax audit could not be collected. It has been observed that the

collections made after the penalty tax assessments do not cover the expenses incurred for tax auditing.

Considering the damage in terms of tax types, it is seen that the most damage is in the value added tax, and also tax penalties and default interest cannot be collected. It can be said that the withholding method is beneficial since the losses are less in the taxes collected through withholding.

The tax damage that has occurred since 2017 has caused a borrowing requirement of 1.7 trillion TL or 260 billion dollars. This amount corresponds to half of the debt stock. Due to the tax damage in this period, a net interest cost of 237 billion TL or 30 billion dollars was incurred.

References

Erdem, M. (2016). *Devlet Borçları,* Bursa: Ekin Yayınevi

Edizdoğan, N. et al. (2021). *Kamu Maliyesi*, Bursa: Ekin Yayınevi

Irwin T. C., (2015). "*Defining the Government's Debt and Deficit*", IMF Working Paper, WP No: 15/238.

T.C. Hazine ve Maliye Bakanlığı, Muhasebat Genel Müdürlüğü, Bütçe Gelir Tabloları (2017-2022), https://muhasebat.hmb.gov.tr/merkezi-yonetim-butce-istatistikleri (20.06.2022)

T.C. Hazine ve Maliye Bakanlığı, Vergi Denetim Kurulu Başkanlığı, Faaliyet Raporları (2016-2021), https://vdk.hmb.gov.tr/vdk-faaliyet-raporlari (22.06.2022)

T.C. Hazine ve Maliye Bakanlığı, Kamu Finansmanı İstatistikleri, (2017-2022), https://www.hmb.gov.tr/kamu-finansmani-istatistikleri (25.06.2022)

FACTORS AFFECTING THE CULTURE OF PUBLIC EXPENDITURES IN TURKEY: AN EMPIRICAL STUDY[1]

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Abstract

Although each discipline interprets the concept of culture from its perspective, culture, in the most general sense, is a set of values that bring individuals and society together in common thoughts, attitudes, and behaviors. In the public finance literature, the concept of culture has come to the fore with the concept of tax culture. In the finance literature, the concept of culture has come to the fore with the concept of tax culture. The subject discussed in our study is the culture of public expenditures as one factor that constitutes the public financial culture. The aim of the research is to determine the factors that determine the public expenditure culture in Turkey as one of the factors that constitute the public financial culture in Turkey. The survey method determined issues constituting the culture of public expenditures in Turkey. In this context, a questionnaire was applied to 1010 people, both online and face-to-face, across Turkey. The main factors affecting the public expenditure culture in Turkey were determined by OLS (Ordinary Least Squares) regression analysis. When the obtained findings are evaluated, there is generally a negative perception of the public expenditure culture in Turkey. The most important factors determining the culture of public expenditures are; profession, tax administration satisfaction, public expenditure audit, fair distribution of public services, tax awareness, state budget awareness, budget literacy, fiscal policy awareness, and fiscal policy objectives.

Keywords: Public Financial Culture, Public Expenditures, Public Expenditure Culture, Social Perception
JEL Code: H50, Z10

[1] This study by Prof. Dr. İhsan Cemil Demir, which continued under his supervision, was created from the doctoral thesis titled Factors Determining Public Financial Culture in Turkey: An Empirical Study.

1. Introduction

In general terms, public expenditures are realized by the state to meet the social needs arising from the coexistence of individuals and are financed mainly by taxes. On the other hand, the culture of public expenditures is the whole of attitudes and behaviors that society and individuals create towards public expenditures as a result of reflecting their perceptions of the monetized state of public services to the outside world. Since individuals have different levels of perception of public expenditures and interact with the cultures of the societies in which they live, the public expenditure culture of each society has its own characteristics.

In this study, the factors that determine the culture of public expenditures as one of the factors that constitute the public financial culture in Turkey are discussed. Since the culture of public expenditures in Turkey consists of issues to measure social perception, the survey method was used in the study. On the other hand, the findings obtained as a result of the survey were interpreted by subjecting them to various statistical analyses.

With our study, individuals within the scope of public expenditure culture in Turkey, public expenditure awareness about the quality and quantity of the expenditures made by the state, the perception of extravagance in public expenditures in Turkey, the perception of corruption in public expenditures in our country, the level of compliance of the expenditures with the preferences of the individuals, the awareness of the financial connection in the individuals, the perception of audit in public expenditures, the perception of justice in the provision of public services, ıt is aimed to contribute to the literature by supporting an empirical study the relationship between the elements that make up the culture and the culture of public expenditures and the relationship between the factors that constitute the other public financial culture and the culture of public expenditures.

According to the findings, the most important factors determining the culture of public expenditures are; profession, tax administration satisfaction, public expenditure audit, equitable distribution of public services, tax awareness, state budget awareness, budget literacy, fiscal policy awareness, and fiscal policy objectives.

2. SOCIAL PERCEPTION OF PUBLIC EXPENDITURES CULTURE IN TURKEY

The social perception of public expenditure culture in Turkey will be examined within the scope of literature and methodology.

2.1. Literature on Social Perception of Public Expenditure Culture in Turkey

When the studies on the social perception of public expenditures in the literature are examined; It is seen that factors such as institutional quality, corruption, financial

connection, tax burden, auditing, justice, education, communication level, tax morale level and public expenditure awareness come to the fore as determinants.

In this context, as institutional quality and corruption, which is expressed as trust in the state and its institutions, increase, the negative perception towards public expenditures decreases; as the awareness of financial connection decreases, negative perception towards public expenditures increases, and as the subjective tax burden increased, negative perception towards public expenditures decreased. It has been determined that as the perception of audit in public expenditures and the perception of justice in the provision of public services increase, the perception of public expenditures also increases positively. As the level of education increases in demographic variables, the perception of public expenditures becomes positive(Demir, 2009: 219-222). As the level of communication increased, the positive perception toward public expenditures also increased (Tandırcıoğlu & Yapıcı, 2018:287). As the level of tax morale increases, there is a positive relationship between the level of perception of public expenditures (Saygın et.al., 2015:21). Public expenditure awareness begins to emerge with the perception of public expenditure. Accordingly, the increase in tax compliance is connected to the establishment of the financial connection, the establishment of the financial connection to the fiscal consciousness and the formation of the fiscal consciousness to the formation of the public expenditure consciousness (Arıman, 2020: 235).

2.2. Methodology of the Research

The factors determining the culture of public expenditures in Turkey were measured by the survey method and the main factors affecting the culture of public expenditures were determined by OLS regression analysis. The questions in the questionnaire were prepared with the help of the literature and within the framework of the opinions of experts in the field, and a pilot study was applied to 230 people. After various analyzes were carried out as a result of the pilot application, the " public financial culture scale" was created by us.

With the public financial culture scale created, we applied a survey to 1010 people with the convenience sampling technique using face-to-face and online survey methods throughout Turkey. In the survey used in the research age, gender, marital status, educational status, city of residence, demographic questions about occupation and monthly income, general multiple choice questions about culture and thirty-nine judgments about the factors that constitute public financial culture. Thirty-nine judgments in the questionnaire were asked with a five-point Likert scale, which means 1 strongly disagree, 2 disagree, 3 partially agree / partially disagree, 4 agree, 5 strongly agree.

The Cronbach's Alpha coefficient, which was found as a result of the reliability analysis of the questionnaire, is 0.842. According to the results obtained, it can be accepted that the questionnaire is highly reliable for social sciences.

3. EMPIRICAL FINDINGS ON THE PERCEPTION OF PUBLIC EXPENDITURES CULTURE IN TURKEY

The findings regarding the public expenditure culture in Turkey were subjected to OLS regression analyses in the STATA statistical program. For this purpose, first of all, four questionnaire expressions were converted into a single variable in order to determine the factors affecting the public expenditure culture in Turkey. This variable was used as the dependent variable in the analysis. The average value of this factor is 3.0413. The four survey statements are as follows:

- "I have information about the types of expenditures made by the government." (Average: 2,7475) (1→5)
- "I have information about the amount of expenditures made by the government." (Average:2,4584) (1→5)
- "It is important for me to know where the tax I pay is spent." (Average: 4,3941) (1→5)
- "I find the expenditures made by the government suitable for my personal preferences." (Average: 2,5653) (1→5)

Table 1: Factors Affecting the Culture of Public Expenditures in Turkey

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
Variables	**Coefficient**	**T-Sta**	**Coefficient**	**T-Sta**	**Coefficient**	**T-Sta**	**Coefficient**	**T-Sta**	**Coefficient**	**T-Sta**	**Coefficient**	**T-Sta**
Undergraduate Degree	0.0301	0.80	0.0362	0.97	0.0196	0.59	0.0191	0.59	0.0172	0.53	0.000547	0.02
Young	0.0921*	1.90	0.0719	1.50	0.00644	0.16	0.00660	0.16	0.0111	0.28	0.00906	0.23
Woman	-0.0844**	-2.21	-0.0745**	-1.97	0.00904	0.27	0.0362	1.09	0.0363	1.11	0.0382	1.18
Single	0.0192	0.42	0.00576	0.13	-0.0283	-0.72	-0.0174	-0.45	-0.0243	-0.63	-0.0282	-0.74
Civil Servant	0.217***	4.59	0.210***	4.52	0.115***	2.79	0.109***	2.66	0.101**	2.48	0.103**	2.54
Income Level 3	-0.0944**	-2.19	-0.0942**	-2.22	-0.0871**	-2.27	-0.0842**	-2.22	-0.0788**	-2.07	-0.0723*	-1.94
Tradition	0.00838	0.33	0.0128	0.52	0.0252	1.12	0.0212	0.95	0.0258	1.19	0.0272	1.28
Religionial Belief	-0.00772	-0.35	-0.00558	-0.25	-0.0169	-0.87	-0.0261	-1.34	-0.0254	-1.32	-0.0260	-1.37
Ethnic Identity	4.52e-05	0.00	0.00385	0.24	0.0127	0.90	0.0141	1.01	0.0133	0.95	0.0134	0.98
Tax Justice	0.0669***	2.96	0.0465**	2.08	0.0392*	1.85	0.0392*	1.87	0.0391*	1.82	0.0393*	1.88
Tax Administration	0.109***	4.60	0.0945***	3.97	0.0827***	3.82	0.0809***	3.81	0.0806***	3.81	0.0762***	3.57
Extravagance	-0.0389*	-1.87	-0.0544***	-2.61	-0.0500**	-2.58	-0.0430**	-2.31	-0.0391**	-2.09	-0.0396**	-2.14
Tax Morale	0.0583*	1.79	0.0537*	1.69	0.0487*	1.70	0.0384	1.36	0.0450	1.61	0.0466*	1.67
Tax Awareness	0.161***	5.17	0.155***	5.08	0.0981***	3.47	0.0891***	3.23	0.0808***	2.99	0.0751***	2.81
Expenditure Audit	0.168***	7.43	0.115***	4.81	0.0856***	3.74	0.0837***	3.77	0.0825***	3.71	0.0848***	3.90
Fair Distribution			0.123***	4.80	0.0718***	3.00	0.0711***	3.12	0.0670***	2.94	0.0684***	3.04
State Budget Awareness					0.264***	13.88	0.225***	10.97	0.196***	8.54	0.188***	8.19
Budget Literacy							0.0996***	5.16	0.0713***	3.40	0.0512**	2.33
Fiscal Policy Awareness									0.0842***	3.63	0.0525**	2.12
Fiscal Policy Objectives											0.0769***	3.18
Prob.	0.0000	7.49	0.0000	6.73	0.0000	6.20	0.0000	5.62	0.0000	5.26	0.0000	5.09
Number of Observations	1,010		1,010		1,010		1,010		1,010		1,010	
R^2	**0.335**		**0.354**		**0.484**		**0,500**		**0,510**		**0,517**	

Six different models have been established in the regression analysis with factors that may affect the public expenditure culture. In the first model established, the R^2 value, which shows the rate of explanation of the dependent variable by the independent variables, is 33.5%. In other models, R^2 increased as each variable was added and was 51.7% in the final model. The increased R^2 value with the established models indicates that the models are set up correctly. Factors affecting the perception of public expenditure culture result from regression analysis; demographic, cultural, administrative, and socio-economic factors.

3.1.Demographic Factors Determining the Culture of Public Expenditures

When the regression analysis results were examined, a significant relationship was found between demographic variables such as age, marital status, occupation, and monthly income and the perception of public spending culture.
According to the first model established, people between the ages of 18-35 have a 10% more positive perception of public expenditure culture than people in other age groups. There was no statistically significant difference between the other five models and the age variable.According to the 1st and 2nd models established, women's perception of public spending culture is more negative than men at the 5% significance level. No statistically significant difference was found between the other four models and the gender variable.According to occupational groups, the perception of public expenditure culture of civil servants is more positive at the 1% significance level than those in other occupational groups.People with a monthly income of 5,500-10,000 TL have a more negative perception of public expenditure culture at the 5% significance level than those in other income groups.

3.2. Cultural Factors Determining the Culture of Public Expenditures

In the model, tradition, religionial belief and ethnic identity factors were used as cultural variables. No statistically significant relationship was found between the perception of public expenditure culture and cultural factors.

3.3. Administrative Factors That Determine the Culture of Public Expenditures

The model used tax administration satisfaction, extravagance and public expenditure audit as administrative factors. According to the findings, as the society's satisfaction with the services provided by the tax administration increases, the culture of public expenditures is also positively affected by this increase (at 1% significance level). As the perception of extravagance in government expenditures increases in our country, the culture of public expenditures is negatively affected by this increase (at 5% significance level).As the perception of equitable distribution of public services increases, the culture of public expenditures is positively affected (at 1% significance level).

3.4. Socio-Cultural Factors Determining The Culture Of Public Expenditures

As a socio-economic factor in the model, fair distribution of public services, tax justice, tax awareness, tax morale, state budget awareness, budget literacy, fiscal policy awareness, and fiscal policy objectives was used.
According to the findings, as the perception that the government's expenditures are adequately audited in our country, the culture of public expenditures is positively affected by this situation (at 1% significance level). As the perception that the tax burden is distributed fairly in our country, the culture of public expenditures is positively affected by this situation (at 10% significance level). As the tax awareness of society increases, the culture of public expenditures is positively affected by this increase (at 1% significance level). As the tax morale of the society increases, the culture of public expenditure is positively affected by this increase (at 10% significance level). As the society has sufficient information about the state budget and the budget literacy of the society increases, the culture of public expenditures is positively affected by this increase (at 1% significance level).

4. Conclusion

According to the research findings we have obtained, it is seen that there is generally a negative perception of the public expenditure culture in society. Since taxes mainly finance public expenditures, they are seen by society as a return of taxes. As a result, it has been determined that the level of financial connection awareness of individuals is high.

Determining the public spending culture perception and the factors affecting this perception is necessary for the economic policies that the state will pursue in this regard.The most important factors that determine the public spending culture are; profession, satisfaction with tax administration, audit of public expenditures, fair distribution of public services, tax awareness, state budget awareness, budget literacy, fiscal policy awareness, and fiscal policy objectives.

For the negative perception of the public spending culture in Turkey to turn into a positive one, economic policies that take these factors into account should be produced. In this framework, the public should be persuaded about the audits carried out by ensuring transparency and accountability in public expenditures in producing economic policies. A more positive perception of public spending culture should be provided by ensuring the fair distribution of taxes and public expenditures in society. A more positive perception should be created in the culture of public expenditures by increasing the budget literacy of the society and ensuring dominance on the issues related to the culture of public expenditures. Negative perceptions towards public expenditure culture should be minimized by bringing tax awareness, state budget awareness, and fiscal policy awareness to society.

References

Journals;

Arıman, Y. (2020). "An Experiment on Determining and Developing Public Expenditure Awareness of Secondary and High School Students", *Eskişehir Osmangazi Üniversitesi İktisadi ve İdari Bilimler Dergisi* , 15 (3), pp. 925-938.

Demir, İ. C. (2009). "Social Perception of Public Expenditures: An Empirical Research", *Maliye Dergisi*, (157), pp. 210-226.

Saygın, Ö., Sandalcı, U. and Sezer, F. (2015). "The Views of Taxpayers on Public Expenditures in the Context of Determinants of Tax Ethics", *Maliye Araştırmaları Dergisi*, 1(3), pp. 21-38.

Tandırcıoğlu, H., and Yapıcı, F. (2018). "Public Expenditure Perception of Dokuz Eylül University Faculty of Economics and Administrative Sciences Students: An Empirical Analysis", *Dokuz Eylül Üniversitesi İktisadi İdari Bilimler Fakültesi Dergisi,* 33(1), pp. 261-292.

Panel Data Analysis of The Place and Impacts of Green Taxes in Selected OECD Countries

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Abstract:

The fact that it is a tax type that prioritizes environmental concerns in order to protect the ecological balance has made green taxes an important tax that is frequently brought to the agenda by governments today. It will only be possible to determine whether green taxes are applied for the purpose of protecting nature and human health or only for generating income, by conducting a panel data analysis on green taxes. The aim of this study is to examine the effects of green taxes on the amount of air emissions, the rate of air pollution, the number of people exposed to air pollution, the amount of waste use, the rate of change in the number of vehicles, the number of road passenger transport, the number of patents of environmental technologies, the amount of renewable energy production at different development levels countries to test it empirically. In the study, in which 19 OECD member countries, including Turkey, were taken as a sample, the annual data of the countries for the period 2000-2020 were used. The detailed implementation of green taxation in a limited number of countries and the observability of the practices in these countries constituted the starting point of our panel data analysis. In this analysis, firstly, the econometric method will be determined. Then, the green tax rate will be examined as the independent variable, five of the eight dependent variables as stationary and three as non-stationary variables. Finally, the results of the panel data analysis will be given and an evaluation will be made. According to the results of the panel data analysis we applied in our study, at the point of whether green taxes are applied with an environmental and human focus or for income generation, the main purpose of green taxes is; while it should reduce emissions that cause environmental pollution, extend human life, reduce the number of people exposed to air pollution, reduce the number of vehicles on the road, increase green patented technologies and renewable energy production, the main purpose of green taxes has been to generate income in all countries studied. For this reason, in all countries where green taxes are applied, such taxes should be implemented with an environmental and human focus. Especially in our country, it would be appropriate to increase the green tax types.

Keywords: Green Economy, Green Taxation, Panel Data Analysis

JEL Codes: H23, F64, K32

The Audits of Supreme Audit Institutions in Supporting Environmental Sustainable Development

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Abstract:

Sustainable development, first mentioned in the 1987 report of the World Commission on Environment and Development, has been recognised as a critical concern in government plans and policies over the last two decades. To provide the development that satisfies the present generation without jeopardising future generations' ability to meet their own needs, sustainability development brings together three domains society, economics, and the environment. Growing international interest in sustainable development emerged at the United Nations Conference on Environment and Development in Rio de Janeiro in 1992. In 2012, a remarkable improvement in sustainable development occurred at the United Nations Conference on Sustainable Development. Thus, the world leaders accepted the necessity to support sustainable development with collective effort. Since that year, the idea of sustainable development has incrementally gained global importance and fundamentally includes the sustainability of society, economy, governance, and environment. In 2015, 193 members of the United Nations accepted "the Agenda 2030 for Sustainable Development Goals (SDGs)" formed with the 17 SDGs, including 169 targets and 232 indicators. Accordingly, all SDGs contain environmental targets, except for the SDG 10-Reduced Inequality . While a part of the SDGs (1, 2, 3, 4, 5, 8, 9, 10, 16, 17) have the limited environmental targets, the SDGs 6, 7, 11, 12, 13, 14 and 15 are directly associated with the issues about climate, natural resources, pollution, renewable energy, water, marine life, ecosystem and other environmental problems. Environmental audits, known as green public auditing, have globally become significant in reaching the target of Agenda 2030 for Sustainable Development Goals in the last years. An environmental audit is a method for identifying the scope of government operations' environmental consequences and deciding whether they comply with applicable environmental laws and regulations. Supreme Audit Institutions contribute positively to achieving the 2030 Agenda and perform environmental auditing through financial, compliance and performance audits to ensure that government programs, initiatives, and transactions comply with ecological goals and rules. In this context, the International Organization of Supreme Audit Institutions Work Group on Environmental Auditing (INTOSAI WGEA) has searched global and regional trends/issues within environmental auditing. It has implemented the environmental auditing survey every there year since 1992. Accordingly, the WGEA has analysed the responses from national SAIs in seven regions worldwide and reported their overviews within the UN SDGs, the Paris Agreement and other multilateral environmental agreements. The study aims to analyse the environmental audits conducted by SAIs worldwide in supporting sustainable development and investigate environmental audits by presenting examples of good practices. It also provides information about audits on the SDGs related to climate change mitigation, adaptation, and other environmental issues through the data obtained from the WGEA database. According to the main findings, the interest of INTOSAI members has increased in environmental audits related to the SDGs since 2015. Most SAIs responded to the WGEA survey have used the SDGs as an audit criterion. The information about environmental audits

conducted between 2022 and 2015 by national SAIs is listed below: One hundred thirteen environmental audits within the SDG 13-Climate Action, One hundred nine environmental audits within the SDG 11-Sustainable Cities and Communities, One hundred four environmental audits within the SDG 15-Life on Land, One hundred one environmental audits within the SDG 6-Clean Water and Sanitation, Seventy-seven environmental audits within the SDG 12- Responsible Consumption and Production, Seventy-five environmental audits within the SDG 3-Good Health and Well-Being, Seventy-two environmental audits within the SDG 7-Affordable and Clean Energy, Forty-five environmental audits within the SDG 9- Industry, Innovation and Infrastructure, Forty environmental audits within the SDG 14-Life Below Water, Thirty-three environmental audits within the SDG 16- Peace, Justice and Strong Institutions, Twenty-four environmental audits within the SDG 8-Decent Work and Economic Growth, Twenty environmental audits within the SDG 2-Zero Hungary, Nineteen environmental audits within the SDG 17-Partnership for Goals, Seventeen environmental audits within the SDG 1-No Poverty, Nine environmental audits within the SDG 5-Gender Equality, Six environmental audits within the SDG 4-Quality Education. While auditors mainly apply to performance audits (value for money) in environmental auditing, compliance and financial audits are preferred less. Additionally, the combination of performance and compliance or performance, compliance and financial audits can occasionally be implemented by SAI in accordance with governments' environmental programs and multilateral agreements. According to the survey, SAIs have planned to conduct more audits about ecological issues and share their experiences. It is detected that climate, air, atmosphere, water, waste, energy, transport, natural resources, land use, other human activities, biodiversity and nature conservation have been critical environmental issues. Additionally, the contents of environmental audits change in regions, e.g. water audits have mainly gained importance in African and Asian continents, and climate, air, and atmosphere audits have been conducted in the EUROSAI, Canada and the US. In Latin America, the audits on forestry and timber resources and climate change, adaptation and water in the Pacific have been in the first order. Although the study presents comprehensive information about environmental audits supporting sustainable development globally, it has limitations. First, the study has not searched the effectiveness level of the environmental audits by SAIs in different countries in reaching the SDGs. Second, audit information has voluntarily been added by SAIs to the INTOSAI WGEA database, which is the most reliable database about environmental audits. The results will help determine the roles and importance of environmental audits regarding the climate crisis and ecological deterioration.

Keywords: Environmental Audit, Sustainable Development and Goals, Supreme Audit Institutions

JEL Codes: H83, Q01, Q53, Q54

Tax Policies Used and Can Be Used for Green Reconciliation: Recommendations for Turkey

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Abstract:

The issue of climate change and the environment has attracted the attention of the public at the national and international level, along with global warming and seasonal changes. The consensus that the fight against climate change is an integral part of sustainable development under the title of "2030 Sustainable Development" at the United Nations meeting in 2015, which also included our country, proves this situation. Again, the economic and social difficulties that emerged in 2020 due to COVID-19 brought this sustainable development issue to the agenda. With increasing concerns, the European Union has also addressed this issue in the international arena. Our country's ratification of the Paris Climate Agreement and its involvement in the 'Green Agreement' process with the European Union accelerated the "green transformation" steps for Turkey. As part of the European Green Deal, the European Union has set a number of targets to combat climate change and promote a cleaner environment. The most important of these goals is to achieve a 55% reduction in greenhouse gas emissions by 2030 and to be a climate neutral continent by 2050. In reducing the greenhouse gases targeted by the Green Deal, states can implement many policies, but one of the most important policies that can be implemented by states is tax policy. With the European Green Deal, many states have started to put tax policies on their agenda in this regard. Tax policies can be used as an important tool to reduce greenhouse gases and support the use of cleaner production technology. For example; A tax could be used on issues such as transport, energy and pollution. Similarly, an energy tax may be imposed on fuel oil, natural gas, coal and electricity used for heating. Tax policies can help us meet our environmental policy goals by promoting the shift to cleaner energy, more sustainable industry and greener habits rather than mere taxation. In such a case, a subsidy for taxpayers investing in clean energy or clean generation may also be part of the tax policy. A price can be set for social costs through tax policies, helping to reduce waste of resources and damage to the environment by changing the decision-making process and encouraging behavioral changes of companies and people. Although there is a consensus to take action on the fight against global climate change, there are also some costs of using tax policy to take action regarding them. The most important of these is that taking these measures is capable of leaving countries behind in the global competitive environment. Although many countries have to take these measures for a sustainable economy, they are often reluctant to do so. When we look at the financial policies implemented at the international level, it is seen that applications such as Carbon Tax, Emission Trading System and Green Climate Fund are used. Emissions trading is a market-based approach to controlling pollution by providing economic incentives to reduce pollutant emissions. The Green Climate Fund, on the other hand, was conceived as a support for developed countries to help developing countries respond to climate change. As a tax policy, carbon taxes are a tax practice that has started to be implemented to minimize the use of fossil fuels by taxing

and is on the agenda with global warming. The aim of the tax is to protect the environment. When we look at our country, there are applications such as Motor Vehicles Tax, Environment and Cleaning Tax, Special Consumption Tax, which can be described as environmental tax in the context of tax policy. However, these are taxes used to provide income to the treasury rather than prevent global warming. For example, when collecting motor vehicle tax, the age and cylinder volume of the vehicle are taken into account, while the emission value is not taken into account. Similarly, environmental and sanitation tax is calculated on the amount of water used. If the taxpayer does not use too much water, he does not have much to do with the tax. Special consumption tax, on the other hand, is considered an environmental tax in some sources because it is levied especially during vehicle purchase, but it has nothing to do with carbon emissions. Although our current taxes are not directly aimed at the green economy, our country has also taken action on the green economy. One of the concrete steps taken in our country regarding the transition to a green economy is the implementation of the Green Reconciliation Action Plan (2021) by the Ministry of Commerce. In the said action plan, there are explanations and targets regarding the use of tax policies. In this study, the international and national implementations to achieve the goals aimed with the Green Agreement are discussed.

Keywords: Green Agreement, Environment, Tax, Green Taxation

JEL Codes: H20,H23,K34

The Impact of Local Government Policies on Internal Migration in Migrant Regions: The Cases of Andalucia

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Abstract:

In this study, the effect of local government policies on internal migration will be examined. This study aims to find the answer to the question of "What is the effect of local government policy components on internal migration?. After 2008, 3% to 3.5% of the total Turkey's population has steadily migrated. This ratio means that approximately 2.25 million people migrate in Turkey every year in the last 10 years. When we compare internal migration rate of Turkey with other countries in the world it is quite high. In this context, Spain is similar two country about ratio of local government expenditure in GDP. The aim of the research demonstrates the effects of the local government policy on the residents in terms of the intention to migration of residents. In this study, both in Turkey and Spain primary data through surveys to be conducted by resident collected in the region that most migration and immigration. (TR1 region in Turkey and Andalusia in Spain). Impact of local government policies on migration potential examined by using discrete choice models (Probit and/or Logit) by using primary data. Thereby, alternative internal migration policies without extra spending in Turkey is aimed to determined. This research is the first attempt to aimed to collect data about the relation between internal migration and local government. The collected data will be compared with a country of similar, and its harmony with the theory will be revealed and new perspectives will be tried to be opened for policy makers. Two methods will be used in the research. Firstly, secondary data obtaining by IMF - COFOG (International Monetary Fund Public Functional Expenditure Classification Database) and UNDESA (United Nations Economic and Social Affairs Database) will be analyzed descriptively. Descriptive analysis includes comparative country statistics. Secondly, This study will create a source data set on the impact of local government policies (services) on internal migration and fill the gap of relevant literature with various papers. The results of this research are directly related to policy makers due to the findings providing relationship between internal migration management and local government policies. Thus, the fiscal burden of internal migration on the public sector and both the economic and social burden of migration will be reduced in the light of these policies. In addition to this, policies aiming to balance the spatial distribution of the population in the long run will contribute positively to the welfare and development of the country. Finally, relevant findings will be shared with public institutions and the academic community in a brief upon request, and search meetings will be held for future studies. This study will pave the way for further research in this area by creating a source data set containing information on the impact of local government policies on internal migration. In the light of the findings obtained from field studies, men rather than women are more likely to migrate. The higher the education level, the higher the probability of migration. Being

employed reduces the probability of migration. According to the model, income and age variables did not have any effect on the intention to migrate. And finally, as Andalusian residents' satisfaction with the services provided by the local government increases, their intention to migrate decreases.

Keywords: Local Government Policies, Internal Migration, Government expenditure by function

JEL Codes: H75,H76, O15,R23

A Study on the Empty Homes Tax

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Abstract:

From the past to the present, local governments have begun to have great importance in terms of their powers and duties. However, the expenditures, own revenues and tax resources of the municipalities within the scope of their duties and responsibilities cannot be financed sufficiently. Due to the inadequacy of the existing resources of the municipalities, their orientation to new resources causes a number of economic effects. In this study, it is discussed that local governments in the world are in various quests to find solutions to the problems in housing markets. Empty house tax is also a prominent concept and a type of financing in this process. Some economic problems in the world also affect the housing markets. The concept of housing finance and speculation comes to the fore in this period. The use of housing as a financial instrument rather than a place to live has come to the fore. Speculation was most evident in global cities such as London, New York, Hong Kong and Vancouver. This process of change in the residences in these cities is tried to be solved by various methods. Empty homes tax has also found its place in these cities with different applications. At the same time, the study aims to take the empty house tax on the scale of world practices and to put its applicability in terms of local governments in Turkey within the framework of the law on municipal revenues. Because this method aims to regulate the housing market and creates a source of income for local governments.

Keywords: Empty Homes Taxes, Local Tax, Municipality

Evaluation of Public Procurement Process in Municipalities in the Framework of Competition and Efficiency

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Abstract:

Due to the increase in migration from rural areas to cities in Turkey, the urban population has also increased significantly. The increase in the urban population, on the other hand, has diversified the needs of the city people and caused an increase in service expectations such as transportation, infrastructure, environmental regulation, social and cultural. The change in service demand has increased the responsibility of municipalities, which are the closest units to the people of the city, and the importance of expenditures. Municipalities use their own tools and equipment while performing these services. However, inefficient use of resources may occur, especially if the service requires advanced technology, knowledge, and expertise. In addition, municipalities may choose to procure goods, services and construction works from the market to implement both policy implementations and public services. Municipalities aim to directly increase the quality of life and welfare of their citizens by using public resources while procuring goods, services and works from the market. On the other hand, municipalities may face an important financing problem in meeting the increasing demand for goods and services at the local level. Although the goods and services provided by the municipalities in Turkey have increased in terms of both diversity and quantity, it can be said that the financial resources required to meet these goods and services have not increased to this extent. This method is also expenditure-oriented and indirectly aims to increase income. When evaluated in terms of performance, it is important to determine the services correctly, to perform them in a competitive way and with optimum costs, and to ensure citizen satisfaction in these services. The basis of effective resource use is the idea of performing a qualified job with the lowest use of resources. In terms of municipalities, the equivalent of this idea in practice is the use of a competitive and equitable public procurement system in the supply of goods and services. Both central and local administrations need an effective public procurement system to use public resources effectively and to reduce costs in the purchasing process under budget constraints. In an efficient public procurement system, since the needs are determined realistically, the best quality goods, services and works are provided at the most affordable price. Thus, the best result is achieved by realizing public savings, reducing the costs of the private sector, and increasing competition. As a matter of fact, getting “value for money” and ensuring efficiency by optimizing competition among the bidders becomes possible with an open, transparent, and non-discriminatory public procurement system. To establish an effective public procurement system, the Public Procurement Law No. 4734 (Public Procurement Law) was issued in 2002 in Turkey. There are no general administrative procedural rules regarding public procurement in Turkey. Legal regulations regarding public procurement are made by various general and special laws. In this context,

the Public Procurement Law No. 4734 and the Law No. 4735 on Public Procurement Contracts are the main laws in the tender processes of public institutions, and the Public Financial Management and Control Law No. 5018 includes the rules regarding the responsibility of those in charge and authorized in the tender process. To ensure efficiency in public procurement, the principles of transparency, competition, equal treatment, reliability, confidentiality, public scrutiny, meeting the needs on time and under appropriate conditions, and efficient use of resources are included in Article 5 of Law No. 4734. These principles are the principles that should be considered by the administration at every stage of the tender process. It limits the freedom of the administration to make a contract, as it allows the administration to make a choice within the framework of these principles, independently of its own will, when choosing the other party of the contract. Therefore, with the tender principles, the legal framework of the public tender process is drawn, and the purpose of the tender process is pointed out. In addition, it also serves to effectively use public resources by ensuring that public tenders are carried out in accordance with the law, and the person who will perform the contracted work at the most appropriate time, best quality, and lowest cost. The aim of this study is to analyze the public procurements made by the Istanbul Metropolitan Municipality in terms of competition and equal treatment principles, which are among the tender principles. The importance of the study is to look at budget management from an expenditure-oriented perspective through public procurement and draws attention to the effectiveness of the public procurement process. In this context, the tenders held by the Istanbul Metropolitan Municipality between 2011-2020 were analyzed. The data used in the study were obtained from the ihalabul.com access address, where Public Procurement Institution and EKAP data were compiled.

Keywords: Competition, Efficiency, Public Procurement.

JEL Codes: H57, H70, H76

The Effect of Rent Controls and Regulations on Fighting Against Inflation and The Applicability of These Policies in Turkey

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Abstract:

There is a strong relationship between the increase in rental prices and the cost of living since a significant portion of personal income is allocated to housing. It is assumed that individuals in many countries allocate approximately one-third of their income to rent, and housing expenses have a significant share in the goods and services baskets used in inflation calculations. However, in cases where rent increases are determined according to the inflation rate, this relationship becomes a cycle that feeds each other. Although other important expenditure classifications, such as food, include many different products, a very large part of the housing cost consists of rent alone. In addition, rent hikes may indirectly cause the price of many different products to increase. This situation brings along the thought that inflation can be restrained if rent increases are limited. It is possible to present many different examples in which certain rules are applied to the determination of rental prices and increase rates and the eviction of the tenant. These applications can be in different forms such as the determination of the rental price per square meter by the state, limitation of the reasons for eviction, application of the ceiling price, and freezing of prices. Although price controls and other restrictions within the free market mechanism are not tolerated that they will disrupt the supply and demand balance of the market, it is seen that there are controls on rental prices or other regulations have been made in this regard in many countries that have adopted the free market economy. The general purpose of these controls and regulations is to enable large masses to access housing, to protect the tenants, and not to allow rent increases to trigger inflation. Although the target inflation rates could not be fully reached, it is possible to say that the price increases in our country remained at relatively acceptable levels throughout the 2000s. However, with the reflection of the recent poor economic policies and external developments on the general level of prices, Turkey again faced the phenomenon of very high inflation. In addition, the average rental prices in Turkey approached the minimum wage in many provinces and reached figures that even exceeded the minimum wage in provinces such as Muğla, Istanbul, and Izmir. While the impact of the various economic problems that emerged with the pandemic has not passed, the serious increases in both the average rent and the general level of prices have increased the living problem in the country and left many people below the poverty line, even hunger. Refusing to increase interest rates, which is the most basic intervention tool of the orthodox economic policy against inflation, and even going for an interest rate cut in the opposite direction, Turkey tries to restrain both exchange rates and inflation with practices such as regulations on reserve requirement ratios, changes in duty rates and threshold values, and offering exchange-rate-protected deposit accounts. However, it is difficult to say that these interventions have the desired effect on the general level of prices and exchange rates. Factors such as the payments that the Treasury has to undertake due to exchange-rate-protected deposits, unavoidable dollarization, high current account deficit, and foreign debt make it difficult to keep inflation under control. In a situation where expectations are negative and there is a loss of confidence in economic policies, increasing the policy

interest rate alone will not be sufficient as an intervention against inflation. At the point that the Turkish economy has reached, heterodox economic policies remain in order to prevent the depreciation of the Turkish lira. The legal regulation limiting the increase in rent prices by twenty-five percent, which is on the agenda of the Turkish Grand National Assembly in June, is an example of an incomes policy implementation in this respect. The aim of the study within this framework is to examine the effect of rent controls and regulations on inflation and to discuss how these practices will affect inflation in Turkey and other economic outcomes, especially the developments in the housing market. In the first part of the study, general information about rent controls and regulations is given, while in the second part, different application examples in the world are explained. In the third chapter, while the price controls and regulations that have been put into practice in Turkey are summarized, the most recent rent increase limitation and its possible consequences are emphasized. In the conclusion part, rent controls and regulations, as an example of heterodox economic policies, and the effects of these policies on reducing inflation in Turkey and their reflections on the markets are evaluated.

Keywords: Rent Controls, Inflation, Incomes Policy

JEL Codes: E31, E64

TAXATION POLICIES TACKLING WITH INFLATION IN TURKEY: A COMPARATIVE ANALYSIS OF RHETORIC AND POLICY IMPLEMENTATIONS

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Abstract

Whilst the neoliberal retrenchment policies kicking off in Turkey within the post-1980s perspective paved the way to a general overhaul of the economic and political system, the process also assumed the obligation to remake the definitions of fiscal policy tools. At the discursive level, Keynesian approaches of taxation characterized by its interventionist trait into social and economic spheres by the very hand of government italicizing extra-fiscality were substituted by neoclassical approaches solely focusing on the sole fiscality of taxation policies as means for financing public expenditures, rendering to a reshaping of fiscal tools. Given the context, the proposed study aims to analyze taxation policies implemented in Turkey to tackle inflation by means of a political economy approach with emphasis on global economic recession affecting the international economic system. The attempt shall be to shed light on whether there has been a gradual rescaling of a more interventionist nature of taxation policies along with the global economic crisis at a discursive level or not. Methodologically, the pursuit shall analyze and utilize different sets of taxation policies against inflation with a thorough elaboration of taxation policies' pretexts in the fight against inflation.

Keywords: Inflation, Taxation, Tax Policies, Indirect Taxes, Income Tax, Discourse
JEL Code: E31, E61, E62,E63,E64

1. Introduction

Whilst the neoliberal retrenchment policies kicking off in Turkey within the post-1980s perspective paved the way to a general overhaul of the economic and political system, the process also assumed the obligation to remake the definitions of fiscal policy tools. At the discursive level, Keynesian approaches of taxation characterized by its interventionist trait into social and economic spheres by the very hand of government italicizing extra-fiscality were substituted by neoclassical approaches solely focusing on the sole fiscality of taxation policies as means for financing public expenditures, rendering to a reshaping of fiscal tools.

Given the context, the proposed study aims to analyze taxation policies implemented in Turkey to tackle inflation by means of a political economy approach with emphasis on global economic recession affecting the international economic system. The attempt shall be to shed light on whether there has been a gradual rescaling of a more interventionist nature of taxation policies along with the global economic crisis at a discursive level or not. Methodologically, the pursuit shall analyze and utilize different sets of taxation policies against inflation with a thorough elaboration of taxation policies' pretexts in the fight against inflation.

2. An Elaboration on the Theoretical Concepts

Inflation It is simply a sense refers. Today continues rise of the price level. When this literal definition of inflation put forth on the agenda the following traits of the term will be of importance. Just to juxtapose (1) The main unit of analyses remans as the general price level i.e., the term is not related to separate and atomistic prices of goods and commodities. In other words, individual increases in prices do not add up to inflation. (2) The general price level has to be on the rise, which has to mean that the increases of a few good and services or non-continuous raises in prices are not counted as inflation (Eğilmez & Kumcu, 266). It will be correct to say inflation emerges as a continuous rise in prices when aggregate demand surpasses aggregate supply

The tools of fiscal policy to tackle with inflation are as follows:

- Public Expenditures
- Public Revenues
- Public Borrowing
- Public Budget

Henceforth public incomes as an instrument to reach the objectives of the fiscal policy ve the tight to extract and increases taxes (increases in tax rates, reductions exemption and confinement of exceptions, amending new taxes into the legal system as a legitimate authority arising from the constitution render the operation of the system feasible and possible.

In time of deflationist periods making use of expansionary fiscal policy reductions are implemented in tax rates in contrast to other eras of inflationist times which are characterized by contractionary fiscal policies to decrease the tax rates. Increases on

tax burden will lead to the deprival of taxpayers from liquidity, increases in budget surplus and absorption of purchasing power (Susam: 52). Indeed, among these, changes conducted over taxes levied upon incomes, expenditures and wealth the impact will be somewhat of different sets of impact. (Ataç:123-126):
Income taxes levied with increasing rate owing to its structure present themselves as attractive tools to tackle with inflation. As the nominal incomes of economic actors rise rather than in real terms individual incomes jump up to the consequent upper tax segment leading to decreases in disposable income and pressures on the aggregate demand.
Increase in the rate of income taxes during the times of struggle with inflation facilitate a more effective way of struggle with inflation. In the meantime, increases in the ratee of income taxes have a deteriorating effect on redistribution of incomes within the love income individuals, it will have a punishing impact on investment and savings among high income groups thereby leading to the contraction of development.

Another way to tackle with the inflation is the taxation on the purchase of goods and commodities. By means of this marriage, the prices of goods and services was increase and it will lead to a reduction in consumption. Therefore. Indirect taxes are effective tools in dealing with the inflation. Aggregate demand will be reduced. That is to say. Income taxes relative to those taxes providing the very same income level of tax revenues will reduce the consumption. The rationale behind this is simply that Income taxes provide certain sections of savings. Moreover, indirect income taxes wing their practical implementation get to be increasingly endorsed by tax administrations.

The level of effectiveness of dealing with inflation remains at an exceptionally low level. Since the basis of wealth tax implementations are quite narrow, and since these taxes do not hold a continuous rise in aggregate demand, wealth taxes cannot be qualified to be effective in dealing with inflation.

The supply-side economics proposes reduction of income taxes to be able to increase production, the alleviation of environmental taxes that could potentially curb production to the point of closure, play loosening of rules and regulations thereby leading to increases in production of loosening of production levels. According to this way of thinking, rather than implementing a demand-based management of Inflation-struggle program, a supply-side-based program targeting to increase the supply by loosening of prices should be put into practice. These propositions have been implemented by neoliberal governments of Turkey in the times of Turgut Özal, in the UK by Thatcher, in the USA by Ronald Reagan. however, please. Reductions in income rates did not increase tax revenues as expected. Studies on why these could not produce the expected results hold that tax rates were not high as expected and findings could not be simply predicted as a bell curve style (Eğilmez&Kumcu: 199).

Policies implemented regarding monetary and fiscal policy Get to be harmonized with each other in the process of dealing with inflation. Another fiscal tool in implementation

Is reduction in tax rates in the process of tackling with inflation. This tool is effective in Increasing Public expenditures and sustaining increases in aggregate supply. Reductions in taxes are used to boost economic growth in both developing and developed countries. Value-added-taxes tax and special consumption taxes, as examples of indirect income tax have an impact on aggregate demand in forms of increases thereby avoiding recessions in the cycle (Demiretal: 76)

Along with the framework given, above, this study will put forth an elaboration of different tax implementations impact on the processes of tackling with inflation between 1980-2000 within the context of Turkey.

3. Tax Policies Implemented since the 1980s

A set of political developments have to come to emerge on both political and economic terrains and neoliberal policies have come to assume to integrate the national economy into the international capitalist system enabling a market economy to be able to operate functionally. The effort shall be to elucidate developments in two dimensions on the period between 1980 and 2000 and the 2000s on

3.1. Tax Policies Implemented since the 1980s

The main objective of tax policies in Turkey was to prevent inflation along with the liberalization opening of national economy to in the international market since the commencement of the 1980s. Indeed, the more primary aim was the opening of the Turkish economy into the international capitalist system.

Despite Turkish efforts to tackle with inflation in Turkey, high growth rate and other factors exacerbated the related processes though inflation was attempted to be slowed down. Taxation policy attempted to avoid boosting aggregate demand with keeping track of inflation. Tax smuggling was avoided, indirect taxes were imposed with increases on the existing ones and tax debts were forced to paid. Tax revenues and increases in indirect taxes were aimed within the programs implemented b Turkish taxation schemes. Tax revenues losses due to lowering of tax rates were reinforced by addition of value added taxes. To be able to boos aggregate supply a new incentive-based taxation policy was put into implementation (Arıkan, 74).

The integration of VAT in a European style since 1985, the eradication of single level consumption taxes, modernization of taxation system and adaptation of the tax system to the European area have been crucial steps in the passage thereby leading to the customization the VAT as an important consumption tax. In the years to come customs taxes have been reduced substantially. The Shock measures have been put into effect on February 4th,1988 to keep an eye of soaring rates of inflation and foreign currencies. Short term decision has been mostly related to monetary policies, along with the fact that reduction in taxes were attempted to be offset by domestic borrowings (Arıkan, 81).

The failure of tax policies to increase tax revenues since the infamous Austerity Measures of January 24th, 1980, have led to tremendous, consolidated budget deficits in the years of 1991 and 1992, unleashing the inflation rates to soar. As tax revenues have come to be uncontrollable, austerity measures have come into effect in 1983 and notorious April 5th, 1994, Measures of Austerity (Yılmaz Uzunali, 111).
Changes introduced in the Income Tax Laws of 1990 were followed with amendments of 1998 and 1999 with changes introduced in terms of rates in both 2005 and 2006. Corporate income taxes have also been reduced with the Legislation Number 3949 dated December 26th, 1993, with great deal of amendments. Accordingly, tax rate brackets and rates have been increased with reductions in exemptions put into effect with measures to support broadening bases of withholding agency, thereby targeting a full relaxation corporate tax income burden

To be able to defend the problem of responding the need of meeting cash need arising in the after math of April 5th, 1994, Crisis, a one-time based set of taxes came into effect with the May 4th, 1994, dated Legislation Number 3986 "The Making of New Taxes for Economic Equilibrium" with the introduction of four new taxes. The expectations from these programs were to curb soaring general price level, to create a moderate environment for the functioning of the economy, to create new initiatives to boost employment and to create an order of stability for the economy. The upshot of the processes was a total failure without the capacity to create a systematic operation of tax system. The share of indirect taxes among other tax revenues proceeded to soar at each passing year (Bal ve Teker, 168).

3.2. Tax Policies implemented since the 2000s on

Increases in indirect taxes have accelerated along with increases in their rates and a number of taxes were decided to be enlengthened in the post-2000s perspective. By means of Legislation Number 4605 dated November 23rd, 2000, motor vehicle taxes, vehicle purchasing taxes, supplementary vehicle purchasing taxes, contribution to education private communication taxes have been regulated with auxiliary arrangements. Tax implementation periods have been extended along with a provisional article's addition into the law to minimize the detrimental effects of the withholding taxes for corporate bodies facing losses, by means of the introduction of "the principle of life standard".

A new crisis broke out on February 19th, 2001, despite measures to offset the November 16th, 2000, crisis. Along with the measures of the Regulation dated April 14th, 2001, other steps were to be identified to increase the levels of revenues. The recovery of Turkish economy from the 2001 Economic Crisis came at a fast pace, returning to growth rates thanks to the Stabilization measures of 2001 and 2001 to be reinforced by the support of the IMF

More anomalies were created by instabilities i in taxation policies undecided inflation rates. More additional tax measures came to be introduced to tackle with budgetary

deficits Moreover different nominal tax rates, numerous investment incentive-based financial instruments real affective tax rates perplexed the situation

A medium rate strategy was devised with the aid of the World Bank in 2002 to develop a new taxation reform strategy whose objectives were inclusive of increasing stability, broadening of the tax base, to ameliorate the effectiveness of tax administrations. The basic components of the program included the imposition of a single tax to rationalize special consumption taxes and corporate taxes along with the renewal of reorganization of tax management schemes (OECD, 2006, s. 1-2).

The new incoming government in the after-math of 2002 elections commenced to follow a new economic policy. A strict fiscal policy dwelling upon minimum of budget deficit, rigid monetary policy to deal with inflation and a flexible currency regime came to operate within the country.

A single tax policy was asserted for tobacco, luxury consumption goods, vehicles, petroleum products with the advent of the Legislation Number 4760 dated June 6th, 2002, Special Consumption Taxes. With the operation of the legislation, 16 different kinds of taxes, fees and two different taxes were eradicated. Advantageous incentives were recognized with five tax amnesties. Indirect taxes as a share tax revenue continued to rise at a moderate level (Bal ve Teker, 168).

With amendments realized in 2003 into the Tax Revenues Legislation tax burden on real persons earnings from corporate investment were reduced significantly. Indeed, a red tape based complex bureaucratic structure was simplified in terms of implementation upon investment-based initiatives

Tax burden shares were reduced along with earnings declared with a legislation passed in 2004 on the other hand earnings on movable assets were supported with the eradication of exemptions. In the aftermath o these processes tax brackets were reduced to 5 from 6 with any changes in tax rate in the first five brackets.

By amendments introduced in 2006 into the personal income tax, tax income brackets were reduced to four with the imposition of rates, 15, 20, 27 and 35 respectively

Corporate taxes were also reduced with amendments introduced in the post 2005s perspective. After the increases introduced between 1999 and 2004 in corporate taxes, the related rates have been reduced from 33 per cent to 30 percent and a final turn to 20 percent.

2008 Global Economic crisis shaped the tax polices in the post-2007 tax policies in Turkey. The country witnessed tax reduction in special income taxes to deal with inflation in 2008.

Expansionary policies came into effect to boost demand and to sustain employment to keep up with the balance of public finance up until that date. The government created incentives for tax schemes to increase investments and provisional reductions that would gear to eradicate stock pilings that might potentially curb production with motives to stimulate domestic demand via the rate of value added tax and special

income taxes as initial steps starting as of 2009 revisional amendments. These reduction were in line with the liberal discourse as the related reductions were reversed after the cleansing of the stock pilings, thereby bringing the rates of indirect taxes to their initial position (Kayar, 2011: 85).

Arrangements for reduction of taxes were engineered for the sake of boosting Turkish economy and economy growth by means of the first steps taken in the late 2016s and the beginning of 2017. These reductions were oriented to those ones to those revenues subject to value added taxes and Special Income taxes and other corporate taxpayers.

Recent developments include amendments regarding the Presidential Decree dated February 14th, 2022, to amend some components of the previous legislations concerning value-added taxes.

4. Conclusion

A final remark must be asserted such that the post 1980s tax policy management in Turkey in terms of its struggle with inflation reveal that governments instituted and consolidated the passage to a new economic systematic and liberalization of Turkish economy

A serious economic crisis coupled with high economic inflation and political crises came into the stage in 1994 with the interval between 1980 and 2000. The economic system failed to alleviate the impact of the crisis with a total incapacity to deal with problems.
A series of reductions in tax policies came into being with the direct and indirect taxes between 2000and 2010.Despite limited success stories, the tax policies had little role to play

The 2010 and 2022 period attempted to penetrate the price policies by means of reduction in tax rates and specifically indirect taxes. Yet the global pandemic circumstances with direct social and economic ramifications made it more than compulsory to find radical remedies to tackle with structural problems rather than solely concentrating upon tax policies.

The relation between fiscal policies and inflation can be concretely put forth by quantitative methods backed with a huge set of published materials. The analysis of the subject on such a quantitative basis will be the concern of a forth coming study.

References

Journals/Periodicals;

Kayar, G. (2011) "Vergilendirmede Adalet Kavramı ve 1980 Sonrası TVS'nin Değerlendirilmesi-I", *Vergi Dünyası*, (358), pp. 83–89.

Books;

Ataç, B. (2006). *MaliyePolitikası*, Eskişehir.

Eğilmez, Mc Kumcu E. (2004). *Ekonomi Politikası Teori ve Türkiye Uygulaması*, İstanbul, Remzi Kitabevi.

Mutluer, M. K., Öner, E.& Kesik, A. (2016). *Teoride ve Uygulamada Kamu Maliyesi*, İstanbul, Bilgi Üniversitesi Yayınları.

Susam, N. (2009). *Türkiyede Uygulanan Maliye Politikaları*, İstanbul, Derin Yayınları.

Thesis:

Arıkan, Z. (1988). "1980 Sonrası Türk Vergi Politikasının Plan Hedefleri Açısından Değerlendirilmesi", (M.A. Thesis), Dokuz Eylül Üniversitesi, İzmir.

Yılmaz Uzunali, D. (1994). "Enflasyonla Mücadelede Vergi Politikası", (M.A. Thesis), Marmara Üniversitesi, İstanbul.

Papers:

OECD. (2006). *Tax Policy Reforms in Turkey.* Center for Tax Policy and Administration. OECD Publishing.

Internet Sources:

Bal, B.& Teker, S. (2019). "The Role and Development of Indirect Taxes in the Turkish Tax System**",** https://dergipark.org.tr/en/download/article-file/770669, (16.08.2022)

Demir, İ.C., Cem, G. &Ciğerci, İ. (2017). "Vergi İndirimlerinin Ekonomik ve Mali Etkileri: Son Dönem Türkiye Uygulamaları". https://dergipark.org.tr/tr/pub/seyad/issue/53364/709473, (20.07.2022)

CONSIDERING THE REGULATION OF INFLATION ADJUSTMENT IN TERMS OF CONSTITUTIONAL TAXATION PRINCIPLES

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Abstract

Inflation creates a general increase in prices and fall in the purchasing value of money. Inflation as an economic concept, changes tax burden, increases progressive income tax, causes unfair taxation of interests and distorts taxation of income. The inflation adjustment regulation of the Tax Procedure Code is a tax policy tool which aims to clear the financial statements from the effects of inflation to eliminate the negative effects of inflation on income taxation. In Turkish tax law, the subject is regulated in the Repeating Article 298 of the Tax Procedure Code and the income and corporate taxpayers who determine their earnings on the basis of the balance sheet are responsible for inflation adjustment in certain conditions. In the period 2021, the conditions of the Repeating Article 298 of the Tax Procedure Code were fulfilled, but the application of inflation adjustment was postponed to 2023 by the Provisional Article 33 which was added to the Tax Procedure Code by the Law No. 7352 adopted on 20.01.2022. The evaluation of the results of this regulation in terms of constitutional taxation principles such as legal certainty, protection of human rights and taxation based on financial power, constitutes the subject of this study. As a conclusion, it is stated that, subjecting the financial statements to inflation adjustment is not only a liability for the taxpayer, but also an application that protects the taxpayer's property right in terms of revealing the real financial power of the taxpayer.

Keywords: Tax law, taxpayer's rights, inflation, inflation adjustment
JEL Code: E31, K34, K41

1. Introduction

Elements of taxable income and economic values are expressed in currency in the taxation process, and although the real value of the currency does not change in the inflation environment, the increase in the nominal value causes some effects in terms of taxation. Inflation has a negative impact on the public economy and tax system (Öncel, 1995: 490, 491). Inflation causes a change in the tax burden distribution (Batirel, 1995: 24) and also distorts the regulation of fundamental taxation principles such as ability to pay principle, taxing real income, principle of equality, taxing the real economic content of the taxable event, principle of social state and protection of property right (Öncel, 1995: 492). So, intervention of the state by using tax policy tools for fighting inflation is a common subject of economy and tax law.

2. Inflation Adjustment

Inflation adjustment is one of these intervention tools which aims to clear the financial statements from the effects of inflation to eliminate the negative effects of inflation on income taxation. The main justification for this regulation as stated in the Preamble of Code no. 5024, is that the operating results cannot be displayed correctly as a result of inflation making the financial statements of the enterprises “far from real status”. As the depreciation shares decrease with the inflation, the declarations made in terms of enterprises are more than necessary, so the taxpayers are taxed above the taxable real financial power and the financial statements do not allow comparison between periods or businesses.

In sub-paragraph (A) of the Rep. Art. 298 of the Tax Procedure Code, inflation adjustment is defined as “calculation in terms of purchasing power at the date of the financial statement”. Accordingly, inflation adjustment is a process consisting of increasing the monetary value of the assets in the financial statements to their values at the date of the table. The adjustment will be made by multiplying the amounts to be taken into account in the inflation adjustment of non-monetary assets with the adjustment coefficients. Inflation adjustment aims to clear the financial statements from the effects from the effects of inflation and thus to eliminate the negative effects of inflation and to tax them according to real financial power.

The inflation adjustment in Turkish tax law, is regulated in the Rep. Art. 298 of the Tax Procedure Code and the income and corporate taxpayers who determine their earnings on the basis of the balance sheet are responsible for inflation adjustment when the increase in the price index is higher from 100% in the last three accounting periods, including the current period, and 10% in the current accounting period. The President is

authorized to reduce the 100% rate up to 35% or raise it back to its legal level, and increase the 10% rate up to 25% or reduce it back to its level.

When inflation adjustment conditions occur, taxpayers are obliged to prepare their financial statements and make inflation adjustments as of the end of the temporary tax periods. The amounts found as a result of the adjustment are taken into account as the starting values of the following period, regardless of whether the inflation adjustment is made in the following period.

In the event that the correction conditions occur again after an accounting period in which inflation adjustment is not applied, inflation adjustment is made starting from the most recent period in which the adjustment was made. The profit of the previous year determined in this way is not subject to tax, the loss of the previous year is not accepted as a loss. However, in the determination of the base, the financial losses of the previous years are taken into account with their registered values. The revaluation rate is the average price increase in the Producer Prices General Index calculated by the State Statistical Institute in October of each year. For 2022, this rate is 36.20%; for 2021, it was determined as 9.11%.

Income or corporate taxpayers, who are subject to full liability and keep books on the basis of the balance sheet, according to the Rep. Art. 298 of the Tax Procedure Code, as of the end of the accounting periods in which the conditions for making inflation adjustments are not fulfilled, are entitled to depreciate their economic assets included in their balance sheets and they can revalue the depreciation shown in the liabilities of their balance sheet in line with certain conditions. In accordance with TPC Provisional Art. 31/7, income or corporate taxpayers who are subject to full liability and keep books on the balance sheet basis had the right to revalue their immovables and other depreciable economic assets registered in their assets until 31.12.2021, provided that they comply with the conditions in the law. After the revaluation made, they were subject to income/corporate tax at the rate of 2% over the value increase amount shown in a special fund account in the liabilities.

In Tax Procedure Code, Rept. Art. 298/Ç is added by the The Code dated October 14, 2021 and no. 7338. The new paragraph regulates the “continuous revaluation” arrangement, which enables the taxpayers to revalue their depreciable maturity accruals “tax-free” in periods when the conditions for making inflation adjustments are not met.

The increase in the value of economic assets as a result of revaluation is shown in a special fund account in the liabilities of the balance between the net balance sheet. Value increase is the difference between the net balance sheet asset values of economic assets after revaluation and before revaluation.

The portion of the value increase amount shown in a special fund account in the liability, transferred to another account or withdrawn from the business in any way other than adding to the capital, will be subject to income or corporate tax in this period, without being associated with the profit of the period in which this transaction is made.

By the Code no. 7338, Provisional Article 32 is also added in Tax Procedure Code. Prior to the revaluation to be made within the scope of Rep. Art. 298 paragraph (Ç), it is regulated that the taxpayers included in the scope can revaluate their immovables and other depreciable economic assets registered in their balance sheets as of the end of the previous accounting period. This arrangement is called “taxed valuation”.

The increase in the value of immovables and other economic assets subject to depreciation as a result of revaluation is shown in a special fund account in the liabilities of the balance sheet and a tax of 2% is calculated on the value increase. Value increase is the difference between the net balance sheet asset values of real estates and other depreciable economic assets before revaluation. By the Prov. Art. 32, it is possible to make a retrospective valuation, provided that it is subject to 2% tax.

3. Addressing the Problem with The Constitutional Taxation Principles

Inflation adjustment was applied once in our tax system in 2004, and it could not be applied in the following years because the increase in PPI did not increase by more than 100% in the last three years and by 10% in the last twelve months. However, as of 31.12.2021, the last three years’ change in PPI is 141,70%; the index increase in the last year was 79.89%, and therefore, inflation adjustment conditions were established as of December 2021.

In spite of that, the implementation of inflation adjustment was postponed to 2023 with the Provisional Article 33 added to the Tax Procedure Code by the Law No. 7352 adopted on 20.01.2022. The evaluation of the results of this regulation in terms of constitutional taxation principles constitutes the main subject of this study.

3.1. Legal Certainty Principle

The principle of legality of tax is regulated in the Art. 73 of the Constitution. By the paragraph 73/3, it is aimed to ensure the “certainty” and “predictability” of tax liabilities for taxpayers, and in this context, the legal security of taxpayers. These criteria of the obligation to interfere with the right to property by law. (Constitutional Court E. 2009/63, K. 2011/66).

When the inflation adjustment application is considered in general, the tax-free adjustment regulated in Rep. Art. 298/A is seen as the ground rule. However, this rule was implemented only in 2004, and since the conditions for inflation adjustment were not met, the opportunity for correction was allowed by temporary arrangements, which are limited in scope and are subject to tax over the value increase. In addition, 15 different Tax Procedure Code Communiques were published on different dates in order to clarify the application of inflation adjustment. Last Communique on Tax Procedure Code no. 537 was published in the Official Gazette dated 14 May 2022.

TPC Rep. Art. 298/A was implemented without delay from 17.10.2003 until 31.12.2022, when inflation adjustment conditions were fulfilled. Therefore, as of 20.01.2022, it is not possible for the taxpayers to foresee that the right arising from the regulation will be postponed, although the current regulation will not be eliminated.

Despite it is the ground rule, the conditions of Rep. Art. 298/A are hard to occur; which makes the implementation of the ground rule "unusual". The main rule and its conditions should reflect the mostly occurring context, in other words, the "usual form". Hence the economic reality does not fit the legal norm, the usual form is maintained with the exceptions. This technique may be criticized under the legal certainty principle.

3.2. Protection of Property Right

Pursuant to TPC Prov. Art. 31/7, income or corporate taxpayers who are subject to full liability and keep books on the balance sheet basis have the right to revalue their immovables and other depreciable economic assets until 31.12.2021, provided that they comply with the conditions in the law. After the valuation, they have been subject to income/corporate tax at the rate of %2 over the value increase amount shown in a special fund.

Although the inflation adjustment conditions within the scope of Rep. Art. 298/A were met as of December 2021, the implementation of inflation adjustment in Rep. Art. 298/A was postponed to 2023 with the Provisional Article 33 added to the Tax Procedure Code by the Law No. 7352 adopted on 20.01.2022. While the taxpayers had the right to benefit from tax-free inflation adjustment, who benefited from the application of TPC Prov. Art. 31/7, have been subject to income/corporate tax at the rate of %2 over the value increase amount. In the meantime, Rep. Art. 298/Ç was not in force and the legislation in question surely was not predictable. This unfair implementation is criticized in doctrine as a breach of taxpayer's property right (Bilici, 2022: 95).

Article 35 of the Constitution, regulates the property right which may be limited by law and for only public benefit. Property right is a negative status right that cannot

be exceeded by the state, so the limitation of the right by taxation should be in accordance with the Art. 13 of the Constitution which means that taxation should not exceed the core of the property right (Sağlam, 1982: 155, 156).

The Constitutional Court, during 1961 Constitution, had defined the core of the right as follows: "*Provisions that severely prohibit or implicitly prevent the protection of a right or freedom, or seriously complicate it, and restrict or abolish the achievement of its purpose, touch the core of that right and freedom*." (Constitutional Court, E.1962/208, K.1963/1, 04.01.1963)

After the 2001 amendments of the 1982 Constitution, The Constitutional Court interpreted the core of the right as; "*to accept that the limitation brought by the law does not affect the core of the right, it must not seriously hinder the use of fundamental rights and prevent it from achieving its purpose, and must not have a nature that would abolish its effect.*" (Constitutional Court, E. 2018/69, K. 2018/47, 31.05.2018)

TPC Rep. Art. 298, regulating the inflation adjustment conditions, according to the conditions are met or not, determination of the tax base is connected to different procedures. In the period when the legal conditions of the tax-free inflation adjustment are realized, the tax-free adjustment application is postponed for 2 years and the tax adjustment is left as the only option, resulting in an extra tax burden on the taxpayers.

As an aspect of 1961 Constitution's interpretation, we could have said that, when the relevant TPC provisions are evaluated systematically, it is seen that the application of inflation adjustment could be criticized that tax-free base adjustments of taxpayers within the scope of Rep. Art. 298 are not explicitly prohibited, but in certain terms, they are "implicitly made unusable" (Örücü, 1975) and thus, by the postponement, may breach the taxpayers' core of property rights.

However, in terms of 1982 Constitution, it may be concluded that the limitation brought by the systematic of the TPC provisions in the current case, has a nature that abolishes the effect of property right for a certain term. That is why, the both readings of "core of right" belonging different periods would have the same conclusion for the actual problem.

It must be noted that the Constitutional Court combines protection of property right in means of legal certainty principle in its last term decisions. (Yaltı, 2017: 16) If the law is not predictable or unclear, and there is not an administrative regulation clarifying the law, it is a violation of the taxpayer's property right (Const. Court., E. 2013/6842, 20.04.2016)

3.3. Ability to Pay Principle

In the first paragraph of the Article 73 of the Constitution, it says that "Everyone is liable to pay taxes, according to his financial power, in order to meet public expenditures. According to ability to pay principle, taxation must be based on the real power of income. Considering the regulation TPC Rep. Art. 298/Ç and Prov. Art. 32 together, regardless of consequences of the Art. 31/7, the actual legislation brings a positive step for taxpayers to have an option to adjust their statements when the main rule's (Rep. Art. 298/A) conditions do not exist.

4. Conclusion

At the Finance Symposium held in 1990, Prof. Dr. Özhan Uluatam's presentation titled "Inflation and Taxation" started with the words, "In our age, most of the societies look like patients who cannot get rid of the inflation virus that has entered their bodies" (Uluatam, 1990). 32 years later, those words are still valid today…

Inflation as an economic concept, changes tax burden, increases progressive income tax, causes unfair taxation of interests and distorts taxation of income. The inflation adjustment regulation of the Tax Procedure Code is a tool which aims to clear the financial statements from the effects of inflation to eliminate the negative effects of inflation on income taxation.

Subjecting the financial statements to inflation adjustment is not only a liability for the taxpayer, but also an application that protects the property right in terms of revealing the real financial power of the taxpayer. The application of TPC Rep. Art. 298 is more than an accounting mechanism, it is a legal tool for taxpayer's rights in terms of inflation.

References

Batirel, Ö. F. (1995). "Enflasyon ve Vergi Sistemi İlişkisi Üzerine", Vergi Dünyası, 172, pp. 24-31.

Dilemre Öden, B. & Bilici, N. (2022). "Son Değişiklikler Çerçevesinde Yeniden Değerleme Uygulaması", Prof. Dr. Güneri Akalın'a Armağan Kitabı, Maliye Teorisi: Kuram ve Politika, (Ed.) Prof. Dr. Erdem Seçilmiş, Prof. Dr. Pelin Varol İyidoğan, Ankara, Hacettepe Üniversitesi Yayınları, pp. 89-96.

Öncel, M. (1995). "Enflasyon ve Vergilendirme", AÜHFD, 44 (1) pp. 489-519.

Örücü, E. (1975). "1961 Anayasası ve Anayasa Mahkemesine Göre Hakkın Özü Kavramı ve Mülkiyet Hakkının Özü", 41 (3, 4), 145-161.

Sağlam, F. (1982). *Temel Hakların Sınırlandırılması ve Özü*, Ankara, AÜSBF Yayınları.

Uluatam, Ö. (1990). "Enflasyon ve Vergileme", 6. Maliye Sempozyumu, 21-23 Mayıs 1990, Antalya.

Yaltı, B. (2017). "Vergisel Alanda Kanun Kavramının Yorumu: Anayasa Mahkemesinin Yaın Tarihli Kararlarına İlişkin Bir Değerlendirme", Vergi Sorunları, 341, pp. 9-25.

TAX POLICY TO SUPPORT FIGHT AGAINST INFLATION

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Abstract

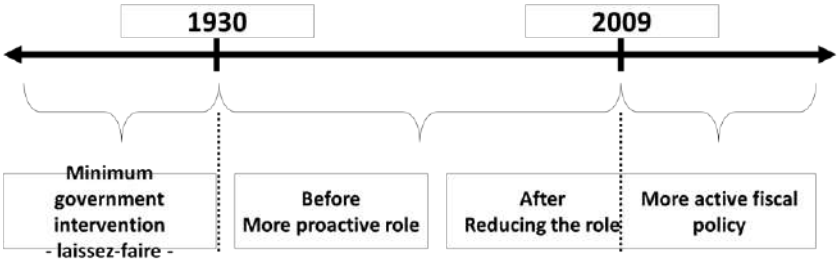
What the size and role of the government in an economy should be is a long-lasting discussion. One dimension of this discussion is the use of monetary policy and fiscal policy to fight against inflation. The monetary policy has a direct link with price stability. Fiscal policy, on the other hand, has an indirect effect on prices through its effects on aggregate demand. Demand-pull inflation is the result of an increase in aggregate demand exceeding aggregate supply. To decrease aggregate demand taxes, one of the fiscal policy tools, can be increased. Increases in taxes will mainly decrease disposable income. As a result, the aggregate demand and the general price level will decrease. However, increasing taxes may not be that easy for the governments because it may result in losing votes. Also, increased tax revenues will decrease the budget deficit and the interest rate. This will cause inflation. The tax response may have lags, which will reduce its effects on inflation. One of the issues to be considered is the automatic stabilization characteristic of taxes. On the other hand, considering the recent price hikes in energy and food products, governments are implementing tax measures in an expansionary manner by decreasing taxes to increase the purchasing power of households and businesses. A recent report by the Ministry of Treasury and Finance states that the revenue foregone due to the automatic adjustment of taxes on fuel amounted to TL 46 billion. But this has reduced inflation by 2,48 percentage points in the first eight months of 2021. In this article, this controversy is reviewed.

Keywords: Fiscal Policy, Monetary Policy, Tax Measures, Inflation Targeting
JEL Code: H2, E31

1. Introduction

Should fiscal policy support the fight against inflation? The timeline in Figure 1 shows until a global crisis as in 1930, the size of the government is considered to be small. This implies that government intervention in the economy should be limited. Right after the crisis governments are invited to put the economy back on track. We see the same approach before and after the 2009 crisis.

Figure 1: Timeline of the Role of the Governments



Source: Adapted from Horton and El-Ganainy, 2022.

It is clear that the government is pushed back in the good times and called for duty in bad times. However, government intervention or economic decision-making of governments has two main tools: monetary policy and fiscal policy. Implementation of these policies may change prices in the economy. This means that the policies of the government may affect inflation.

In this article, the government decisions that affect the economy are discussed. The focus is on fiscal policy and especially on tax policy. Tax policy may support inflation through its effects on aggregate demand. Recent price hikes in energy and food products led the governments to implement several measures, taxes being the most chosen measures among both advanced countries and emerging and developing countries. Together with these measures from a global perspective, the relationship between tax policy and inflation in Türkiye is presented taking two reports of public institutions into account. The article concludes with the issues to be considered while determining tax policy in the fight against inflation.

2. Government Decisions Affecting Economy

Governments in general have three objectives to intervene in the economy. The first objective is to provide goods and services such as safety and security, health, education and infrastructure. The second one is to ensure macroeconomic stability. This short-term objective includes stimulating the economy and fighting against inflation among others. The third one is to provide sustainable growth in the long term by reducing poverty, improving infrastructure, and others.

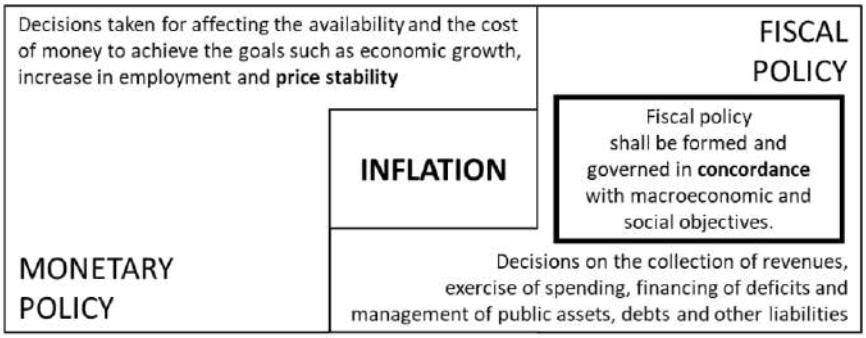
The tools to achieve the above-mentioned objectives are mainly monetary policy and fiscal policy. In Turkey, for example, The Central Bank of Turkey defines monetary policy as the decisions taken for affecting the availability and the cost of money to achieve the

goals such as economic growth, increase in employment and price stability. (The Central Bank of the Republic of Türkiye, 2022). According to Article 4 of Law, no 1211 on The Central Bank of the Republic of Türkiye the primary objective of the Bank shall be to maintain price stability. Therefore, the primary objective of the Central Bank provides a direct relationship between monetary policy and inflation: implementing monetary policy to achieve price stability.

Fiscal policy on the other hand covers the decisions on public finance. According to Article 4 of Public Financial Management and Control Law, no 5018 public finance consists of the collection of revenues, the exercise of spending, financing of deficits and management of public assets, debts and other liabilities. In this respect, there is no direct connection between fiscal policy and inflation. However, one of the fundamental principles of public finance listed under Article 5 of Law no 5018 is that fiscal policy shall be formed and governed in concordance with macroeconomic and social objectives. Here the keyword that connects fiscal policy with inflation is "concordance". Hence, fiscal policy may support the fight against inflation.

In this context, inflation is at the intersection of monetary and fiscal policies. While monetary policy aims at maintaining price stability, fiscal policy should be formed and governed in concordance with the fight against inflation. Figure 2 shows this interaction.

Figure 2: Monetary – Fiscal Policy Interaction against Inflation



3. Main Heading

Inflation is the continuous increase in the prices of goods and services in an economy. And one type of inflation is called demand-pull inflation. This type of inflation occurs when the aggregate demand increases over the aggregate supply. In this case, more demand than supply will result in price increases. To reverse this increase in the short-term aggregate demand must be reduced. Taxes may support the fight against inflation by contributing to the reduction of aggregate demand through its effects on the components of aggregate demand. Changes in taxes will directly affect public expenditures (G) and indirectly affect private consumption I, investment (I) and net exports (NX).

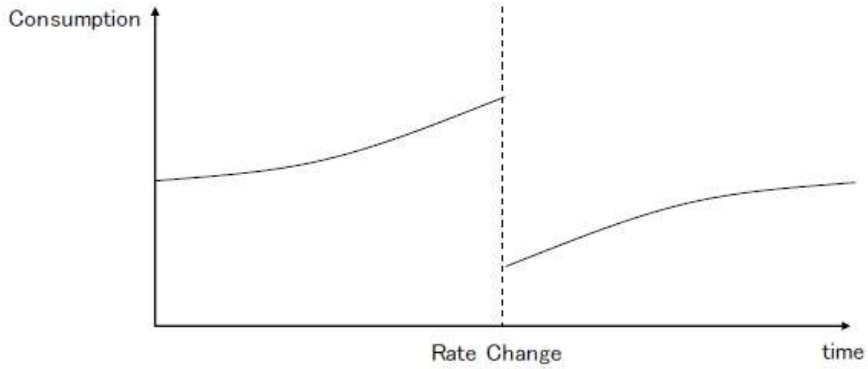
The fiscal policy has two tools: public expenditures and taxes. And it has two types: expansionary and contractionary. Implementing expansionary fiscal policy through

increasing expenditures and/or decreasing taxes will increase the aggregate demand. On the contrary, implementing contractionary fiscal policy through decreasing expenditures or increasing taxes will decrease the aggregate demand. The focus of this article is using taxes to decrease aggregate demand and as a result to support the fight against inflation.

Taxes are mainly classified into three groups: income taxes, consumption taxes and property taxes. Income taxes are collected on the income of individuals and corporations. These taxes decrease disposable income and so the aggregate demand will decrease as well. A study by the IMF assesses the relationship between property taxes and house price volatility. It is argued that taxing property is a strong tool to depress volatility. According to the findings of the study, if the property tax were increased by 0,5 per cent, the price volatility would decrease between 0,5-5,5 per cent (Poghosyan, 2016).

The effects of consumption taxes are controversial. Increasing consumption taxes means increasing total tax revenues, which is a contractionary fiscal policy. And this is what we are looking for decreasing the aggregate demand. However, consumption taxes are embedded in the prices of goods and services. Any increase in consumption taxes will reduce the aggregate demand but also increase the price level. The net effect is ambiguous. Another issue is the announcement of the VAT change rate before the change is implemented. If the government announces a VAT rate increase, which will take place on the declared date, people may increase their consumption before the rate change. They will stock their needs to protect themselves from price increases. But this means that aggregate consumption will increase before implementing the rate increase. This will diminish the effect of the contractionary tax policy right before it is implemented (Miki, 2011). Graph 1 shows the movement of aggregate consumption before and after the VAT rate is raised.

Graph 1: Movement of Aggregate Consumption when the VAT Rate is Raised

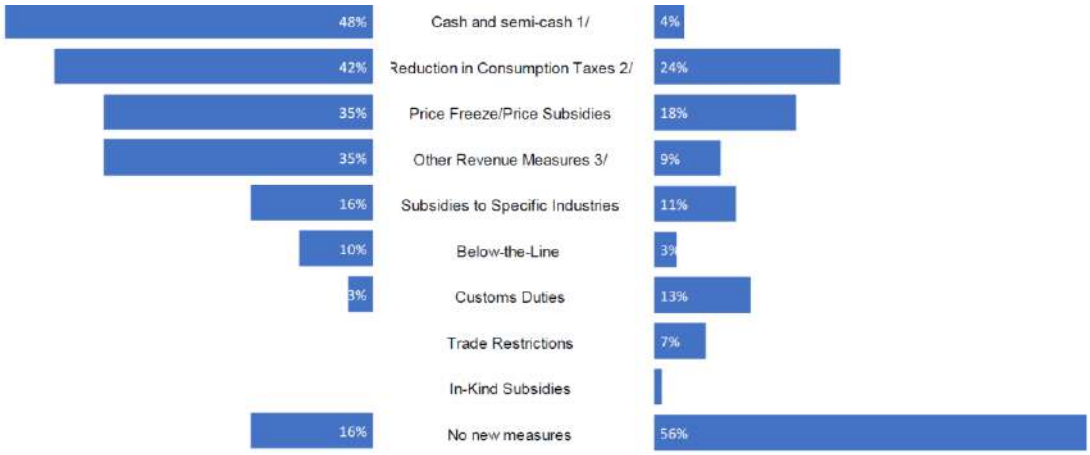


Source: Miki (2011)

4. Tax Response to Fight against Inflation

The world is facing price hikes in energy and food. Countries are responding to these high prices with some policy tools. Graph 2 shows these tools by grouping the countries into two: the first group is developed economies (31 countries) and the second group is emerging and developing economies (103 countries). Nearly all advanced countries implemented at least one of the tools. However, less than half of the emerging and developing countries used at least one of the tools. The main reasons behind this are the continuity of the dependency on current energy and food subsidies, narrow fiscal space and the inability to widen the social safety net in emerging and developing economies (Amaglobeli et. Al., 2022).

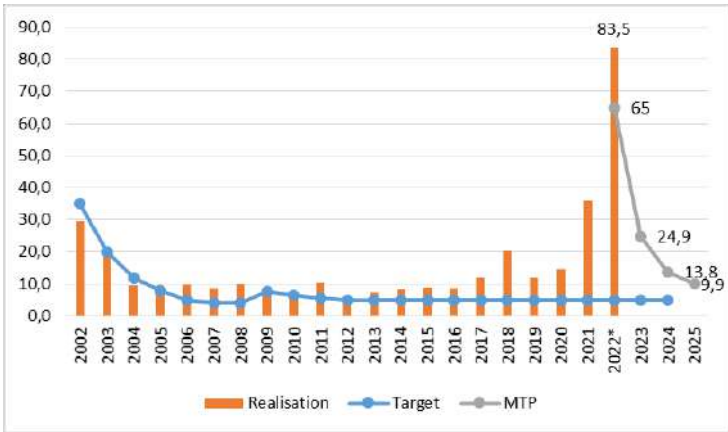
Graph 2: Measures in Response to High Energy and Food Prices



Source: Amaglobeli et. Al. (2022).

In Turkey, an accompanying report on the fight against inflation to the eleventh development plan states that high public expenditures have played an important role in growth. However, using taxes and price adjustments to cover the increasing budget deficit had negative effects on inflation. The calculated effect for the last decade is 2 percentage points. And specifically in 2016, the inflation target of the Central Bank was 5 per cent and the realization was 8,5 per cent. 1,1 percentage points of the difference between the target and the realization were stemming from these tax and price adjustments (T.C. Kalkınma Bakanlığı, 2018). Graph 3 shows the Central Bank's inflation target, realizations and Medium Term Programme (2023-2025) (MTP) estimations.

Graph 3: Inflation Targets and Realizations, %



* As of September 2022

Source: TURKSTAT and Central Bank Data

According to the Public Finance Report of the Ministry of Treasury and Finance, another public report, the effects of the automatic price adjustment mechanism on inflation in the period of January-August 2021 are calculated as -1.42 points direct, -1.06 points indirect and -2.48 points in total at the expense of TL 46 billion revenue loss (T.C. Hazine ve Maliye Bakanlığı, 2021).

Consequently, it should be taken into account that the primary objective of tax policy is to raise revenue to fund public expenditures. And an effective tax system should provide fairness, adequacy, simplicity, transparency and administrative ease. In other words, the tax system should be clear, easy to follow and manageable both for the taxpayer and the tax administration. Although it is challenging to use tax policy against inflation, tax measures taken may support the fight against inflation.

5. Conclusion

In theory, taxes are considered a policy tool to fight against inflation. And in practice governments use taxes in response to price hikes. However, there are some issues to be considered. First of all increasing taxes as a policy choice may cause losing votes. Secondly, when taxes are increased, as a consequence the tax revenues may increase, which will decrease the pressure on the state budget. This will result in a reduction of interest rates, which is equal to an expansionary monetary policy. And this type of monetary policy will increase inflation. Recognizing the economic situation, preparing tax responses and implementing the measures may take time, which will cause us to be late in fighting against inflation. Another issue is taxes being automatic stabilizers. When the economy grows tax revenues will automatically increase, which is equivalent to contractionary fiscal policy. In contrast, when the economy shrinks, tax revenues will automatically decrease, which is equivalent to expansionary fiscal policy. These issues must be taken into account to support the fight against inflation through tax policies.

References

Amaglobeli, D., Hanedar, E., Hong, G. H., & Thévenot, C. (2022). Fiscal Policy for Mitigating the Social Impact of High Energy and Food Prices. IMF Note 2022/001, IMF, Washington, DC.

Miki, B. (2011). The Effect of the VAT Rate Change on Aggregate Consumption and Economic Growth. Working Paper Series Bo 297, Columbia University in the City of New York, Center on Japanese Economy and Business.

Poghosyan, T. (2016). Can Property Taxes Reduce House Price Volatility? Evidence from U.S. Regions. IMF Working Paper WP/16/216, IMF, Fiscal Affairs Department.

Republic of Turkey Ministry of Finance Strategy Development Unit. (2013). The Public Financial Management and Control Law No. 5018. Ankara. Retrieved April 20, 2022, from https://ms.hmb.gov.tr/uploads/2019/01/Public-Financial-Management-and-Control-Law-No.-5018.pdf

T.C. Hazine ve Maliye Bakanlığı. (2021). Kamu Maliyesi Raporu 2021-II.

T.C. Kalkınma Bakanlığı. (2018). On Birinci Kalkınma Planı (2019-2023) Enflasyonla Mücadele Özel İhtisas Komisyonu Raporu. Ankara.

The Central Bank of the Republic of Türkiye. (2022). Para Politikası. Retrieved April 20, 2022, from The Central Bank of the Republic of Türkiye Web Site: https://www.tcmb.gov.tr/wps/wcm/connect/TR/TCMB+TR/Main+Menu/Temel+Faaliyetler/Para+Politikasi#:~:text=Para%20politikas%C4%B1%3B%20ekonomik%20b%C3%BCy%C3%BCme%2C%20istihdam,olarak%20al%C4%B1nan%20kararlar%C4%B1%20ifade%20etmektedir.

Türkiye Cumhuriyet Merkez Bankası. (n.d.). Retrieved April 22, 2022, from https://www.tcmb.gov.tr/wps/wcm/connect/d6ac47f4-379f-43da-bf2b-7ad855dca0ff/The_Law_on_the_Central_Bank_of_the_Republic_of_Turkiye.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-d6ac47f4-379f-43da-bf2b-7ad855dca0ff-nWcODLa

THE RELATIONSHIP BETWEEN RIGHT TO PROPERTY AND TAXATION IN THE DECISIONS OF THE CONSTITUTIONAL COURT

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Abstract

The right to property is one of the fundamental rights guaranteed both by the European Convention on Human Rights and the Constitution of the Republic of Turkey. This right is not only a constitutional right but also protected by the ECHR, the jurisprudence by the Constitutional Court, as of the European Court of Human Rights, on the limits of interference with the right to property has started to emerge. Especially after the "Individual Application" mechanism, which was included in the system in 2010, the jurisprudence has become systematised. From the Constitutional Court's point of view, when Article 35 of the Constitution is analysed, it is seen that the Constitution contains three rules regarding interference with the right to property. The text of the Article includes the right to peaceful enjoyment of property by stating that everyone has the right to property. It determines the conditions under which the right to property can be restricted. At the same time it outlines the general framework of the conditions for deprivation of property. Finally, by stipulating that the use of the right to property cannot be contrary to the public interest, the state is enabled to control and regulate the use of property. In its assessment of the right to property within the scope of taxes, the Constitutional Court considers that taxes and similar obligations should be examined within the scope of the state's authority to regulate or to control the use of property in the public interest. However, the Constitutional Court also states that in order for the interference with the right to property to be in conformity with the Constitution, the interference must be based on the law, have a public interest purpose and be carried out by observing the principle of proportionality.

Keywords: Right to property, European Convention on Human Rights , Individual Application, taxation, interference with property
JEL Code: K34, K38, K39

1. Introduction

The right to property is one of the fundamental rights guaranteed both by the European Convention on Human Rights (ECHR) and the 1982 Constitution - Constitution of the Republic of Turkey. Since the right to property is not only a constitutional right but also protected by the ECHR, the jurisprudence of the Constitutional Court, as of the European Court of Human Rights, has begun to form regarding the limits of interference with the right to property.

Especially after the amendment made to the 1982 Constitution by the Law, dated 5/7/2010 and numbered 5982, the "Individual Application" has systematised the jurisprudence. Although the Constitutional Court has been examining and interpreting the right to property within the framework of the provisions of the Constitution and the European Convention on Human Rights in its norm review decisions for many years, with the establishment of the individual application mechanism, especially the decisions of the Individual Application overlap with the decisions of the European Court of Human Rights (ECtHR).

The reason for behind that with the individual application, a potentially large number of applications from Turkey to the ECtHR will be decided within a domestic remedy that must now be exhausted by following the same decision-making steps.

2. Constitutional Court Decisions: Right to Property, Principles and Taxation

In the individual application mechanism, the ECtHR's judgements are applied almost verbatim and the Constitutional Court judgements always refer to the ECtHR key cases. Since it is not possible to ignore the ECtHR's interpretations on the ECHR's provisions on interference with property, it is considered appropriate first to analise the relevant provision of the ECHR and the criteria followed by the ECtHR in its judgements, (and) then to examine the relevant provisions of the 1982 Constitution and the Constitutional Court's opinion on the subject together.

Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms

Article 1

Protection of property

"Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law.

The preceding provisions shall not, however, in any way impair the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or to secure the payment of taxes or other contributions or penalties."

"Three rules" have been recognised as to how the Article 1 of the Additional Protocol to the ECHR on the right to property should be understood and interpreted. The Sporrong

and Lönnroth v. Sweden judgement[1] outlined these three rules and the James and Others v. the United Kingdom judgement[2] explained the relationship between the rules.

Rule 1 is the right to demand respect for the right to property and the right to peaceful enjoyment of one's property. The exception is the state's interferece with this. **Rule 2** concerns the deprivation of property and its conditions. **Rule 3** is the power to regulate the use of property, i.e. state interference with control property or ensure the payment of taxes.

The ECtHR recognises the right to property as an autonomous concept. In other words, it may attribute a different meaning to the right to property than the meaning attributed by national legal systems. Therefore, it takes a very broad view of the right to property: The acquisition of an economic value is sufficient for property. It is observed that the ECHR state parties benefit from a wide margin of appreciation in restricting the right to property[3] (Kratochvíl, 2011: 348).

This wide margin of appreciation is an issue that the ECtHR does not overcome or does not endeavour to overcome in its judgements. This attitude stems from the ECtHR's conviction that national judges are able to better appreciate the public interest than international judges.[4]

In the Constitution of the Republic of Turkey, it is seen that the "Right to Property" is regulated in the Second Chapter of the Constitution titled "Rights and Duties of the Individual" as follows:

Constitution of The Republic of Turkey

Chapter Two

Rights and Duties of the Individual

"XII. Right to property

ARTICLE 35- *Everyone has the right to own and inherit property. These rights may be limited by law only in view of public interest. The exercise of the right to property shall not contravene public interest."*

According to the decision of the Constitutional Court on Cancellation of the Rule Providing for the Collection of the Unjust Part of the Lawsuit Filed Against the Payment Order with a Ten Percent Increase:[5]

"The right to property is the right to property without harming the rights of others and in accordance with the laws. To use what he owns as he wishes, provided that he complies with the limitations, and to utilise its products. It is a right that allows the owner to benefit

[1] https://hudoc.echr.coe.int/rus#{%22itemid%22:[%22001-57579%22]}
[2]https://hudoc.echr.coe.int/app/conversion/pdf?library=ECHR&id=001-73433&filename=JAMES%20v.%20THE%20UNITED%20KINGDOM.pdf
[3] Jan Kratochvíl, "The Inflation of the Margin of Appreciation by the European Court of Human Rights", Netherlands Quarterly of Human Rights, Vol. 29/3, 324–357, 2011. 348
https://www.corteidh.or.cr/tablas/r26992.pdf
[4]https://hudoc.echr.coe.int/app/conversion/pdf?library=ECHR&id=001-73433&filename=JAMES%20v.%20THE%20UNITED%20KINGDOM.pdf
[5] Constitutional Court, E.2021/119, K.2022/48, 21/4/2022.

from and dispose of his property. In this context, the restriction or deprivation of any of the owner's powers to use the property, to benefit from the products and to dispose of the property is a violation of the right to property."[1]

Regarding the "existence and type of interference", the Constutional Court states as follows:

"When the Article 35 of the Constitution and other provisions touching the right to property are evaluated together, it is seen that the Constitution contains three rules regarding interference with the right to property. Accordingly, the first paragraph of the Article 35 of the Constitution includes the right to peaceful enjoyment of property by stating that everyone has the right to property, and the second paragraph sets out the framework for interference with the right to peaceful enjoyment of property. In the second paragraph of the Article, the conditions under which the right to property may be restricted in general are determined and the general framework of the conditions of deprivation of property is also drawn. In the last paragraph of the article, the use of the right to property cannot be contrary to the public interest, thus enables the state to control and regulate the use of property. Some other articles of the Constitution also contain special provisions enabling the control of property by the state. It should also be noted that the deprivation of property and the regulation of property are special forms of interference with the right to property"[2].

In this context, it is observed that the ECtHR and the Constitutional Court's interpretations of the right to property overlap.

As regards taxes and similar obligations, the Constutional Court stated that *"There is no doubt that tax obligations lead to a decrease in assets"* and expressed the opinion that *"Taxes and similar obligations must be examined within the scope of the state's power to regulate the use of property or to control the use of property for public benefit".*[3]

Regarding the criteria for determining the violation of the right to property, the Constitutional Court, in the *Ford Motor Company Decision*, states that *"The primary criterion to be taken into account in interferences with the right to property is that the interference is based on the law. When it is determined that this criterion is not met, it will be concluded that the right to property is violated without examining the other criteria".*[4]

In some of its other judgements, the Constutional Court emphasises the priority of the criterion of *"the interference being based on law"* as follows: *"The legal basis of the interference requires the existence of a formal law. The absence of a formal legal provision enacted by the Grand National Assembly of Turkey deprives the interference with the right of constitutional grounds."*[5], *"In addition to the existence of a law, the text*

[1] Constitutional Court, E.2017/21, K.2020/77, 24/12/2020, § 137.
[2] Constitutional Court, Individual Application Decision - Recep Tarhan and Afife Tarhan, B. No: 2014/1546, 2/2/2017, §§ 55-58.
[3] Constitutional Court, Individual Application Decision - Arif Sarıgül, B. No: 2013/8324, 23/2/2016, § 50; Yapı ve Kredi Bankası Anonim Şirketi (2), § 39.
[4] Constitutional Court, Individual Application Decision - Ford Motor Company, B. No: 2014/13518, 26/10/2017, § 49.
[5] Constitutional Court, Individual Application Decision - Ali Hıdır Akyol and Others [GK], B. No: 2015/17510, 18/10/2017, § 56.

and application of the law must also have a content in which individuals can foresee the consequences of their behaviour, have legal certainty that does not leave room for arbitrariness and be accessible. In other words, the quality of the law is also important in determining whether the condition of compliance with the law is fulfilled." [1]

According to the Constitutional Court, *"accessibility"* refers to the publicity of the relevant legal regulation, i.e. its publication (Špaček, s.r.o./Czech Republic, B. No: 26449/95, 9/11/1999, §§ 56-61). The *"foreseeability"* means that the consequences that may arise in case of the application of the rule of law can be predicted in advance (Hentrich v. France, B. No: 13616/88, 22/9/1994, § 42).

In the *İskenderun Demir ve Çelik A.Ş.* judgment, in which the Constutional Court ruled that the taxation process constituted an interference with the right to property, the following opinion was given: *"When Articles 13, 35 and 73 of the Constitution are evaluated together, it is understood that in order to prevent arbitrariness in the event of interference with the right to property through taxation, the interference must be based on a provision of law that regulates the main basic elements of the tax such as the event giving rise to the tax, the liable, the responsible, the tax base, the upper and lower limits of the amounts and rates, the levy, accrual and collection procedure, sanctions and statute of limitations in an accessible, specific and predictable manner"*[2]

In the *İş Bankası* judgment, the Constutional Court emphasised that the Constitution of the Republic of Turkey provides a more secure protection than the Convention by stipulating that all restrictions shall be made by law in absolute terms (see Constitutional Court, Individual Application Decision No: 2013/817, 19/12/2013, § 31). However, the ECtHR interprets legality broadly by recognising that sub-statutory regulations, the principles developed through case-law based on stabilised judicial decisions and even customary law can also satisfy the requirement of legality (see Malonei v. the United Kingdom, Constitutional Court, Individual Application Decision No. 8691/79, 2/8/1984, § 66-68; The Sunday Times v. the United Kingdom, Constitutional Court, Individual Application Decision No. 6538/74, 26/4/1979, § 47; Špaček, s.r.o.v. the Czech Republic, B. No: 26449/95, 9/11/1999, § 57).

As in the Article 35 of the 1982 Constitution, it is stated in the Protocol No. 1 of the Convention that the right to property is not an absolute right and may be restricted in the public interest. This restriction is of course not unconditional. There must be a balance between the public interest pursued and the right restricted, and there are principles foreseen to ensure this balance.

The principle of proportionality guaranteed in this sense under the Article 13 of the Constitution consists of three sub-principles: the principles of suitability, of necessity, and of proportionality in the narrow sense.[3]

[1] Constitutional Court, Individual Application Decision - Necmiye Çiftçi and others, B. No: 2013/1301, 30/12/2014, § 55; Türkiye İş Bankası A.Ş. [GK], B. No: 2014/6192, 12/11/2014, § 44.
[2] Constitutional Court, Individual Application Decision - İskenderun Demir ve Çelik A. Ş. [GK], B. No: 2015/941, 25/10/2018, § 67.
[3] In terms of balance, about the usage of similar criteria in the German Constitution see. Robert ALEXY, Constitutional Rights, Balancing, and Rationality Ratio Juris. Vol. 16 No. 2 June 2003 (131–40) p. 135. https://www.corteidh.or.cr/tablas/a63.pdf

Suitability means that the foreseen restriction is suitable for achieving the desired objective. N*ecessity* refers to the compulsory restriction in terms of the objective to be achieved, in other words, it is not possible to achieve the same objective with a lesser restriction. Last, *proportionality in the narrow sense* means that a fair balance must be observed between the restriction imposed on the right and the objective to be achieved. The ECtHR uses the term *fair balance* in this context. However, within the framework of the state's positive obligations regarding the right to property, the implementation of the measures in question should not impose an excessive burden on the property owner.

3. Conclusion

The peaceful enjoyment of the right to property is the rule. However, there are certain exceptions in the usage of this right. The first exception is that this right may be restricted or deprived by the state when the public interest is the case. The second exception is that the state may regulate the exercise of this right, especially in terms of taxation.

There are some conditions for these exceptions. These are as follows: 1- There must be accessible and foreseeable legal basis that will ensure rule of law and will not allow arbitrariness, 2- The public interest that is necessary and cannot be achieved by a lesser restriction must be the case, 3- The restriction must be suitable, necessary and proportionate in the narrow sense within the framework of the principle of proportionality.

Failure to fulfil any of these conditions will lead to a violation of the right to property.

In this sense, by observing a fair balance, regulations that do not impose an excessive burden on the property owner are required.

In the evaluation of all mentioned above the issue of prioritisation among fundamental rights should be taken into consideration. The fact that the right to property is not regarded as an absolute right, and that it may be limited to different extents in different countries and periods of time according to the economic and political approach in the face of other rights and "public interest", the definition of which is also not absolute, plays an unconditional role in the appreciation of the public interest deemed necessary.

References

Journals/Periodicals;

Alexy, R. (2003). Constitutional Rights, Balancing, and Rationality Ratio Juris. Vol. 16 No. 2 June 2003 (131–40) https://www.corteidh.or.cr/tablas/a63.pdf

Kratochvíl, J (2011).“The Inflation of the Margin of Appreciation by the European Court of Human Rights”, Netherlands Quarterly of Human Rights, Vol. 29/3, 324–357, 2011. 348 https://www.corteidh.or.cr/tablas/r26992.pdf

Decisions;

https://hudoc.echr.coe.int/rus#{%22itemid%22:[%22001-57579%22]}

https://hudoc.echr.coe.int/app/conversion/pdf?library=ECHR&id=001-73433&filename=JAMES%20v.%20THE%20UNITED%20KINGDOM.pdf

https://hudoc.echr.coe.int/app/conversion/pdf?library=ECHR&id=001-73433&filename=JAMES%20v.%20THE%20UNITED%20KINGDOM.pdf

Constitutional Court, E.2021/119, K.2022/48, 21/4/2022.

Constitutional Court, E.2017/21, K.2020/77, 24/12/2020, § 137.

Constitutional Court, Individual Application Decision - Recep Tarhan and Afife Tarhan, B. No: 2014/1546, 2/2/2017.

Constitutional Court, Individual Application Decision - Arif Sarıgül, B. No: 2013/8324, 23/2/2016.

Constitutional Court, Individual Application Decision - Ford Motor Company, B. No: 2014/13518, 26/10/2017.

Constitutional Court, Individual Application Decision - Ali Hıdır Akyol and Others, B. No: 2015/17510, 18/10/2017.

Constitutional Court, Individual Application Decision - Necmiye Çiftçi and others, B. No: 2013/1301, 30/12/2014.

Constitutional Court, Individual Application Decision - İskenderun Demir ve Çelik A. Ş. [GK], B. No: 2015/941, 25/10/2018.

https://www.corteidh.or.cr/tablas/a63.pdf

Witness' Statements During Tax Proceedings Within The Framework Of The European Court Of Human Rights Decisions

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Abstract:

The witness is a third person who relays what he knows about the event subject to trial through his five senses (Kunter, 1989: 343). The witness statement is regulated as evidence in both the Code of Civil Procedure ("CCP") and the Criminal Procedure Code ("CPC"). Witness evidence is one of the most important tools of proof in criminal proceedings where freedom of evidence applies (Güngör, 2015: 307-318). In civil procedure, however, the possibility of using witness as evidence is very limited in terms of monetary disputes.

When we look at the tax proceedings where the rules of administrative judgment procedure are valid, we see that in practice, tax courts do not conduct hearings during the trial phase. The reasons of this situation was listed by the doctrine as the fact that the written trial procedure has been accepted in the Administrative Judgment Procedure Law ("AJPL") and that there is no provision regarding the hearing of witnesses and no explicit reference to the institution of "witness" in Article 31, which regulates that the relevant provisions of the CPC will be applied in some cases where there is a gap in the law (For detailed information, see Gümüşkaya, 2015: 286).

However, the absence of a clear provision in the AJPL regarding hearing minutes and witnesses in the hearing or trial, or the principle of written trial procedure itself should not be interpreted as a prohibition of hearing witnesses in administrative judgment procedure (Kaşıkcı, 2017: 142). Whereas; in accordance with Article 3/B of the Tax Procedure Law, it is regulated that the statements of witnesses can be accepted as evidence, provided that they "have a natural and clear relationship with the taxable event". TPL art. 3/B is a procedural rule that will be applied not only in the taxation phase but also in the tax judgment phase (Güneş, 1986: 490 et al.; Rençber, 2021: 71 et al.). According to TPL art. 3/B, "The event giving rise to the tax and the real nature of the transactions related to this event can be proven with all kinds of evidence, except oath." also confirms this view in essence, since "oath" is a means of proof that can only be used at the trial stage. At this point, the method of systematic interpretation[1] requires thinking that the will of the Legislator, who has discussed the "oath" and "witness" evidence in the same paragraph, accepts the witness evidence as a means of proof in tax proceedings.

Beyond these discussions, the restriction of taxpayers' ability to apply for witness statements during the trial means interference with the right to a fair trial.

As a matter of fact, the European Court of Human Rights ("ECtHR") reveals the importance of using witness evidence in tax proceedings in terms of the right to adversarial proceedings in two recent

[1] The systematic interpretation method is the method in which the meaning of a legal provision is determined by taking into consideration its place in the structure of the law and its connection and relationship with other legislative provisions (Öncel et al, 2019: 24).

judgments regarding witness evidence. Within the scope of the study, the ECtHR's Pakozdi v. Hungary judgment dated 25 November 2014[2] and Chap Ltd v.Armenia dated 4 May 2017[3] will be examined and the possible effects of the ECtHR's view on witness evidence in tax proceedings will be evaluated in terms of Turkish Tax Proceedings Law.

In the case subject to in Pakozdi v. Hungary decision, a tax audit was carried out on Ms. Ildido Pákozdi, covering the years 1999-2001, by the Hungarian Fejér Region Regional Tax Center and a penalty assessment was made due to some funds that she received from her father and invested in her company as capital. Pákozdi objected to the penalty assessment of the tax administration, and the Tax Administration rejected Pakozdi's objections. Thereupon, Pakozdi filed a lawsuit in the District Court against the rejection decision of the Tax Administration. The District Court overturned the Tax Administration's decisions. This time, the Tax Administration appealed to the Supreme Court against the decision of the District Court.

The Supreme Court overturned the District Court's decision, citing that Pákozdi's father did not provide any documents, transfer records or similar supporting evidence proving that his father had given him credit, and therefore the father's written statements were inadmissible. No hearing was held at any stage of the proceedings, including the Supreme Court, and Pakozdi's father's statements were not heard despite Pakozdi's request.
The ECtHR held that the Court of Cassation should have held a hearing or should have sent the file to the District Court for a hearing in order to assess the evidential strength of the written statements of the applicant's father and making such a decision violated the applicant's right to an adversarial trial. In its decision, the ECtHR emphasized that a detailed evaluation of the power of proof should be made even if there is no open hearing request in Pazkodi's application to the Court of Cassation. As can be understood from the ECtHR decision, the Court of Cassation rejected the testimony of witnesses in this case, as there was no other written evidence commonly found in similar proceedings, however in the light of the available information, it was understood that the courts had the freedom to accept all kinds of evidence, and **the fact that the witness, who was the basis of the applicant's allegations, was not heard significantly limited the applicant's right of defense.**
Pakozdi v. Hungary decision is extremely important in terms of Turkish Tax Proceedings Law, where the principle of freedom of evidence is applied, similar to Hungarian Law. Because the ECtHR has revealed that in cases where the principle of freedom of evidence is valid - in other words, the evidence to be used in the trial is not explicitly limited by law - an evidence that will contribute to the evaluation of the legality of the taxation process must be taken into consideration by the judicial authorities. The ECtHR calls for additional care and a hearing in the context of the fairness of the proceedings, **especially in cases where the burden of proof is on the taxpayer.**
In the Chap Ltd v. Armenia decision, the ECtHR ruled that the failure to listen to the witnesses used by the tax administration during the tax investigation violates the right to a fair trial.
In the case subject to the decision, Chap Ltd is a private company engaged in regional television broadcasting in Armenia. The Revenue Administration of the Republic of Armenia carried out a tax inspection with the Chap Ltd Company and a penalty of approximately 50,000 Euros was assessed against the company. During the tax inspection process, the statements of businessmen who advertised the company were consulted by the tax administration. However, these witness statements applied by the tax administration and the information and documents provided by them could not be examined by the applicant in the judicial process carried out for the nullification of the or tax/penalty notice. In addition, the applicant's requests for the hearing of witnesses during the trial were also rejected.

[2] ECtHR, Pakozdi v. Hungary, Application No: 51269/07, 25.11.2014
[3] ECtHR, Chap v. Armenia, Application No: 15485/09, 4.5.2017

According to the ECtHR, no original tax, additional tax and tax penalty has been imposed against the Company, based only on the witness statements and the documents submitted by the witnesses, during the tax investigation phase. There are other evidences against the Company. With this; The Court, which is hearing the lawsuit filed for the nullification of the administrative act, relied on the tax administration's examination report and therefore the witness statements processed in this report, in addition to other information and documents, and took them as a basis for its decision. In other words; relevant witness statements played a decisive role in the resolution of the dispute.
This being the case, Chap Ltd Company's request to hear witnesses during the trial had to be granted because there is no other way to test the veracity of their statements. In this respect, Chap Ltd Company was deprived of an important procedural guarantee in the disputed case.
As a result;
We believe that in accordance with Article 3 of the Tax Procedure Law, titled "Proof", witness evidence can be used in tax proceedings, and a roundabout way of conveying the written statements of witnesses to the court will not fulfill the same function, because the judge can ask questions to the witness in order to speak of a true testimony, if he sees inconsistencies in the answers he receives or if he feels the need for a good understanding, he should be able to ask additional questions and only thus can form his conscience,
In the said ECtHR decisions, it is stated that the refusal of the requests for the hearing of witnesses constitutes a violation of the principle of adversarial trial, especially in Pakozdi v. Hungary and the part of the Hungarian judgment, which states that if there is no clear limitation that witnesses cannot be heard in systems where the freedom of evidence regime is adopted, must be heard, sets a precedent.

JEL CODE: K34

KEYWORDS: Witness statement, right to demand an adversarial trial, right to a fair trial, tax judgment law, freedom of evidence principle

BIBLIOGRAPHY

Gümüşkaya, G. (2015). *Vergi Hukukunda İspat***,** İstanbul Üniversitesi Sosyal Bilimler Enstitüsü Yayınlanmamış Doktora Tez, İstanbul.

Güneş, G. (1986) "Vergi Hukukunda Delilller", *İÜHFM,* C. LI, ss.475-494.

Güngör, D. (2015). "Ceza Muhakemesinde Tanık Beyanının Delil Değeri Üzerine Bazı Tespit ve Değerlendirmeler", *İnönü Üniversitesi Hukuk Fakültesi Dergisi*, Cilt: 6 (2), ss. 307-318.

Kaşıkcı, M. (2017). *Vergi Yargılaması Hukukunda Yargılamanın Yenilenmesi*, İstanbul: Filiz Kitabevi.

Kunter, N. (1989). *Muhakeme Dalı Olarak Ceza Muhakemesi Hukuku***,** İstanbul: Beta Yayınevi.

Öncel, M., Kumrulu, A., Çağan, N., Göker, C. (2019). Vergi Hukuku, Ankara: Turhan Kitabevi.

Rençber, A. (2021) "Vergi Hukukunda Tanık Delili: Ceza Muhakemesi Kanunu'nun Vergi Yargılamasında Uygulanabilirliği", *7. Uluslararası Asos Kongre'si Hukuk Sempozyumu Tam Metin Kitabı,* Eskişehir, Türkiye, 27 Nisan - 29 Mayıs 2021, ss.65-82.

Theoretical Discussions on Financial Privileges And Financial Discrimination: Are Menstrual Products Merit Goods?

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Abstract:

Tax expenditures consisting of exceptions, exemptions and deductions are not informality caused by the government itself. These practices, which create an ordinary deviation from the standard tax system, have the feature of being for socio-economic purposes determined by the government. The existence of socio-economic purposes is the ground of legitimacy of tax expenditures. But on the other hand, it is clear that the deviations that occur create financial privileges. Some authors describe these privileges caused by tax expenditures as financial discrimination, ignoring the socio-economic goals that are desired to be achieved. Privilege and discrimination are close to each other, but in terms of affirmation, the first is positive and the second is negative. For this reason, it should be discussed theoretically whether deviations in the tax system are privileges or discriminations. This discussion is important in terms of eliminating existing prejudices and intellectual confusion and contributing to the literature. In our opinion, tax expenditures are not discriminatory, they are privileged practices. However, there are also practices that create discrimination in tax systems, including those in Turkey. Discrimination with a negative image is mainly about human rights. The first examples of discrimination that come to mind are gender and racial discrimination. There are also religious, political, ethnic, sectarian, language-based, wealth-level and class-based discriminations. Political rights and freedoms prohibit all kinds of discrimination and impose responsibilities on governments to ensure that social relations are lived in accordance with the principle of equality. When the literature on discrimination is examined, it is seen that a dual title is opened as direct discrimination and indirect discrimination. Accordingly, the form of direct discrimination is an expression of the understanding of equality and means “making a difference between persons in the same or similar position”. There are no such discriminatory practices in the Turkish tax system. Tax expenditures integrated into the system for socio-economic purposes are not discrimination, they are practices that create privilege. These privileges are necessary and important. Because tax expenditures are focused on either eliminating inequality of opportunity and regulating income distribution or creating economic incentives. Indirect discrimination, which is another form of discrimination, is accepted as “legal regulations, practices and measures that are equally valid and seemingly neutral, but that have a different or more negative impact on some individuals and groups than on others”. There are such discriminatory practices in the Turkish tax system, especially in the field of indirect taxes. The ways and methods followed in the taxation of menstrual products, which are the subject of this study, are one of the clear proofs of such discrimination. The aim is to draw attention to this discrimination and to discuss the necessity of eliminating it by revealing the ways and methods. The demand for menstrual products used only by women, especially sanitary pads and tampons, is not optional but essential. Women's access to these products should be included in the basic need category and the ongoing indirect discrimination in terms of taxation should be ended. In recent years, some activists and non-governmental organizations have objected to the discriminatory taxation of these products, whose demand is inelastic, by using

the rhetoric of buffer tax, and a rather young literature has emerged in the academy. The aim of this study is to contribute to this literature. In terms of taxation, governments' attitude towards menstrual products can take five different ways. These; (i) standard rate taxation, (ii) reduced rate taxation, (iii) zero rate taxation, (iv) exemption and (v) public supply. Turkey is among the countries in the first group and this attitude of the government is evidence of indirect discrimination against women. Accordingly, it is of particular importance to address and reveal the practices in other countries. The thesis of this study is that menstrual products are merit goods. Therefore, governments need to make these products available to women free of charge. The possibility of this is an important indicator of modernity. While forgone tax revenue may be worrisome in the short term, the long-term gains that can be made by doing so are much more. Turkey has serious advantages in terms of producing cotton, which is the basic input required for menstrual products. Even only Söke plain and Söke farmers are at a sufficient level in terms of features, equipment and knowledge required for production. Pads and tampons are standard products that have a certain production technique and have completed the product development. The production of these products through a state-owned enterprise to be established has strategic importance in terms of regional development, especially employment. Providing access to manufactured menstrual products to women across the country is a government achievement in itself. Making public regulations, establishing logistics networks and delivering these products, especially to rural areas, are activities that provide economic contributions. In addition, it is a separate achievement that even the lost labor of women who cannot reach these products due to financial difficulties are brought back to the economy and social life in this way. The image of a government that produces menstrual products through state-owned enterprises, makes them available to women free of charge throughout the country, and exports these products to poor countries free of charge, has a unique value in terms of country's prestige. When Turkey becomes a country that does this, it will be a lesson to other governments. Turkey has been a country that has taught similar lessons in the past. For example, women in Turkey gained the right to vote and be elected in 1934, even before many developed countries. It is possible that a similar development, which is extremely important for the image of the country, will be repeated by providing women with free access to menstrual products and be a model for other countries. With this aspect, the study intends to be a pioneer in academic studies and projects to be carried out.

Keywords: Tax Expenditures, Fiscal Discrimination, Menstrual Products, Tampon Tax, Merit Goods

JEL Codes: H00, H20, H30, H40, H41.

Economic, Social and Fiscal Reasons of Expenditure Taxes in Türkiye: A Historical Analysis

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Abstract:

As in the world, various types of taxes on expenditure have been seen in Türkiye since the very old times. For example, the history of "bac", a kind of purchase and sales tax, dated back to the establishment of the Ottoman Empire (Aşık, 2003:73). Expenditure taxes, such as bac, which were collected from marketplaces, continued to exist under various names until the Tanzimat. However, over time, the share of these taxes in the state's tax revenues became insignificant, and many of them were abolished (Dikmen, 1945). Shortly after the establishment of the Republic of Türkiye, expenditure taxes became important again in terms of state revenues. Both the increase in public expenditures because of the developments in the world conjuncture such as the First World War and the 1929 Economic Depression, and the decrease in tax revenues in Türkiye as a result of the abolition of Aşar (T.C. Resmi Gazete, 23 Şubat, 1925, Sayı: 84) played an important role in that.

Immediately after the abolition of Aşar, the General Consumption Tax/Umumi İstihlak Vergisi (T.C. Resmi Gazete, 22 Şubat 1926, Sayı:304), which we can call the first expenditure tax in the modern sense, was put into effect as a cascade tax. This tax was abolished one year later due to difficulties in implementation, and the Wholesalers Tax/Muamele Vergisi (T.C. Resmi Gazete, 31 Mayıs 1927, Sayı:598) was introduced in 1927. The Wholesalers Tax was amended in 1931 (T.C. Resmi Gazete, 2 Ağustos 1931, Sayı:1862), 1934 (T.C. Resmi Gazete, 15 Mayıs 1934, Sayı:2701) and 1940 (T.C. Resmi Gazete, 04 Haziran 1940, Sayı:4526). It was revised many times until it was abolished in 1957. In the period the Wholesalers Tax was implemented, it was exposed to criticism from industrialists, academics and even bureaucrats working in the tax administration. These critics included shrinkage in the industry because of unfair competition against large enterprises, deterioration in tax morale, keeping quite wide the exceptions and the exemptions, leading to reverse progressivity and, low efficiency of tax revenue.

Considering the negative effects of the Wholesalers Tax on the industry, expenditure taxes were reformed and the Expenditure Tax Law (T.C. Resmi Gazete, 23 Temmuz, 1956, Sayı:9362) was enacted in 1957. By this law, a wide range of consumption and service taxes were combined, and raw materials, banking and insurance transactions, PTT and transport services were included in the tax scope. However, this new tax also contained many of the drawbacks of the Wholesalers Tax. The properties this tax having such as substantial exceptions for the raw materials, collection of the tax at a stage far from consumption, and the requirement of advance payment during the first production stage (Musabalı, 1966) negatively influenced the industry. As a result of wide range of exceptions and exemptions, this tax remained largely as a tax on fuel, textile industry and imports (Özer, 1969).

In the 1960s, the import substitution industrialization model was adopted in Türkiye. In the development plans prepared in this period. it was started to be discussed that changes in taxes should

have been made to increase the industrial investments of both the public and private sectors. In the 2nd Five-Year Development Plan (T.C. DPT,1968:109), the value added tax, which is a cascade tax, came to the agenda but could not be carried into effect. Taxes on raw materials continued to adversely affect the industrial sector. Also, some of the increase in tax revenue required for financing public investments was obtained through rises in expenditure taxes such as fuel, banking, and insurance transactions. The increasing need for revenue led to the enactment of the Financing Law (T.C. Resmi Gazete, 10 Ağustos 1970, Sayı: 13575), which introduced new taxes in 1970. In addition to direct taxes, the Financing Law also covered new expenditure taxes such as Spor Toto Tax, and the Turnover Tax (İşletme Vergisi). The Turnover Tax, which was collected in a lump sum method, led to injustice, and not all of the tax reflected to the consumers entered the state treasury, and the expected tax revenue could not be achieved. It was discussed whether the Turnover Tax, a kind of retail sales tax, was a step for the transition to the value added tax in the period it was introduced. However, this tax remained as a special sales tax, unlike the general value added tax. Wholesalers taxes, negatively influencing economic development but easy to collect, were preferred in Türkiye. The reasons of such a choice were the lack of a large and well-functioning tax organization, a rationally functioning market, and tax morale (Yaşa, 1956). The Value Added Tax (T.C. Resmi Gazete, 02 Kasım 1984), which has been on the agenda since 1972, was finalized only in 1984 after many draft laws and it entered into force in 1985. In accordance with the economic mentality of the period, the direct tax burden was tried to be reduced by this tax.

In the 1990s, the revenue needs of the state were tried to be met by increasing VAT and taxes on fuels. In 2002, the Special Consumption Tax Law (T.C. Resmi Gazete, 12 Haziran 2002) was enacted to separate general consumption taxes from special consumption taxes and to harmonize with the European Union acquis. Since the years they were introduced, VAT and SCT have formed a significant share of tax revenue. From the first expenditure taxes to the present, the share of expenditure taxes in total tax revenues in Türkiye has always been high, except in the 1970s. Although expenditure taxes are sometimes used for economic incentive such as export exemption in VAT, for economic stability as a tool of expansionary fiscal policies in recession periods or for social purposes through rate differentiation, the primary reason for these taxes has always been fiscal. Although they cause inequality in income distribution by not taking into consideration financial power of taxpayers, the governments have preferred the expenditure taxes for some reasons such as easy collection, high revenue, and low tax resistance.

Keywords: Expenditure Taxes, Tax Policy, Economic Policy
JEL Codes: H20, H21, H25

THE RELATIONSHIP BETWEEN GOVERNANCE AND ECONOMIC PERFORMANCE: AN EVALUATION ON THE EFFECT OF THE EUROPEAN UNION PROCESS ON TURKEY'S ECONOMIC PERFORMANCE

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Abstract

A close link between governance and economic performance have been stated in the literature. According to the literature influenced by Acemoğlu and Robinson, institutions are distinguished as inclusive and extractive. By implementing the principles of transparency, equitability, accountability and responsibility, governance facilitates achieving inclusive institutions that help to develop and prosper. International institutions like International Monetary Fund, the World Bank, particularly the European Union adopt the perception of good governance. Out of other types of partnerships, enlargement is the one that the European Union exerts great influence on. Turkey and European Union have established customs union and negotiation process that has not resulted in membership however had transformative effects on Turkey's governance structure. By adopting European model, autonomous authorities have been founded, rule-based decision-making has been exercised, and disciplining laws have been enacted. Therefore, good governance has helped to yield high growth and well-being of citizens and attract foreign direct investments. In this period, International Monetary Fund, the World Bank and the European Union have functioned as double anchors in the transformation of Turkey's economy. Deterioration of relations in the aftermath of the crisis of 2008 has had negative impacts on Turkey's economy. Stalling of negotiations and losing of European Union anchor have exacerbated governance and reflected negatively on economic indicators. The most criticized area has been public procurement with very frequent amendments and increasing numbers of exemptions. The widely used indicators released by the World Bank-World Governance Indicators- were used in this research. As a conclusion when Turkey had European Union anchor, it has ranked high in terms of governance and ranked low when the relations have almost ceased.

Keywords: governance, institutional quality, European Union, EU anchor, economic performance
JEL Code: B52, F63, G28, O19, P48

1. Introduction

Institutions play a crucial role in economic growth and development of a country. Inclusive and extractive institutions approach developed by Acemoğlu and Robinson (2012) states that while inclusive institutions contribute to economic growth positively, extractive ones have damaging effects on the economy. In this context, governance emerges as the main element, wide-ranging repercussions of which affect the economy and well-being of citizens positively. Common aspects of governance are maintaining rule of law and democracy, establishing a participatory and inclusive governance approach and combatting corruption. Transparency, accountability, equitability and responsibility are prerequisites for good governance.

International organisations such as International Monetary Fund, the World Bank and the European Union have attached great significance at the concept of governance. Particularly, the European Union, by exerting great influence on its partnership relations makes effort to impose good governance. The model based on Copenhagen criteria in the process of admitting a new country to the Union, entails the country in question to comply with rule of law, free market economy, and the ability to take on obligations of membership.

Outcomes of Turkey- European Union relationship have been the establishment of customs union and negotiation process, both entailing regulatory requirements. In terms of Turkey's expectation to become a member, the status of affairs has been unsatisfactory, somehow had transformative effects on its institutional structure and governance.

The main hypothesis of this research is that the period in which Turkey has had close relationship with the European Union has contributed to economic performance through governance; on the other hand, derailing from the European Union process has had negative impacts. Apparently, the European Union process together with agreements with International Monetary Fund and World Bank have been instrumental as double anchors. Implementing rule-based decision making by founding autonomous authorities independent from political pressure, enacting disciplining laws have been consequences of the process, culminating in high growth and attracting foreign direct investments. Setbacks from reform process, conversely, have given rise to decadence of governance and economic performance. Quality of growth has deteriorated foreign and direct investments have contracted.

In the context of this research, literature on governance and economic performance is analysed, the effect of the relationship between Turkey and the European Union on Turkey's economic performance is evaluated by analysing European Commission's Progress Reports on Turkey and World Governance Indicators data released by the World Bank.

2. Literature Review on Governance and Economic Performance

Institutions are known as "the rules of the game" as put forth by North. Within this prominent framework, institutions are distinguished as formal and informal institutions. When political,

economic and legal rules are the instances of formal institutions; concepts such as norms of behaviour, codes of conduct and culture compose informal institutions (North, 1999/2010; 9-13). Works of Acemoğlu and Robinson on institutions that have been mostly debated and assumptions of which are commonly accepted distinguish institutions as inclusive and extractive. While inclusive institutions reflect positively on economic performance and human development, extractive ones pave the way for a poor nation (Acemoğlu &Robinson, 2012). Repercussions of institutions on economic performance bring about the concepts of institutional quality and level of institutional development that lead to the concept of governance. Although there is not a generally accepted definition of governance, common aspects of different definitions that form governance or the elements that are associated with are, rule of law, democracy, and anti-corruption approach, inclusive and participatory governance approach. The basic principles of governance are stated as equitability, accountability, transparency and responsibility. The adoption of those principles are of great significance in the process of establishing inclusive institutions. As revealed by North in a historical perspective, it takes a long historical process for institutions to be established and is affected by cultural, economic, social and legal factors. It is obvious that adoption of those principles in governance has a transforming effect (North, 1999/2010; 97-136). Through establishment of inclusive institutions, governance encourages democratic and human development as well as economic development. Furthermore, positive effect of governance on human capital and capital investments lays the groundwork for innovation and technology transfer, investment and economic development. In this way, governance capacity of the country is led to translate economic and social resources into development. (Hall&Jones, 1999; 83-84) Good governance and high quality institutions ensuring particularly rule of law, accountability and transparency are of great significance to combat corruption, rent-seeking behaviour and socially unfair privileges enjoyed by specific groups. (Masuch et al, 2018; 15)

International organisations such as World Bank and International Monetary Fund (IMF) have also contemplated governance as a guiding principle in policy making while their own role and transformation have been debated. Kaufmann of Brookings Institution, Kraay and Mastruzzi of World Bank have defined governance as the traditions and institutions determining how authority has been exercised (Kauffman et al., 2010;1-4). Their research based on data sources starting from 1996 has been mainstreamed in the literature and come up with widely used indicators. We used these indicators in this research to evaluate governance in Turkey. Three areas of governance have been defined concerning the process ensuring the election, monitoring and replacement of governments, the capacity of the government to formulate and implement effective policies, the respect of governments and citizens for the institutions determining their economic and social relations surrounding them. World Governance Indicators (WGI) based on those areas have thus been formulated. Two indicators corresponding to three governance areas have paved the way for six interrelated indicators:

voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, control of corruption (The World Bank, 2022b).

3. The European Union as a Transformative Power on Governance

Among the organisations or communities of Western states, the European Union (EU) as a regional integration has the leading role to emphasize governance, human rights, democracy, and the rule of law as the main elements of its external partnerships (Börzel et al, 2008; 4).

The EU defines its objective as promoting peace, its values and wellbeing of people. To reach those goals, the Union has established a single market and prioritised sustainable development based on balanced economic growth, price stability, full employment, a highly competitive social market economy, a high level of protection of the environment. (Treaty on EU art. 2-3) From the Union's point of view, those goals can be reached through good governance. Rule of law that is undeniably an element of good governance is the primary condition that needs to be fulfilled for a country to be admitted to the EU.

Among various external relationships, the EU has set with the outer world such as enlargement, neighbourhood and trade. Enlargement is the one that the EU exerts the most influence and exercises transformative power (Öniş &Kutlay, 2019; 230, Yalman&Göksel, 2017). In this respect, enlargement process is the instrument of institutional transformation. The EU has formulated the enlargement process based on Copenhagen criteria that stipulate a country to ensure rule of law and democracy along with a functioning free market economy and the ability to take on the obligations of membership (EUR-LEX, 2022).

3.1. A Brief History of the EU-Turkey Relations

Turkey-EU relations can be traced back to the year 1959 when Turkey applied for partnership with the European Economic Community. The most concrete outcomes of this inconclusive relationship with difficulties have been customs union and negotiation process. By signing the Ankara Agreement in 1963, a customs union has been planned to be established between Turkey and the European Economic Community. In case Turkey fulfilled its commitments arising from the agreement, the Community would consider Turkey's membership. Notwithstanding, expansion of the Community's trade relations, Turkey's incapacity to fulfil its commitments that were incompatible with its import substitution development model and derailing from democracy as a result of 1980 coup have ceased the relations. Revival of the relations has been the consequence of Turkey's inclining to free market economy in the aftermath of 1980 coup. Aiming at opening to international markets, attracting foreign direct investment and receiving loans from European countries have been the motives of Turkey to apply for full membership in 1987 (Akman &Çekin, 2021; 300) To this end, tariff cuts that were not made earlier were carried out and customs union was accomplished by the end of 1995.

The establishment of the customs union between Turkey and the EU has been the initial step for subsequent developments that have transformed Turkey's governance and economic performance. After Turkey was acknowledged as a candidate country in 1999, the decision to start negotiations was taken in 2004 and negotiations have commenced in 2005. The negotiation process is related to the terms and conditions under which the candidate country will be admitted to the Union. The negotiation process necessitates the candidate country to fulfil obligations of the EU membership and adopt the EU acquis. The EU carries out this process through the model based on Copenhagen criteria that has been formulated in the Central and Eastern Europe enlargement.

3.2. Negotiation Process and Its Effect on Governance of Turkey

Turkey's negotiation process has started with conditionality under 35 chapters in the context of adopting the EU acquis. From the outset, when Turkey was acknowledged as a candidate country by the end of 1999, the state of affairs can be examined in two periods. The first period which has lasted until 2008 global crisis, corresponds to vivid negotiation process helping to transforming institutional structure and building good governance. On the contrary, the second period beginning thereafter overlaps with the deterioration of the relations, stalling of the negotiation process and institutional decadence. In the first period, institutional transformation has yielded high quality growth; "EU anchor" has attracted foreign direct investments. In the second period, however, decadence of institutions has generated low quality growth and the volume of foreign direct investments has decreased.

3.2.1. The Process from Customs Union to Global Crisis of 2008

In the context of customs union and negotiation process, Turkey has made a great number of institutional arrangements and regulations that have contributed to its institutional capacity. To start with, in the framework of customs union, Turkey had to align with the EU's execution of customs, technical standards, preferential trade regimes, intellectual property rights, competition and state aid policies. Furthermore, regulatory institutions in those areas such as Competition Authority, Turkish Patent and Trademark Office, Turkish Accreditation Agency were established within this framework. Customs union with the EU has meant more than cutting tariffs and applying common customs tariff for the third parties. It has required regulations and establishment of regulatory authorities. (Akman&Çekin, 2021; 307)

Along with trade regulations, the structure of the economy has been subject to transformation according to the principles of free market economy. The EU monitors developments in candidate countries through its progress reports that are launched regularly. The first progress report for Turkey was launched in 1998 which stated that Turkey had institutional structure of a free market economy, expressing the need to diminish the size of the public sector in the economy (T.C. Dışişleri Bakanlığı AB Başkanlığı, 2022a; 20). In this context, Turkey has started

privatization practices and privatized the sectors of electricity, petrol, tobacco and sugar, established regulatory authorities in the privatized sectors such as Energy Market Regulatory Authority, Tobacco and Alcohol Market Regulatory Authority (Morgil, 2006; 94-95).

Preparing for the EU membership process has also coincided with the recovery period after two consequent crises of 1999 and 2001. Strong Economy Programme launched in the wake of 2001 crisis under the agreement signed with IMF was prepared in order to restructure banking system, discipline public finance and sustain financial stability. Establishment of Banking Regulation and Supervision Agency, Central Bank independence and amendment of Capital Market Law have been the regulatory reforms implemented in this respect (Acemoğlu & Üçer, 2015; 12-13). Therefore, this process was backed up by double anchors of Bretton Woods institutions-World Bank - IMF, and the EU.

Central Bank independence which came into force in 2001 has explicitly stated that primary objective of the Central Bank of the Republic of Turkey was price stability and prohibited to finance government by transacting in the primary market (The Law on the Central Bank of Republic of Turkey, art.56). Two important laws regarding public finance were enacted. The Public Finance and Debt Management Law of 2002 and the Public Financial Management and Control Law of 2003. The Law of 2002 has targeted preventing non-transparent borrowing, providing financial accountability, bringing government borrowing, assurances under strict rules, and the obligation to report. The latter has set the framework for financial management. Principles and merits, multiyear budgeting, scope and execution of the budget, performance management, strategic planning and internal control, accounting, monitoring and reporting have been introduced within this framework (Atiyas, 2012; 12-13).

The most significant development came with the enactment of Public Procurement Law of 2002 under the surveillance of World Bank. The aim of this law was assuring effectiveness, transparency and competitiveness in public procurement (Acemoğlu &Üçer, 2015; 13).

Along with regulation in the monetary, fiscal and public procurement areas, by adopting “European model” in the public management area, autonomous authorities have been established in the sectors that have been liberated. Through rule based policy making, as is the case of Competition Authority, power to make decision has been left to autonomous authorities, unlimited power of the executive has been restricted and providing autonomous authorities independent from government influence has been targeted in these terms (Atiyas, 2012;22).

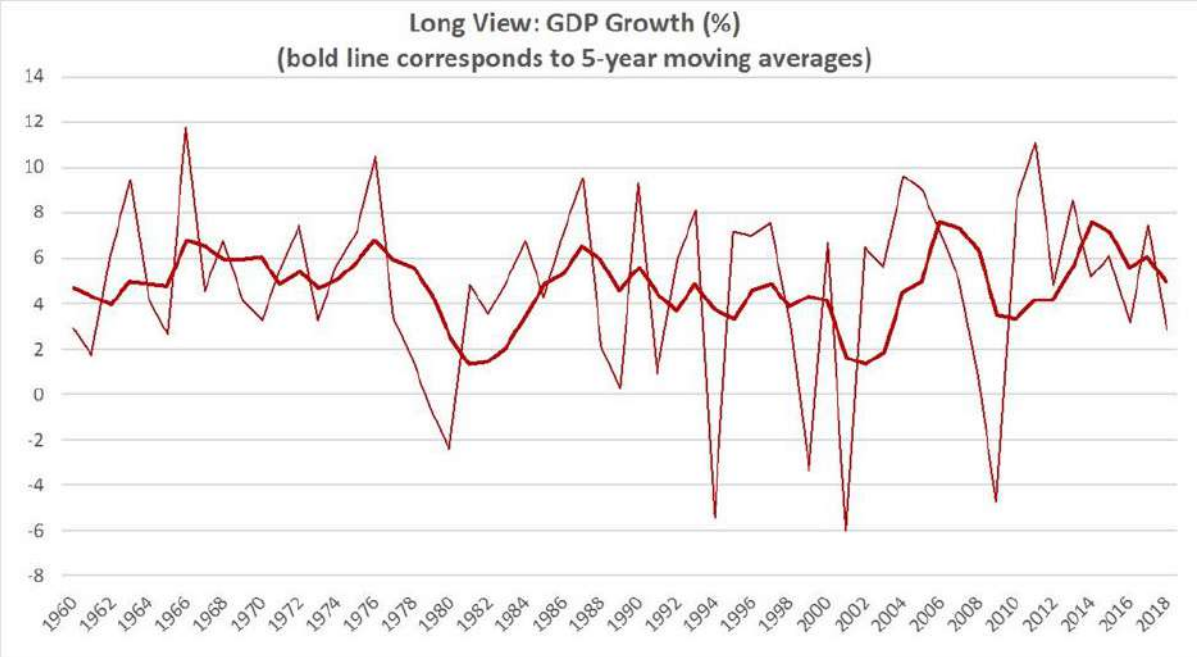
Autonomous authorities are as follows:

Competition Authority (founded in 1994 and came into operation in 1997 under the customs union.), Banking Regulation and Supervision Agency (founded in 1999 and came into operation in 2000), Telecommunication Authority (founded in 2000 and renamed to Information Technologies and Communication Authority in 2008), Energy Market Regulatory Authority (2001), Tobacco and Alcohol Market Regulatory Authority (founded in 2002,

dissolved and transferred to Ministry of Agriculture and Forestry in 2017), Public Procurement Authority (2002). Capital Market Board founded in 1981 has been revised (Yalman& Göksel, 2017; 27).

The reforms and institutional structuring in question played significant role in disciplining public finance and stabilising financial system. The infamous duty losses have been swept away to a great degree and the rate of inflation has been decreased to one digit number as of 2004 (Akman&Çekin, 2021; 300). Based on Acemoğlu and Üçer's works of 2015 and 2019, Turkey's economy for the period between 2002-2006 can be compared to a rising star, with the annual growth rate of %7,6 (see Figure 1) and the total factor productivity rate around %5.2 for this period. When Gini coefficient for the year 2003 was 42%, it has fallen to 38% in 2008 (Acemoğlu & Üçer, 2019; 10-11). It has again risen to 41.9 % in 2019 (The World Bank, 2022a). Recovery in the distribution of income has been supported with the distribution of public services such as education, healthcare and infrastructure. Income has been distributed geographically giving rise to the so-called Anatolian tigers (Acemoğlu & Üçer; 2015; 6).

Figure1. GDP Growth (%) (1960-2018)



Source: Acemoğlu and Üçer, 2019 based on TURKSTAT data.

The decision of 2004 to start negotiations and the commencement of negotiations in 2005 have contributed to inflow of foreign direct investments from European countries. As of 2004, inflow of FDI from European countries has risen drastically and maintained high until the adverse of effects of global crisis have hit European countries (Akman &Çekin, 2021; 301).

Figure 2. Value and Share of Inflows of FDI in Turkey originating from the EU (2002-2019) (in million Dollars and %)



Source: Akman &Çekin, 2021; 301.

3.2.1. The Post Crisis Period, De-Europeanisation and the Collapse of EU Anchor

Reform process in the wake of the crisis of 2001 and EU membership perspective have contributed to Turkey's economy, effects of which have reflected to economic indicators positively. However, the positive atmosphere has started to alleviate due to EU's attitude to design negotiation process in an open-ended framework and declare that the termination of the process could not be assured. Membership of Southern Cyprus without unification and obligation of Turkey to open its ports to Southern Cyprus ships under customs union brought about the issue of declaration by Turkey and counter declaration by the EU. Suspension of negotiations under eight chapters associated with customs union has been the consequence of the developments taking place. Ambivalent nature of the negotiation process as well as blockages coming from EU countries have exacerbated trust (Yalman&Göksel, 2017; 31).

The first signs of the process that can be called de-Europeanisation have appeared in the course of 2008 global crisis and 2010 Sovereign Debt Crisis thereafter. The economic slowdown in EU has reflected to Turkey's economy as narrowing of the market. Deceleration of the enlargement process because of the crisis has also had adverse effects. Stalling of the negotiation process has eventually destroyed EU anchor and EU advantage has lost its impact. Post crisis period has introduced BRICS as new alliances for Turkey and moved away from former allies of the West as EU, World Bank and IMF. In the process of de-Europeanisation,

relations with Russia, China and Qatar have gained importance (Akman&Çekin, 2021; 302, Öniş&Kutlay, 2017; 234).

The post crisis period has witnessed not only deterioration of Turkey-EU relations but also the decline of the institutional reform process. Allegations of corruption against four ministers in 2013 have risen perception of risk on Turkey that has reflected to progress report as allegations of political influence on public tenders. A state of emergency has been declared in Turkey after the coup attempt in 2016. It has been criticized in the progress report by emphasizing the worsening of investment environment and warning against setback from economic reforms (Acemoğlu&Üçer, 2019; 31-32).

Modernisation of customs union to rejuvenate relations which came to fore with a declaration by the Commission and Turkey gained approval from the European Parliament on the condition to bring a clause on human rights and fundamental freedoms, however has been subject to objections of some member states led by Germany. Modernisation of customs union has thus been shelved and remained inconclusive (Ülgen, 2017). The latest chapter opened in the negotiation process has been the financial and budgetary provisions in 2016. (T.C. Dışişleri Bakanlığı Avrupa Birliği Başkanlığı, 2022b.) From then on, relations have developed in the axes of refugee crisis and security (İktisadi Kalkınma Vakfı, 2017; 41).

EU anchor has been functional in terms of Turkey's economy. Yet, this functionality has served beginning from 1999 until 2008. From this point of view, it can be concluded that negotiation process has been beneficial until negotiations have started. Adverse effects of the Europeanisation and losing of anchors have come into existence in governance, particularly in the field of public tenders. Alterations to the public procurement law and increasing number of exemptions are incompatible with principles of transparency and accountability. Therefore, they are subject to be criticized in progress reports of the EU. Some of the instances of criticisms elaborated are as follows: Turkey has not made progress in the field of public procurement, Public Procurement Authority is not autonomous and local government and infrastructure tenders are open to corruption (European Commission, 2019; 66-68). Another crucial aspect of public procurement practices is that negotiation procedure (Public Procurement Law Article 21/b) rather than open procedure has turned out to be ordinary procedure although specified in the circumstances of natural disasters and unforeseen situations requiring emergency action (Toker, 2019; 43-45). As for fight against corruption, not setting up anti-corruption bodies and not implementing recommendations of Council of Europe's Group of States against Corruption (GRECO) have been repeatedly covered in progress reports (European Commission, 2022; 70-72).

3.3. Evaluation of World Governance Indicators (WGI) for Turkey

WGI developed by World Bank are widely used in the literature to measure governance quality of a country. Data collected for 200 countries and territories, for the period starting from 1996,

indicate a country's rank, 0 corresponding to the lowest and 100 corresponding to the highest. Table 1 displays WGI for Turkey for the period 1996-2021. A glance at the table shows a trend of increase in a positive way corresponding to rising quality of governance at the beginning of the table and a decrease at the end of the table corresponding to a setback of governance quality. Considering all indicators, all have evolved differently showing different levels of development; however, there is a similar trend for all indicators staying below where they started. Rising trends generally overlap with the period of institutional and governance reforms. On the contrary, low ranks coincide with the period when institutional reform process has dwindled.

Table 1. WGI for Turkey (1996-2021)

Years	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
1996	45,5	10,64	55,74	59,24	47,24	51,61
1998	31,84	12,23	46,11	68,39	48	45,36
2000	40,3	21,16	56,92	64,62	50,5	49,75
2002	42,29	21,69	60,71	58,67	52,48	34,85
2003	45,77	25,13	60,71	56,12	59,41	52,02
2004	49,52	20,87	57,64	56,65	58,37	51,71
2005	50,96	27,67	58,82	60,78	58,37	56,1
2006	45,67	27,05	59,02	59,31	55,5	58,05
2007	46,15	19,81	64,08	62,14	54,07	59,71
2008	46,15	18,75	63,59	59,22	56,73	60,68
2009	45,5	15,64	63,16	59,81	57,82	60,29
2010	44,55	18,96	64,11	59,81	58,77	58,57
2011	44,13	18,48	65,4	62,09	57,75	58,29
2012	41,78	12,8	65,4	64,93	57,28	62,56
2013	40,85	10,9	64,45	64,93	55,87	61,14
2014	36,45	11,9	67,79	66,35	57,21	52,88
2015	35,47	9,05	62,02	62,5	53,37	53,37
2016	30,05	4,76	54,81	61,06	46,63	50,48
2017	27,59	7,14	55,29	57,21	45,19	49,52
2018	25,12	10	53,85	52,4	42,31	43,75
2019	24,63	10	54,33	54,81	44,71	44,71
2020	24,15	12,74	47,60	50,48	38,46	43,27

2021	23,67	12,26	49,52	49,04	36,54	40,38

Source: WGI, https://info.worldbank.org/governance/wgi/Home/Reports (15.10.2022)

4. Conclusion

The most recent approach on the relationship between institutions and economic performance is that of Acemoğlu and Robinson distinguishing institutions as inclusive and extractive ones and emphasizing the role of inclusive institutions on growth and development of a country. The questions of how a country is governed in terms of election, monitoring and replacement of governments, the government's ability to formulate sound policies and both governments and citizens' respect for institutions have paved the way for indicators mainstreamed in the literature to gauge governance in a country. Rule of law, democracy, anti-corruption approach and participatory governance are of great significance for a country to reach its full potential. International institutions have designed their role emphasizing the significance of governance. The EU as a regional integration has transformative power on countries which it exerts influence on. Enlargement is an instrument of transformative power of the EU. Through Copenhagen criteria, a country is motivated to ensure rule of law and democracy along with a functioning free market economy and the ability to take on the obligations of membership. In addition, practices of good governance are imposed on candidate country.

Turkey and EU have maintained a partnership relationship since 1959 and negotiations have commenced in 2005 in the pursuit of the EU's acknowledging Turkey as a candidate country in 1999. EU candidacy status has accelerated the institutional reform process that had already begun with IMF and World Bank in the wake of two consecutive crises of 1999 and 2001. Double anchors of EU, IMF and World Bank have contributed to the transformation of Turkey's economy and institutional structure. By setting up autonomous authorities and rule-based decision-making, main principles of governance-transparency and accountability have been achieved. Good governance has reflected to economic performance as well. Due to cyclical developments taking place in both the EU and Turkey as well as global crisis of 2008, negotiation process has stalled and institutional transformation has lost pace and collapsed. The negotiation process has been functional until the negotiations have been interrupted. Losing EU anchor has had repercussions on decadence of institutional quality and economic performance verified by the evaluation of WGI on Turkey.

References

Acemoglu, D. & Robinson J. (2012). *Why Nations Fail: The Origins of Power, Prosperity and Poverty*, London, Profile Books.

Acemoğlu, D.&Üçer, M. (2015). "The Ups and Downs of Turkish Growth, 2002-2015 Political Dynamics, The European Union and the Institutional Slide", NBER Working Paper 21608.

Acemoğlu, D.&Üçer, M. (2019)."High-Quality Versus Low-Quality Growth in Turkey-Causes and Consequences", CEPR Press Discussion Paper 14070.

Akman, M.S. & Çekin, S.E. (2021). "The EU as an Anchor for Turkey's Macroeconomic and Trade Policy", EU-Turkey Relations: Theories, Institutions and Policies, (Ed.) Reiners, W. &Turhan, E., Palgrave Macmillan, pp. 2955-322.

Atiyas, İ. (2012). "Economic Institutions and Institutional Change in Turkey During the Neoliberal Era". https://research.sabanciuniv.edu/id/eprint/20470/1/economic_institutions_npt.pdf , (10.10.2022).

Börzel, T.A. & Pamuk, Y.&Stahn, A.(2008). "Good Governance in the European Union", Freie Universitat Berlin, Berlin Working Paper on European Integration, No.7.

EUR-LEX, European Union (2022). Accession Criteria (Copenhagen Criteria), https://eur-lex.europa.eu/EN/legal-content/glossary/accession-criteria-copenhagen-criteria.html, (15.11.2022).

European Commission. (2019). Turkey 2019 Report, Brussels. https://neighbourhood-enlargement.ec.europa.eu/turkiye-report-2019_en, (10.10.2022).

European Commission.(2022). Türkiye 2022 Report, Brussels, https://neighbourhood-enlargement.ec.europa.eu/turkiye-report-2022_en, (13.10.2022).

Hall, R.E. & Jones, C.I.(1999). "Why Do Some Countries Produce So Much More Output Per Worker Than Others?", The Quarterly Journal of Economics, February 1999, pp. 83-116.

İktisadi Kalkınma Vakfı. (2017). İKV Report on Turkey-EU Relations: Keeping Together in the Face of Multiple Challenges, İstanbul, Publication No.288.

Kaufmann,D.&Kraay,A.&Mastruzzi,M.(2010). "The Worldwide Governance Indicators: Methodology and Analytical Issues", World Bank Draft Policy Research Paper.

Masuch, K. & Anderton, R.S.& Benalal, N.(2018). "Structural Policies in the Euro Area", Occasional Paper Series, No. 210.

Morgil, O. (2006). "Kopenhag Ekonomik Kriterleri ve Türkiye'nin Uyum Süreci", Ankara Avrupa Çalışmaları Dergisi: Prof. Dr. Ahmet Gökdere'ye Armağan, 5 (2), pp. 91-102.

North, D.C.(2010). Kurumlar, Kurumsal Değişim ve Ekonomik Performans (G.Ç.Güven,Trans.) Cambridge, Cambridge University Press (Original Work Published-1999).

Öniş, Z.&Kutlay, M.(2019). "Global Shifts and the Limits of the EU's Transformative Power in the European Periphery: Comparative Perspectives from Hungary and Turkey", Government and Opposition, 54(2), pp. 226-253.

T.C. Dışişleri Bakanlığı AB Başkanlığı. (2022a). Türkiye'nin Katılım Yönünde İlerlemesi Üzerine Komisyon'un 1998 Düzenli Raporu, https://www.ab.gov.tr/files/AB_Iliskileri/AdaylikSureci/IlerlemeRaporlari/Turkiye_Ilerleme_Rap_1998.pdf, (15.10.2022).

T.C. Dışişleri Bakanlığı AB Başkanlığı. (2022b). Katılım Müzakerelerinde Mevcut Durum, https://www.ab.gov.tr/katilim-muzakerelerinde-mevcut-durum_65.html, (15.11.2022)

The World Bank. (2022a). World Development Indicators: Distribution of Income or Consumption, http://wdi.worldbank.org/table/1.3, (15.11.2022)

The World Bank (2022b). World Governance Indicators, https://info.worldbank.org/governance/wgi/, (15.11.2022).

The World Bank. (2022c). World Governance Indicators: Türkiye, https://info.worldbank.org/governance/wgi/Home/Reports (15.10.2022)

Toker, Ç. (2019). Kamu İhalelerinde Olağan İşler, Tekin Yayınevi: 765, ISBN: 978-9944-61-276-0.

Ülgen, S. (2017). "Trade as Turkey's EU Anchor", https://carnegieeurope.eu/2017/12/13/trade-as-turkey-s-eu-anchor-pub-75002, (10.10.2022).

Yalman,G.L &Göksel, A.(2017). "Transforming Turkey? Putting the Turkey-European Union Relations into a Historical Perspective", Uluslararası İlişkiler, 14(56), pp. 23-37.

Convicts And Prisons in The Public Expenditure Window: Social Rights and A Budget-Based Perspective

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Abstract

The state is spending a lot of public expenditure to meet the needs of society. While there are still many dimensions of these expenditures, the strong justice dimension is one of the most important aspects of an effective public service and a prosperity state. The social rights of prisons and convicts within the scope of justice services are the main theme of this study. The theme will be covered under public spending due to the share within the budget. Because justice is a fundamental element that makes a state a state and it's the only key to society's functioning in order.

The prisons, where criminals are left and are also wanted to develop in favor of society during their stay, are certainly one of the public services that a state should pay particular attention toThe fact that ex-convicts are a fragile, disadvantaged group in the community, acting on the reperilability of crime concerns, leads to the need for government support for this area being more revenue. At this point, the cultural, economic and social rights that the state will provide to convicts in criminal execution institutions will, without a doubt, contribute to community prosperity by playing a leading role in the integration of society and the former convict. In addition, the rights and public services to be offered in accordance with the characteristics of the convicts still in the criminal execution institutions must also be specific (such as child prisoners, women prisoners, pregnant prisoners, etc.). There is a very diverse picture in terms of the social rights provided to the prisoners in Turkey. It is vital that the criminal has social rights in his new life so that he does not rethink crime. When the law on the execution of penal and security measures is considered, the social rights of convicts can be listed as health rights, education rights, matters for children who are obliged to care for, cultural rights, moral rights, supervised freedom, employment rightsThe first thing to notice in prisons and budgetary connections is that the criminal executions alone constitute 45.14% of the Justice Ministry budget. In Turkey, the increase in the number of prisons in crowdness makes it necessary to improve the living conditions in particular.

In order to improve the social rights of both convicts and improve prison conditions, public services must vary according to needs. For example, the difference between the needs of a convicted woman and a convicted male can be considered to be one of the key steps to achieve both social rights and gender-sensitive structures. The development of justice services is only possible by increasing the share of the budget. It is important to remember that convicts who do not integrate into a society (a) can lead to undesirable costs for society in the next process. So, in particular, seeing prisons as a place that is not only deprived of freedom, can be the first link to a paradigm change, seeing them as a place for people who are supported by social rights and who are not going back to society to crime. The development of this ring is undoubtedly possible with public expenditure.

This study has two basic dimensions. The first is public services for the social rights the convict has during his stay in prison. Another aspect of the study is prisons. Given that there is a parallelism between the increase in the number of convicts and the increase in prison requirements, the need to

review this subject under budget is the basis of the second dimension of the study. Given that one of the main objectives of the execution is to facilitate the fit of the convict to society through various social services, the importance of public spending in this area also emerges. As a result, it is the main goal of achieving the social rights that convicts have, the status of prisons and understanding their share within the budget. In addition, the aim of this study is to contribute in a thinly way to the development of a healthier prison system and to the development of condemned rights by attracting a photograph of prisons and convicts in Turkey, drawing attention to deficiencies and to the needs of those to be done with the help of both budget and other statistical data.

Key Words: Public Expenditure, Budget, Justice Service

JEL Codes: H6, H61, H69

The Role and Importance of Local Governments in Solving Environmental Problems

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Abstract

The world is faced with many environmental problems as of today, due to the reckless use of natural resources by people with the idea that the planet cannot be harmed. The fact that the ecological balance of the world is deteriorating gradually requires that each country take the necessary measures to solve the current problem within the framework of its own legal conditions, and it also necessitates some measures to be taken at the international level. These problems appear as environmental problems that affect both people, animals, and nations. For this reason, economic tools such as taxes, fees, subsidies, pollution permits, and wages are used in many environmental problems such as agricultural pollution, natural resource consumption, mining, and climate change. Thus, it is aimed to make changes in consumer and producer behaviors in the process, and thus to prevent pollution of the environment.

In order to solve all these problems, first of all, each country should identify its own problems, and take the necessary measures by creating environmental awareness regarding the solution of these environmental problems. Before global cooperation, countries should start to solve their own problems. Therefore, while the solution of environmental problems requires a responsibility at the national level, it also imposes responsibility on local government units at the local level. For this reason, the role of local governments is as important as the role of the central government in the implementation of the economic and regulatory tools to be applied while seeking solutions to environmental problems.

In this study, first of all, environmental problems and the regulatory, participatory and economic tools used to solve these problems will be discussed. Afterwards, Turkey's regulations regarding these tools will be briefly mentioned, and the place and importance of local governments in the fight against environmental pollution will be discussed. It will be mentioned which commissions and contracts are arranged for local governments to determine environmental policies. The practices of the municipalities in Turkey on environmental policies and the issues they are authorized in line with the current legal regulations are also included in the scope of the study. In the study, it is stated that the Municipalities use their authorities in the legal framework to create environmental awareness and combat environmental problems within the framework of the authorities granted to them; however, it has been evaluated that local governments should be given more importance in order for this struggle to be more successful.

Keywords: Environmental Tax, Environmental Pollution, Municipalities, Economical Vehicles
JEL Code: H23, H71.

1. Introduction

Our planet Earth, on which all living creatures live, is faced with many environmental problems as of today, due to the reckless use of its natural resources by humans, with the premise that the planet is "invulnerable". Our planet has been overexploited over the past few decades, and the degradation of its environmental fabric has reached alarming proportions. Since the environment is considered a non-consumable public good, people continued to consume and harm the environment without accepting that we could cause natural disasters such as earthquakes, floods or tsunamis, instead of taking measures to protect the planet. However, at the point reached today, it has been accepted that the environment is also an exhaustible public good. The fact that the ecological balance of the world is deteriorating gradually requires that each country take the necessary measures to solve the current problem within the framework of its own legal conditions, and it also necessitates some measures to be taken at the international level. Because, although environmental problems such as air pollution, water pollution, soil pollution, deforestation, acid rain, public health problems and overpopulation in a country are perceived as a problem only belonging to that country, in fact, the impact dimensions of these problems are at international levels. Social changes and technological developments are not only affecting a single country but also neighboring countries. Problems that require measures on a global scale, such as the depletion of the ozone layer, global warming, effects on marine life, climate change, reductions in biodiversity, appear as environmental problems that affect both humans, animals and nations. For this reason, economic tools such as taxes, fees, subsidies, pollution permits and wages are used in many environmental problems such as agricultural pollution, natural resource consumption, mining, and climate change. Thus, the resulting costs are reflected in the prices of goods and services, and it is aimed to change the behavior of consumers and producers in the process, and thus to prevent pollution of the environment, and to ensure that those who harm the environment participate in the elimination of the damages they have caused.

In order to solve all these problems, first of all, each country should determine its own problems and take the necessary measures by creating environmental awareness regarding the solution of these environmental problems. States should cooperate with surrounding countries by using economic tools, regulatory tools and voluntary practices at the national and local level, primarily on environmental issues. However, in order to solve the environmental problems, countries should start to solve their own problems before global cooperation. In other words, first of all, everyone should sweep in front of their own house, and in the second stage, they should work hand in hand with their neighbors to clean the neighborhood they live in and take all necessary precautions. For this, the solution of environmental problems and the establishment of environmental

awareness should be started by intervening at the local level first. Then, measures should be taken on an international scale, cooperation should be established, and common goals should be determined.

While solving environmental problems and protecting the environment without harming it require a responsibility at the national level, it also imposes responsibility on local government units at the local level. For this reason, the role of local governments is as important as the role of the central government in the implementation of the economic and regulatory tools to be applied while seeking solutions to environmental problems. When we examine the legal regulations related to environmental problems in Turkey, it is seen that local governments have been given important powers in this regard. Environmental Law and other relevant legislation provisions have assigned important duties to local governments in protecting the environment and solving problems. Therefore, central governments, local governments and other actors should act together and take active measures in order to solve the environmental problems that human beings face due to the wrong and careless use of the environment.

In this study, firstly, a brief information about environmental problems will be given. Then, the regulatory, participatory, and economic tools for the solution of environmental problems will be discussed. In addition to the aforementioned tools to be used in the solution of environmental problems, the legal framework of environmental policies determined by Turkey will be specified, and the place and importance of local governments in environmental policies will be mentioned. Local governments are at the center of environmental problems that countries are experiencing. Therefore, municipalities, special provincial administrations and villages are expected to effectively implement the determined environmental policies and policies on environmental problems. Particularly, municipalities are requested to be more effective in this regard. For this reason, the issues that the municipalities in Turkey are authorized in line with the current legal regulations on environmental policies are also included in the scope of the study.

2. Environment and Environmental Issues

The classical economists' view of the environment is that it is inconsumable. They argue that in order to keep the economic life in balance and to continue production, maximum benefit should be obtained from natural resources. Environmental problems are not one of the priority problems of governments or humanity (Özdemir, 2009: 3). Today, the environment is accepted as a global public good (Kargı & Yüksel, 2010: 190). Environmental problems have become almost the first priority problem of countries.

The increase in natural disasters in recent years has led the attention of humanity to determine the source of these negative events, and to work on reducing these disasters. Global warming does not only cause natural disasters, but also causes many bad events such as new diseases, soil losses, and food shortages. These negative consequences of global warming not only make life more difficult in the whole world day by day, but also cause serious economic welfare losses.

Every industrial development adds some problems to our lives as well as the beauty and convenience it brings to human life. The problem of environmental pollution, which has a long history, entered our lives as if it was a response to the contributions of industrialization to human life, but it was not accepted as an important agenda item in the first years of industrialization. While the goal of countries in industrialization is development and economic growth, the negative effects of this positive development on the environment have caused the deterioration of the ecological balance, and have become a threat to human health. We see that the basis of most of the natural disasters being experienced today is the disruption of the ecological balance and polluting the nature as a result of production and consumption activities while human beings are realizing their industrialization goals.

The interaction of human beings with the environment has negatively affected the environment because of using it only for their own interests. These adverse interactions did not cause any environmental problems until the 20th century, except for the situations created by natural events in the environment. The need for more production and product diversity with the developing technology of the industrial revolution, along with the changing and developing consumption understanding, has triggered more production. This has increased the need for resources. In order to meet this need, the environment, which is considered invulnerable and inconsumable, has been started to be used and consumed more. Although the environment renews itself to a certain extent, some non-renewable resources have started to deplete and excessive consumption has begun to cause environmental pollution, but this situation has not been taken into account by human beings for a long time. At the point reached today, natural resources that are used excessively and unconsciously have started to run out. This situation has led to environmental problems that do not appear suddenly, but accumulate cumulatively.

Environmental problems have been taken seriously since the 1970s and solutions have been tried to be produced. At that time, legal regulations were mostly in the form of technological measures for the establishment of treatment plants and reduction of emissions, and measures for renewable energy sources and ecological planning. In other words, for the solution of the problem, it was tried to find a solution with the arrangements for prevention and repair (Özdemir, 2009: 7).

Although the developed policies were aimed at prevention, environmental problems continued to increase. With the idea that radical solutions to the problem should be found, economists such as William J. Baumol, Wallace E. Oates, and Pigouvian developed various models in the 1970s. The standard price approach model and models suggesting imposing a tax on emissions-related actions as it will lead to a reduction in emissions have been proposed. In the light of these different models, environmental taxes have started to take place among the environmental policies of European countries since the late 1970s. In the European Union (EU), the implementation of a common carbon tax was aimed as an important tool for climate change policy in the late 1980s. However, it could not be implemented due to the old unanimity principle regarding tax policy in the EU. However, different ecological taxes or ecological tax reforms have been implemented in Europe by different leading countries such as Denmark, Sweden, England and Germany. In all these countries, higher taxes on fuels have been an important part of enforcing environmental taxes. Today, various environmental taxes are applied in almost every EU country (Envirotech, 2014).

By the 1990s, "Sustainable Development" models were accepted in almost every country and the necessity of reviewing economic systems came to the fore. At the United Nations Conference on Environment and Development held in 1992, it was specifically mentioned that the economic tool of environmental taxes should be used instead of user fees and incentive practices on the control and prevention of environmental pollution. This situation has increased the importance given to environmental pollution, and has made the use of environmental taxes widespread. In the conference, the importance of cooperation between countries was emphasized in order to establish a fair taxation between countries, and to prevent unfair tax competition (Ekmekçi, 2003:2). In the 2000s, with environmental problems reaching global dimensions, instead of encouraging "good" actions, "bad" actions were taxed (Özdemir, 2009: 11). Therefore, with the implementation of environmental taxes, the states generate income, on the other hand, they use taxes as a means of combating environmental problems. States also use the said financial instrument to combat environmental problems by encouraging their activities by applying tax reductions to producers who do not harm the environment.

In this process, issues such as whether environmental taxes are applied to achieve environmental policy goals or only to increase the governments' revenues and that it is very difficult to predict which tax rate in ecological taxation actually leads to the desired reduction of emissions have been discussed. Despite these discussions, every country includes environmental taxes in their systems in order to prevent environmental pollution.

3. Policy Tools to be Used in Solving Environmental Problems

Today, pollution of air, water and soil, depletion of the ozone layer, increase in greenhouse gas emissions and global warming, in short, environmental problems of global scale, which have reached alarming proportions today, have made it necessary for states to urgently review and develop their environmental policies, both internally and internationally. Due to the fact that the damage to nature has reached global dimensions by exceeding the borders of a single country, the Organisation for Economic Co-operation and Development (OECD) and the European Union (EU) have developed various financial instruments by taking the issue into their priority agendas in order to prevent environmental pollution.

3.1. Prohibitive and Punitive Regulations

Achieving a cleaner environment and achieving sustainable development have become one of the priority goals of every country. In line with this goal, countries want to change the attitudes and behaviors of those who cause environmental pollution by including prohibitive and punitive legal regulations in their systems. Thus, it is aimed to control the wastes and emissions that cause environmental pollution within the framework of the standards determined by the state, and to prevent the pollution that may occur as a result of the production process (Carter, 2007: 323). Due to the regulations made for institutions, it also affects the living conditions of individuals (Connelly & Smith, 2003: 158). However, the prohibitive and punitive regulations brought by the state were insufficient and ineffective in reducing the amount of emissions. For this reason, since it is not sufficient to use the regulatory tools alone within the scope of combating environmental problems, it would be appropriate to use them together with other environmental policy tools.

3.2. Voluntary Practices

States also use participatory tools in solving environmental problems. It is aimed to contribute to the making of plans, making and implementing decisions in the determination of the political process by participating in policy meetings, information meetings and referendums of those who cause and are exposed to environmental pollution (Orhan, 2018: 8). Voluntary practices and agreements are another environmental policy tool. It is also considered as a voluntary policy tool that states provide information and training to raise awareness about the environment, enable businesses to evaluate and improve their environmental performance (Arıkboğa, 2019: 28), or make it easier for people to take legal action against those who harm the environment. While determining the environmental policies of the states, it is aimed to

cooperate with other actors and to reach an agreement by discussing the issue as a result of this cooperation. Here, the voluntary nature of the agreement differentiates it from unilaterally decided regulatory and economic instruments. However, participatory tools alone are not enough to solve environmental problems.

3.3. Economic Tools

Economic tools are also an important environmental policy tool. Based on the "polluter pays" principle, many countries in the world use economic tools to solve environmental problems. States benefit from public solutions to ensure that producers and consumers are responsible for the external costs arising from their activities and to make positive changes in their future choices towards the environment by ensuring that those who cause harm bear the costs of this harm. Taxes, fees, emissions trading, incentives (subsidies), pollution permits, deposit refund system, and performance bonds are economic tools used by governments. Environmental taxes are the most widely used among public solution tools. With many tax applications under various names such as environmental taxes, road tax, carbon tax, energy tax, motor vehicle tax within the framework of the "polluter pays" principle, it is aimed both to ensure that those who harm the environment bear the cost of the damage they cause and to realize positive preference changes towards the environment in producer and consumer behaviors.

3.3.1. Taxes

Since the 1990s, many countries have started to use environmental taxes mainly among economic tools. The European Union and OECD have made a common definition of “environmentally related taxes”. According to this definition, environmental taxes are: “a tax whose tax base is a physical unit (or a paroxy of it) that has a proven specific negative impact on the environment”, and environmentally related taxes are: “any compulsory, unrequited payment to general government levied on tax-bases deemed to be of particular environmental relevance” (OECD, 2021: 8).

The European Union has classified environmental taxes under four titles, as “*energy taxes, transportation taxes, taxes on pollution, natural resource taxes*”, and OECD has classified them in three titles as “*emission-based taxation, product-based taxation and use-based taxation*” (OECD, 2011: 10-11, Eurostat, 2019).

According to the distinction made by the European Union, energy taxes are collected on energy products used for transportation purposes and on energy products such as natural gas, diesel oil, coal and electricity used for stationary purposes. According to the classification made by the European Union, carbon taxes are also included in this scope. Although carbon dioxide taxes are actually pollution taxes, they are mainly handled

within the scope of energy taxes, as they arise due to the use of energy by fossil fuel producers. Carbon tax is applied in Norway, Poland, Finland, France, Portugal, Sweden, Denmark, Latvia, Estonia, Germany, Luxembourg, Ireland and Slovenia.

Transport taxes are taxes levied on the use or ownership of a motor vehicle. One-time purchase of motor vehicles, importation of vehicles, or annual road tax due to use of roads are among the taxes collected in this context.

Pollution taxes include taxes on emissions measured in water and air, on noise, on harmful gases, and on water and solid waste. Unlike carbon dioxide taxes, sulfur dioxide taxes are considered within the scope of pollution taxes (Öz & Kutbay, 2016: 254-256).

Natural resource taxes are collected from the rental price of the mines where fossil fuels such as oil, gas and coal are extracted from, and from activities such as hunting in forests, cutting trees, and fishing.

The water legislation, which was issued in France in 1959 in order to control environmental pollution, is the first environmental tax to be implemented. In the Netherlands and Germany, environmental taxes were implemented in 1971 in order to control wastewater (McEldowney & Salter, 2016: 5). About twenty years after these practices, as the awareness of environmental pollution increased, countries started to change their environmental policies. Scandinavian countries have pioneered environmental tax reforms (Miller & Vela, 2013: 5). Scandinavian countries were followed by other European countries such as Austria, Belgium, Netherlands and England (Holzinger, 2003: 201-202). While the policies produced were designed according to the internal functioning and country structure of each country, the polluter pays principle gained importance. It is seen that environmental taxes are generally preferred as the most suitable economic tool with low cost and flexibility (Eurostat, 2019 b) in order to apply the polluter pays principle and to implement environmental policies. Energy taxes take the first place among environmental taxes in OECD and EU member countries. According to 2016 data, energy taxes constitute 77% of environmental taxes in EU countries (Eurostat 2018). Carbon taxes are considered within energy taxes. Transportation taxes take the second place. Taxes on motor vehicles are in the first place among transportation taxes and constitute approximately 20% of total environmental taxes. These two taxes are followed by pollution and natural resource taxes. The share of these taxes in total environmental taxes is only 3% (Eurostat, 2018).

In Turkey, "the only type of environmental tax that directly serves environmental purposes" (Satır Reyhan, 2014: 116) is the Environmental Cleaning Tax. However, there are indirect taxes with environmental objectives in the system. Value Added Tax, Special Consumption Tax, and Motor Vehicle Tax are also considered as “environmental taxes”. The use of certain products harms the environment. These taxes are considered as taxes

that indirectly create positive environmental effects by taxing the use of these products, both internalizing the externality and ensuring that the polluter pays its compensation. However, in statistical studies, it has been determined that environmental taxes have an indirect effect in preventing production, consumption and behaviors that cause carbon emissions and pollute in other ways, and cannot fully prevent them (Biyan & Gök, 2014: 302-303). It has been determined that the environmental taxes put into practice mostly constitute a financial resource for the financing of public services, and the aim of preventing environmental pollution remains in the background. "Electricity and Coal Gas Consumption Tax", which is collected for environmental purposes and collected by municipalities in accordance with the Law on Municipal Revenues in Turkey, is also considered within the scope of environmental taxes (Toprak, 2017: 184). The mentioned taxes are briefly given below.

3.3.1.1. Environmental Cleaning Tax

The "Environmental Cleaning Tax" (ECT) for environmental purposes has been implemented in Turkey since 1993. This tax, collected by municipalities within the scope of the Law on Municipal Revenues, was divided into two parts, ECT for solid waste and ECT for wastewater, until 2003. According to this distinction, ECT was taken according to the tariff determined as seven groups and five degrees for solid wastes. On the other hand, ECT taken from wastewater was taken according to the amount to be determined by the municipal council, taking into account the building groups determined for solid wastes, and not exceeding the water consumption price. In metropolitan municipalities, on the other hand, it was stated that the provisions of the water and sewerage administrations' own laws would be applied regarding the cost of wastewater (Tosuner & Tekbaş, 2004: 40).

The implementation of the said tax was changed in 2003, and the separation of solid waste and wastewater was ended. With this amendment (Law No. 2464, Duplicated Article 44): The subject of ECT is "buildings used in housing, workplace and other forms within the municipal boundaries and adjacent areas and benefiting from the environmental cleaning services of the municipalities". Those who use these buildings are the taxpayers of this tax. According to the law, a distinction was made between residences and workplaces in terms of taxation.

The ECT tariff is determined separately for municipalities and metropolitan municipalities. ECT is taken in an amount determined per cubic meter according to the amount of water consumption used by the residences. The tax amount determined per cubic meter to be collected from the residences is increased every year at the rate of re-evaluation. The calculated tax is reflected on the water bill and is thus accrued and

collected together with the water bill. In metropolitan municipalities where water and sewerage services are regulated by a separate law, the task of collecting ECT from residences is given to Water and Sewerage Administrations. Most of the taxes (80%) collected by the Water and Sewerage Administration are transferred to the relevant district municipalities. The remaining part (20%) is transferred to metropolitan municipalities.

ECT received from buildings used for workplaces and other purposes other than residences are divided into different groups and degrees and subject to tax. In the relevant law, the tax tariff divided the building groups into 7 groups and 5 degrees. These tariffs are also increased every year according to the rate of re-evaluation. However, the said tariff is applied by 25% more in metropolitan municipalities. This tax, which is collected from workplaces and buildings used in various ways, is accrued at the beginning of the year. It is paid in two installments during the installment periods of the property tax. In addition, in the provinces where there are metropolitan municipalities, 20% of the ETC collected from the workplaces and buildings used in various ways is transferred to the metropolitan municipalities.

It is debatable whether the Environmental Cleaning Tax, which is the only tax directly levied in Turkey within the scope of combating environmental pollution, serves the purpose. The tax, which is taken on the water consumption of the houses with the legal regulation, can have an effect on reducing water consumption to some extent. With the tax they are exposed to due to the amount of wastewater created, it can internalize negative externalities according to the polluter pays principle. However, the tax levied has no effect on preventing the pollution caused by solid waste. Water consumption may decrease, but it does not contribute to the negative externality cost of the pollution caused by the solid wastes created. On the other hand, the tax collected from the workplaces is related to the building groups. In other words, it is not related to the amount of wastewater and solid waste generated. The tax is calculated independently of pollution. Therefore, it is not possible to internalize negative externalities (Ercan, 2015: 215). For this reason, we can say that the tax in question fulfills the duty of allocating resources to municipalities rather than preventing pollution, which is the main target (Satır Reyhan, 2014: 116).

3.3.1.2. Electricity and Coal Gas Consumption Tax

Another tax levied by municipalities for environmental purposes in Turkey is the "Electricity and Gas Consumption Tax". It is an environmental tax that can be evaluated within the scope of energy taxes. According to the Law on Municipal Revenues, the tax in question is collected at the rate of 5% of the electricity sales price or the gas sales

price over the electricity and gas consumption. Persons and institutions that consume electricity and gas are liable for this tax. Organizations that distribute electricity and gas are also given the title of tax responsible.

Electricity and Coal Gas Consumption Tax is collected over electricity and gas consumption. Since it is collected by adding an additional cost to the consumption amount, its impact on the environment is indirect. On the other hand, the efficiency of the "Electricity and Coal Gas Consumption Tax" has further decreased due to the decrease in the use of coal gas (Arıkboğa, 2016: 294). Therefore, it has very little positive environmental impact. It mostly takes place on the axis of allocating resources to municipalities.

3.3.2. Fees and Contribution Shares

Environmental fees and contribution shares are collected in return for some services such as waste collection and conversion services provided by local governments and central governments, such as emission fees (removal of industrial, medical and industrial wastes) and user fees (domestic and industrial water use and wastewater disposal) (OECD, 2006: 41). As a result of the polluter pays principle, these fees and charges can also be seen as a pricing of the pollution created. We can give examples of the costs collected from water and solid wastes polluting the environment, the emission fees for the removal and conversion of medical or industrial wastes, the user fees for the use of industrial and domestic water and the disposal of solid wastes, and the administrative fees and fees for some permit and license regulations (OECD, 1997: 18).

Each country can use tax, duty or fee as an economic policy tool to prevent environmental pollution within the scope of its own conditions and policies. For example, while environmental tax is collected on an amount determined per cubic meter based on the water consumption amount of the houses in Turkey, it is charged as a fee in some countries. Since the target is to prevent environmental pollution, taxes, fees and contribution shares are considered as a whole, not separately (OECD, 1997; OECD, 2006).

Since the application of the said taxes and fees is the subject of another study, only the names of the applied taxes and fees are included here, but their contents are not included.

- Emission fees (removal and conversion of medical or industrial waste)
- User fees (industrial and domestic water use and solid waste disposal)
- User fees paid for highways
- Wastewater and universal solid waste fee

- Medical waste disposal fee
- Excavated soil, construction/wreckage waste transport permit fees
- Fees for waste from ships
- Other fees related to waste
- Other fees

3.3.3. Emissions Trading System (ETS) (Trade Permits)

Another important economic tool used in environmental policies is the application of the emissions trading system. The aim of the emissions trading system is to keep the amount of emissions emitted to the environment as a result of production and consumption under control. With this application, states calculate the emission level that can be allowed in a certain region in order to keep the emission level under control. They then set a goal to which level they want it to be lowered (European Commission, 2005-2020).

After this determination, they distribute the emission permits to achieve the determined emission targets, either by selling them at auction or by taking into account the previous emission amounts of the organization. These emission permits can be bought, sold and traded in the market. The first country to implement the emissions trading system was the USA. This practice, which was carried out in the 1970s, started to be implemented in the EU in 2005. 25 of the EU member countries have started to apply emission trade permits. Pilot implementation was carried out until 2007. In this process, 95 percent of the permits were distributed gratuitously. With the Kyoto Protocol, the second stage was started and keeping the emission levels under control for the years 2008-2012 has been an important tool in achieving the targets in the Kyoto Protocol. (European Commission, 2005-2020).

The advantage of this practice is that if the distribution of emission permits is done appropriately, it guarantees the achievement of the target. The fact that permits are tradable and can be bought and sold provides flexibility for organizations to reduce their pollution and guides them (EEA, 2005: 14-18). Carbon Border Adjustment Mechanism, which is on the agenda these days, shows the importance of ETS. In the implementation of this system, there are criticisms that the data to determine the quota should be sufficient, administrative duties such as auditing and their costs should not prevent the implementation (Keleş & Al, 2015: 313). Carbon Border Adjustment Mechanism is briefly mentioned here as it is the subject of another study.

3.3.4. Incentives

OECD expressed incentives (subsidies) as "*a means of keeping prices below market level for consumers and above market level for producers or reducing costs for both consumers and producers*" (EEA, 2005: 101). In order to prevent environmental pollution, countries give incentives and apply tax reductions. Subsidies can be defined as an indirect transfer of public resources, rather than a direct expenditure, by reducing the tax liabilities of taxpayers through tax reductions provided by governments (OECD, 2010: 12-19).

Tax reductions can be applied in the form of tax exemptions, reductions in rates or tax bases. Tax deductions provided to taxpayers are realized as follows.

- Tax exemptions: Some amounts are excluded from the tax base;
- Tax deductions: Some amounts deducted from the benchmark to arrive at the tax base;
- Tax credits: Some amounts are deducted from the tax liability;
- Tax rate reduction: A reduced tax rate is applied to a taxpayer or class of taxable transactions;
- Tax deferral: Delay in paying taxes" (OECD, 2010: 15).

Subsidies are used as one of the economic instruments of environmental policy that can be used in various sectors such as energy, industry, agriculture, and transportation. In many countries, subsidies are used as a tool to combat environmental pollution by favoring practices that are less harmful to the environment in agricultural production, encouraging the use of renewable energy by reducing the use of fossil fuels, encouraging the use of electric motor vehicles that reduce carbon emissions (EEA, 2005: 103).

While the states use taxes to prevent harmful behaviors in order to realize the country's environmental policies, on the other hand, they try to cause positive behaviors in terms of environment by applying subsidies and tax reductions to direct the society to environmental behaviors (İrteş Gülşen, 2021: 136). However, these incentives lose their economic effectiveness in the long run. Because the incentives provided contradict the "polluter pays principle" (Barde, 1994: 12). In countries where public resources are scarce, incentives applied in this way are also criticized for causing a significant loss of income. Therefore, incentive applications should be carefully planned considering the economic conditions of the countries (Sterner & Coria, 2012: 108-109).

3.3.5. Deposit Refund System and Performance Bonds

The deposit refund system is a proven tool to be the most effective and sustainable way to move towards the Zero Waste Circular Economy, which preserves the value of

materials by reusing them, uses recycling as a last resort, and ensures that no waste is leaked into the environment (ZWE, 2019).

With the deposit refund system, a price is added to the product to ensure that products that may cause environmental pollution are reused or recycled. If the empty containers of the product are returned after use, the deposit received will be refunded. The system is based on offering an economic incentive. The use of the deposit refund system is being implemented not only in the beverage industry, but also in other industries such as shipping, shipping packaging and, other forms of packaging, helping to prioritize reuse through refill systems (ZWE, 2019).

In Turkey, as a country where 20 billion beverage packaging waste is generated annually, the Deposit Management System for packages made of plastic, metal and paper started to be implemented as of January 1, 2022, following the plastic bag fee in order to protect the environment and nature and reduce pollution (TÜÇA, 2021). While the rate of collection of non-returnable beverage packages is 47% in the European Union, the rate of collecting returnable beverage packages is 94% (Batı & Kaçmaz, 2021). This practice greatly reduces carbon emissions while protecting the environment.

4. The Role and Importance of Local Governments in Combating Environmental Pollution

It is now an accepted fact that it is no longer sufficient for countries to seek solutions on their own against environmental problems that are experienced on a global scale and that can no longer be ignored, that it is necessary to look at the issue as a whole and that common solutions should be sought. The environmental problem in one country has now affected neighboring countries. In addition, all kinds of political tools to be used in environmental problems have different effects depending on the situation in the country. Sharing experiences and exchanging ideas will be progressive steps in determining environmental policies. However, it is very important to intervene when the problem first arises and when the problem is small. For this reason, the place and importance of local governments in environmental policies should not be ignored. Local governments are at the center of environmental problems that countries are experiencing. From this point of view, the Council of Europe has organized various congresses and established committees in order to strengthen the local and regional autonomy of the member states, to develop cooperation between the interregional and border regions in Europe and to seek solutions to environmental problems.

One of these is the “Congress of Local and Regional Authorities”, which was formed by the Council of Europe in 1957, on environmental issues. European Charter of Local Self-Government and the European Landscape Convention can be cited as examples of

agreements signed on the basis of local governments. In these agreements, new projects on spatial planning, sustainable development and urban planning are supported, and regional integration and solidarity are encouraged.

The European Framework Convention on Cross-Border Cooperation Between Local Communities and Governments emphasizes the importance of cooperation on the environment. The European Framework Convention on Cross-Border Cooperation Between Local Communities and Governments (21 May 1980), adopted by the Council of Europe in 1980, aims to develop cooperation opportunities between local governments. and to eliminate all kinds of administrative, legal, political and psychological obstacles to the development of cooperation projects between neighboring local government units and to develop cooperation. Attention is drawn to the potential importance of cooperation between local and regional communities or governments in border areas in achieving this goal, in areas such as regional, urban and rural development, environmental protection, improvement of public facilities and services, and mutual assistance in emergencies. The Convention aims to contribute to the economic and social development of the border regions, and to the spirit of unity. (EEA, 2006: 18).

Turkey signed this Convention on 4/2/1998. The agreement was approved by the Law No. 4517 dated 1/2/2000 and with the statement "This Convention shall take effect in terms of cooperation to be established with the local governments of the countries with which Turkey has diplomatic relations, and it is only valid in special administrations, municipalities, villages, and local administration unions established for this purpose" (EEA, 2005:14).

With Agenda 21, "sustainable development" was adopted as the common goal of all humanity in the 21st century at the UN Earth Summit held in Rio in 1992. In this direction, the Action Plan titled “Agenda 21”, which sets out the principles and areas of action for tackling environmental and development problems and achieving sustainable development goals in the 21st century, has been adopted by UN member states. Agenda 21 begins with the sentence “Humanity stands at a defining moment in history”. The main reason why environmental problems are at the top of the agenda all over the world is that a very frightening future for humanity is beginning to become clear. In a world that is increasingly polluted and its natural resources are consumed without measure, attention is drawn to the ever-increasing environmental degradation, diseases, poverty, and inequalities. As a way out, the concept of "global partnership" is brought to the agenda for meeting basic needs, improving living standards, better protection, and management of ecosystems. (EEA, 2005: 14).

In the Chapter 28th of Agenda 21, the importance of the participation and cooperation of local governments in the realization of the determined targets is emphasized, since a

large part of the problems and solutions addressed are based on activities at the local level. In this section, where the concept of "Local Agenda 21" is introduced, it is decided that civil society and all other interested parties will create the Local Agenda of the 21st Century for their cities under the leadership of local governments. Emphasis is placed on strengthening cooperation between local governments and representatives of international communities, local government associations, and other local governments. It is aimed to develop and implement programs in order to involve all segments of the society in the decision-making, planning and implementation processes of local governments.

The European Committee of the Regions, based in Brussels, is the advisory body representing local governments in the European Union. Established in 1994, the Committee influences the decisions taken by local and regional governments through their opinions to the Commission, Parliament and the Council, protects and safeguards the interests of local and regional governments, and enables institutions to function more democratically. The Commission and the Council request the Committee to give an opinion on the following issues:

- "Economic and social solidarity (regional policies and structural funds) that directly affect local and regional governments,
- Transport, telecommunications and energy networks covering the whole of Europe,
- Public health,
- Education, youth and cultural issues,
- Employment policies, vocational training and social policies,
- Environmental problems,
- Transportation problems" (OECD, 1989: 15).

As can be seen, the European Union supports local governments to protect the interests of local governments and to intervene more quickly and effectively in the problems experienced by establishing advisory boards and committees in many fields such as economic, social, transportation, environment, culture, telecommunications, and energy.

It has organized various congresses and formed committees in order to strengthen the cooperation between the member states of the Council of Europe, to improve the cooperation between the interregional and border regions, and to seek solutions to environmental problems. Agreements were also signed in order to strengthen the autonomy of local governments and thus to produce effective solutions to the problems experienced. We can give EU Covenant of Mayors and Compact of Mayors as examples to these contracts. These agreements are briefly mentioned below.

5. Global Covenant of Mayors for Climate and Energy

The Global Covenant of Mayors for Climate and Energy brings together two major city initiatives on climate change. It brings together the Compact of Mayors, which came into force in 2014, and the EU Covenant of Mayors, which came into effect in 2008, to form a single global coalition.

The Global Covenant of Mayors is a global coalition of mayors and municipal workers whose goals include preventing global warming, reducing greenhouse gas emissions at the local level, and tracking results in a transparent manner (Avrupa Birliği Başkanlığı, 2022).

The Global Covenant of Mayors is also the largest urban climate and energy initiative in the world, covering 11,389 cities and regions from 57 countries (TBB, 2021). Cities that are party to the convention aim to provide a clean, carbon-free environment by providing cost-effective and sustainable energy opportunities to all in the long run. The municipalities, cities and regions that have signed the contract participate voluntarily in order to achieve the objectives set at the urban or national level, such as irrigation and access to clean energy. The Climate & Energy Action Plans they have prepared are subject to the monitoring process. It encourages municipalities and cities that are parties to the convention to work with regions, states, and central governments.

12 sectors and 9 main hazards have been defined within the framework of the Global Covenant of Mayors for Climate and Energy. These sectors are; agriculture and forestry, buildings, civil defense and emergencies, economy, energy, environment and biodiversity, health, land use planning, tourism, transport, waste, water.

In the plans to be made, it is expected that action plans will be prepared by taking these sectors into consideration.

The processes of the Global Covenant of Mayors for Climate and Energy, which brought these two city initiatives together, were as follows:

> "2008: Covenant of Mayors – CoM was launched by the European Commission in 2008 to engage and support mayors to achieve the climate and energy goals of the European Union.
>
> 2011: The success of the initiative quickly exceeded expectations and attracted new local and regional authorities in Europe and beyond. Covenant of Mayors – CoM consisted of 2000 cities until October 2010. The Convention's East initiative started in 2011 and is currently active in Belarus, Ukraine, Moldova, Armenia, Georgia and Azerbaijan.
>
> 2012: The European Commission launched the Cleaner Energy Saving Mediterranean Cities project, extending the Covenant of Mayors to the Southern

Region of Europe. This project supports cities in joining the Covenant of Mayors and delivering ambitious sustainable development policies. CESMED Office operates in Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine and Tunisia.

2014: Compact of Mayors became operational.

At the Climate Summit in Paris a few years later, Maroš Sefčovič, Vice-President of the European Commission, stated that the Covenant of Mayors initiative, which will establish new regional offices in Sub-Saharan Africa, North and South America, will also focus on the countries of Japan, India, China, and South East Asia.

2016: On June 22, 2016, a new network called Global Covenant of Mayors - GCoM was announced by Covenant of Mayors – CoM and another city initiative, Compact of Mayors. The resulting Global Covenant of Mayors - GCoM is the largest collaborative movement of local governments committed to going beyond their national climate and energy targets (Kahraman & Özkul, 2021: 6).

Cities that have signed the convention have agreed to adopt approaches that will mitigate and adapt to the impacts of global climate change. Cities that are party to the convention have committed to reduce their carbon dioxide emissions by at least 40 percent until 2030 and to prepare a "Sustainable Energy and Climate Action Plan" within the first two years after signing the convention (Kahraman & Özkul, 2021: 6).

Local governments are obliged to realize the following gradual approach for their contractual commitments;

"• Conducting Core Emissions Inventory and Climate Change Risk and Vulnerability Assessment;

• To prepare and present a Sustainable Energy and Climate Action Plan within two years from the date of the city council decision;

• To submit a Progress Report at least every second year following submission of the Sustainable Energy and Climate Action Plan for evaluation, monitoring and verification (Kahraman & Özkul, 2021: 9).

It is envisaged that "Sustainable Energy and Climate Action Plans" mainly cover the following sectors:

o "Municipal infrastructures (central heating, public lighting, smart grids, etc.)

o Land use and urban planning

o Decentralized renewable energy sources

o Public and private transport policies and urban mobility

o Participation of citizens and civil society in general

o Smart energy movement of citizens, consumers, and businesses" (Kahraman & Özkul, 2021: 6).

The EU, which took action by realizing the one degree temperature increase experienced after the 2000s and how this increase changed the world, how it affected and how important this increase was, signed the Green Deal. EU countries have set a target until 2050 with this agreement. This goal is to reduce the carbon emission rates recorded in 1990 by 55 percent by 2030 and to become the "first carbon-neutral continent by 2050". For this target, the "Fit for 55" proposal has been drafted. One of the applications in the "Fit for 55" proposal is the "Carbon Border Adjustment Mechanism".

The purpose of the "Carbon Border Adjustment Mechanism" is to try to prevent companies from moving their production to countries with high carbon emissions and limited emission restrictions, and to prevent carbon leakage. The system, which will start to be implemented in 2023, will be taxed per ton of greenhouse gas released during the production process for products exported to the EU as of 2026. With this system, as in the Emissions Trading System (ETS), the same amount of carbon cost will be applied to the imported products, as is the carbon cost on a product produced within the EU borders. Unlike the ETS system, the new system will calculate the emission level that can be allowed in a certain region in order to keep the emission level under control, and will set a target to which level they want it to be reduced (Bozhan, Ş, 2021). In the Carbon Border Adjustment Mechanism, tax is charged on the exported product. Beyond adjusting the emission level at the permissible level in a particular region, the aim is to prevent production from being transported to countries that do not regulate carbon emissions, thus preventing carbon leakage. The implementation will start with products such as iron, steel, electricity, aluminum, and fertilizer.

Municipalities have also taken action to take the necessary measures within the framework of these agreements and contracts. After the signing of Global Covenant of Mayors for Climate and Energy, many municipalities have started to take important steps to reach their carbon neutral target. It is now agreed that if the necessary precautions are not taken, our livable world will no longer exist in the future. Achieving the carbon neutral target is a process that takes decades, not 3 or 5 years. For this reason, administrations generally set the year 2050 as the target. If the goal is not achieved, there will be no world left for our children and grandchildren to live in. Because, due to climate change, food resources are losing their productivity, cultivated areas are decreasing, clean water resources are decreasing, and a food crisis is on the way. In this case, it means that human beings cannot meet their most basic needs of nutrition and shelter.

Countries that are aware of the situation are taking new steps in their economic order to reduce carbon emissions. One of the most important results to be drawn from the

"European Green Deal" signed by the European Union is the carbon tax. Countries that cause high carbon emission production with low technology, such as Turkey, are subject to criticism from the European Union. If low-emission products are not produced with high technology, starting from 2026, Turkey will have to pay carbon tax per ton for each product exported to the EU. According to today's calculations, a burden of 2.4 billion Euros will fall on the shoulders of future generations.

Many municipalities in Turkey signed the Global Covenant of Mayors for Climate and Energy and prepared plans and programs under the name of Sustainable Energy and Climate Action Plan or Green City Action Plan and started the necessary studies for its implementation. Reducing carbon emissions by 40 percent by 2030 will reduce a significant cost on the country.

Edirne Municipality is one of the municipalities that are party to the agreement. Since 2018, it has been generating electricity from landfill gas. By generating electricity from methane, approximately 30 million kilowatt hours of electricity was produced in a 3.5-year period. This is a very important development in terms of both supporting the country's resources in energy production and reducing carbon emissions (Edirne Belediyesi, 2021).

Antalya Municipality is one of the municipalities that signed the agreement. According to the agreement, Solar Power Plant (SPP) investments are important for clean energy. The province is a city that receives 300 days of sunshine out of 365 days. There are 11 SPPs available in Antalya. It is aimed to increase this number to 18 in 2023. SPP investments have a significant contribution to the agricultural sector. 74% of the electricity of 51 irrigation cooperatives in Antalya is met from SPPs (Antalya BŞB, 2022).

The Greater London Council has proposed a 'clean air' tax of £2 per day on all vehicles in the capital, except for vehicles running on 'the cleanest fuels'. A new report has been published in order to reach the net zero emission target for 2030 determined by the London Metropolitan Municipality. According to the report's findings, vehicle traffic in the capital needs to decrease by 27 percent over the next eight years to reach this target. The report also suggests that cars are used for very short distances in London, with one-third of those distances being walked in 25 minutes and two-thirds cycling in less than 20 minutes (BBC, 2022). It is possible to multiply these examples.

As can be seen, municipalities take measures on a local basis to fulfill the requirements of the agreement they signed. These measures have been increased over time and are progressing towards the goal of minimizing the damage done to the world by developing first at the country level and then at the level of other countries and regions. For this, economic resources are needed.

6. Conclusion

Although many countries have started the process of combating environmental pollution in the last few decades, they have made significant progress, produced solutions and developed policies. In the framework of the "polluter pays principle", external costs have been tried to be internalized by using the economic tools of environmental policy. Governments use various public and market solutions to reduce the amount of greenhouse gases released into the atmosphere. Taxes are the leading tools used effectively in the fight against environmental problems. It is aimed to ensure that those who harm the environment participate in the solution and expense of the problem they have created by using taxes, fees, trade permits, deposit refund system, incentives, and other similar economic tools. It is predicted that producers and consumers who cause environmental pollution over time and have to bear the cost, will make positive changes in their behavior and prefer investments that cause the least damage to the environment.

While solving environmental problems and protecting the environment without harming it require a responsibility at the national level, it also imposes a responsibility on local government units at the local level. For this reason, the role of local governments is as important as the role of the central government in the implementation of the economic and regulatory tools to be applied while seeking solutions to environmental problems. In this direction, the European Union wants to strengthen the importance and autonomy of local governments by establishing various commissions and committees, and to intervene more quickly and effectively in the problems experienced. With the committees established and the contracts signed, it has assigned duties to local governments for the solution of environmental problems.

Each country tries to take the necessary measures in line with its own conditions. While some countries have been applying taxes since 1980 to prevent the emission of greenhouse gases, many countries, including Turkey, do not apply any tax in this regard. After the EU's target of "being the first carbon-neutral continent by 2050", non-EU countries that could not reduce their greenhouse gas emissions realized that they needed to take measures to avoid being exposed to the heavy carbon tax burden and started working to implement carbon taxes within their systems.

In this study, the economic tools of the environmental policy of the municipalities are mentioned. In the example of Turkey, it is seen that municipalities collect two basic taxes regarding environmental problems. These are the "Environmental Cleaning Tax" and the "Electricity and Coal Gas Consumption Tax", and these taxes collected by the municipalities are the only environmental tax types that directly serve the environmental purpose of the state. In other general budget tax revenues, it is seen that environmental provisions are included in the laws as articles. Although not as common

as taxes, there are economic tools such as fees and incentives used by municipalities. However, when we look at the total revenues, it is seen that these economic instruments are used to generate income for the state rather than to prevent environmental problems.

For example, the portion of the Environmental Cleaning Tax (ECT) collected from the houses is taken in proportion to the amount of water used, but the tax does not have a correlation with the amount of solid waste. Therefore, ECT can have an effect on reducing water consumption, but not on the amount of solid waste generated. Since ECT from workplaces is taken independently of wastewater and solid waste, only in association with building groups, it is not possible to talk about the internalization of externalities in accordance with the polluter pays principle. Since the Electricity and Coal Gas Consumption Tax imposes an additional cost on consumption, its impact on the environment is indirect. In other words, the purpose of preventing pollution of both taxes is secondary. It cannot go beyond the function of providing resources to local governments.

In Turkey, municipalities are not authorized to take incentive measures for environmental purposes, such as tax reductions or aid. Therefore, governments that will provide such incentives should be able to arrange for municipalities to use these tools and provide financial incentives to direct local people when necessary. For example, by ensuring the recycling of wastes such as waste oils and batteries, a step will be taken to prevent pollution at the local level, and citizens can be encouraged to be more sensitive to the environment, and direct them to positive behaviors.

Finally, environmental problems are a global problem that affects the whole world. The current climate change crisis and the increase in environmental pollution problems reveal that this problem requires an urgent solution and that all countries of the world should seek a joint solution instead of seeking a solution to this problem within the borders of a single country. Realizing how important problems can be caused by the warming of the world by one degree, countries realized the importance of reducing carbon emissions in the fight against global warming. With this awareness, both developed countries that cause the most carbon emissions and developing countries should do their part in this fight, and legal arrangements should be made for the most effective implementation of tax applications, which is an important tool in the fight against environmental problems. While making these regulations, local governments should include provisions that will make people and institutions that cause environmental pollution pay the price of the pollution they create and internalize the externalities. When the problem is solved from its source, the level of pollution spreading throughout the world will decrease and it will be easier to deal with environmental problems.

The "*Covenant of Mayors*" initiated by the European Commission in 2008 and the "*Global Covenant of Mayors for Climate and Energy*" in 2016 have become a global initiative. The number of municipalities in Turkey, which has taken part in this process, has increased since 2011. In the sustainable energy action plans of municipalities, their targets for reducing greenhouse gas emissions and use of this gas should be realistic. For each energy source, for example, all production processes until electricity generation must be calculated by taking into account the emission value. However, realistic calculations and realistic solutions can help cope with these problems. The plans made should postpone the goal of providing income to the states, and environmental protection should be made the first goal.

References

Arıkboğa, Ü. (2016). Belediyelerin Gelir Yapısı: Sorunlar ve Çözüm Önerileri, *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 13 (33).

Antalya Büyükşehir Belediyesi. (2022). (https://www.antalya.bel.tr/Haberler/HaberDetay/4961/buyuksehir-belediyesi-surdurulebilir-enerji-ve-iklim-eylem-planini-acikladi). (22.07.2022).

Barde, J. P. (1994). Economic Instrumets in Environmental Policy: Lessons From The OECD Experience And Their Relevance to Developing Economies, Working Paper:92, OECD Development Centre.

Batı, S. & Kaçmaz, S.I. (2021). Yılbaşında Uygulama Başlıyor. Depozito İade Sistemi Nasıl İşleyecek? (https://www.hurriyet.com.tr/gundem/yilbasinda-uygulama-basliyor-depozito-iade-sistemi-nasil-isleyecek-7-soru-7-yanit-41874455).

BBC. (2022). (https://www.bbc.com/turkce/haberler-dunya-60051852). (21.06.2022).

Biyan, Ö. ve Gök, M. (2014). Çevre Politikaları Kapsamında Avrupa Birliği ve Türkiye'de Çevre Vergilerinin Uygulanışı: Karşılaştırmalı Bir Analiz, *Hitit Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, Yıl 7, Sayı 2. pp: 281-310.

Bozhan, Ş. (2021). Karbon Vergisi Uygulamasının Türkiye'ye Ekonomik Etkileri. (https://ekoiq.com/2021/08/karbon-vergisi-uygulamasinin-turkiyeye-ekonomik-etkileri/). (21.06.2022).

Carter, N. (2007). The Politics of the Environment, New York, Cambridge University Press.

Connelly, J. & Smith, G. (2003). Politics and the Environment: From Theory to Practice, New York, Routledge.

Edirne Belediyesi. (2021). (https://www.edirne.bel.tr/icerik/gurkan-avrupa-belediye-baskanlari-sozlesmesini-imzaladi). (13.05.2022).

Ekmekçi, E. (2003). *Küreselleşme ve Vergilemede Yeni Eğilimler*. İstanbul: Kazancı Kitap Ticaret Yayinlari, 2003.

Environment Agency (EEA). (2005). Market Based Instruments for Environmental Policy in Europe, EEA Technical Report No:8/2005, Luxembourg, Office for Offical Publications of the European Communities.

Enviromental Technoloy. (2014). (https://www.envirotech-online.com/news/air-monitoring/6/breaking-news/what-is-ecotax/31598). (07.02.2022).

Ercan, E. (2015). Türkiye'de Çevre Vergileri Mi Çevre Vergisi Mi? *TBB Dergisi.* Sayı 119: pp: 209-226.

European Commission. (2022). Development of EU ETS (2005-2020) https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets/development-eu-ets-2005-2020_en). (10.08.2022).

Eurostat. (2018). Environmental Tax Statistics. https://ec.europa.eu/eurostat/statistics-explained/ index.php?title=Environmental_tax_statistics_-_detailed_analysis#Environmental_tax_revenue_ in_Europe_in_2016. (17.12.2021).

Eurostat. (2019). Environmental Tax Revenues. (http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=env_ac_taxvelan g=en). (07.02.2022).

Holzinger, A. J. (2003). Eco-taxes in the European Union: The need for a uniform structure. Wisconsin International Law Journal, 21(1).

Kahraman, A.C. & Özkul, M. (2021). Belediye Üyelik Rehberi. Marmara Belediyeler Birliği.

İrteş Gülşen, M. (2021). Classification Of Environmental Tax Applications and Examples of Implementation in Selected Countries, *Süreklilikten Sürdürülebilirliğe Ekonomi*. Holistence Publication.

Kargı, V. & Yüksel, C. (2010). Çevresel Dışsallıklarda Kamu Ekonomisi Çözümleri. *Maliye Dergisi,* Sayı 159, Temmuz-Aralık 2010.

Keleş, R. & Al. (2015). *Çevre Politikası,* Ankara, İmge Kitabevi.

McEldowney, J. F., & Salter, D. (2016). Environmental taxation in the UK: the climate change levy and policy making. *Denning Law Journal*. 28.

Miller, S. J., & Vela, M. A. (2013). Are environmentally related taxes effective? (No. IDB Working Paper Series No. IDB-WP-467, Inter-American Development Bank)

OECD. (1989). Economic Instruments for Environmental Protection, Paris, OECD. (21.07.2022).

OECD. (1997). Environmental Taxes and Green Tax Reform, Paris, OECD. (21.07.2022).

OECD. (2006). The Political Economy of Environmentally Related Taxes, Paris, OECD. (15.03.2022).

OECD. (2010), Tax Expenditures in OECD Countries, Paris. (13.06.2022).

OECD. (2011). Environmental Taxation A Guide for Policy Makers. (https://www.oecd.org/env/tools-evaluation/48164926.pdf). (07.02.2021).

OECD. (2021). OECD Environmental Data and Indıcators. (https://www.oecd.org/environment/indicators-modelling-outlooks/data-and-indicators.htm.). (15.03.2022).

Orhan, G. (2018). *"Türkiye'de Çevre Politikaları," Türkiyede Kentsel Alan ve Çevre Politikaları Analizleri*, Ed. Elvettin Akman ve Cenay Babaoğlu, Ankara, Ekin Yayınevi, s.1-22.

Öz, E. & Kutbay, H. (2016). Ekolojik Vergileme: Seçilmiş Bazı Dünya Ülkeleri ile Türkiye Verilerinin Karşılaştırılması, *Eskişehir Osmangazi Üniversitesi İİBF Dergisi,* Nisan 2016, 11(1).

Özdemir, B. (2009). Küresel Kirlenme Sürdürülebilir Ekonomik Büyüme ve Çevre Vergileri. *Maliye Dergisi* 156(1).

Satır Reyhan, (2014). Çevre Ekonomisinde Çevre Vergileri Uygulamaları. *Hitit Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* - Yıl 7, Sayı 1.

STERNER, T. & Coria, J. (2012). *Policy Instruments for Environmental and Natural Resource Management.* New York, RFF Press.

TC. Dışişleri Bakanlığı. (2002). Avrupa Birliği Başkanlığı, Birleşmiş Kentler ve Yerel Yönetimler Orta Doğu ve Batı Asya Bölge Teşkilatı. (https://www.ab.gov.tr/_50323.html).

Toprak, D. (2017). Türkiye'nin Çevre Politikasında Yerel Yönetimlerin Rolü: Yerel Yönetim Bütçesinin İncelenmesi, *Maliye Araştırmaları Dergisi*, 3 (2).

Tosuner, M. & Tekbaş, A. (2004). Atık Su Bedeli ve Sıvı Atık Çevre Temizlik Vergisinin Gelişimi ve Niteliği Üzerine Bir İnceleme, *Vergi Sorunları,* Sayı 189.

Türkiye Belediyeler Birliği, (2021). Avrupa Birliği Belediye Başkanları İklim ve Enerji Sözleşmesi. (COVENENT OF MAYORS). https://www.tbb.gov.tr/Tr/Duyuru_avrupa-birligi-belediye-baskanlari-klim-ve-enerji-sozlesmesi-covenant-of-mayors_1214).

Türkiye Çevre Ajansı. (2021). 'Depozito Yönetim Sistemi 2022'de Hayat Buluyor.' (https://tuca.gov.tr/haber/depozito-yonetim-sistemi-2022-de-hayat-buluyor/14).

ZWE. (2019). Deposit Return Systems: an effective Instrument towards a Zero Waste Future. https://zerowasteeurope.eu/2019/07/deposit-return-systems-an-effective-instrument-towards-a-zero-waste-future/ (15.10.2022).

Bank-Specific Determinants of the Non-Performing Loans: An Empirical Analysis for Turkey

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Abstract

The issues incurred by banks in receiving the loans they extend induce an increase in the loans called as non-performing loans, which may have an negative effects on the banks balance sheets. It is widely accepted that the increases in the non-performing loans, which represents to ex-post credit risk, to total loans lead to deteriorate asset quality of banks and banking crises. Accordingly, detecting the factors affecting the non-performing loans of the banking sector, which is the largest component of the financial system, has a vital role to ensure financial stability. This study investigates empirically the bank-specific drivers of non-performing loans in the Turkish banking sector. In this study, with monthly data obtained from the BDMK, besides it is analyzed the effects of lending behavior of banks on the non-performing loans, the main hypothesis on the topic are tested. The mentioned hypotheses are that the "bad management I" hypothesis, the "skimping" hypothesis, the "bad management II" hypothesis, the "moral hazard" hypothesis, the "too big too fail" hypothesis and "deposit rate effect" hypothesis. Testing the validity of these hypotheses enables to reveal which factors related to bank dynamics increase non-performing loans and therefore decrease loan qualityof banks.

Keywords: Non-performing loans, Credit risk, Bank-specific Determinants

Jel Codes: G21, E51, C2.

POWER AND TRUST AS DETERMINANTS OF TAX COMPLIANCE: AN EVIDENCE FOR THE SLIPPERY SLOPE FRAMEWORK FROM TURKEY

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Abstract

The slippery slope framework model, one of the prominent models in the tax compliance literature, argues that tax compliance stands on the trust in the tax authority and the power of tax authorities. The current study aimed to test the predictions of the slippery slope framework model in Turkey with multivariate statistical tests and structural equation modeling analysis. In order to explain the relationship between trust and power better, the study included a "legitimate power variable" shaped by these two variables in the research model. The study tested the data from 214 certified public accountants operating in the TR90 region (Artvin, Giresun, Gümüşhane, Ordu, Rize, Trabzon) in Turkey with structural equation modeling analysis. In accordance with the model's predictions, study results revealed that trust in authorities positively affected voluntary tax compliance, while coercive power positively affected enforced tax compliance. On the other hand, while legitimate power had a direct and significant positive effect on voluntary tax compliance, it had no direct significant effect on enforced tax compliance and tax evasion. It is thought that the research will contribute to the literature in terms of providing empirical evidence that combines social psychological and deterrence-based approaches in increasing tax compliance in Turkey.

Keywords: Tax Compliance, Slippery Slope Framework, Trust in authorities, Power of authorities
JEL Code: H26, C83

1. Introduction

The efficient collection of tax revenues has maintained its significance for centuries for finance needs required by public expenditures. This situation reveals the importance of tax compliance, such that establishing sustainable and high tax compliance is an impressive success criterion for today's tax administrations. When considering the seriousness of tax compliance, it is significant to identify and comprehend the motivational factors that push individuals to pay taxes or not. However, information on the determinants of tax compliance, where human plays the lead, is quite limited. Motivational factors determining tax compliance are complex and different in individual and social characteristics. *The slippery slope framework model* is one of the most prominent models in the literature that tries to explain tax compliance behavior.

The current study, which aims to test the validity of the slippery slope framework model based on Turkey's data, comprises four parts: the first part is the introduction; the second part covers the theoretical background. The third part contains the methodology, while the fourth part presents the research findings. The current study ends with the conclusion section, which covers the evaluation of the results.

2. Theoretical Background

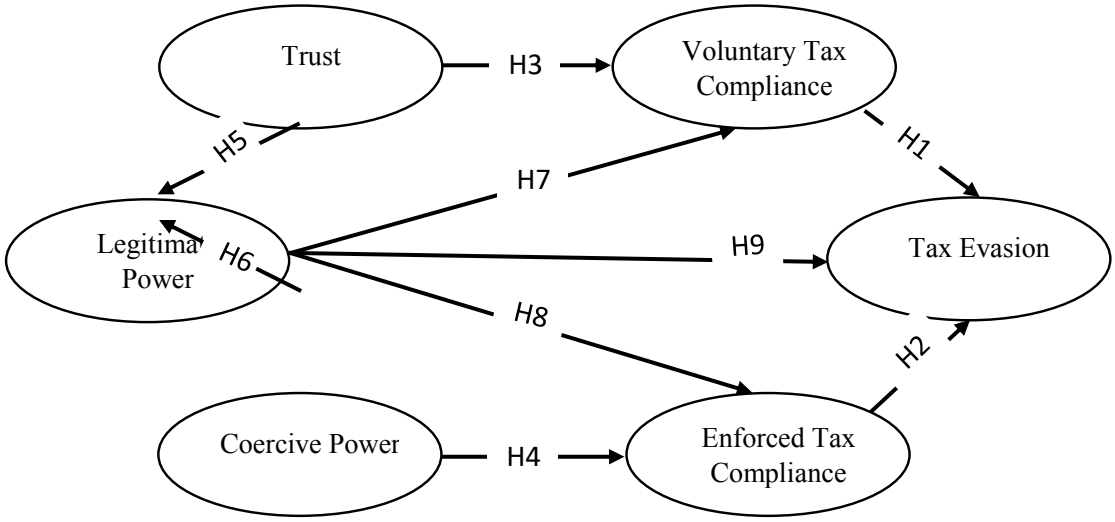
Tax compliance can be briefly expressed as the complete and timely fulfillment of tax obligations in accordance with the law. Long-standing tax compliance research has two main approaches: The first is the economic approach, which claims that taxpayers aim to maximize their expected benefits by thinking rationally and strategically. This approach suggests that high audit and penalty rates are the most influential elements in achieving success in tax compliance and that low audit frequency and weak penalty rates cause tax non-compliance. The other approach in the tax compliance literature attaches importance to various psychological and sociological factors. This approach seeks to answer the question of *"why people pay taxes despite low audit and penalty rates"* through motivational elements, such as trust in administration and government, justice, and social norms. The slippery slope framework model is one of the prominent models in this context.

The slippery slope framework model, which classifies tax compliance as voluntary and enforced, predicts two determinants for tax compliance: *trust in the administration* and *the power of the administration*. Accordingly, trust in the administration affects *voluntary tax compliance*, and the power of the administration affects *enforced tax compliance*. These two factors define the general level of tax

compliance (Kirchler, 2007). The administration's decisiveness to implement frequent and comprehensive inspections and penalty policies to detect and prevent tax evasion determines taxpayers' perception of the power of the administration. On the other hand, trust in the administration expresses the perception of individuals and social groups that the administration is benevolent and acts for the common good of the society (Kirchler et al., 2008: 212). In this model, which blends economic and psychological components to explain tax compliance behavior, the uncertainty comes from the relationship between coercive power and trust. So much so that the use of force by the administration is likely to damage the elements of trust, but, on the other hand, the possibility of contributing to the trust environment and positively affecting cooperation also exists. Similarly, prominent trust-based policies may negatively affect the perception of the "power of the administration" and harm tax compliance or vice versa (Gangl et al., 2012: 3). In order to make this ambiguous and complex relationship more understandable, some authors have separated the power concept as coercive and legitimate power (see Gangl et al., 2012; Kastlunger, 2013; Rodrigues et al., 2019). While coercive power is related to the authorities' ability to control and punish, legitimate power stands on an appreciated leadership that employs qualified personnel, provides information to citizens, and helps them comply with the law (Gangl et al., 2015: 7).

Recently, many empirical studies testing the hypotheses of the slippery slope framework model have reached findings that support this model's predictions (Muehlbacher et al., 2011; Benk & Tamer, 2012; Kastlunger et al., 2013; Kogler et al., 2013; Kogler et al., 2015; Faizal et al., 2017; Sigle et al., 2018; Mardhiah et al., 2019; Andyarini et al., 2019). Figure 1 shows the research model and hypotheses created in light of the theoretical background and literature.

Figure 1: Research Model



H1: There is a significant impact of taxpayers' perception of voluntary tax compliance on tax evasion;

H2: There is a significant impact of taxpayers' perception of enforced tax compliance on tax evasion;

H3: There is a significant impact of taxpayers' perception of trust on voluntary tax compliance;

H4: There is a significant impact of taxpayers' perception of coercive power on enforced tax compliance;

H5: There is a significant impact of taxpayers' perception of trust on legitimate power;

H6: There is a significant impact of taxpayers' perception of coercive power on legitimate power;

H7: There is a significant impact of taxpayers' perception of legitimate power on voluntary tax compliance;

H8: There is a significant impact of taxpayers' perception of legitimate power on enforced tax compliance;

H9: There is significant impact of taxpayers' perception of legitimate power on tax evasion.

3. Methodology

The current study aimed to test the predictions of the slippery slope framework model in Turkey with multivariate statistical tests and structural equation modeling analysis. Since it is hard to get taxpayers' sincere thoughts on taxation issues, instead, the questionnaires were directed to certified public accountants–taxpayers' advisors in

taxation and financial matters–to get the answers to taxpayer-oriented questions. After examining domestic and foreign literature, the research tools were determined: the trust in administration scale was adapted from Mulder et al. (2009), coercive and legitimate power and tax evasion scales from Kastlunger et al. (2013), voluntary and enforced tax compliance scales from Kirchler and Wahl (2010). A seven-point Likert-type scale served for the variables in the model (1=strongly disagree; 7=strongly agree).

The research population consisted of independent certified public accountants working in the TR90 region, one of Turkey's 26 statistical regions. According to TÜRMOB data, on 15.05.2022–when the online data collection process started–the research population comprised approximately 970 independent certified public accountants. Although 223 participants responded to online surveys sent via email and social media, after excluding erroneous and unsuitable ones, analyses progressed with 214 participants. It was concluded that the number of samples reached was appropriate for multivariate statistical tests and structural equation modeling analysis, and the analysis phase started. The obtained data were converted into numerical data using SPSS 25 and AMOS 25 package programs and analyzed.

In this context, the research tools' validity was tested with confirmatory factor analysis (CFA). CFA is a type of analysis used to test the compatibility of the collected data with the previously discovered factor structure. There are various fit indices in the literature to examine CFA compliance. Some indexes and acceptable value ranges are as follows: $\chi 2/df<3$; RMSEA and SRMR <.08; AGFI>.80 and CFI, IFI>.90 (Karagöz, 2017; Thakkar, 2020). Reliability was tested with Cronbach's Alpha coefficient. This coefficient, which takes a value between 0-1, should be 0.70 and above to be qualified as reliable (George & Mallery, 2019). Then, the research model built in the light of the literature was tested using structural equation modeling.

4. Results

The table below demonstrates the CFA factor loads and fit indices applied for the research scale with six variables. The first CFA solution could not produce a model-data fit. However, performing the suggested modifications sequentially and removing three expressions with insufficient factor loading from the scale enabled the indexes indicating the model-data fit to reach a satisfactory level. Factor loads between 0.617 and 0.976 were above the minimum level. According to these results, CFA confirmed the construct validity of the research scale with 29 statements and six factors. The Cronbach's Alpha coefficient calculated to examine the reliability level of the research scale was 0.884. Accordingly, the research scale had high reliability.

Table 1: Results of CFA (N=214)

Factors	Items	Factor Loading	Factors	Items	Factor Loading
Enforced Tax Compliance	ETC1	,824	Voluntary Tax Compliance	VTC1	,681
	ETC2	,780		VTC2	,791
	ETC3	,664		VTC3	,866
	ETC4	,678		VTC4	,819
	ETC5	**Deleted**		VTC5	,805
Coercive Power	CP1	,841	Legitimate Power	LP1	,890
	CP2	,976		LP2	,914
	CP3	,829		LP3	,739
	CP4	**Deleted**		LP4	,684
	CP5	,617		LP5	,778
Trust	T1	,797	Tax Evasion	TE1	,617
	T2	,906		TE2	,745
	T3	,913		TE3	,898
	T4	,766		TE4	,855
	T5	,705		TE5	,678
	T6	**Deleted**			
	T7	,759			

Fit Indices for CFA			
χ2/df	2,572	**CFI**	,905
RMSEA	,074	**IFI**	,905
SRMR	,058	**AGFI**	,802

In the last stage of the analysis, path analysis tested the hypotheses. Model and data fit indices show that model-data fit was sufficiently good (X2/df =2,51; RMSEA =,072; SRMR =,060; CFI =,908; IFI =,909 and AGFI =,805). Table 3 shows the findings obtained by testing the structural model. Accordingly, only three of the nine hypotheses created were not accepted; the remaining six hypotheses were statistically significant with at least a 95% confidence interval.

Table 2: Path Analysis and Hypothesis Test Findings

Path	B	SD	β	t	hypothesis	decision
TE←VTC	**-,080**	**,035**	**-,159**	**-2,252****	**H1**	**supported**
TE←ETC	**-,270**	**,085**	**-,211**	**-3,174****	**H2**	**supported**
VTC←T	**,493**	**,090**	**,407**	**5,446***	**H3**	**supported**

ETC←CP	**,180**	**,036**	**,325**	**5,058***	**H4**	**supported**
LP←T	**,723**	**,077**	**,588**	**9,431***	**H5**	**supported**
LP←CP	**-,042**	**,081**	**-,025**	**-,517**	**H6**	**not supported**
VTC←LP	**,157**	**,070**	**,161**	**2,230****	**H7**	**supported**
ETC←LP	**-,008**	**,021**	**-,022**	**-,358**	**H8**	**not supported**
TE←LP	**,058**	**,034**	**,119**	**1,701**	**H9**	**not supported**

Note: *: p<0.01, **: p<0.05, β is standardized regression coefficients, SD is standard deviation.

5. Conclusion

In line with the slippery slope framework model predictions, the research results revealed that high tax compliance depended on deep trust and coercive power use. According to these findings, trust in the tax administration is a prominent determinant of voluntary tax compliance and legitimate power. Policies that strengthen the relationship between trust in administration and taxpayer relations are crucial in high tax compliance. In this context, a fair, respectful, helpful, and open-minded taxation relation and high service quality can increase the taxpayers' perception of legitimacy and trust towards tax administrations. Furthermore, as the study findings displayed, enforced compliance strategies in a tax system are also essential to combat evasion. Therefore, focusing only on one tax strategy of two will cause the other tax strategy to be neglected. Hence, tax compliance policies should coordinate these two strategies and focus on taxpayer behaviors.

Some hypotheses regarding legitimate power could not be confirmed in the study. The study confirmed the effect of trust on legitimate power, but there was no significant effect of force utilization on legitimate power. Moreover, contrary to the expectation of the current study, the impacts of legitimate power on enforced compliance and tax evasion were insignificant. This result might stem from the characteristics of tax compliance determinants that differ from society to society and even from individual to individual.

References

Andyarini, K. T., Subroto, B., & Subekti, I. (2019). The Influence of Cooperative Taxpayers' Trust and the Power of Tax Authority on Cooperatives Taxpayer Compliance. In 5th Annual International Conference on Accounting Research (AICAR 2018). Atlantis.

Benk, S. & Budak, T. (2012). "Power and trust as determinants of voluntary versus enforced tax compliance: Empirical evidence for the slippery slope framework from Turkey". *African Journal of Business Management*. 6(4). 1499-1505.

Faizal, S. M., Palil, M. R., Maelah, R., & Ramli, R. (2017). "Power and Trust as Factors Influencing Tax Compliance Behavior in Malaysia". *Asian Journal of Accounting and Governance,* 8, 79-85.

Gangl, K., Hofmann, E. Pollai, M. & Kirchler, E. (2012). "The Dynamics of Power and Trust in the 'Slippery Slope Framework' and its Impact on the Tax Climate". https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2024946. (05.09.22).

Gangl, K., Hofmann, E. B., Hartl, B. & Kirchler, E. (2015). "The Double-Edged Relationship between Coercive Power and Compliance with Public Authority: Evidence from a Representative Sample of Austrian Self-Employed Taxpayers". https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2667630. (06.09.22).

George, D. & Mallery, P. (2019). IBM SPSS Statistics 25 Step by Step (15th Edition). New York: Routledge.

Karagöz, Y. (2017). *SPSS ve AMOS Uygulamalı Bilimsel Araştırma Yöntemleri ve Yayın Etiği*. Nobel: Ankara

Kastlunger, B., Lozza, E., Kirchler, E. & Schabmann, A. (2013). "Powerful authorities and trusting citizens: The Slippery Slope Framework and tax compliance in Italy". *Journal of Economic Psychology*. 34. 36-45.

Kirchler, E. (2007). *The Economic Psychology of tax behavior.* Cambridge: Cambridge University Press.

Kirchler, E., Hoelzl, E. & Wahl, I. (2008). "Enforced versus voluntary tax compliance: the "slippery slope" framework". *Journal of Economic Psychology*. 29(2). 210-225.

Kirchler, E. & Wahl, I. (2010). "Tax compliance inventory TAX-I: Designing an inventory for surveys of tax compliance". *Journal of Economic Psychology.* 31. 331–346.

Kogler, C., Batrancea, L., Nichita, A., Pantya, J., Belianin, A. & Kirchler, E. (2013). "Trust and power as determinants of tax compliance: Testing the assumptions of the

slippery slope framework in Austria, Hungary, Romania and Russia". *Journal of Economic Psychology*. 34: 169-180.

Kogler, C., Muehlbacher, S. & Kirchler, E. (2015). "Testing the "slippery slope framework" among self-employed taxpayers". *Econ Gov* 16, 125–142.

Mardhiah, M., Miranti, R. & Tanton, R. (2019). The Slippery Slope Framework: Extending the Analysis by Investigating Factors Affecting Trust and Power". *CESifo Working Paper*. No. 7494. CESifo. Munich.

Muehlbacher, S., Kirchler, E. & Schwarzenberger, H. (2011). "Voluntary versus enforced tax compliance: empirical evidence for the "slippery slope" framework". *European Journal of Law and Economics*. 32. 89-97.

Mulder, L. B., Verboon, P. & Cremer, D. D. (2009). "Sanctions and moral judgments: The moderating effect of sanction severity and trust in authorities". *European Journal of Social Psychology*. 39. 255-269.

Rodrigues, M. J. S., Diogo, T. R. & Samagaio, A. (2019). "Tax Compliance And Slippery Slope Framework: Comparative Analysis Of Portuguese And Swiss Taxpayers". https://aeca.es/old/xixencuentrocomunicaciones/38f.pdf. (06.09.22).

Sigle, M., Goslinga, S., Spekle, R., Hel, L. & Veldhuizen, R. (2018). "Corporate tax compliance: Is a change towards trust-based tax strategies justified?". *Journal of International Accounting, Auditing and Taxation*. 32. 3–16.

Thakkar, J. J. (2020). *Structural Equation Modelling*. Singapore: Springer.

OBESITY TAX AWARENESS: A FIELD RESEARCH

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Abstract
Changes in environment, technology and culture affect people's life, and these changes sometimes provide some negative feedback while making positive developments. Recently, obesity has emerged as a result of people's unhealthy diet, lack of exercise and irregular eating habits. This disease has effects on both human health and economy. Obesity disease imposes direct and indirect costs on the economy and negatively affects the economy. For this reason, in order to eliminate the negativities caused by obesity, the state or related institutions provide various trainings and information and impose some prohibitions and restrictions, such as adding calorie calculations to the contents of the products. One of the policies implemented by the states in order to eliminate the negative effect of the disease is the obesity tax. Obesity tax, just like penalties, is to keep people away from the use of products that cause obesity in order to ensure that people do not do certain behaviors that may have negative consequences. The world-wide perspective on obesity tax differs. In Turkey, the point of view on obesity tax is still open to debate. For this reason, this research begins to be discussed with the question of what is the point of view on obesity tax in Turkey. The aim of the research is to reveal the latest debates about the obesity tax in Turkey and to open the discussion of what will be the benefits if this tax is met in practice. As the method of the research, the survey method is preferred from the quantitative research method. Survey results and findings are tested with statistical software and analysis results are obtained by using T-test and ANOVA tests. With the result obtained from the research, suggestions for future studies are presented and literature studies are diversified in line with this suggestion.

Keywords: Tax Applications, Obesity Tax, Tax Acceptability, Tax Awareness
JEL Code: H2, I1

1. Introduction

Obesity is considered to be one of the most important diseases of the twenty-first century. Technological developments on a global scale make people inactive and in addition, with the increase in income level, people's eating and meal understanding cause a negative change. On the other hand, factors such as excessive consumption of unhealthy products by young people, the thought that fast food products are more delicious, the lack of time left for people from a busy business life and the lack of time to do sports also cause the progression of obesity. This disease has effects on both human health and economy. Obesity disease is reflected in the economy as the costs of illness, absenteeism, inability to find a place at work, interruption of business continuity, inefficiency, medical care and death costs. The reason for the obesity tax; to reduce the consumption of such products, together with taxes taken from unhealthy and high-energy products, and to use the income obtained as a resource in the fight against obesity. Obesity tax is not a tax applied by the state to generate income. While most countries take it to the field of application, it still remains on the agenda as a matter of discussion in some countries. In countries such as Denmark, America, France, Mexico, Finland and Belgium, obesity tax is levied, and the after-tax effects are presented as positive outputs in the economy. In Turkey, the point of view on obesity tax is still open to debate. Our research begins to be discussed with the question of what is the point of view on obesity tax in Turkey. On the other hand, taxation policies are proposed as a means of preventing a negative situation and curing diseases. This research also reveals whether taxation policies are preferred by the public. In our study, a survey is conducted about the causes of obesity, the prohibitions to be used in the prevention of obesity, the acceptability of obesity tax, the use of obesity tax revenue and the application of obesity tax on food products.

2. Costs of Obesity Disease

Obesity disease, which is among the important diseases of our age, Epstein vs. (2010) is defined as the accumulation of fat in the body as a result of hormonal or insufficient physical activity. Among the main causes of obesity are unbalanced nutrition, insufficient physical activity, various diseases and some drugs (T.C. Ministry of Health, 2013:22).

Regardless of the cause of obesity, the disease has some economic (direct) and non-economic (indirect) costs (Lehrent et. al. 2013:107). The economic costs of the disease are medical care and non-medical care costs. Medical care costs include inpatient costs, drug costs, etc. costs can be counted. Non-medical care costs are transportation costs (Wolf, 2002:59). Indirect costs of the disease are loss of productivity, absence from work, disability and premature death due to the psychological diseases it causes.

The costs caused by obesity have been examined in previous studies. Popkin it. get. (2006), the cost of absenteeism from work due to obesity was $44 billion between 1998 and 2000 in China. Ricci et. get. (2005) found that the productivity loss caused by individuals over the age of 18-65 with a body mass index over 30 in the USA between 2002 and 2003 was 13 billion dollars. Tsai et. get. (2005), on the other hand, found that

women with obesity were found to have 21 days of job loss and 3.5 times more short-term absence from work compared to their other sexes.

2.1 Obesity Tax

The demands of food and beverage products have an inelastic structure. However, the tax directs people to change the inelastic nature of food and drink at the point of purchase. In this way, according to Hawkess (2008), people will start to prefer healthier products, which are substitutes for foods that cause obesity, with a tax to be applied.

The obesity tax is a Pigou tax. Pigou tax is a special tax imposed on the prices of goods and services that do not reflect real social costs (Alemanno & Carreno, 2011: 571). The economic costs caused by obesity can be evaluated within the scope of social costs. Therefore, a tax rate to be added to products that cause obesity is the difference between the social cost caused by the disease and the private cost.
The obesity tax has two effects. The extra tax equal to the difference between the private cost and the social cost that will be added to the foods that cause obesity will cause the companies to reduce the production level. The second effect is that this additional tax will increase the selling prices of the products, thus reducing the tendency of people to buy. Lin et. get. (2011) according to the results of related study, a 20% tax to be applied to beverages reduces the daily intake of 34-47 calories in adults and 40-51 calories in children.

Obesity tax is applied by many countries in the world. According to the North Carliona University Global Food Research Program (2020) report, Norway charges $2.22 per liter of concentrated syrup, sugar and sweeteners in beverages since 1981, and Samoa charges $0.18 per liter of carbonated beverages since 1984. As can be seen, the obesity tax application dates back to ancient times. There are countries that have recently started to implement it. Among them are Peru, Panama, Morocco and Qatar by 2019.

2.2. Data Analysis

Within the scope of the field research, the scales in the studies of Chambers and Traill (2011) and Eykelenboom et al. (2020) on obesity tax were adapted and a questionnaire consisting of 6 sections and 36 questions was prepared using a 5-point Likert scale. The first part of the questionnaire form 1-3 questions are about "Obesity Awareness". In the second part, questions 4-7 are about "Obesity Tax Application". The third part is questions 8-17 about "Efficiency of Obesity Tax". The fourth section 18-21 questions are about "Using the Obesity Tax". Fifth section 22-29 questions are about "Other Tools in Combating Obesity". The sixth part, questions 30-36, is about "Demographic Questions".

The survey form was transferred to the participants via the online system. A total of 441 people participated in the survey. As can be seen in Table 1, 73% of the respondents were female and 27% were male.

Table 1 Gender distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	322	73,0	73,0	73,0
	Male	119	27,0	27,0	100,0
	Total	**441**	**100,0**	**100,0**	

Table 2 shows the education distribution of the male and female participants in the survey. 260 of the 322 female participants who participated in the survey were university graduates and 51 of them were graduates. Among the male participants, there are 73 university graduates and 42 postgraduate graduates.

Table 2 Distribution of gender by education level

		Education				
		Secondary School	High School	University	Postgraduate	**Total**
Gender	Female	2	9	260	51	**322**
	Male	1	3	73	42	**119**
	Total	**3**	**12**	**333**	**93**	**441**

Table 3 shows the occupational distribution of male and female participants in the survey. According to the results, 125 of the female participants stated that they were not working, 77 of them were students and 42 of them were working in the public sector. On the other hand, 55 of the male participants are public sector employees and 26 of them are students.

Table 3 Distribution of gender by occupation

		Occupation						
		Housewife	Retired	Public Sector	Private Sector	Student	Not Working	**Total**
Gender	Female	39	2	42	37	77	125	**322**
	Male	0	9	55	23	26	6	**119**
	Total	**39**	**11**	**97**	**60**	**103**	**131**	**441**

Table 4 shows the household income distribution of the male and female participants in the survey. It is seen that the household income of female participants is mostly between 5.501-10.500. For male participants, it is seen that the household income amount is 20,001 and above.

Table 5 shows the participants' approach to obesity. According to the results, 225 of the respondents do not think that obesity is a genetic disease. The distribution of this by gender is shown in Table 6. 45.2% of female participants and 52.9% of male participants agree that obesity is not a genetic disease. When the participants' weight status is examined, it is seen that a similar result emerges. In Table 7, it is seen that people who are in the 40-60 and 61-80 weight groups do not accept obesity as a genetic condition. However, it is seen that people in the 61-80, 81-100 and 100+ groups have a high tendency to accept obesity as a genetic condition.

Table 4 Distribution of gender by income

		Income					
		0-5.500	5.501-10.500	10.501-15.500	15.501-20.000	20.001 ve üzeri	**Total**
Gender	Female	79	123	70	30	20	**322**
	Male	8	16	26	28	41	**119**
	Total	**87**	**139**	**96**	**58**	**61**	**441**

Table 5 Is obesity a genetic disease?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	52	11,8	11,8	11,8
	Do not agree	163	37,0	37,0	48,8
	Netural	82	18,6	18,6	67,3
	Agree	106	24,0	24,0	91,4
	Strongly Agree	38	8,6	8,6	100,0
	Total	**441**	**100,0**	**100,0**	

Table 6 Genetic acceptance distribution of obesity disease by gender

		Is obesity a genetic disease?					
		Strongly Disagree	Do not Agree	Netural	Agree	Strongly Agree	**Total**
Gender	Female	36	116	65	77	28	**322**
	Male	16	47	17	29	10	**119**
Total		**52**	**163**	**82**	**106**	**38**	**441**

Table 7 A genetic disease distribution of obesity disease depending on weight distribution

		Is obesity a genetic disease?					
		Strongly Disagree	Do not agree	Netural	Agree	Strongly Agree	**Total**
Weight	40 -60	22	79	34	35	10	**180**
	61-80	21	60	40	51	19	**191**
	81-100	9	23	5	19	7	**63**
	101+	0	1	3	1	2	**7**

Total	**52**	**163**	**82**	**106**	**38**	**441**

Tables 8 and 9 compare the genetic status approach of obesity with the health food price approach and the status of foods that can cause obesity in restaurants and supermarkets. According to the results in Table 8, those who do not accept obesity as a genetic condition also think that their healthy food is not expensive. However, according to Table 9, those who do not accept obesity as a genetic condition also think that there are more unhealthy fatty foods in restaurants and supermarkets and that people are obese for this reason. In addition, the participants who accept obesity as a genetic condition accept that there are too many unhealthy foods in restaurants and markets, which is the cause of obesity.

Table 8 Obesity is a genetic condition - People become obese because healthy food is very expensive

		People become obese because healthy food is very expensive					
		Strongly Disagree	Do not agree	Netural	Agree	Strongly Agree	**Total**
Obesity Genetic Conditon	Strongly Disagree	23	12	3	9	5	**52**
	Do not agree	37	78	16	25	7	**163**
	Netural	10	29	7	28	8	**82**
	Agree	15	50	12	19	10	**106**
	Strongly Agree	6	15	4	5	8	**38**
	Total	**91**	**184**	**42**	**86**	**38**	**441**

Table 9 Obesity is a genetic condition. - People become obese because there are too many unhealthy and fatty foods in restaurants and supermarkets

		Many unhealthy and fatty foods in restaurants and supermarkets					
		Strongly Disagree	Do not agree	Netural	Agree	Strongly Agree	**Total**
Obesity Genetic Conditon	Strongly Disagree	9	11	2	**17**	**13**	**52**
	Do not agree	7	39	11	**67**	**39**	**163**
	Netural	1	9	4	49	19	**82**
	Agree	4	20	15	47	20	**106**
	Strongly Agree	2	4	2	16	14	**38**
	Total	**23**	**83**	**34**	**196**	**105**	**441**

Table 10 shows whether the obesity tax application is supported in the fight against obesity. According to the results of the survey, 50.3% of the participants support the obesity tax application. Table 11 shows the status of the obesity tax application according to the income distribution of the respondents. It is seen that individuals with an income range of 5.501-10.500 have a high tendency to support taxation in the fight against obesity.

Tables 12 and 13 show under which conditions the obesity tax application can be supported more. Participants show that if tax revenue is used both for the purpose of reducing obesity and for health initiatives, it can support the obesity tax by 55.5% and 64.1%.

Table 14 shows the efficiency of the obesity tax. According to the results of the survey, it is seen that the burden of obesity tax should be undertaken by the producers. It is also supported by the majority of the participants that this tax paid by the producers will encourage them to make healthier production. It is seen that the obesity tax will improve the health of the society and individuals and reduce the consumption of unhealthy foods and beverages by the majority of the participants.

Table 10 Supporting the obesity tax application in the fight against obesity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	72	16,3	16,3	16,3
	Do not agree	76	17,2	17,2	33,6
	Netural	71	16,1	16,1	49,7
	Agree	112	25,4	25,4	75,1
	Strongly Agree	110	24,9	24,9	100,0
	Total	**441**	**100,0**	**100,0**	

Table 11 Distribution of obesity tax acceptance by income

		Income					
		0-5.500	5.501-10.500	10.501-15.500	15.501-20.000	20.001 +	**Total**
Supporting tax application	Strongly Disagree	16	22	16	9	9	**72**
	Do not agree	14	22	24	10	6	**76**
	Netural	13	20	21	13	4	**71**
	Agree	18	34	18	16	26	**112**
	Strongly Agree	26	41	17	10	16	**110**
	Total	**87**	**139**	**96**	**58**	**61**	**441**

Table 12 Supporting the implementation of an obesity tax if the income is used for health initiatives.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	44	10,0	10,0	10,0
	Do not agree	57	12,9	12,9	22,9
	Netural	57	12,9	12,9	35,8
	Agree	158	35,8	35,8	71,7
	Strongly Agree	125	28,3	28,3	100,0
	Total	**441**	**100,0**	**100,0**	

Table 13 Supporting the implementation of the obesity tax to reduce obesity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	55	12,5	12,5	12,5
	Do not agree	78	17,7	17,7	30,2
	Netural	63	14,3	14,3	44,4
	Agree	135	30,6	30,6	75,1
	Strongly Agree	110	24,9	24,9	100,0
	Total	**441**	**100,0**	**100,0**	

In this direction, it is also supported by the participants that the obesity tax will reduce the future health care costs. However, it is also thought by the participants that the obesity tax is not fair for low-income people and individual freedom may be restricted. In Table 15, it is considered that the obesity tax is not fair by the group at the minimum wage level of 0-5,500. As the income level increases, the idea that the obesity tax is fair gains weight.

Table 14 Obesity tax efficiency

	Strongly Agree	**Agree**	Netural	Do not agree	Strongly Disagree
Obesity tax must be paid by consumers.	**%15**	**%22,6**	%17,3	%25,3	%19,7
Obesity tax encourages producers to produce healthier.	**%26**	**%31,4**	%15,5	%17,7	%9,4
The obesity tax will save health care costs in the future.	**%20,6**	**%37,4**	%21,4	%13,2	%7,4
Obesity tax will contribute to improving people's health.	**%20,4**	**%35**	%21,1	%15,7	%7,8
The obesity tax contributes to improving my health.	**%17,7**	**%34,1**	%19,5	%18,4	%10,3
Obesity tax reduces people's consumption of unhealthy food and drink.	**%22,4**	**%35,2**	%16,4	%16,6	%9,4
The obesity tax reduces my consumption of unhealthy food and drink.	**%21,7**	**%36,1**	%15,2	%18,6	%8,3
Obesity tax must be paid by the manufacturers.	**%32,3**	**%30,7**	%10,8	%18,8	%7,4
The obesity tax is not fair to low-income people.	**%29,4**	**%36,8**	%12,8	%15,2	%5,8
Obesity taxes can restrict individual freedom.	**%17,5**	**%27,4**	%25,6	%21,7	%7,8

Table 15 Obesity tax is not fair for low income people - Income

		Income					
		0-5.500	5.501-10.500	10.501-15.500	15.501-20.000	20.001 +	**Total**
Obesity tax is not fair low-income group	Strongly Disagree	5	6	8	1	6	**26**
	Do not agree	10	13	13	15	16	**67**
	Netural	10	19	11	4	11	**55**
	Agree	27	57	38	20	22	**164**
	Strongly Agree	35	44	26	18	6	**129**
Total		**87**	**139**	**96**	**58**	**61**	**441**

Table 16 shows the use of obesity tax. According to the results, the majority of the participants think that the obesity tax should be used in health expenditures, in activities that will inform the society about health and in promoting healthy production. In addition, it is seen that the use of tax for the general budget is not supported. Table 17 shows the distribution of the use of obesity tax in the promotion of health products within income groups. It is seen that minimum wage and middle income groups support the use of obesity tax in the production of healthy products, but it is supported by people from every income group. In addition, as can be seen in Table 18, it is thought that obesity tax should be used in the production of healthy products by a large part of those who think that the obesity tax is not fair for the low-income group.

Table 16 Use of obesity tax

	Strongly Agree	**Agree**	Netural	Do not agree	Strongly Disagree
The income from obesity tax should be used for health.	**%42,6**	**%42,2**	%8,1	%4	%3,1
The income from obesity tax should be used for community health programs.	**%38,1**	**%43,3**	%9,6	%5,6	%3,4
The income from the obesity tax should be used for the general budget.	%6,7	%17,7	%21,1	**%33,6**	**%20,9**
The income from obesity tax should be used for incentives in the production of healthy products.	**%34,8**	**%46,2**	%9,4	%5,4	%4,3

Table 17 Income from obesity tax should be used for incentives in the production of healthy products - Income distribution

		Income					
		0-5.500	5.501-10.500	10.501-15.500	15.501-20.000	20.001 +	**Total**
Incentive production of healthy food	Strongly Disagree	5	5	3	3	3	**19**
	Do not agree	2	4	6	6	6	**24**
	Netural	10	10	10	5	5	**40**
	Agree	37	59	41	28	38	**203**
	Strongly Agree	33	61	36	16	9	**155**
	Total	**87**	**139**	**96**	**58**	**61**	**441**

Table 18 Obesity tax revenue should be used to encourage the production of healthy products - Obesity tax is not fair to low income people.

		Obesity tax is not fair low-income group					
		Strongly Disagree	Do not agree	Netural	Agree	Strongly Agree	**Total**
Incentive production of healthy food	Strongly Disagree	5	2	1	1	10	**19**
	Do not agree	1	6	2	7	8	**24**
	Netural	0	2	5	14	19	**40**
	Agree	4	32	29	96	42	**203**
	Strongly Agree	16	25	18	46	50	**155**

Total	**26**	**67**	**55**	**164**	**129**	**441**

Table 19 shows the results of other tools to be used in the fight against obesity. According to the results, with obesity, the government thinks that in the first stage, the society should prefer applications that will raise awareness about obesity, for example, the coloring of foods according to the contents of the packaging. Among the applications that will create awareness, the most preferred ones are writing the product contents in large packages, coloring the packages according to the oil, salt etc. ratios of the products, and advertising controls. Displaying the content on the packages is another tool to raise awareness. In these, while the oil, salt etc. ratios are displayed on the packages, it is preferred to show the low oil and salt ratio in green, and the oil and salt ratio in red, such as the traffic light. In addition, in terms of accessibility, it is supported by the majority of the participants that healthy products should be sold in vending machines used as snacks, which are now used by many of the social areas.

Table 20 shows the distribution of those who support the obesity tax and the practices that will raise awareness in the fight against obesity. According to the results, the majority of support for obesity tax supports the preference of practices that will raise awareness in the fight against obesity. In addition, the majority of those who do not support the obesity tax support the use of tools to raise awareness.

Table 19 Other tools that can be used in the fight against obesity

	Strongly Agree	**Agree**	Netural	Do not agree	Strongly Disagree
Government advertisements should control the advertisements of products that cause obesity, as well as cigarettes and alcohol.	**%51,6**	**%39,2**	%4,5	%3,1	%1,6
Healthy products should be sold in vending machines in social areas instead of products such as junk food that cause obesity.	**%49,3**	**%37,4**	%6,3	%4,5	%2,5
Product contents should be written larger on the packages.	**%58,7**	**%34,3**	%3,8	%2,2	%0.9
The packages of the products contain oil, salt, etc. should be colored according to the proportions. (example: the packages of products such as chips containing more oil are red)	**%58,1**	**%33,2**	%4,9	%2,5	%1,3
Contents should be shown with spoon size on the packages of the products. (example: a tablespoon of salt)	**%42,8**	**%36,5**	%11,2	%8,3	%1,1
Product contents should be shown with traffic light lights. (example: Red color of additives, green color of natural substances)	**%48**	**%39,2**	%7,8	%3,4	%1,6
The contents should be shown on the packages of the products with the cup size. (example: a glass of sugar)	**%39,2**	**%34,1**	%13	%11,4	%2,2
In the fight against obesity, the state should first make practices that will raise awareness in the obesity tax.	**%48,9**	**%40,1**	%5,8	%3,1	%2

Table 20 Supporting the implementation of obesity tax - The state should first make awareness-raising practices in the fight against obesity in the obesity tax

	Awareness practices in fight against obesity

		Strongly Disagree	Do not agree	Netural	Agree	Strongly Agree	Total
Supporting obesity tax	Strongly Disagree	8	3	5	24	32	**72**
	Do not agree	0	4	7	39	26	**76**
	Netural	0	0	8	31	32	**71**
	Agree	1	4	2	62	43	**112**
	Strongly Agree	0	3	2	23	82	**110**
	Total	**9**	**14**	**24**	**179**	**215**	**441**

2.3. Data Analysis with T- Test And ANOVA

In this section, the relationship between demographic variables and obesity awareness, obesity tax practices, efficiency of obesity tax, use of obesity tax and other tools to be used in the fight against obesity are examined. In this context, the t-test was applied to the gender variable. ANOVA test was applied for education, occupation and income variables.

Table 21 shows whether there is a significant difference in perceptions of obesity awareness among women and men surveyed. According to the Levene's test result, the population variances are equal since sig.>0.05. According to the result, there is a significant difference between male and female obesity awareness. ($t_{2,2765:0,006}$ <0.05)

Table 21 Gender - Obesity Awareness

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Awareness	Equal variances assumed	2,937	**,087**	2,765	439	**,006**	,24077	,08707	,06966	,41189
	Equal variances not assumed			2,708	202,523	,007	,24077	,08893	,06543	,41612

Table 22 shows whether there is a significant difference in the perceptions of women and men surveyed regarding the use of the obesity tax. According to the Levene's test result, the population variances are equal since sig.>0.05. According to the result, there is a significant difference between men and women in their perceptions of using the obesity tax. ($t_{2,215:0,27}$<0.05)

Table 22 Gender –Use of obesity tax

	Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper

Use of obesity tax	Equal variances assumed	,001	**,974**	2,215	439	**,027**	,18556	,08377	,02091	,35020
	Equal variances not assumed			2,210	209,755	,028	,18556	,08398	,02001	,35111

Table 23 shows whether there is a meaningful difference in the approaches of women and men surveyed to other tools to be used in the fight against obesity. According to the Levene's test result, the population variances are equal since sig.>0.05. According to the result, there is a significant difference between approaches to men and other tools to be used in the fight against obesity. ($t_{6,426:0,000}$<0.05)

Table 23 Gender - Other tools to be used in fighting obesity

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Other tools against obesity	Equal variances assumed	,863	**,353**	6,426	439	**,000**	,39621	,06166	,27503	,51740
	Equal variances not assumed			5,745	174,014	,000	,39621	,06897	,26009	,53233

Table 24 shows whether the education level of the participants and the use of the obesity tax affect them. According to the results of the analysis, the level of education affects the use of the obesity tax, since it is less than sig.<0.05. According to the results of the survey, the use of obesity tax differs between individuals with a university education level and individuals with a graduate education level.

Tablo 24 Education level and Use of obesity tax

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8,646	3	2,882	4,807	**,003**
Within Groups	262,035	437	,600		
Total	270,681	440			

Table 25 shows the professions' attitudes towards obesity tax application, obesity tax efficiency, use of obesity tax and other tools to be used in the fight against obesity. Occupations of the participants affect their attitudes towards obesity tax application (sig.<0.05), obesity tax efficiency (sig.<0.05), use of obesity tax (sig.<0.012) and other tools used in the fight against obesity (sig.<0.05).

Table 25 Attitudes of professions towards obesity tax implementation, obesity tax efficiency, use of obesity tax and other tools to be used in the fight against obesity

		Sum of Squares	df	Mean Square	F	Sig.
Obesity tax implementation	Between Groups	20,112	5	4,022	2,503	**,030**
	Within Groups	699,023	435	1,607		

	Total	719,135	440			
Obesity tax efficiency	Between Groups	7,794	5	1,559	2,764	**,018**
	Within Groups	245,303	435	,564		
	Total	253,097	440			
Use of obesity tax	Between Groups	8,894	5	1,779	2,956	**,012**
	Within Groups	261,787	435	,602		
	Total	270,681	440			
Oher tools obesity	Between Groups	9,470	5	1,894	5,522	**,000**
	Within Groups	149,188	435	,343		
	Total	158,657	440			

It is seen that there is a difference in obesity tax implementation between housewives, students and those who do not work. In addition, the obesity tax efficiency approach of housewives and the public sector, the private sector and the unemployed is changing. The approach to the use of obesity tax is changing between housewives and public sector employees and public sector and students. Housewives and retired, public and private sector employees differ in their approach to other tools used to combat obesity. In addition, it is seen that there is a different approach between the unemployed and the retired, public sector and private sector employees.

According to the results of Table 26, the income level of the participants affects the approach to obesity tax efficiency, the use of obesity tax and other tools used in the fight against obesity. People with an income level of 0-5,500 and an income level of 5.501-10.500 are changing their approach to obesity tax efficiency. The obesity tax use approach of people with an income level of 5.501-10.500 and income level of 20.001 and above changes. The approach of people with an income level of 5.501 to 10.500 and an income level of 20.001 and above to other tools used in the fight against obesity changes.

Table 25 Income level affects obesity tax efficiency, the use of obesity tax and other tools used in the fight against obesity

		Sum of Squares	df	Mean Square	F	Sig.
Obesity tax efficiency	Between Groups	5,783	4	1,446	2,549	**,039**
	Within Groups	247,314	436	,567		
	Total	253,097	440			
Use of obesity tax	Between Groups	8,272	4	2,068	3,436	**,009**
	Within Groups	262,410	436	,602		
	Total	270,681	440			
Oher tools obesity	Between Groups	5,884	4	1,471	4,198	**,002**
	Within Groups	152,773	436	,350		
	Total	158,657	440			

3. Conclusion

Obesity is increasing every year as an important disease of our age. In this context, countries are looking for various ways to combat this disease. One of the first suggestions that come to mind as a solution to this is the taxation of unhealthy products, namely the 'obesity tax'. However, another solution is to inform people about obesity and to raise awareness about the scope of consumed food and beverages.

The aim of this study is to evaluate the approach of the society to the obesity tax application and other tools in Turkey. According to the results of the study, people do not consider obesity as a genetic disease. The easy accessibility of unhealthy foods and beverages is seen as an important factor in the spread of obesity.

In the fight against obesity, tax and practices that will raise awareness (for example, packaging of food products and writing the contents more clearly, etc.) are emphasized. In this context, it has been observed that tools to raise awareness should be preferred as the first step in the fight against obesity. The product contents are written larger on the packages, the oil, salt, etc. contained in the product packages. Coloring the products according to their ratios, selling healthy products in vending machines that we frequently encounter in social areas, and controlling them with advertisements are considered as steps of this approach.

As a second step in the struggle, it is seen that taxation will be supported if the tax revenue is spent on incentives in the production of health products, health expenditures and health programs that will raise awareness. An important point here is the injustice caused by the obesity tax. According to the results of the study, it is seen that obesity tax is not fair for individuals with low-income level. However, it is seen that the tax can be fair, especially if the income obtained from the tax is used as an incentive to produce healthy foods or as an incentive to purchase them.

References

Journals/Periodicals

Alemanno, A., & Carreño, I. (2011). ‘‘Fat Taxes in The EU Between Fiscal Austerity and The Fight Against Obesity.’’ *European Journal of Risk Regulation*, *2*(4), pp. 571-576.

Chambers, S. A., & Traill, W. B. (2011). ‘‘What The UK Public Believes Causes Obesity, and What They Want to Do About It: A Cross-Sectional Study’’. *Journal Of Public Health Policy*, *32*(4), pp. 430-444.

Epstein, L. H., Salvy, S. J., Carr, K. A., Dearing, K. K., & Bickel, W. K. (2010). ‘‘Food Reinforcement, Delay Discounting and Obesity.’’ *Physiology & behavior*, *100*(5), pp. 438-445.

Eykelenboom, M., Van Stralen, M. M., Olthof, M. R., Renders, C. M., & Steenhuis, I. H. (2021). ‘‘Public Acceptability of A Sugar-Sweetened Beverage Tax and Its Associated Factors in The Netherlands.’’ *Public Health Nutrition*, *24*(8), pp. 2354-2364.

Hawkes, C. (2008). ‘‘Regulating Food Marketing to Young People Worldwide: Trends and Policy Drivers.’’ American Journal of Public Health ,*98*(3), pp. 390-390.

Lehnert, T., Sonntag, D., Konnopka, A., Riedel-Heller, S., & König, H. H. (2013). ‘‘Economic Costs of Overweight and Obesity.’’ *Best Practice & Research Clinical Endocrinology & Metabolism*, *27*(2), pp. 105-115.

Lin, B. H., Smith, T. A., Lee, J. Y., & Hall, K. D. (2011). ‘‘Measuring Weight Outcomes for Obesity Intervention Strategies: The Case of A Sugar-Sweetened Beverage Tax.’’ *Economics & Human Biology*, *9*(4), pp. 329-341.

Popkin, B. M., Kim, S., Rusev, E. R., Du, S., & Zizza, C. (2006). ‘‘Measuring The Full Economic Costs of Diet, Physical Activity and Obesity-Related Chronic Diseases’’. *Obesity Reviews*, *7*(3), pp. 271-293.

Ricci, J. A., & Chee, E. (2005). ‘‘Lost Productive Time Associated With Excess Weight in The US Workforce.’’ *Journal Of Occupational and Environmental Medicine*, 47(12), pp. 1227-1234.

Tsai, S. P., Wendt, J. K., Ahmed, F. S., Donnelly, R. P., & Strawmyer, T. R. (2005). ‘‘Illness Absence Patterns Among Employees in A Petrochemical Facility: Impact of Selected Health Risk Factors.’’ *Journal of Occupational and Environmental Medicine*, 47(8), pp. 838-846.

Wolf, A. M. (2002). ‘‘Economic Outcomes of The Obese Patient.’’ *Obesity Research*, *10*(s11), pp. 58-62.

Books;

T.C Sağlık Bakanlığı (2013). Birinci Basamak Hekimler için Obezite ile Mücadele El Kitabı, Ankara.

Internet Sources;

Global Food Research Program (2020). Sugar Drink Taxes Around The World. University of North Carolina.
https://globalfoodresearchprogram.org/wpcontent/uploads/2020/08/SugaryDrink_tax_maps_2020_August_REV.pdf, (17.11.2022)

The Tampon Tax: Efficiency or Equity?

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Abstract:

Today, it is thought that women face many economic barriers that men do not. Many of the aforementioned barriers, including the wage gap in similar jobs, women's economic problems related to the birth process, and implicit prejudices in the workplace, are the result of multiple political, social, and cultural factors. In addition, these factors make it difficult to eliminate the economic problems faced by women. One of the obstacles that women face financially is the tampon tax. The concept of tampon tax is used to describe the taxes applied to needed hygiene products such as tampons and pads. In general terms, the tampon tax represents an expense that women have to bear in addition to the cost of biologically necessary products that they need in their social lives. In this context, tampon tax consists of a value-added tax or other taxes applied on tampons and other feminine hygiene products, while it can give tax exemption status to other products that are considered basic needs. In the relevant context, it would be more accurate to accept the concept of tampon tax as a popular term used to call attention to the subject rather than an absolute definition. After the conceptual framework of the tampon tax, it is thought that the tax rates applied on such products used by women are of great importance. It is estimated that especially the high taxes applied make it difficult for women to access the hygiene products they need. One of the purposes of taxation is to ensure efficiency. When examined in a theoretical context, it has an important role in ensuring efficiency to be taxed with low tax rates from products with high demand elasticity and from taxes with low demand elasticity. Although this situation in the financial literature is called Ramsey taxation, it is aimed not to change the behavior of economic units and the overload situation resulting from taxation is tried to be minimized. In this context, when tampon taxes are examined, it is thought that high-rate taxes to be applied on hygiene products, especially where women's demand elasticity is low, are suitable for efficiency purposes. In addition, from the point of view of public revenues, it is estimated that indirect taxes applied to feminine hygiene products have a significant share in the budget. However, besides the efficiency in taxation, another issue to be considered is the social justice situation. Although the mentioned hygiene products are mandatory for women, they are unlikely to be substituted with other products. In this context, although it is thought that the high-rate taxes to be collected from such products will provide efficiency in the theoretical sense, it is estimated that it will hinder the equality of opportunity between the genders. In this context, the tampon tax represents a tax burden applied to approximately half of the population because of their gender, and it causes discussion in the literature by claiming that the aforementioned tax is a kind of gender discrimination. Thus, taxing a biological necessity is thought to place an unfair financial burden on women, who already face numerous economic and other disadvantages compared to men. When the literature on bumper tax is examined, it has been observed that the aforementioned literature has expanded with the struggles

for women's rights. In this context, firstly, the legal compliance of the taxes applied for feminine hygiene products was questioned. Especially when evaluated within the scope of constitutional equality principle, tampon tax was found unconstitutional in some studies. In addition, tampon taxes have been abolished or their rates reduced in various countries and regions that have adopted this principle. Another point of view in the literature has developed within the scope of the question of who is responsible for the tampon tax. In this context, it has been determined in various empirical studies that the bumper tax is mostly undertaken by female consumers. This situation is supported by the theories already available in the financial literature. Another point of view has developed on the solution of the tampon tax. In this context, solutions such as the abolition of the tampon tax or the reduction of its rates have been proposed. However, since the abolition or imposition of a tax will take place within the political decision-making mechanism; It is thought that such solution proposals are among the populist discourses without an effect-value analysis. But abolishing the bumper tax is predicted to be much easier than eliminating the gender pay gap, permanently securing women's access to their economic rights regarding the birth process, or solving any of the many challenges women face. In many parts of the world, women pay high tax rates for items used during their menstrual period, such as pads and tampons. An important reason for the tampon tax to be put on the agenda can be explained by examining the UK, which is one of the countries that abolished the tampon tax completely in 2021. Accordingly, this change occurs with three main reasons. First, it is helping increasing numbers of people in poverty buy and access menstrual and hygiene products. Second, it sends a powerful message to society about menstruation. Finally, this policy change is also seen as a strong challenge to gender inequality. Various regulations on tampon taxes have been carried out by many countries in recent years. In this context, when the history of the UK on the tampon tax is examined, this rate was brought to %17.5 in 1973, then reduced to %5 in 2001 and completely abolished in 2021 (Herman, 2021: 21). Countries in the European Union have been deviating from standard sales tax rates since 2007 and are free to apply reduced tax rates to feminine hygiene products. Still, many countries have not reduced their tax rates, in addition, Hungary applies the highest rate in Europe with 27 percent. In addition, many Scandinavian countries, whether they are EU members or not, apply a tax of approximately 25 percent on feminine hygiene products. However, it is known that Greece increased the tampon tax to 23 percent as part of the country's fiscal discipline measures. In recent years, three Eastern and Central European countries - Poland, the Czech Republic and Lithuania - have reduced their "tampon tax" to 5 percent, while Germany has reduced taxes on feminine hygiene products from 19 percent to 7 percent, and Luxembourg to 3 percent. has dropped it. It is known that the current rate for Switzerland is 7.7 percent, but plans to reduce it to 2.5 percent (Benneth, 2017: 19). Likewise, it is being discussed that the current 10 percent rate in Spain should be reduced to 4 percent. Ireland is the only country in Europe that does not have a sales tax on feminine hygiene products. The Spanish government is considering reducing VAT on sanitary napkins and tampons in its 2019 budget. Almost half of the 27 EU member states continue to apply the standard VAT rate on products such as jewellery, wine, beer and cigarettes, sanitary pads and tampons. In 10 of these countries, this rate is stated as over %20. In addition to the aforementioned EU member states, in Turkey in 2022, among the VAT discounts to be applied within the scope of the fight against inflation in various products, the VAT rate was reduced from %18 to %8, including pads and tampons. As a result, in this study, the theoretical infrastructure of the tampon tax has been examined. However, tax practices between Turkey and EU countries were compared and it was observed that Turkey applies lower tax rates on feminine hygiene products than many EU member states. In addition, when the tampon tax application is examined chronologically, it is seen that while the efficiency purpose of taxation was at the forefront in the past, governments have taken into account the justice between the genders more in recent years.

Keywords: Tampon Tax, Gender Inequality, Efficiency or Equity

JEL Codes: H2, J16, J18

Valuation in Determining the Truth Taxable Income

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Abstract:

Valuation, which is one of the important end-of-period transactions for determining the actual value of taxable income, refers to the recording of assets and liabilities belonging to the company at their actual values. Valuation is important in terms of determining the value of the assets in the enterprise on the valuation day and finding their true value and determining the tax base based on this value. Valuation, which is the subject of determining the monetary value that will be based on the first time assets and resources are recognized and displayed in the financial statements in the following periods, refers to a process that directly affects the operating profit for the period. The regulations related to valuation are included in both the Tax Procedure Code (TPC) and the Turkish Commercial Code (TCC). In Article 258 of the TPC, valuation is expressed as the appreciation and determination of economic assets related to the calculation of the tax base. In Article 79 of the TCC, it is regulated that fixed and current assets and liabilities will be assessed in accordance with the criteria set out in these standards in accordance with the Turkish Accounting Standards (TAS). However, Article 64 of the TCC states that the valuation provisions will not prevent the implementation of the provisions governing the same issues of the TPC and other tax laws, the determination of the tax base in accordance with the tax laws and the preparation of financial statements for this purpose. For this reason, taxpayers who are subject to independent audit must comply with the TPC and related secondary regulations from a tax point of view when preparing their financial statements in accordance with the TAS. Therefore, the balance sheet account and income statements prepared in accordance with the TAS should also be re-arranged according to the TPC and related secondary regulations during the determination of the taxable corporate income. This situation causes both a loss of cost and time from the point of view of companies, and causes a different calculation of taxable income, making it difficult to determine the truth income of the company. Turkish Accounting Standards (TAS) and Turkish Financial Reporting Standards (TFRS) Valuation, financial status and operating results in a fair way to be identified as, when evaluating the tax legislation, the tax base considers in determining the price of financial assets to be identified. The purpose of the valuation provisions in the TPC is to determine the tax receivables; There are differences between TAS/TFRS and TPC in terms of valuation criteria due to the fact that TAS/TFRS is intended to present the economic assets in the financial statements at their current and fair values. These two different applications also reveal two different profit-loss situations. The use of different valuation measures in standards and tax legislation makes it difficult to determine the true value of operating profitability, and this affects the truth of commercial earnings. In determining the fair value of an asset or debt, it is necessary to capture the spirit of the times by taking into account economic changes in a current way. In general, a fair value approach has been adopted in the valuation of assets and liabilities in accordance with TMS/TFRS. TFRS 13, prepared in accordance with International

Financial Reporting Standards, is a financial reporting standard that defines fair value, regulates the framework for measuring fair value in a single TFRS, and determines disclosures related to measuring fair value. TFRS 13 defines fair value as the price to be paid market participants in a regular transaction on the measurement date, from the sale of an asset or at the transfer of a debt. TFRS 13, fair value measurement; basically, three methods have been determined as market approach, cost approach and revenue approach. Companies can also use valuation methods that are consistent with one or more of these approaches to measure fair value. Because in some cases, a single valuation method is appropriate, while in some cases, it may be appropriate to use more than one valuation method collectively. The provisions on valuation in the TPC, which define valuation as the appreciation and determination of economic assets related to the calculation of the tax base, are included in articles 258-298 in the first and second parts of the third book of the TPC. In addition, it is seen that the "inflation adjustment and revaluation rate regulation" and the regulations related to valuation take up a wide place in the duplicate article 298. In TPC, different minimum valuation criteria have been determined according to the types of economic assets. However, when carrying out valuation, each of the economic assets is taken into account alone. In articles 261 of the TPC, valuation measures are specified according to the type and nature of the economic asset. These are; cost price, fair stock market, saving value, book value, nominal value, fair value, precedent price and fee, tax value and purchase price. Due to the fact that TPC and TAS/TFRS set different valuation criteria, the financial statements give different results in terms of both applications. According to TPC, when Companies that have prepared their financial statements re-arrange these financial statements in accordance with TAS / TFRS, they also have to re-correct many accounting records. This situation leads to the fact that the assets and liabilities of the companies, their book values are presented in different amounts in the financial statements. Therefore, it will be more accurate to prepare financial statements in a single order both to eliminate confusion and to determine the profit and loss situation of the company correctly. New financial instruments in Turkey and in the World, new the emergence of new sectors of commercial space, the company of these corporation become international companies to mergers, divisions and transfers, begin to be experienced as intense; the company's true financial information is becoming more and more important than before. Both in view of these circumstances, and in terms of the correct determination of the tax base; it seems that the regulations contained in the TPC are lagging behind compared to the principles and principles set out in the TAS/TFRS and cannot capture the spirit of the time. The valuation measures set out in the standards for assets and liabilities are more comprehensive, more dynamic, more appropriate to the spirit of the time and up-to-date than the measures set out in accordance with the TPC. For this reason, the provisions on valuation in the TPC; its adaptation to the TAS and TFRS prepared within the framework of international criteria, principles and standards will be accurate in terms of determining the determination of truth taxable income in a healty.

Keywords: Truth of Income, Valuation, Fair Value, International Standards, Tax Legislation

JEL Codes: K34, M41

Tax Regulations in the Understanding of Democratic State

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Abstract:

There has been a conflict of interest between states and administrators since the earliest times when societies began to form, and there has always been a tendency for one to limit the other. These restrictions were applied very harshly by the governments of the time and a heavy pressure was created on the society under their control. In the financial field, as in every field, governments have used the powers granted to them in an unlimited and arbitrary manner, leaving the society with a tax burden that they cannot pay. For this reason, the first uprisings in the historical course were born as a reaction to the unlimited powers of the governments and the Magna Carta document, the first step in the history of democracy, emerged in 1215. In a way, Magna Carta is the transition of the people from paying tribute to paying taxes. Thanks to this document, the taxation authority in the hands of the governments was limited in favor of the people. Currently, in modern states, the fact that people know what their taxes are spent on, that taxes are based on a constitutional basis, and that they say "yes" or "no" to the budget is the result of a thousands of years of struggle for democracy. The term democracy etymologically means "sovereignty of the people". The inability of all the people to directly participate in the state administration has led to the formation of "representative democracies". From this point of view, democracy can be expressed as the power to change the government rather than the people's self-government. With the emergence of representative democracies, the taxation powers of the governments have also taken their share from this democracy and the understanding of "there is no tax without representation" has been adopted. While the transition to democracy in Western states has been achieved gradually with thousands of years of struggle, in our country this process is relatively short and intermittent. Therefore, in Turkey, which wants to follow the West, the transition to democracy has been experienced as a revolution, not an evolution. According to Article 2 of the Constitution, the Republic of Turkey is a democratic and social state of law. Democratic social law states can be considered as a level reached by contemporary states. This concept reveals the constitutional foundations of fiscal law and therefore tax law. Because a regular tax system must be the basis for a democratic state of law to function properly. Otherwise, states will have a shortage of resources in order to fulfill the duties expected of them. Tax can be thought of as a kind of cost of transition to democracy when viewed from the point of view of individuals. When tax comes under the title of democracy, the coercion in the spirit of tax softens a bit. When democracy means that the people are effective in state transactions, in all state affairs, therefore, the administration should make an effort to enlighten the people, inform them and take into account their wishes. This is a requirement of being a democratic administration. In the field of taxation, tax administrations should apply to the cooperation of individuals and ensure their participation in the administrative processes they do about individuals. Individuals should know the transactions made about them in advance, and tax administrations should undertake the task of clarifying the complex tax legislation. When we look at our country, there are reflections of democracy in tax administrations. The introduction of the declaration system, the establishment of tax commissions on various issues, the administration of

explanations and directions to inform the taxpayer can be counted as examples. The taxation authority is a necessary and important authority because the state must provide resources to provide the public goods and services given to it. The healthy execution of the democratic regime depends on the financial resources that the state will provide through its taxation authority. Democracy should not be shaken and taxation should be done legally. The necessity of being a democratic tax state is that the tax system should have a place in the constitutional plane. However, it is not enough just to have these regulations in the constitution. At the same time, they must be implemented by the administration. Tax administrations should not forget that they use these powers in the name of a democratic state of law while carrying out their tax and taxation transactions. The duties of state institutions have increased due to the developing and modernizing state system. Tax administrations also get their share from this increase in duty. It cannot be expected that the state and its subordinate tax administrations go out of democracy and engage in arbitrary or discretionary practices while executing tax and similar transactions, which are one of the biggest limiters of fundamental rights and freedoms, on individuals. If such practices exist within the country, it cannot be mentioned that there is a democratic taxation system and therefore a state of law. In summary, the development of democracy and the steps taken in the name of democracy started from the very beginning because the people could not meet the financial demands of the government. Democracy has settled into a certain system over the years, and states and governments have organized their tax systems accordingly. However, saying "democracy exists if the taxation system is correct" is not enough on its own. Adopting the taxation system only in an abstract sense in order to create democracy does not solve the societies. It is necessary to accept democracy as a standard of living rather than a political apparatus or a tax instrument. The state is required to be with individuals in every transaction that may affect their rights or freedoms, to provide certain information in cases where it is not available, to provide clear guidance, to answer their questions, to resolve their disputes and to observe their rights at all times. If democratization is to be achieved in the Turkish tax system, tax administrations and tax institutions must fulfill all of the above-mentioned duties in full. In our study; The development of democracy in the context of its relationship with tax, the tax regulations that should be in a democratic state understanding, the democratization mechanisms in the tax administration and administrative institutions will be tried to be explained, the existing democratic tax tools and regulations will be explained, and the problems will be examined.

Keywords: Democracy, Tax, Democratic State, Taxation, Taxation Authority, Democratic Tax Administration

JEL Codes: K34, H20

THE ROLE OF THE STATE IN DEVELOPMENT WITH BLOCKCHAIN TECHNOLOGY ON THE FLOOR OF INFORMATION TECHNOLOGIES

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Abstract

Blockchain is characterized as a public ledger of information or data collected over a network located on the Internet. The groundbreaking potential of Blockchain is the technology it uses to record this data or information given to it. Based on Blockchain, as the name suggests, there is a working system based on a chain reaction. In this study, information technologies as a result of digitalization in the globalizing world and the relationship of blockchain technology, which is described as the biggest revolution after the internet, with development and the mission relationship undertaken by states are emphasized. In addition, the role of information technologies, which are among the most important building blocks of the digital economy by quickly penetrating all areas of life, on development has been mentioned. After defining information technologies in the study, the position and importance of blockchain technology were emphasized and its role in development was discussed. As a result, it has been concluded that blockchain technology is seen as creative destruction in development and increases the efficiency of the public and private sectors. Countries need to benefit from this technology, as productivity provides long-term development. However, the physical conditions of the countries shape the policy measures they will take. It is believed that it is important for the development that countries use blockchain technology by spreading it over a period of time.

Keywords: Blockchain, Information Technology, Development, Digital Transformation.

JEL Code: O33, M15, O1.

1. Introduction

The globalizing world has paved the way for the emergence of many concepts. With the use of computers in the 1990s, a transformation began to take place. The wind of change with information technologies causes the emergence of new technology with the phenomenon of virtual money. In this context, economies, governments, and societies around the world are becoming digital.

Digital technologies are developing rapidly, and as a result of the improvement of the communication infrastructure and the widespread use of smartphones and computers, the production and storage of data becomes of strategic importance. So much so that blockchain technology promises to solve exactly this problem. Thanks to its features, it is considered the biggest revolution after the internet revolution and the processes of integrating this technology by societies are accelerating day by day.

The ongoing digital transformation of the economy and society holds many promises to drive innovation, create efficiencies and improve services while increasing productivity growth. Digital technologies also facilitate the participation of people in economic and social activities. However, as digital transformation changes the nature and structure of organizations, markets, and communities, it also raises issues of jobs and skills, privacy, and security. The transparency of blockchain technology and the fact that it works without being tied to any authority or institution behind it is an alternative to the solution to this problem. The study aims to determine the role of the state in the development of blockchain technology. In this context, firstly, the conceptual framework of information technologies was drawn and blockchain technology was explained. Finally, a link has been established between blockchain technology and development.

2. Conceptual Framework of Information Technologies

In a narrow sense, the system IT is a concept that compiles, stores, and processes data in a simple way and is defined as the accessibility of information obtained through various technologies. It is a structure that allows it to be opened, stored, and transmitted efficiently (Şahin & Topal, 2016: 1). According to another definition, computerised information systems, especially the processing of information in the management and development of software and computer hardware, are to shop, transmit protect and provide secure access (Kahraman, 2019: 1).

2.1. The Latest Link in Digital Transformation: The Concept of Blockchain

Technologies that emerged as a result of the acceleration of digital transformation in the last ten years; e-mail, social media, mobile web, cloud computing, the internet of things, and blockchain technology. Although blockchain technology, which is described

as the architectural building block of the new era, is mentioned together with Bitcoin, it is expressed as the general name of the technology behind Bitcoin.

The concept of blockchain, which was first proposed as a research project in 1991, e-Donkey and BitTorrent, which emerged as two independent projects in the early 2000s, are used to share data with other people we do not know but with whom we can communicate, or rather machines, on the internet. they emerged as a kind of data storage solution developed end-to-end called “Peer to Peer - P2P” (Usta & Doğantekin, 2018: 20). The first use of the blockchain is with Bitcoin in 2009. Since then, the use of blockchains has evolved with various variations. These; various cryptocurrencies are used through the decentralized financial system (DeFi), smart contracts, and non-tradable tokens (NFTs) (Hayes, 2022).

In the study titled "Bitcoin: A Peer-to-Peer Electronic Cash System" published by a person or persons with the pseudonym Satoshi Nakamoto, although Bitcoin is described, the existence of a new technology behind it is emphasized. In the aforementioned technology, transactions can be made without the need for the presence of third parties with the distributed registration system. This technology plays a key role in the emergence of digital-based social and economic models, as well as in financial markets and the conclusion of contracts, eliminating the need for a trusted third party as a guarantor (World Economic Forum, 2015: 5). Undoubtedly, it is the features of the blockchain that make it so important. This technology has three essential features (Ramada, 2016):

a. Decentralized distributed ledger technology system,

b. The fact that every information recorded in the system is non-recyclable and indelible,

c. Before starting the process, authentication is done and each user has a personal private key (password).

2.2. Distributed Technology

The structure of the basic working method of blockchain technology is based on “distributed ledger technology”. Distributed registry system, in other words, is based on keeping data secured by multiple control mechanisms rather than keeping it in a single center. Thus, the problems of corruption, destruction, deletion, and attack that can be experienced by keeping them in a single center are eliminated (Güven & Şahinöz, 2018: 74). It is protected with a cryptographic structure against a possible attack and is stored permanently (Wenke et al., 2022: 3).

DLT has the feature of being a central database. Because of this feature, it represents a digital collection. Distributed ledger technology has been referred to as “Worldwide Ledger” (Tapscott and Tapscott, 2016: 7). According to the World Economic Forum, blockchain is expressed as a technology protocol that enables the direct exchange of data between two parties without the need for an intermediary (The World Economic Forum, 2018).

When we look at the working process of the blockchain, it is seen that the process begins with the creation of a block simultaneously with the entry of data into the system. A block is in the system at the same time as the transaction is created. It spreads it to the nodes that make up the entire chain in the network and ensures its proliferation. One of the nodes verifies the block, which in practice is called mining. The miners re-spread the network to form blocks (Banerjee et al., 2018: 156).

2.3. Smart Contract

The concept of smart contracts was first used by Nick Szabo. In his articles published in the early 1990s, he defined smart contracts as "protocols in digital form that fulfill the promises of the parties"(Szabo, 2022). Although the blockchain system first entered our lives as electronic money, the first practical use of smart contracts on a blockchain was seen in the Ethereum protocol in 2015. The main innovation of the Ethereum protocol, the Ethereum Virtual Machine (EVM), was software that runs on all nodes in the Ethereum network and is the building block of a distributed virtual computer. This distributed virtual computer is capable of operating smart contracts coded by users. Thus, today, there are tens of blockchain protocols with the ability to run smart contracts and tens of thousands of smart contracts running on these protocols. Smart contracts, which are characterized as computer programs in which automatic actions are executed in return for the fulfillment of predetermined conditions between two or more parties, eliminate intermediaries and ensure that processes are operated automatically, quickly, and at less cost. Smart contracts, one of the most critical components of the blockchain, have characteristic features of blockchain technology such as security, immutability, and transparency (Smart Contract Report, 2021).

3. Blockchain Technology: Its Relationship With Development

Economic growth includes only increasing production capacity, while economic development includes some social, political, and cultural variables as well as economic growth. However, in Turkish, these two concepts are often used interchangeably, and in this study, the word economic development is based on economic growth. In this context, the focus of the study is to shift the production possibility curve or the aggregate supply curve to the right in the long run with blockchain technology. Multiple factors determine economic growth, and one of them is technology. Technological development increases productivity with the innovations it creates in the organizational structure and production phase (Ertek, 2016: 389-390). However, it should be emphasized that economic growth, in the long run, is only achieved by productivity growth. Technology is perhaps the most important factor in increasing productivity (Krugman & Wells, 2011: 230-231). Because the discovery, application, and dissemination of new technologies have a great contribution to economic growth (Yıldırım et al., 2016: 281). In this respect, technological development constitutes exponential growth (growth built on old growth) (Acemoğlu et al., 2016: 150). However, when growth theories are examined, some models take technology internally and

externally. The study is based on Kaldor's growth theory, which considers technology as an intrinsic factor (Llerena & Lorentz, 2004: 3).

In the development of countries with blockchain technology, countries have been reduced to three different categories due to the generalizability of social sciences and internal growth models. In this framework, groups of blockchain experts should be formed in low and middle-income countries, investments should be made in graduate programs in advanced STEM fields, blockchain associations and incubation centers should be established, pilot programs for blockchain should be established, and developments obtained as a result of these programs should be integrated into existing platforms (UNCTAD, 2021: 34-37). In upper middle-income countries, a national blockchain strategy and accordingly directives should be established, blockchain centers should be established, groups of blockchain experts should be formed, important areas of use for blockchain technology should be determined, and national and international strategic collaborations should be established (UNCTAD, 2021: 37-40). In high-income countries, a blockchain development committee should be established, synergies should be ensured through research and development, and innovation should be encouraged (UNCTAD, 2021: 40-41).

4. Conclusion

From the past to the present, development economists have conducted studies on the development differences between countries and focused on why some countries are more developed. In contrast, other countries are not so developed. In this context, technology is a factor that partially explains this difference and is an important factor in the development of countries. While some economists have evaluated the effect of technology on development effect internally, other economists have considered it externally.

Today, blockchain technology, which increases the efficiency of the public sector, which is expressed as an inefficient sector by Baumol, and which, as expressed by Schumpeter, is within the creative destruction required for the necessity of development, provides uncertainty and productivity increase in many areas. These areas are; food security, finance, foreign trade, taxation process, public administration, internal audit, health, logistics, education, etc. can be listed as.

The differences in the physical conditions of the countries enabled the countries to be examined in separate categories. This framework requires investment in these areas primarily due to the lack of technology and the lack of qualified personnel in low and middle-income countries. Upper middle-income countries should make this technology a national strategy and invest in human capital, although it is better than the countries in the last category. In high-income countries, incentives should be given to research and development since there is no human capital problem.

References

Acemoğlu, D. Laibson, D. & List, J. A. (2016). *Makroekonomi,* (Çev.) Ertok, M., Tunalı, Ç.B., Dayanır, A., Tuna, K., Hacıoğlu, V. & Şener, Ş., (Ed.) Şener, S, Beta Yayınevi, İstanbul.

Banerjee, M., Lee, J., & Choo, K.K.R., (2018). *"A Blockchain Future For Internet Of Things Security: A Position Paper", Digital Communication and Networks,* Vol: 4, Issue: 3, 149-160.

Blockchain Türkiye Smart Contract Report, (2021). https://bctr.org/dokumanlar/Akilli_Sozlesme_Raporu.pdf, (11.11.2022).

Ertek, T., (2016). *Makroekonomiye Giriş*, Beta Yayınevi, İstanbul.

Güven, V., Şahinöz, E., (2018). *Blok Zincir Kripto Paralar Bitcoin: Satoshi Dünyayı Değiştiriyor*, 1. Baskı, Kronik Kitap, Haziran 2018, İstanbul.

Hayes, A., (2022). Blockchain Facts: What Is It, How It Works, and How It Can Be Used, 18 September 2022, Investopedia, https://www.investopedia.com/terms/b/blockchain.asp, (22.09.2022).

Kahraman, E. (2019). IT (Information Technologies) Nedir?, http://blog.emrahkahraman.com.tr/it-information-technologies-nedir/, (11.11.2022).

Krugman, P., Wells, R. (2011). *Makro İktisat,* (Çev.) Oğuz, F., Arslan, M.M., Akkemik K.A. & Göksal, K. Palme Yayıncılık, Ankara.

Llerena, P., Lorentz, A. (2004). "*Alternative Theories on Economic Growth and the Co-evolution of Macro-Dynamics and Technological Change: A Survey"*, LEM Working Paper Series, 27.

Ramada, M., (2016). "For Insurers #Blokchain is the New Black", https://blog.willis.com/2016/12/for-insurers-blockchain-is-the-new-black/ (07.06.2019).

Szabo, N. (2022). Smart Contracts: Building Blocks For Digital Markets, https://www.fon.hum.uva.nl/rob/Courses/InformationInSpeech/CDROM/Literature/LOTwinterschool2006/szabo.best.vwh.net/smart_contracts_2.html, (11.11.2022).

Şahin, H., Topal, B. (2016). "The Effect of The Use of Information Technologies in Businesses on Cost and Financial Performance", *International Journal of Engineering Innovation & Research*, 5 (6), ISSN: 2277-5668.

Tapscott, D., Tapscott, A., (2016). *Blockchain Revolution*, Portfolio Penguin Random House, UK.

The World Economic Forum, (2018). "Blockchain and Distributed Ledger Technology", 23 Nisan 2018, https://www.weforum.org/communities/blockchain-and-distributed-ledger-technology, (02.08.2022).

Unctad (2021). *"Harnessing Blockchain for Sustainable Development: Prospects and Challenges"*, UNCTAD/DTL/STICT/2021/3 and Corr.1, Geneva, pp. 34-37.

Usta, A., Doğantekin, S., (2018). *Blockchain 101*, Güncellenmiş Versiyon, Bankalararası Kart Merkezi, https://coinmarketcap.com/currencies/bitcoin/markets/, (01.02.2022).

Wenke, C., Lang, F., & BUSCHLE, M., (2022). "Distributed Ledger Technology in the Financial Industry: Managerial, Organizational, and Technological Challenges", Thirtieth European Conference on Information Systems (ECIS 2022), 1-15, Timişoara Romania.

World Economic Forum, (2015). Technology Tipping Points and Societal Impact, Global Agenda Council on the Future of Software & Society, https://www3.weforum.org/docs/WEF_GAC15_Technological_Tipping_Points_report_2015.pdf, 1-44.

Yıldırım, K., Bakırtaş, İ., Yılmaz, R. & Esen, E. (2016). *Makro İktisada Giriş*, Nisan Yayınevi, Eskişehir.

Taxable Event of The According to Income Elements

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Abstract:

In the 19th article of the Tax Procedure Law, which is titled as the taxable event; It has stated when the tax will arise with a regulation such as "Tax receivables arise with the occurrence of the event to which they are taxed or the evolution of the legal situation". This situation, which is also considered the starting point of the taxation process, is related to the receipt of each element of income counted in the law in terms of income tax. In this situation; “obtaining” may differ in terms of the elements of income, and the taxation may cause confusion depending on this difference. Therefore, it is useful for the proper functioning of the tax system to determine whether the tax arises in the context of the elements of income, and if it does, when it arises.

In terms of Income Tax, since the taxable event will occur with the receipt of the income, the taxation process will begin with the receipt of the income. It is obvious that the starting point of the taxation process will also differ according to the elements, since the Income Tax Law contains element-specific regulations for each income element.

According to the Income Tax Law, your income; It has seven elements: Commercial Income, Agricultural Income, Wages, Self-employment Earnings, Real Estate Capital Income, Securities Capital Income and Other Earnings and Revenues. If natural persons receive income from the elements listed, the taxation process will also begin, as the event that generates the tax for them will occur. In the law, it is explained how the income will be obtained in terms of each element, therefore, it is stated when the taxable event will occur for the taxpayers who obtain these elements.

If we briefly summarize the concept of the event that gives rise to the tax in terms of each element of income, which will be explained in detail and with the help of special tax / judicial decisions in the study;

In terms of commercial income, the accrual of that income seems sufficient for taxpayers to obtain commercial income. In accordance with the relevant articles of the law; for taxpayers whose commercial income is determined on the basis of the balance sheet, the difference in equity at the end of the period and the beginning of the period is reached by adding the values withdrawn from the business during the year and subtracting the additions. In this case, since the asset and liability accounts in the balance sheet are evaluated according to the tax procedure law valuation provisions, it is considered that the accrued but uncollected gains have been obtained. Similarly, the difference between annual revenue and expense is accepted as commercial income in determining the commercial income on the basis of the operating account. Since the collected or accrued values will be written into the annual revenue, the acquisition is also based on the accrual principle in terms of the operating account basis.

Agricultural income is taxed either by deduction from sales revenue or on the basis of the balance sheet or operating account according to the real method. For taxpayers whose agricultural income is

determined according to the real method, the accrual principle is valid as in the commercial income. For taxpayers who do not exceed the size criteria specified in the law and who do not have a combine harvester or similar agricultural machine and do not have more than two tractors under the age of ten, there is no requirement for determining the agricultural income in the real method. In this case, taxation will be realized by deductions by the people who buy the product from the farmer. Those who receive the product from the farmer will issue a producer receipt to the farmer, and write the income tax amount deducted from the farmer there. If it is accepted that the farmer collects the amount that he should receive in return for the product by issuing the producer's receipt, the acquisition can be considered to be dependent on the collection principle. However, when a receipt is issued to the farmer, since it is not clear whether the payment has been made, a collection-related situation is not mentioned, which leads us to the conclusion that obtaining agricultural income depends on accrual.

The wage is expressed as the monetary value that a real person receives in return for the service to be rendered in the workplace by the employer. If the real person who receives a fee has provided a service, he has the right to demand his receivable in return, and the right to dispose of this receivable legally. The right to claim this receivable, that is, the right of legal disposition, is accepted as obtaining in terms of wages. Although there are resources that are expressed as the basis of collection in the literature, even if it is not collected, if the person who receives the fee is able to demand his fee, that is, if he has offered his service, it is considered to be obtained.

While defining the determination of self-employment income, the Income Tax Law includes the phrase "…collected…" in its article 67. In this context, self-employment earnings are based on the collection principle.

In terms of Real Estate Capital Income and Securities Capital Income, the concept of acquisition is based on the principle of collection. The specific situation that should be mentioned here; If the persons who obtained real estate capital gains have collected the rental income of the following years in advance, the income is considered to be collected in the relevant year, not the year in which it was collected, but in accordance with the periodicity principle.

In terms of other earnings and revenues, collection or accrual principles are applied according to the status of the income and revenue.

In the study; In terms of the seven income elements listed in the Income Tax Law, the concept of obtaining the taxable event will be explained with the help of the rulings given and the judicial decisions taken.

Keywords: Income Tax, Taxable Event, Obtaining

JEL Codes: H20, H24, K34

A SOLUTION TO PROVIDE FAIRNESS IN INCOME DISTRIBUTION IN TURKEY: BASIC INCOME

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Abstract

The problem of inequality and unfairness in income distribution is still remain one of the most cases in today's world. Even if governments and different organisations showing some efforts to reduce income inequlity, it would be said that the problem of inequality is not solved. In different parts of world, people are suffering income shortage. Governmets use different political tools to interfere the distribution of income. Two of the most used political tools by the states are tax and transfer policies. In spite of these policies, the income is not distributed fairly in the world. The purpose of the study is to offer a different approach for income distribution and to evaluate the distributive effect of basic income by using microdata. Microdata obtained from the Household Budget Surveys published by Turkish Statistical Institute used to see the effect of basic income at poverty line. The evaluation of income distribution is carried out by Gini coefficients between 2010 and 2017 in Turkey. According to the results of the study, after transfering basic income to the individuals Gini coefficients decreased from 0.400-0.435 to 0.260-0.285 approximately. This shows the considerable positive effect of income distribution. In spite of the reducing effect of basic income to the distribuion of income, carrying out pilot studies in different countries would help to see the feasibility of basic income.

Keywords: Income Distribution, Basic Income, Turkey, Microdata.
JEL Code: D31, H30, O15.

1. Introduction

Today, there are various problems that people face over the years. These problems can be environmental problems such as earthquakes, climate change, or water scarcity which may occur as a result of climate change while they can also be man-made problems[1] such as religious conflicts between people, terrorism, inequality between men and women, and unfair distribution of income. Inequality in income distribution is considered one of the major problems in the world according to some scientific researches, surveys, and interviews (Karaduman, 2014). As a matter of fact, in the survey conducted by the United Nations for the term of October 2021 with the participation of 28 countries, the issue that concerned individuals most was found to be poverty and social injustice[2]. Therefore poverty, inequality in income and unfair distribution of income are one of the often discussed topics.

Different efforts are made by non-governmental organizations, foundations, private sectors, and especially by the public sector to reduce income inequality. The public sector uses various policy instruments in different countries to provide income equality. By implementing various management policies with tax and transfer policies, the state seeks to make the distribution of income between individuals fairer.

Despite the policies implemented to reduce income inequality among individuals, when the last two centuries are considered, it can be said that a fairer distribution has not been achieved[3]. While in 1820s, the share of the 10% with the highest share of income was 50%, in 2020s, this share has increased to 55%. Similarly, while the share of the 50% with the lowest share of income was about 14% in 1820s; in 2020, this share has decreased to 7 percent. Decreasing share of the poor means income distributed unevenly.

In order to achieve fairness in the distribution of income, the state has resorted to different policies over the years. Accordingly, the impact of basic income (BI) in income inequality, which is argued in panels, conferences and interviews organized by various national and international platforms today, is discussed within the scope of the study.

2. Basic Income Concept

The official maturation of the idea of a publicly financed basic income, whose foundations were laid in Thomas More's book *Utopia* published in 1516, dates back to 1986. The Basic Income European Network (BIEN) was established in 1986 by a group of economists, social scientists and philosophers living in Western Europe. In 2004, as a result of the basic income debates that spread throughout the world, the name of the Basic Income European Network was changed to The Basic Income Earth Network (Standing, 2020: 13-14). In Turkey, basic income disputes started officially with in Turkey Citizen's Basic Income Platform in 2016. In 2020, the first Basic Income Congress held.

[1] https://www.bbvaopenmind.com/en/articles/15-global-challenges-for-the-next-decades/
[2] https://unfoundation.org/blog/post/five-global-issues-to-watch-in-2021/
[3] World Inequality Report 2022.

Additively, in 2021 within the organization of Turkey Citizen's Basic Income Platform, basic income was debated for 24 hours via zoom. The name of the event was 'Basic Income March" (Citizen's Basic Income Platform Turkey).

Basic income, which is sometimes referred to by different names such as universal basic income and citizen's income, is defined as payments made to individuals at regular intervals, without being bound by any conditions. The word unconditional mentioned herein means that the grant is transferred to each individual without exception, in other words, basic income covers everyone. Besides, whether individuals work or not does not affect their basic income and basic income being regular means that it is not a one-off payment.

The features of basic income is as follows:

- Unconditional
- Automatic
- Non-withdrawable
- Individual
- As a Right

Even though basic income would vary with age, people with same gender, marital status, family structure, employment status etc. should get paid with the same amount. That is the reason why BI is unconditional. Automatic means, payments would be weekly or monthly. BI would not be means tested. This means even someone's wealth or income increased, BI does not change. In addition, basic income would be paid on individual basis, not on household basis. It is also important to note that basic income is not a help from government to citizens. Everybody living in a specific country would be paid as a right of being citizen (Citizen's Basic Income Trust, 2020).

3. Literature Review

In the literature, basic income is a subject that academics, intellectuals and activists have been working on especially in recent years. Studies on basic income in international literature have increased with the 1990s. In the studies generally, the concept of basic income, the applicability of basic income, the financing of basic income and the results of pilot studies on this subject are analyzed. In Turkey, there are also studies starting after 2010s on basic income in the national literature, albeit at a limited level.

The literature on basic income can be categorized within its main features, relationship between equity and fairness, feasibility and experimental studies. The literature underlining the features of basic income has started from 2000s (Van Parijs, 1997; Torry, 2018; Yapıcı & Karabulut, 2018; Beken, 2020; Rizvi et. al., 2022). Other studies about basic income is focused its relationship between equality and justice (Baker, 1992; Clark & Kavanagh, 1996; White, 1997; Van Der Veen, 1998). Besides these studies, basic income is also argued about its necessity and feasibility (Van Parijs, 1992; Standing, 1997; Van Parijs, 2004; Standing, 2008; Topateş, 2012; Standing, 2017; Straubhaar, 2017; Orlu, 2019; Rincon, 2021; Rakıcı & Bozdoğan, 2022; Salih & Erikli, 2022). There are also experimental studies and pilot projects about the feasibility of basic income in

various countries (Kangas et. al., 2019; Esenlikci & Engin, 2021; Beken, 2021). Lastly, feasibility of basic income in Turkey was evaluated in some academic researches (Irzık, 2018; Kaya, 2019; Erdoğdu & Akar, 2020; Şahin & Kılıç, 2021; Kahvecioğlu & Çakmak, 2022).

4. Methodology and Results

This study aims to examine the effect of basic income, which has been discussed frequently in recent years, on income distribution in Turkey as an alternative policy. The effect of basic income on distribution is examined between 2010 and 2017. Household Budget Survey microdata obtained from The Turkish Statistical Institute are discussed. In the mentioned years, the effect of a basic income at the poverty line level added to the net income of individuals on income inequality was evaluated by comparing the Gini coefficients.

Table 1. The effect of basic income in income distribution (Gini coefficients)

Year/Type of Income	Net Income	Net Income After Basic Income
2010	0.401	0.263
2011	0.416	0.278
2012	0.408	0.274
2013	0.421	0.281
2014	0.436	0.287
2015	0.441	0.285
2016	0.412	0.264
2017	0.432	0.279

Source: My calculations from Household Budget Survey

Table 1 shows the Gini coefficient results of net individual income distribution between 2010 and 2017. After transfering a basic income payment at the poverty line level to the individuals, income distribution is getting more equal. In example, in 2017 the net personal income is 0.432. Net income after basic income payment Gini is 0.279 which means income distribution is getting much equal. Briefly, Gini coefficients indicate a considerable effect on basic income for equal income distribution.

5. Conclusion

Basic income is an important topic as it can ensure the formation of a society where income is distributed more fairly, individuals live more peacefully and happier and their lives are secured, employees become stronger in bargaining against employers, and inequality between men and women is reduced.

According the results of the research from 2010 to 2017,it can be observed that basic income affects the distribution of income positively in Turkey. The Gini coefficient in all years is decreasing after the basic income transfer at the poverty line. Gini coefficients are decreasing from 0.400-0.435 to 0.260-0.285 approximately. This result indicates that

basic income has a remarkable effect on fair income distribution in Turkey in the years between 2010 and 2017.

There is some debate about the feasibility of basic income, even though it has a corrective effect on income inequality. First of all, the question of how to finance basic income is a topic that is often discussed in the literature. One issue considered by some intellectuals about basic income is that it might reduce the desire of individuals to work. Causing inflation in the market, increasing the number of migrations to the applied country, and reducing wages are some of the objections to this idea.

It is crucial to carry out pilot studies for large kits before implementing basic income policies, to see the impact and economic consequences of individual behavior, and to evaluate the possible effects. In addition, it is necessary to implement pilot projects transferring basic income to the citizens to see both cultural, behavioral and economic effects in Turkey. Organizing panels, symposiums and congress, doing more researches will increase the debates on basic income. Informing citizens, politicians and bureaucrats might raise awareness for the society. Technological progress and basic income is also a topic to debate. As automation and robotisation develops, there could be less need for people. Individuals would lose their jobs and they may need money for living. Lastly, outbreak of Coivd-19 in 2020 showed that society is vulnerable. A warranty for people's needs must be implemented.

References

Baker, J. (1992). "An Egalitarian Case for Basic Income", *Arguing for Basic Income : Ethical Foundations for a Radical Reform"*, (Ed.) Phillippe Van Parijs., Verso, London, New York.

Beken, H. G. (2020). "21. Yüzyılda (Evrensel) Temel Gelir Tartışmaları", *Marmara Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 42 (2), pp. 180-201.

Beken, H. G. (2021). "Evrensel Temel Gelir Deneyi ve Projelerinin Değerlendirilmesine Teorik Bir Bakış", *Çalışma İlişkileri Dergisi*, 12 (2), pp. 154-185.

Citizen's Basic Income Platform Turkey. https://www.vatandasliktemelgeliri.org/, (13.11.2022).

Citizen's Basic Income Trust. (2020). What is a Citizen's Basic Income? https://citizensincome.org/citizens-income/what-is-it/, (12.11.2022).

Clark, C. M. A. & Kavanagh, C. (2002). "Basin Income, Inequality, and Unemployment : Rethinking the Linkage between Work and Welfare", *Journal of Economic Issues*, 30 (2), pp. 399-406.

Erdoğdu, M. M. & Akar, S. (2020). "Dördüncü Sanayi Devrimi Çerçevesinde Koşulsuz Temel Gelir: Türkiye İçin Bir Değerlendirme", *Eskişehir Osmangazi Üniversitesi Dergisi İİBF Dergisi,* 15 (3), pp. 903-924.

Esenlikci, A. C. & Engin, M. A. (2021). "Sosyal Demokrat Refah Devletlerinde Evrensel Temel Gelir: Finlandiya Örneği", *IBAD Sosyal Bilimler Dergisi*, (9), pp. 252-266.

Irzık, E. (2018). "Turkey's Social Assistance Regime–Is It Time For Basic Income?", *Tesev Good Governance Debates*.

Kahvecioğlu, F. & Çakmak, U. (2021). "Evrensel Temel Gelir ve Türkiye'de Uygulanabilirliği Üzerine Analizler", *Sosyal Güvence,* 11 (20), pp. 623-659.

Kangas, O., Jauhiainen, S., Simanainen, M. & Ylikännö, M. (2019). "The basic income experiment 2017–2018 in Finland," Preliminary results.

Karaduman, İ. C. (2014). "Global Challenges for the World", *OBRONNOŚĆ. Zeszyty Naukowe*, 2 (10), pp. 45-58.

Kaya, Ş. M. (2019). "Türkiye'de Bir Sosyal Harcama Olarak Evrensel Temel Gelir Uygulaması", *Politik Ekonomik Kuram*, 3 (1), pp. 129-149.

Orlu, C. (2019). "Basic Income: Is it Applicable to Modern States?", *Journal of Social Policy Conferences*, 76, pp. 213-237.

Rakıcı, C. & Bozdağ, C. A. (2022). "Evrensel Temel Gelir ve Uygulanabilirliği Üzerine Bir Değerlendirme," *Mali Çözüm Dergisi*, 32 (169), pp. 73-98.

Rincon, L. (2021). "A Robin Hood for All: A Conjoint Experiment on Support for Basic Income", *Journal of European Public Policy*, pp. 1-25.

Rizvi, A., Welch, V., Gibson, M., Labelle, P. R., Pollard, C., Wells, G. A., & Kristjansson, E. (2022). "PROTOCOL: Effects of Guaranteed Basic Income Interventions on

Poverty-Related Outcomes in High-Income Countries: A Systematic Review", *Campbell Systematic Reviews*, 18 (4), pp. 1-16.

Şahin, S. Ç. & Kılıç, İ. E. (2021). "Basic Income and Its Applicability in Turkey.," *New Perspectives on Turkey*, 65, pp. 6-26.

Salih, P. & Erikli, S. (2022). "Evrensel Temel ve Dünyada Örnek Uygulamalar," *Uluslararası Sosyal Bilimler Dergisi*, 3 (1), pp. 56-73.

Standing, G. (1997). "The Folly of Social Safety Nets: Why Basic Income is Needed in Eastern Europe", *Social Research*, 64 (4), pp. 1339-1379.

Standing, G. (2008). "How Cash Transfers Promote The Case for Basic Income", *Social Research*, 3 (1), pp. 1-30.

Standing, G. (2017). *Basic Income: And How We Can Make it Happen,* United Kingdom, A Pelican Introduction.

Standing, G. (2020). Temel Gelir, (Çev.) Ceren C., İstanbul, Tellekt.

Straubhaar, T. (2017). "On The Economics of a Universal Basic Income. *Intereconomics*", 52(2), pp. 74-80.

Topateş, H. (2012). "Çalışma ve Yurttaşlık İlşikisi Bağlamında Temel Gelir", *Çalışma İlişkileri Dergisi*, 3 (2), pp. 131-153.

Torry, M. (2018). *Why We Need A Citizen's Basic Income*, Bristol, Policy Press.

Van der Veen, R. J. (1998). "Real Freedom Versus Reciprocity: Competing Views on The Justice of Unconditional Basic Income", *Political Studies*, 46(1), pp. 140-163.

Van Parijs, P. (1992). "Basic Income Capitalism", *Ethics*, 102 (3), pp. 465-484.

Van Parijs, P. (1997). "Reciprocity and the Justification of anUnconditional Basic Income Reply to Stuart White", *Political Studies*, 45 (2), pp. 327-330.

Van Parijs, P. (2004). "Basic Income: A Simple and Powerful Idea for The Twenty-First Century", *Politics & Society*, 32 (1), pp. 7-39.

White, S. (1997). "Liberal Equality, Exploitation, and The Case for An Unconditional Basic Income", *Political Studies*, 45(2), pp. 312-326.

Yapıcı, F. & Karabulut, Ş. (2018). "16. Yüzyıldan 21. Yüzyıla Temel Gelir Düşüncesinin Yeniden Doğuşu", *Erciyes Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 52, pp. 353-380.

The Effect of Housing Price Increase on Income Distribution: An Empirical Analysis Between OECD Countries (2010-2020)

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Abstract:

The sharp declines in housing prices in the USA during the 2008 crisis showed how the housing market could affect the global economy. Before the crisis, the bubble in housing prices was not perceived, and the abundant and low-cost loans led to an explosion in housing demand. The sharp declines in prices after the bursting of the housing bubble caused a larger crisis to be experienced worldwide, with the contagion effect in the financial system and through derivatives markets. Today, the rapid rise in the housing market after the Covid-19 pandemic has brought the need for housing which is as vital as food to a level that is difficult to meet for low and middle income groups, especially in crowded big cities. Expansionary monetary and fiscal policies applied especially in developed countries in the fight against the pandemic and inflationary pressure in the world not only increased housing costs but also made these assets an important investment tool for the wealthy groups who wanted to maintain their purchasing power. While the effects of the pandemic have just disappeared, the war and political tensions in the world and irregular population movements have also helped to disrupt the supply and demand balance and to increase the housing prices and rents especially in big cities. This situation causes a larger part of their income to be allocated as rent for households who do not have enough savings to buy a house, and a decrease in their savings; In terms of property owners, the increase both in rents and house prices led to higher disposable income and total wealth. As a result of this two-way effect, it is expected that the effect of increases in housing prices on income distribution will be regressive and negatively affect income inequality which has become an important problem today. In addition, large migration movements created by political instability and the attractiveness of housing investments for foreigners are thought to be triggering factors in price increases. In Turkey, the interest policy implemented by the CBRT, increasing exchange rates, high inflation and its expectations have made the first and second hand house prices the fastest rising among OECD countries. The purpose of the study is to empirically analyze the effects of housing price increases on income distribution which emerged for the reasons briefly mentioned above. The effects of price increases due to supply and demand-side reasons on income inequality will be examined through OECD countries. In the study, the real world housing prices index published regularly by the OECD will be used. Thereafter an econometric analysis will be presented on the annual percentages of housing price change in selected OECD countries and the change in the gini coefficients, which reveal the primary and secondary distribution used in the measurement of income inequality. The OECD's own database will be used for Gross and Net Gini values for countries. With the study, it is aimed to develop a model and contribute

to the development of policy recommendations by considering the possible roles played by macroeconomic differences which are accepted in the literature and shape policy responses both on income inequality and on housing prices. For the purposes mentioned above, three dependent variables, net gini (⟦YN⟧_it), gross gini (⟦YN⟧_it) and the change between net gini gross gini (⟦YE⟧_it), are considered as income distribution criteria. Each of the dependent variables will be explained with the macro variables (inflation rate (⟦enf⟧_it) and savings rate (⟦tsrf⟧_it)), then the effect of housing prices on income distribution will be revealed using the housing price index (⟦kf⟧_it), migration (⟦göç⟧_it) and urbanization rate (⟦kh⟧_it) variables. First difference model dynamic panel estimator will be used to explain the models. In the Anderson and Hasio method, which is a dynamic panel estimator, the first differences of the dynamic model are taken and then the appropriate instrumental variable is used. However, if the error terms of the first difference model do not have varying variance and sequential dependence, the Anderson and Hasio method is suitable. In case of autocorrelation or varying variance between the error terms, Arrrellano Bond (1991) Generalized Moments (GMM) method will be used. The models to be considered are as follows: ⟦YB⟧_it=α+β_1 ⟦YB⟧_(it-1)+β_2 ⟦kf⟧_it+β_3 ⟦enf⟧_it+β_4 ⟦tsrf⟧_it+u_it ⟦YN⟧_it=α+β_1 ⟦YN⟧_(it-1)+β_2 ⟦kf⟧_it+β_3 ⟦enf⟧_it+β_4 ⟦tsrf⟧_it+u_it ⟦YE⟧_it=α+β_1 ⟦YE⟧_(it-1)+β_2 ⟦kf⟧_it+β_3 ⟦enf⟧_it+β_4 ⟦tsrf⟧_it+u_it ⟦YB⟧_it=α+β_1 ⟦YB⟧_(it-1)+β_2 ⟦kf⟧_it+β_3 ⟦göç⟧_it+β_4 ⟦kh⟧_it+u_it ⟦YN⟧_it=α+β_1 ⟦YN⟧_(it-1)+β_2 ⟦kf⟧_it+β_3 ⟦göç⟧_it+β_4 ⟦kh⟧_it+u_it ⟦YE⟧_it=α+β_1 ⟦YE⟧_(it-1)+β_2 ⟦kf⟧_it+β_3 ⟦göç⟧_it+β_4 ⟦kh⟧_it+u_it With the findings and results obtained in the study, it is expected to reveal that housing price increases can turn into factors that trigger income inequality more. It will be revealed that the governments should use two fiscal policy tools such as taxes and transfers effectively and they could use progressive mechanisms according with market regulatory role when necessary.

Keywords: Housing, Housing Price Index, Inflation, Income Inequality, Income Distribution.

JEL Codes: D31, P43, R31

USE OF DIGITAL CURRENCY IN TAX-FREE FINANCING OF PUBLIC SPENDING

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Abstract

Blockchain technology and its leding mysterious asset cryptocurrency cause new revolution of the world. But the revolution is not crypto assets themselves, today profiting on crypto assets is a temporary situation, eventually the authority will dominate the technology. The ledger technology is more revolutionary than cyrpto assets. Ledger technology is more revolutionary than crypto assets. While electronic money defined as a term in directive 2000/46/EC of The European Parliament and Of the The Council, blockchain was developed in 2008 and bitcoin came alive in 2009. By crypto assets threaten the public rules as using for lounding the dirty money of underground economy. When crypto assets became a mean of laundring the dirty money of underground economy and threaten the public rules , governments began to regulate the subject. Central Banks began to study on the national digital currency. But on the other hand, digital currency probably there will be a serious problem of money creation capabilities of banks over deposit money. And, this will also cause a defcit of money source for crediting the markets. In this study, we are offering a new temprorary digital currency (STEPARA) that can be created by banks without any necessity for money source for conventional banking affairs. STEPARA is not available for saving, so the money necessity (seigniorage right) that will arise from the value added, could be covered by central banks. This new bank currency (STEPARA) that funded by the future commercial receivables could also used for liquidation of the commercial debts against other traditional means as checks, bonds, policies etc. We simulate, calculate and show the affects on micro, macro and public ecenomy, when if STEPARA used against the checks in 2018 and or when the company discounted its future receivables in to cash same day of sales.

Keywords: Digital Currency, seigniorage, tax, financing of public expenditure, STEPARA
JEL Code: E51, E58, G28, H62, K34

1. Introduction

Money is a financial instrument that has been the most speculated but has not yet been substituted. In addition to the spending and savings of individuals at the micro level, money itself has now become an investment tool. Although to preserve the money's value by minting it on precious metals such as gold and silver, it turned out that this option did not have a sufficient structure to prevent the great depression. As a matter of fact, II. With World War II, the gold standard collapsed (Kuruç,2016, 8).

The USA, Canada, Japan, Australia and Western Europe gathered in the Brettton Woods region with the thought of the resumption of international trade and the rapid re-establishment of the international monetary system destroyed by the world wars period, and discussed the new monetary system in order to be able to trade among themselves. While British Keynes suggested an international currency depending on the value added in trade and varying amounts of gold, American White's view of indexing the other currencies to the US dollar and to the US dollar prevailed (Tomanbay,2017,13) . However, by 1976, the insufficiency of gold to meet the added value of production caused the system to collapse and Bretton Woods officially ended with the Jamaica Agreements in 1976 (Halm,1977, 12).. Although history has justified Keynes, countries preferred to switch to a floating exchange rate regime instead of a new gold-indexed system. It has been debated if there is a provision of money or not, from that day.

In recent years, crypto-currency propagandists argue that money has no provision and that the one who prints the money becomes unjustly enriched. They also argue that with decentralized cryptocurrencies on blockchain technology, the individual will protect their purchasing power, and the state cannot be a partner in this by printing free money(Özkul & Baş, 2020,61). But, there is a need for a real market that the money can buy real things. And mostly these markets are under the control of the states.

On the other hand, money has a provision that depends on added value of production as Keynes pointed out. New money is needed in order to store the new added value created as a result of production in an economy except of the product itself. Theoretically, it is expected that the purchasing power of money will not change when an amount of new money is printed equivalent to the added value in an economy. The states are authorized to print money, therefore money is the main indicator of sovereignty (Çatlı & Şimşek,2021,171). In order to use the currency internationally, it must be convertible with other currencies. In order for the money printed for the first time to be put on the market, it must be spent by the government. So, the difference between the nominal value of this newly minted money and the printing cost is named seigniorage right, and this is a kind of a public revenue (Süslü & Baydur, 202, 98).

Central banks have determined price stability, in other words, keeping the value of the national currency stable, as the main task for the balanced use of the seigniorage right. However, as a requirement of commercial life, there is a need for banking activities between those who have money in hand and those who need this money for finance. Banks depositing partial provisions to the central bank for the loans they use enables banks to create fiat money. There are criticisms that not forcing the banks for complete

provisions by central bank causes waiving public's seigniorage right. In the current financing system, the views that argue that the seigniorage right being used by not the society, but the banks, and that the central bank should force the banks giving full provision for the loans extended, have been voiced more loudly in recent years (Kutval,2022,54).

Reserve currencies, especially the US dollar, which is used in a significant part of international trade, also put pressure on the national currencies of import-based economies using floating exchange rate regimes. Thus, the need for foreign currency in imports causes reserve currencies to become investment and savings tools and the to become a stakeholder in national currency's seigniorage right.

The inclusion of cryptocurrencies, whose owner and control are unknown, in the struggle to get a share from all this seigniorage right, has caused the concept of digital money to come to the fore in many countries. With the Directive 2009/112, the European Union has made regulations so that cryptocurrencies do not harm the monetary system. In our country, with the Law No. 6493 on Payment and Securities Settlement Systems, Payment Services and Electronic Money Institutions, legal rules have been introduced for the printing of digital money. The Central Bank of the Republic of Turkey banned the use of cryptocurrencies directly or indirectly in payment transactions in our country in 2021.

As in all countries, our central bank has serious digital currency studies in our country. Although the Swedish government has announced that they will switch to digital money instead of crowns in 2022, it has not yet achieved this transition (Bloomberg,2021). Members of the U.S. banking community announced the launch of a proof of concept (PoC) project that will explore the feasibility of an interoperable digital money platform known as the regulated liability network (RLN)(Businesswire,2022). China, which almost does not allow the use of physical money in its domestic market, has a leading role in the world in digital money applications. China, which has made strict quarantine practices under pandemic conditions, has been able to strictly implement quarantine practices by taking advantage of the digitalization of its payment system. The transition of countries to digital money will prevent banks from creating fiat money and will ensure that a significant part of the national seigniorage right is returned to the central bank. However, this will seriously affect the traditional incomes of banks.

With the transition to digital money, banks must be able to print their own digital money instead of fiat money for futures and lending. While the banking activities will be able to continue without any problems with the temporary special digital currencies to be designed over the forward receivables, the seigniorage rights to be formed will be transferred to the government. With the transition to digital money, the known and accepted truths in all areas of the economy, including public finance, will also change.

According to Article 73 of our Constitution, taxes can only be collected for financing public expenditures. The net tax obligation is the difference between the other public revenues and the total public expenditure. As a public revenue, the increase in seigniorage revenues will naturally reduce the need for tax revenues. In this study, it will be revealed that public expenditures can be financed with seigniorage income

increases to be obtained via using digital money without the need for taxes.

In this study we will try the find the answers of the questions as follow: can Public Expenditures be financed tax-free; how will the digital Turkish lira affect banking; how should banks develop financing models in Digital Turkish Lira; is it possible financing without resources and interest-free; are we ready for the digital cash economy; could Universal Basic Income (UBI) be financed in a liberal market.

2. Currencies of Electronic Environment

It is an inevitable reality that paper formed money will completely disappear from our lives in the near future. A significant part of the money used as a means of payment emerges as the money created in the electronic environment. Cryptocurrencies are not legal money and are not the subject of our study, nowadays they are called crypto assets instead of money. The legally recognized electronic environment money types are as follows:

Electronic Money: It is the legal money issued to be blocked in the fund account in the bank in return for funds within the scope of the Law No. 6493 and can be used as a payment instrument. Except for special circumstances, it should be paid back to the depositor on the first business day following the day it is requested.

Deposit Money: Pursuant to Article 4 of the Banking Law No. 5411, banks are authorized to provide loans and dematerialized payment services. Banks are required to deposit a certain portion of these amounts to the central bank as required reserves for the loans they give and the deposits they collect. In this way, banks can create deposit money that can be used for payment, like paper money.

Digital Money: the term of digital money was used for all kind of means of payment whether it is legal or not. But, nowadays, digital money is used as central banks' issued money that its emission is controlled via identification numbers. It is waiting that digital money will be used instead of paper money that all has identification number. Term of digital money we used here is as a fiat money of central bank that could be identified and the emission is under controlled.

2.1. Money Supply and Seigniorage Capability

The money supply in Türkiye by September 2022 is shown in Table 1.

Table 1. Contribution of Broad Money Components to the Annual Growth in M3 Money Supply (September 2022)

	September 2022 (Million TRY)	July 2022 (%)	August 2022 (%)	September 2022 (%)
M3	7.604.421	80,35	87,16	84,91
Funds Received from Repo Transactions	12.456	0,14	0,15	0,14
Money Market Funds	74.728	0,59	0,76	0,83
Debt Securities Issued	40.724	0,47	0,49	0,45
M2-M1	4.635.158	48,07	53,06	51,76

Time Deposits (TRY)	2.595.540	25,49	28,94	28,98
Time Deposits (FX)	2.039.618	22,58	24,12	22,77
M1	2.841.355	31,07	32,70	31,73
Currency Outside Banks	294.855	3,23	3,44	3,29
Demand Deposits (TRY)	737.017	7,59	8,30	8,23
Demand Deposits (FX)	1.809.482	20,25	20,97	20,20

Source: CBRT

As we can see the percentage of currency outside banks is only 3,87 in whole M3. Total emission volume is approximately 330 Billion Turkish Lira in September 2022. Practically, with 35 Billion TRY, banking system can manage to create 3,3 trillion deposit money in TRY . On the other hand, foreign currency deposits are 3,8 trillion and half of the time deposits in TRY is bind to exchange rate of foreign currencies. Currency substitution is too high as 5,3 trillion TRY of M3 is bind to foreign currency (69,7%). We can clearly say that, CBRT can not use the seigniorage right arise from value adds of the domestic economy, efficiently.

2.2. Possible Effects of Digital Currency on Banking

Defendants of full reserved banking defend that if we deduct the money creation capabilities of banks, the source comes from the seigniorage right could pay the governmental debts fully. But, money is also necessary for credits, not only for payment. Full reserved banking is harmful for financing and banking. So, what will be the effects of digital money on banking is a serious question. Lets' estimated the possible effects with the specification of central bank's digital money:

- Everyone will have a digital ledger in the infrastructure to be used for the circulation of the National Digital Currency.
- All kinds of money transactions and movements of money could be tracked by the CBRT.
- CBRT's digital ledgers will be enough to reserve and use the digital currency for the holders, so they will not need a bank for digitalization of the money, so this will cause difficulties for banks to find demand deposits (low-cost funds).
- The digital national currency that the bank takes into time deposits can only be used as a loan, and there will be no money creation opportunity.
- Banks' ability to provide financing will be restricted and funding costs will rise.

3. STEPARA (Certified Commercial Electronic Money)

The documents of invention as description, claims and drawings of Certificated Commercial Electronic Money Issuance, Circulation And Refund Method And System Based On The Future Commercial Receivables (STEPARA) is issued in World Intellectual Property Organization pages (Aslan,2020). It is Digital (with specific ID number) Electronic money in accordance with Law No. 6493. It is designed for banking. No resource usage is required for its issuance (Money Creation). It arises due to commercial transactions. Its main function is to increase the turnover rate of working capital. The

payback date is fixed. The parties to the commercial transactions determine the repayment date. It cannot be used as a savings tool. It can be fund by either active or passive methods. Passive funding no needs to any monetary funds, it can be funded via guarantee, collateral, bail, insurance, tekaful, cooperative bail etc. On the other hand, active funding depends on the tied money as time deposit, asset backed securities, Sukuk type of rental certificates, treasury bonds, government bonds, equity sector bonds, cash etc.

Briefly, emission of STEPARA is auto-controlled by the demand. The flows are as follows.

1. The buyer agrees with the bank and delivers the active or passive funds
2. The bank establishes a non-cash limit to the buyer, for electronic money.
3. Buyer and seller agree on due date for the repayment for electronic money funds.
4. Bank issues STEPARA (Electronic Money) and makes payment to the seller on behalf of the buyer
5. The buyer receives the merchandise
6. Until the repayment date, the buyer can use his electronic money in the system as he wishes.
7. If he desires to leave the system before repayment day, he can exchange the STEPARA with cash by profit sharing or rediscount methods.
8. The buyer pays the money back to the bank in cash until the repayment date as the deposit liabilities
9. The bank repays the depositors holding of STEPARA and removes the STEPARA from circulation.

3.1. Design and aims of primary services

STEPARA was designed as a system that issuing electronic money, circulate it and, refunding in cash. It contains three main service those all contains services and subservices those have algorithms to produce conclusions in all level economics.

With its services and sub-services, the Primary Issuance Service maximizes the working capital turnover coefficient by reducing the receivables collection time in the microeconomic field to zero days and reduces the need for resources by increasing capital efficiency.

The Primary Circulation Service provides the financing of trade in the macroeconomic field with its services and sub-services and contributes to economic growth by ensuring that the money issued (emitted) remains in circulation until the repayment date and value-added commercial transactions are carried out. Since STEPARA Emission depends on commercial transactions, its emissions from its own are increasing and decreasing according to economic conditions. Since the results are directly traceable, it therefore allows economic management to intervene in the economy without the use of interest instruments. In addition, system algorithms allow participation (interest-free finance) transactions and sukuk production and tracking. It also causes an increase in tax revenues due to increased operating profitability.

The Primary Refund Service creates benefits in the field of Public Economy (Finance) with its service and sub-services. By removing STEPARA from circulation on the reimbursement date, it transfers to the National Central Bank the right to create money that is supposed to represent the added value generated using SETPARA, thus ensuring that this benefit arises directly in the public sphere. Since this resource can be used for public spending, it can be used as a source for all kinds of policies.

STEPARA designed as a legal currency type for an alternative way of liquidate the receivables to fiat money, checks, bonds, credit cards, baters, assignment, Murabaha type of sukuk etc. It contains beneficiary features while excludes harmful sides these means.

3.2. Relations with Rules of economics, commercial and technical

The definition of *Certified Commercial Electronic Money Issuance, Circulation and Refund Method and System Based on the Future Commercial Receivables* in the title of our invention is used to emphasize legal and academic limitations and fully describes our invention. In order for the invention to work on the electronic system in order to give benefit and to provide legal results (for example, Article 99 of the Turkish Code of Obligations) Payment function in the article) must be operated in a method that complies with legal regulations. Our invention is designed to include method and system.

Our system can be run in a distributed decentralized database (blockchain-DeFi) or in a centralized (CeFi) database. The software and languages to be used may also be changed or updated independently of the invention. Technical elements will include the software to be developed, relational database, message queue systems, backup, mobile applications. The platforms on which it will operate may be the internet, servers, mobile phones, and future meta-verses or other platforms. Within the framework of legal regulations, it is mandatory to operate the system servers in a way that they are hosted in the country and in two separate places.

STEPARA will be implemented in accordance with the rules of the Law No. 6493 on Payment and Securities Settlement Systems, Payment Services and Electronic Money Institutions, where electronic money is regulated. The law allows electronic money to be issued by the CBRT, banks, Electronic Money Institutions and the PTT. On the other hand, since STEPARA can also be issued using non-cash funding (Guarantee and Collateral Sub Services) methods, the funding authority in this direction is limited to Banks under the Banking Law No. 5411, to Financing and Savings Finance Companies within the scope of the Financial Leasing, Factoring, Financing and Savings Finance Companies Law No. 6361 and to the Insurance Companies within the scope of the Insurance Law No. 5684. However, the STEPARA method is a system that can only be implemented by banks located in the intersection cluster of both clusters. In which business model STEPARA can be implemented is subject to different rules, if the Bank wants to operate STEPARA only by integrating it with its own system platforms, then the System will be operated as a support service in accordance with the provisions of the Regulation on Banks to Receive Support Services. In the event that more than one bank

wants to run their own STEPARA on the common system, it can also be operated as an independent system (system operator) in accordance with Article 4 et seq. of the Law No. 6493.

While the Banking Supervision and Regulation Agency (BRSA) was the competent authority for electronic money, this authority has already passed to the Central Bank of the Republic of Turkey (CBRT). Within the framework of the provisions of the Regulation on the Information Systems and Electronic Banking Services of Banks published in the Official Gazette dated 15.3.2020 and the Regulation on the Operating Principles and Service Model Banking of Digital Banks published in the Official Gazette dated 29.12.2021, the STEPARA system will now be able to serve as an open banking service in accordance with the Service Model Banking.

STEPARA is a digital currency according to today's legal and regulatory body definitions. It also includes innovation in terms of being a digital currency. In particular, the definition of crypto money to some of the assets that are speculative investment tools that do not fall under the definition of money for advertising purposes also causes confusion. Crypto currencies consist of simple records that cannot be distinguished from others without a serial / identification number and do not carry any function of money. Electronic money, issued in accordance with the legal definition, is a means of payment like national (fiat) money. That is, it has the ability to legally liquidate the debt. The value of electronic money is equal to the value of the national currency in the linked fund. In other words, it can also be defined as stable coin. The main difference between the fiat (physical national) currencies that the CBRT prints and gives to the market and electronic money is electronic money's being just a record. In other words, electronic money does not have a specific serial/identification number. They are kept as a record. On the other hand, banks are subject to Article 4 of the Banking Law. They have the authority to make payments on record in accordance with the article. Depending on the CBRT's reserve requirement ratios, banks can also create money by issuing loans on the deposits they collect within the scope of banking activities, this operation called money creation is the basic function for banking and they create financial opportunities by using the money market instrument.

STEPARA's Certificate Service, on the other hand, gives a unique ISIN code and unique and distinctive ID that allows for independent tracking. In this respect, it also meets all the requirements of today's digital money concept. The ID numbered money (digital money) feature, is available in STEPARA.

3.3. Solved problems and/or maximized benefits in Economics

The main aim is Turning the stagnation caused by the third-party use of working capital into mobility and increasing the number of jobs that can be done with working capital, via turning the future commercial receivable to a liquid asset that has the same effect with cash.

For simulation we found the assumptions as follows:

The report issued by Bloomberg, Euler Hermes, Allianz Research indicates that the average due date was 66 days in Global, while it was 83 days in Türkiye, in 2017. In the heat map, in electronics due date increase up to 140 days, but in retail it is only 28 days. Average due date in Germany was 54 days, 50 days in the Netherlands, 43 days in New Zeeland, 51 days in the United Kingdoms. So we can assume 90 days as an average due date in commercial affairs in Türkiye.

We calculate, the gross profit ratio in the collected balance sheets (average of 8721 company) via CBRT was 13,24 % in 2014, 15i11% in 2015 and 16,17% in 2017. And also 22% in 2017 and 25 % in 2018 average gross profit ratio were calculated over the balance sheets announced in KAP (Public Disclosure Platform) of random ten company listed in XU030 of Borsa Istanbul. So we can assume 20 % as an average gross profit ratio in commercial affairs in Türkiye.

These two indicators shows that with a working capital a trader can turn the capital four times annually and gain 80 percent gross profit ratio. On the other side, In 2018 rediscount rate defined by CBRT was 18,50%. Theoretically a company can rediscount its receivables in to cash with the interest of rediscount rate. We used this ratio for converting STEPARA in to cash.

3.3.1. Micro Economics: Effects on Balance sheet of Company

We randomly selected ten of thirty companies (ARCLK, ASELS, ENJSA, KOZAA, PGSUS, TUPRS, TTKOM, TCELL, TKFEN, PETKM) listed in XU030 of Borsa Istanbul due to calculate the simulation of STEPARA for the effect on balance sheets. Balance sheets were disclosed in the Public Disclosure Platform. The simulated assumption was if the company turns its future receivables in to cash via rediscount rate of CBRT, what would be the cost of STEPARA, against paid finance costs as exchange losses and interest for financing.

In 2018 the calculations are as follows: (BTRY is used for Billion Turkish Liras)

ARCLK:

Current Position: the time for collection of receivables was 82 days, Turnover speed was 4,4 times annually, gross profit ratio was 32 %, Financial Costs was 4,6 BTRY, ratio of financial costs to gross sales was 55%, profit before taxation was 0, 949 BTRY.

STEPARA Effect: Rediscount costs could have been 1,28 BTRY, advantage could have been 3,38 BTRY, profit before taxation could have been 4,34 BTRY, rise of profit could have been be 357 %.

ASELS:

Current Position: the time for collection of receivables was 79 days, Turnover speed was 4,6 times annually, gross profit ratio was 25 %, Financial Costs was 0,86 BTRY, ratio of financial costs to gross sales was 39 %, profit before taxation was 2,24 BTRY.

STEPARA Effect: Rediscount costs could have been 0,41 BTRY, advantage could have been 0,44 BTRY, profit before taxation could have been 2,68 BTRY, rise of profit could have been be 20 %.

ENJSA:

Current Position: the time for collection of receivables was 49 days, Turnover speed was 7,3 times annually, gross profit ratio was 33 %, Financial Costs was 1,59 BTRY, ratio of financial costs to gross sales was 27 %, profit before taxation was 1,32 BTRY.

STEPARA Effect: Rediscount costs could have been 0,53 BTRY, advantage could have been 1,06 BTRY, profit before taxation could have been 2,38 BTRY, rise of profit could have been be 80 %.

KOZAL:

Current Position: the time for collection of receivables was 0 days, Turnover speed was 1322,1 times annually, gross profit ratio was 61 %, Financial Costs was 0,01 BTRY, ratio of financial costs to gross sales was 1 %, profit before taxation was 1,425 BTRY.

STEPARA Effect: Rediscount costs could have been 0,0003 BTRY, advantage could have been 0,013 BTRY, profit before taxation could have been 1,44 BTRY, rise of profit could have been be 1 %.

PGSUS:

Current Position: the time for collection of receivables was 7 days, Turnover speed was 46,3 times annually, gross profit ratio was 15 %, Financial Costs was 0,40 BTRY, ratio of financial costs to gross sales was 32 %, profit before taxation was 0,54 BTRY.

STEPARA Effect: Rediscount costs could have been 0,04 BTRY, advantage could have been 0,37 BTRY, profit before taxation could have been 0,91 BTRY, rise of profit could have been be 68 %.

PETKM:

Current Position: the time for collection of receivables was 35 days, Turnover speed was 10,4 times annually, gross profit ratio was 17 %, Financial Costs was 2,61 BTRY, ratio of financial costs to gross sales was 165 %, profit before taxation was 1,00 BTRY.

STEPARA Effect: Rediscount costs could have been 0,19 BTRY, advantage could have been 2,42 BTRY, profit before taxation could have been 3,42 BTRY, rise of profit could have been be 241 %.

TKFEN:

Current Position: the time for collection of receivables was 42 days, Turnover speed was 8,6 times annually, gross profit ratio was 15 %, Financial Costs was 0,82 BTRY, ratio of financial costs to gross sales was 46 %, profit before taxation was 1,64 BTRY.

STEPARA Effect: Rediscount costs could have been 0,32 BTRY, advantage could have been 0,52 BTRY, profit before taxation could have been 2,16 BTRY, rise of profit could have been be 32 %.

TCELL:

Current Position: the time for collection of receivables was 46 days, Turnover speed was 7,8 times annually, gross profit ratio was 32 %, Financial Costs was 4,62 BTRY, ratio of financial costs to gross sales was 70 %, profit before taxation was 2,67 BTRY.

STEPARA Effect: Rediscount costs could have been 0,55 BTRY, advantage could have been 4,07 BTRY, profit before taxation could have been 6,74 BTRY, rise of profit could have been be 152 %.

TTKOM:

Current Position: the time for collection of receivables was 75 days, Turnover speed was 4,8 times annually, gross profit ratio was 45 %, Financial Costs was 7,87 BTRY, ratio of financial costs to gross sales was 86 %, loss was 2,02 BTRY.

STEPARA Effect: Rediscount costs could have been 0,89 BTRY, advantage could have been 6,98 BTRY, profit before taxation could have been 4,96 BTRY, there is no need to calculate the rise of profit because of loss in current position.

TUPRS:

Current Position: the time for collection of receivables was 18 days, Turnover speed was 20 times annually, gross profit ratio was 10 %, Financial Costs was 5,56 BTRY, ratio of financial costs to gross sales was 60 %, profit before taxation was 3,72 BTRY.

STEPARA Effect: Rediscount costs could have been 0,96 BTRY, advantage could have been 4,607 BTRY, profit before taxation could have been 8,32 BTRY, rise of profit could have been be 123 %.

3.3.2. Macro Economics: Effects on Profitability and Taxation Base

Our calculations showed that only difference in ten of these companies mentioned above caused mass increase in taxation base of company income tax. It could be interesting to simulate the whole economy that how STEPARA cause difference.

In 2018, the averages and totals of these ten companies calculated as follows:

Gross Profit was 28 %, total profit before taxation was 13,5 BTRY, financial costs were 29,02 BTRY, Rediscount cost with STEPARA could have been 5,17 BTRY, Advantage with STEPARA 23,85 BTRY about 82 %. If these companies used STEPARA to finance their trade, their profit before taxation could have ben 37,35 BTRY. This could have raised the company tax up to 4,77 BTRY. In 2018 collected total company tax was 78,67 BTRT, so with only ten company could have produced 6% more tax for public spendings.

3.3.3. Public Finance: Effects on Financing Public Spendings an Universal Basic Income

In 2018, 20,5 million checks were issued by the traders and 97,86 % these were paid regularly. Total value of these checks were 939 BTRY. This amount corresponds to 195 Billion US dollars (BUSD) at the average exchange rate. Average value of the checks were 45 thousand TRY. Due to 20% average gross profit rate added value with these checks were 39 BUSD. When we assume 800 BUSD gross national product in 2018, check economy's effect was 5%. Despite the liquidation feature of checks, mostly banks receives the checks as a collateral for loans. So, checks could not been use effectively

with, physical other problems. When we used STEPARA instead of these checks, as a money, that can be used as a payment means, in current conditions of Türkiye as average due date is 90 days and gross profit ratio is 20%, the calculations are as follows. We assume that in 90 days money can be turned at least 10 times is so reasonable. So;

Value add would have been 390 BUSD (ten times 39 BUSD). But STEPARA has to be refund at due date, so, money demand could be covered by CBRT via issuing new money, this is the amount of the seigniorage right. Budget value of year 2019 was 170 BUSD. When we cover all public spendings with this created money, 220 BUSD money remains that has to be spent. This is also a serious problem for stability of the value of the Turkish Lira. This remainder source could be distributed between the citizens. When we assume 82 million citizen of Türkiye in 2018, 2.682 USD could be transferred as a share of welfare per citizen. By this way universal basic income could be financeable and applicable with STEPARA.

4. Conclusion

As an answer of the question if Public Expenditures can be financed tax-free; it has been calculated that 390 Billion USD seigniorage right can be generated by using the digital currency with a certain repayment date instead of a check (7% of the economy). This situation leads to the conclusion that tax revenues are not needed (Budget size is 170 Billion USD in 2019). In this situation, according to Constitution 73, no tax can be demanded.

As an answer of the question how the digital Turkish lira affects banking; if the identification number is used in the digital currency, the production of fiat money is restricted. Demand for demand deposits will decrease as money can be transferred between digital wallets.

As an answer of the question how banks should develop financing models in Digital Turkish Lira; the banking sector, whose deposit money opportunities will be limited, has to develop new financing methods over digital money. STEPARA is a convenient tool for this situation. Banks' establishing and owning new electronic money companies are not the solution of obtaining low-cost funds.

As an answer of the question if financing without resources and interest-free is possible; in the near future, debt settlement without the use of money will become more efficient as the values that can be liquidated will increase. Since simultaneous reciprocal (duplex) transactions will eliminate the concept of indebtedness, since the capital value will be "zero" in the interest calculation, mathematically no interest will arise.

As an answer of the question if we are ready for the digital cash economy; the digital cash economy is an inevitable phenomenon of the near future. The fact that those who manage digital systems will have big data will increase the importance of personal data and financial privacy. Alternatives to the digital cash economy should be prepared now.

As an answer of the question if Universal Basic Income (UBI) could be financed in a liberal market economy; the seigniorage right that will arise in the digital money (STEPARA) system we propose is far above the resources required for public expenditures. As the area of use in the economy expands, the seigniorage right increases

geometrically. The fastest spending method to prevent the overvaluation of money is transfer spending. It has been calculated that at least USD 2,682 Universal Basic Income per person per year can be distributed.

References

Journals/Periodicals;

Çatlı, M. & Şimşek, S. (2021). DİJİTAL PARA VE EGEMENLİK . Türkiye Adalet Akademisi Dergisi , 0 (48) , 151-184 . DOI: 10.54049/taad.1009216

Kuruç, B. (2016). BRETTON WOODS ANTLAŞMASI'NIN 70. YILI . Hacettepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi , Hacettepe University Journal of Economics and Administrative Sciences , 7-26 . DOI: 10.17065/huniibf.309266

Kutval, Y. (2022). FAİZSİZ BİR MERKEZ BANKACILIĞI MÜMKÜN MÜ? İSLAM İKTİSADI LİTERATÜRÜ PERSPEKTİFİNDEN BİR İNCELEME. ESAM Ekonomik ve Sosyal Araştırmalar Dergisi 3 / 1 (Nisan 2022): 39-58 . https://doi.org/10.53662/esamdergisi.1021657

Özkul, F. & Baş, E. (2020). DİJİTAL ÇAĞIN TEKNOLOJİSİ BLOKZİNCİR VE KRİPTO PARALAR: ULUSAL MEVZUAT VE ULUSLARARASI STANDARTLAR ÇERÇEVESİNDE MALİ YÖNDEN DEĞERLENDİRME . Muhasebe ve Denetime Bakış , 20 (60) , 57-74 . Retrieved from https://dergipark.org.tr/tr/pub/mdbakis/issue/54474/684239

Süslü, B. & Baydur, C. (2011). Para İkamesi ve Türkiye'deki Gelişimi . İstanbul Üniversitesi Siyasal Bilgiler Fakültesi Dergisi , 0 (27) , . Retrieved from https://dergipark.org.tr/tr/pub/iusiyasal/issue/608/6119

Tomanbay, M. (2017). John Maynard Keynes'in Yaşamı ve İktisadi Düşüncesinin Gelişimi . Ufuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi , 6 (11) , 7-16 . Retrieved from https://dergipark.org.tr/tr/pub/ufuksbedergi/issue/57466/815023

Books;

Halm N.G. (1977). Jamaica and Par-Value System, Essays In Internationa Financa No:120, Princeton University, Orinceton,New Jersey

Reports:

Central Bank of the Republic of Türkiye. (2022). *Monetary Developments-Semptember 2022*, Ankara, https://www.tcmb.gov.tr/,(18.11.2022)

Euler Hermes. (2018). Payment Behavior May 2018. Https:// eulerhermes.com (11.10.2019)

Papers:

Aslan M. (2020). WIPO, World Intellectual Property Organization. WO2020091713 - *Certificated Commercial Electronic Money Issuance, Circulation And Refund Method And System Based On The Future Commercial Receivables,* Patent Application. Patenstcope.wipo.int

Internet Sources:

BloombergHT. (2021). İsveç Merkez Bankası dijital para çalışmasının ilk sonuçlarını açıkladı. https://www.bloomberght.com/isvec-merkez-bankasi-dijital-para-calismasinin-ilk-sonuclarini-acikladi-2278056 (18.11.2022)

Businesswire.(2022). Members of the U.S. Banking Community Launch Proof of Concept For A Regulated Digital Asset Settlement Platform. https://www.businesswire.com/news/home/20221115005936/en/Members-of-the-U.S.-Banking-Community-Launch-Proof-of-Concept-For-A-Regulated-Digital-Asset-Settlement-Platform (18.11.2022)

Central Bank of the Republic of Türkiye. (2022). Sector Balance Sheet StatisticsAnkara, https://www.tcmb.gov.tr/,(18.11.2022)

European Union. (2009). COMMISSION DIRECTIVE 2009/112/EC. https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:223:0026:0030:EN:PDF

Mevzuat. (2022).For all Turkish legislation. https://mevzıuat.gov.tr

Public Disclosure Platform. (2022). Financial Reports. https://kap.org.tr (18.11.2022)

Public Disclosure Platform. (2022a). Indexes. https://kap.org.tr (18.11.2022)

Risk Center. (2022). Check Statistics, https://www.riskmerkezi.org (18.11.2022)

DIGITAL WALLET AND TAX DIMENSION

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Abstract

Digital wallet technology is one of the most talked about payment tools that have developed and diversified in recent years. Moreover, the digital wallet can provide convenience and speed to people at every point of life by integrating not only in the financial field but also with other applications we use in daily life. Digital wallet technology has been in demand by various countries around the world and has been used increasingly day by day. With a digital wallet, people get rid of the problem of physically carrying cards with them. The information of the cards owned by the people is stored in the digital wallet, and the transactions are completed in a short time with the QR code or password created in the digital wallet during shopping or when they want to withdraw money from the ATM. With the development of digital wallet technology in the near future, it is likely to be used in different areas such as virtual identity transport. Therefore, the structure of the financial system will change completely in the short run. Thus, taxation of digital wallets and documentation of transactions will be important. In this context, the digital wallet has been examined in terms of Tax Procedure Law No. 213, corporate tax, value added tax, and banking and insurance transactions tax. Since the taxation part of the subject is based on many different special tax laws, relevant laws and provisions on the subject have been scanned.

Keywords: Changing World, Technological Development, Digital Wallet, Taxation.
JEL Code: K34, O30.

1. Introduction

As a result of the developments in information technologies, the use of technology in every field has become widespread. Increasing competition in the financial sector has brought along the need for more personnel in parallel with the transaction volume. The constant increase in costs, the necessity of keeping information and documents ready for continuous use, and the search for increasing the efficiency and diversification of the banking services offered to customers have made it necessary to use the technological opportunities of the age widely and effectively in the banking sector. In particular, it has caused significant changes in payment systems and instruments. With the effect of the pandemic, there have been rapid developments in the world and the behavior patterns of consumers have changed. Increasing use of technology in business and daily life not only facilitates transactions, but also increases crimes such as fraud, threats, blackmail, and insults, and causes our photos or other personal data to be shared unintentionally. However, it is seen that various measures have been taken in this regard. In parallel with the changing world, it is seen that legal measures also change over time.

The development of mobile payment technologies enables payments to be made simply and easily via mobile phones. The rapid increase in the number of digital wallets and accordingly the number of users in the recent period allows consumers to shop easily. Apart from shopping, consumers also have the freedom to transfer money between banks via digital wallets. For example, a person who pays bills with a company's digital wallet can also transfer money to a different person. Digital wallets fulfill three basic functions in financial transactions. These are user login, transaction confirmation, and user interface. In the long-term, most of the expenditures have shifted from cash to electronic payments, which shows that mobile technologies and credit card products are in full integration. The usage areas of the digital wallet are not limited to payment transactions, we have the opportunity to use it in a wide range of areas, from digital keys that we can use at home or office entrances to electronic tickets that we can use for sports competitions or public transportation. In this study, it is aimed to examine the digital wallet and the tax dimension of the digital wallet, which has started to take an important place in our lives. In this direction, the conceptual dimension of the digital wallet, the types and benefits of the digital wallet, and finally the tax scope of the digital wallet were evaluated.

2. The Conceptual Dimension of the Digital Wallet

The digital wallet or “mobile wallet” application, which uses Near Field Communication (NFC) technology, one of the digital technologies developed in the period from the 1990s to the present, has been offered to mobile subscribers in Turkey as of 2011 (Baydur, 2011: 4). A digital wallet can be defined as a mobile phone application that can store all kinds of digital information thanks to the NFC tag it has, and can transfer this information to an NFC reader at a maximum distance of 20 cm when necessary (Coskun et. al., 2013: 2261). Thanks to this technological feature of the digital wallet, it has now become

possible to carry personal and financial tools such as credit cards, debit cards, all kinds of electronic tickets, digital door keys in a single device such as a mobile phone.

Technology has become an integral part of the market. In popular and developed economies, mobile payments are accepted as a payment system. They are of great interest because they show greater benefits than other payment behaviors. Digital wallets continue to evolve. More work needs to be done to secure and complete transactions, the main barrier to digital payment success (Hassan & Shukur, 2019: 46). A digital wallet has both a software and an information component. The software provides security and encryption for personal information and actual transaction. In the information component part, digital wallets are stored by the customer and are easily self-protected. Therefore, most e-commerce applications are fully compatible with the website (Upadhayaya, 2012: 40).

"*The electronic payment systems have to meet several minimal characteristics in order to be efficient* (Salodkar et. al., 2015: 976):

- *Atomicity: This characteristic takes into account that during the transfer no existing money is lost or no money is created.*
- *The impossibility of the non-reputation: None of the users involved in the transaction can decline his responsibility conferred by the electronic signature.*

Also, the solutions of the electronic payments represent the central point of different requests, more or less economical:

- *Security: The system must retain the possibility of frauds within the electronic environment.*
- *Availability: The systems must be accessible and available at any moment in time.*
- *Cost efficiency: The transaction cost must be reasonable even in the case of the micropayments.*
- *Integration and scalability: The systems must be inter-operable with all the other existing systems, also they must integrate themselves with the new payment methods from the online environment.*
- *The ease of using: Any system of electronic payments must be accessible through different types of hardware terminals and from different software platforms.*
- *Confidentiality: The data regarding the parties involved into the transactions must be available for the others only up to the confidentiality level established by the collaboration protocol".*

Thanks to technology, mobile users today can use their smartphones to make money transactions or payments using the applications installed on their phones. In addition to paying, people can also store their invoices on their smartphones (Rathore, 2016: 69). People can do many transactions in a few seconds with the help of digital wallets instead of waiting in banks (Malik et. al., 2020: 359). A digital wallet is one of the latest forms of mobile payment systems that can store data thanks to the electronic chip it contains, and can replace a credit card or ticket when necessary. According to another definition, a digital wallet is an application that combines different personal services such as store cards, tickets, and business cards in a mobile phone and uses NFC technology for this.

3. Types and Benefits of Digital Wallet

There are two types of digital wallets. These are e-wallet (digital wallet) and m-wallet. E-wallet owners can use it from desktop, laptop computers, in short, over the web. M-wallets are wallets that can be used on mobile devices. Especially with m-wallets, people can shop quickly and securely from their smart phones. Users can own both an e-wallet and m-wallet, as long as the technical infrastructure of the service provider companies allows. Paycell application offered by Turkcell to its users and Vodafone Pay application owned by Vodafone company can be given as examples of m-wallets. On the other hand, virtual wallets specially designed by banks for their customers have developed considerably. For example, the number of users of applications such as Fastpay offered by Denizbank, Tosla used by Akbank, and Kassa using QNB Finansbank infrastructure is increasing (Karakoç, 2021).

With the emergence of Covid-19, the use of digital wallets in order to prevent virus transmission to people has provided significant benefits. People are now starting to use more non-cash transaction options. Through a digital wallet, people can perform any payment or transaction activity using a mobile phone (Nuryasman & Warningsih, 2021: 272). However, there are many more benefits of a digital wallet. These are (Upadhayaya, 2012: 40):

- *"Send and receive payments anywhere in the world.*
- *Unlimited transfers.*
- *Easy recurring payments and transfer.*
- *Manage our account from our mobile phone.*
- *World Ventures-branded prepaid MasterCard available.*
- *Security for our bank account and credit card numbers.*
- *E-mail or SMS notifications after transactions.*
- *We are in complete control.*
- *Access our commissions faster.*
- *Pull money into our e-wallet from any bank account.*
- *Receive wired funds/transfers directly into our e-wallet.*
- *Any bank account worldwide.*
- *Transfer money from e-wallet to e-wallet without sharing personal account numbers.*
- *Request paper commissions checks".*

However, it should not be forgotten that digital wallets can be stolen and used illegally outside of their owners. It should not be overlooked that, due to its irreversible transaction structure, it may also be a system open to risks arising from operational errors or abuses by malicious vendors (Güleç et. al., 2018: 22).

4. Digital Wallet in terms of Tax Procedure Law (TPL) and Corporate Tax

"Electronic Invoice Application" was put into service with the publication of TPL General Communiqué No. 397. The provisions of the Communiqué, which explains the procedures and principles regarding the issuance of the invoice as an electronic document, its transmission in the electronic environment, its preservation, and submission, are important for the explanation of the subject. According to this (Karakoç, 2021):

- It is an advance in the case that money is loaded by the users who own the wallet to the wallet applications offered by the companies to their consumers. Since these funds deposited in digital wallets are in the form of advances and do not constitute a return for the delivery of goods and/or service during the money loading phase, companies do not need to issue a document in accordance with the provisions of the TPL regarding the money loading process.
- It is obligatory to issue an invoice on behalf of the wallet holders for the service fees, such as commissions or fees, received by the companies providing digital wallet application service, within a maximum of seven days from the date of delivery of the service.
- In the performance of a good or service purchased using digital wallets, the seller will need to issue an invoice on behalf of the buyers in question. Invoices to be issued both in paper and electronic media must be issued within a maximum of seven days from the delivery of the goods or the performance of the service. It is natural that the penalties stipulated in the TPL will be applied if the said maximum period is not respected.

In accordance with the Law No. 6493 on Payment and Securities Settlement Systems, Payment Services and Electronic Money Institutions, Electronic Money Institution refers to the legal entity authorized to issue electronic money, and Payment Institution refers to the legal entity authorized to provide and perform payment services. It is also stipulated that the said institutions wishing to operate should be established as joint stock companies. Digital wallet servers can receive a certain commission from their users under the monthly or annual wallet usage fee, or for uploading money to the wallet, transferring money from the wallet, paying bills, and similar services. These amounts are in the nature of income of the companies in question. Therefore, the fees received due to these transactions within the scope of commercial activities should also be considered as commercial income.

5. Digital Wallet in terms of Value Added Tax (VAT) and Banking and Insurance Transactions Tax

In Article 1 of the VAT Law No. 3065, it is stipulated that the deliveries and services made within the framework of commercial, industrial, agricultural, and self-employment activities in Turkey are subject to VAT. According to this (Karakoç, 2021):

- It is an advance in the case of users loading money into the wallet applications offered by the companies to their consumers. Since these funds deposited to

digital wallets are in the form of advances and do not constitute a return for the delivery of goods and/or service during the money loading phase, VAT is not required to be calculated over these advance payments regarding the money loading process.

- VAT is required to be calculated for the service fees received by companies providing digital wallet application services under commission or similar names in return for this service. The said commission income will be subject to 18% VAT.
- Since a taxable event will occur in the purchase of goods or service performance using digital wallets, VAT will be calculated on the invoices issued by the seller on behalf of the said buyers. It should be noted that an invoice must be issued within a maximum of seven days from the date of delivery of the goods or the delivery of the service.

On the other hand, due to the fact that electronic money and payment institutions provide banking services by intermediating payment, commissions they receive as taxpayers for banking and insurance transactions will be subject to tax. Banking and insurance transactions tax should be calculated over the amounts received in favor of the services provided within the scope of Article 12 of the Law No. 6493 (Karakoç, 2021).

6. Conclusion

In line with the technological innovations and realities brought by the modern world, digital payment systems have started to replace cash. A digital wallet is software that allows money to be stored and transferred in a virtual environment, thus enabling shopping and many other financial transactions. The number of digital wallets and accordingly the number of users has increased rapidly in recent years, allowing consumers to shop easily. Especially during the pandemic period, the possibility of transmission of viruses detected on cash or bank cards has disappeared. Consumers no longer have to carry a card with them while shopping. In addition to the functions of digital wallets such as shopping, money transfer, and bill payment, they also have the function of keeping the personal information they contain more securely than a physical wallet. Digital wallets are secured against fraudulent activities with various passwords such as passwords, facial recognition, and fingerprints. Therefore, the structure of the financial system will change completely in the near future, and taxation of digital wallets and documentation of transactions will also be important.

Uploading money to digital wallet applications by users is an advance, and there is no need to issue a document according to the provisions of the TPL. In addition, VAT is not required to be calculated for this transaction. In the performance of a good or service purchased using digital wallets, it is obligatory to issue an invoice by the seller on behalf of the said buyers. Digital wallet servers can receive a certain commission from their users under the usage fee or under different names. These amounts are in the nature of income of the companies in question. Therefore, the fees received due to these transactions within the scope of commercial activities should also be considered as commercial income by the companies. Since a taxable event will occur in the purchase of goods or services using digital wallets, VAT must be calculated by issuing an invoice

on behalf of the buyers in question. In addition, since electronic money and payment institutions provide banking services by intermediating payment, commissions they receive as taxpayers for banking and insurance transactions will be subject to tax. As can be seen, it has been tried to reach a conclusion based on the existing special tax laws for the taxation of digital wallets. However, it is clear that taxation will arise in many matters. The fact that only the relevant regulations are included in different laws and communiqués makes it difficult to understand the subject.

References

Baydur, S. (2011). "Alternatif Bir Ödeme Aracı Olarak Elektronik Cüzdan", (Yüksek Lisans Tezi), Marmara Üniversitesi, İstanbul.

Coskun, V., Ozdenizci, B. & Ok, K. (2013). "A Survey on Near Field Communication (NFC) Technology", *Wireless Pers Commun Springer,* 71, pp. 2259–2294.

Güleç, Ö. F., Çevik, E. & Bahadır, N. (2018). "Bitcoin ile Finansal Göstergeler Arasındaki İlişkinin İncelenmesi", *Kırklareli Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 7 (2), ss. 18-37.

Hassan, A. & Shukur, Z. (2019). "Review of Digital Wallet Requirements", *IEEE,* pp. 43-48.

Karakoç, İ. (2021). "E-Dönüşüm Sonrası Dijital Cüzdan ve Vergisel Boyutu", *Yaklaşım Dergisi,* (339), https://portal.yaklasim.com/makale/2021-3/e-donusum-sonrasi-dijital-cuzdan-ve-vergisel-boyutu?term=dijital%20c%C3%BCzdan, (12.09.2022).

Malik, R., Kataria, A. & Nandal, N. (2020). "Analysis of Digital Wallets for Sustainability: A Comparative Analysis Between Retailers and Customers", *International Journal of Management (IJM),* 11 (7), pp. 358-370.

Nuryasman, M. N. & Warningsih, S. (2021). "Determining Factors of Digital Wallet Usage", *Jurnal Manajemen*, 25 (2), pp. 271-289.

Rathore, H. S. (2016). "Adoption of Digital Wallet by Consumers", *BVIMSR's Journal of Management Research,* 8 (1), pp. 69-75.

Salodkar, A., Morey, K. & Shirbhate, M. (2015). "Electronic Wallet", *International Research Journal of Engineering and Technology,* 2 (9), pp. 975-977.

Upadhayaya, A. (2012). "Electronic Commerce and E-wallet", *International Journal of Recent Research and Review,* 1, pp. 37-41.

EVALUATION OF TAXATION OF INCOME GENERATED BY REAL PERSONS FROM SOCIAL MEDIA PLATFORMS BY COMPARING VARIOUS COUNTRIES: PROBLEMS AND SUGGESTIONS

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Abstract

With the rapid and effective spread of the digital economy in the world right after globalization, new business models were developed and various ways of earning income emerged. One of these ways is for real people to earn money by producing content, receiving advertisements and promoting products on the most common platforms of today, such as Youtube, Instagram, Facebook and Twitch, which are called social media. In the Turkish Tax Law, the income of social media content producers has been created as a gain exclusion under the repeating article 20/B of the Income Tax Law with the regulation made in Law No. 7338. It is noteworthy that in the Ministry of Finance's communique on this regulation, this income is considered as "commercial income". However, the fact that the income of social media content producers has the characteristics of other income in addition to commercial income, has led to questioning the correct taxation. Although there are approaches that assume that the income generated belongs to the income from self-employment, there are also voices that argue that it should be counted among the different types of income from time to time. On the other hand, the said income is exempt from tax under certain conditions, so there are regulations for final taxation with withholding. In this study, the income of social media content producers in Turkish tax law is evaluated in terms of tax law within the framework of the views expressed in the literature and also compared with the practice of different countries. As the main result of the study, it was found that there are some qualification problems in the income of social media content producers, and they also have problems in terms of tax fairness, and appropriate conclusions were drawn about the practices in different countries.

Keywords: Social Media, Tax Liability, Income Tax, Digital Economy.

JEL Code : H24, H27, K33.

1. Introduction

With the proliferation of the Internet and the rapid expansion of the digital world, it is becoming more common to develop new and different economic activities that add value and generate income in ways other than traditional methods. For people who can reach many people through widespread platforms, increasing their number of followers and generating different incomes in this way has become not only an everyday situation, but also a goal. In addition to these developments, countries that want to get their share by taxing income have started to look for ways to make their tax systems suitable for this new economy.

As far as Turkish tax law is concerned, such discussions have taken place both in academia and in practice. The discussion, which started with what type of income or income is included in labor income, particularly focused on what the book and voucher system should be. This study attempts to evaluate, through a comparison with foreign practices, whether it is appropriate to subject such income to taxation as business income under the law. On the other hand, an attempt is made to analyze whether the current regulations are appropriate in terms of income characteristics.

2. Concept of Social Media and Methods of Generating Revenue on the Platforms

Social media; referred to as a click ecosystem consisting of search engines, media sites, online intermediaries, and online visitors (Chaffey & Smith, 2008: 98). In terms of the social dimension, social media, as an environment that allows individuals to present themselves, is said to provide an environment in which other people can fulfill the desire to control the individual's impressions of themselves (Goffman, 1959: 11). Although the concept of platform is not considered new, a definition of platforms in digital environments is made as "a business based on providing value-added interactions between external producers and consumers" (Bozdoğanoğlu, 2020: 39-40). The most widely used social media platforms today are Facebook, Twitter, Instagram, and YouTube.

It can be seen that the most widely used social media platforms in the world also have organic connections with each other. While YouTube is the second most used internet platform in the world, Instagram is the 28th most used platform. Google/Alphabet owns YouTube. Instagram is part of the Facebook empire. YouTube and Instagram are a part of Internet advertising, which contributes significantly to the profits of Google and Facebook (Fuchs, 2021: 174). While some of these platforms share their advertising revenue with social media phenomena, some others use other methods instead of sharing. For example, in the YouTube affiliate program on Youtube and in-stream ads on Facebook, advertising revenue is shared with phenomena. On the other hand, on Instagram platforms, the ad revenue is not shared with the influencers. On Instagram, influencers are not paid by the platform, and influencers can earn revenue in return for product or service advertising through collaboration agreements with brands. Twitch, on the other hand, shares the platform's revenue with publishers, offering them the opportunity to earn income (Yegen, 2022: 187-188). Since it is possible to generate income from these platforms from anywhere in the world, curiosity and concern have

arisen about how the tax rules for social media phenomena should be applied globally (Abidin & Ots, 2016: 157).

3. Taxation of Income from Social Media Platforms in Various Countries and Turkey

In the countries studied, income from social media platforms is taxed in the same way as all other income. In other words, there is no separate regime for taxing income from social media platforms. Therefore, individuals pay taxes on their taxable income and have the right to make deductions under the general rules. In addition, social media phenomena are generally recognized as self-employment in the countries studied. For example, in Finland, if the amount of monetary income from activities on social media platforms becomes significant, they are classified as self-employed/independent entrepreneurs (Abidin et al., 2020: 75). Similarly, in Canada, phenomena that work for themselves as independent contractors or sole proprietors are considered self-employed (TurboTaxCanada, 2022). In addition, income tax returns must be filed for income from social media activities in these countries. In the United Kingdom, for example, a return must be filed, if the income from the phenomena, which are generally considered self-employed, exceeds 1,000 Euros.

The specific regulation on the taxation of income obtained from social media platforms in Turkey took the form of a tax exemption through Law No. 7338. In which article 20/B was added to the Income Tax Law, stating that social media phenomena are exempt from income tax, provided that they do not exceed the amount included in the fourth income bracket of the tariff set forth in Article 103 of the Income Tax Act (ITA) (TL 880,000 for the year 2022). It is not clear from the provisions made by the legislator in the repetitive Article 20/B of the ITA whether the income covered by the said exemption is commercial income. The title of the article, assumes that the income obtained is "income", but it does not say what kind of income it is. From the explanations in the communiqué of the Ministry of Finance and the explanatory memorandum of the law, it is clear that it is "commercial" income.

There are also discussions in the literature about the nature of income from social media activities. In other words, the initiative that starts with a phone camera later becomes the person’s profession and the video content is produced based on personal work, scientific or professional knowledge or expertise. The comments that it is possible to evaluate a person’s work, which is more labor-intensive than capital and without commercial organization, and that it is possible to evaluate the income from personal work as income from self-employment meet a common point (Ergin, 2021; Uçar, 2019: Aydemir & Baykaç, 2020).

One of the main reasons for the dispute over whether income from social media activities is commercial income or income from self-employment is the application of different rules for the two types of income. According to the Income Tax Act, commercial income is subject to the accrual principle, while income from self-employment is subject to the collection principle (Şenyüz et. al., 2022: 8). If income from social media platforms is to be considered as business income, it must also be on an accrual basis. This violates the principle of equality by creating a different practice from other commercial income.

In accordance with Article 20/B(5) of the ITA, a threshold has been established for the requirement to file a declaration in the exemption request for social media income. Filing a declaration is a very important obligation for taxpayers. If withholding tax becomes the final form of taxation, taxpayers who earn income subject to withholding tax are cut off from tax administration, and this situation does not create tax awareness among taxpayers, and awareness that tax obligation is a national obligation cannot be created (Biyan & Güneş, 2012: 196-197). In addition, the fact that taxpayers cannot file a return because they do not exceed the thresholds set according to the tariff, and therefore cannot benefit from the possibility of spending, also violates justice.

There is also a regulation on whether those who earn income from social media under the repeated Article 20/B of the Income Tax Law make tax withhold under Article 94 of the Income Tax, that is, whether they are liable to pay tax. Those who earn the said income are subject to tax deduction on their income, but do not make income withhold under Article 94 of the Income Tax Law. The rent, fee, etc. paid by the person who is not eligible for the exemption or violates the conditions. The exclusion of income subject to withholding tax makes it diffucult to trace and audit. Therefore, the rule, which was introduced to tax an income earner under a simple procedure, creates an informal environment by not providing for the obligation to withhold.

4. Conclusion

When evaluating the regime adopted in the Turkish tax law to tax real persons' income from social media platforms, taking into account the practices of different countries, the following conclusions and suggestions can be made:

- The type of income should not be limited only within the framework of business income, but it should be possible to determine the tax liability according to the type of activity of each earner.

- Income from social media activities is usually both self-employment and business income and even self-employment income comes to the fore as income on a collection basis,

- It is fairer to leave the obligation to keep books, prepare records and declarations on a voluntary basis, or to establish a lower declaration limit in light of the principles of purity of income and actual income,

- It can be stated that the deactivation of the taxable entity and its exclusion from the withholding tax obligation should be reconsidered (at least, those who do not benefit from the exemption should be included in the group of taxable entities) in order to avoid the informal environment.

References

Abidin C. & Ots, M. (2016). "Influencers tell all? Unravelling authenticity and credibility in a brand scandal", Blurring the lines: Market-driven and democracy-driven freedom of expression, (Ed.) M. Edström, A. T. Kenyon, & E-M. Svensson, Gothenburg: Nordicom, University of Gothenburg, pp. 153-161.

Abidin, C., Hansen, K., Hogsnes, M., Newlands, G., Nielsen,M., Nielsen, L. & Sihvonen, T. (2020). "A Review of Formal and Informal Regulations in the Nordic Influencer Industry", Nordic Journal of Media Studies, 2 (1), pp. 71-83.

Aydemir, R. & Bakaç, S. (2020). "Youtuber'lık Faaliyeti ve Vergisel Boyutu", İSMMMO Dergisi, 30(158), ss. 265-285.

Biyan, Ö. & Yılmaz, G. (2012). "Ücretlerin Vergilendirilmesine İlişkin Karşılaştırmalı Bir Öneri: Beyanname Yükümlülüğü", Maliye Dergisi, Sayı: 162, ss. 184-218.

Bozdoğanoğlu, B. (2020). Dijitalleşme Süreci ve Vergilendirme, Ankara, Gazi Kitabevi.

Chaffey, D. & Smith PR. (2008). E-marketing Excellence: Planning and Optimizing Your Dijital Marketing (E-Marketing Essentials), 3rd Edition, Routledge, Abingdon-on-Thames.

Ergin, N. E. (2021). Sosyal medya fenomenlerinin ve Youtuberların vergilendirilmesi, https://www.dunya.com/kose-yazisi/sosyal-medya-fenomenlerinin-ve-youtuberlarin-vergilendirilmesi/610917, (09.08.2022).

Fuchs, C. (2021). Social Media: A Critical Introduction, Third edition, London: Sage.

Goffman, E. (1959). The Presentation of Self in Everyday Life, https://www.worldcat.org/title/46887588, (30.09.2022).

TurboTaxCanada. (2022). Canadian Tax Guide for YouTubers and Influencers, https://turbotax.intuit.ca/tips/making-money-on-youtube-and-social-media-10500#:~:text=your%20taxable%20income.,Do%20YouTubers%2C%20TikTokers%20and%20influencers%20have%20to%20pay%20taxes%20in,sponsor%20you%2C%20you%20pay%20taxes, (17.09.2022).

Uçar, H. (2019). "Youtuber'ların Vergilendirilmesi", Vergi Raporu, Sayı: 233, ss.136-151.

Yeğen, B. (2022). "Twitch Platformu Özelinde, Sosyal Medya İçerik Üreticilerinin Elde Etmiş Oldukları Kazançlarının Gelir Vergisi Kanunu Açısından Değerlendirilmesi", Yönetim ve Ekonomi Araştırmaları Dergisi, 20 (2), ss.186-204.

TAX MISDEMEANOR SANCTIONS AND THE PROBLEM OF COMPETENCE IN METHODS OF JUDICIAL APPLICATION AGAINST THEM

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Abstract

The main sanction to be applied to tax misdemeanors is administrative fine as in other misdemeanors. The penalties in question are the sanctions imposed by the administration directly through an administrative act, without requiring a judicial decision, based on the authority given by the laws, to those who violate the tax legislation. However, the sanctions imposed on tax misdemeanors are not limited to administrative fines. withholding from professional activity in the VUK; to prevent transportation vehicles from traffic, to keep goods on hold and to protect them; There are various types and weights of administrative measures, such as taxpayers' declarations, which are the basis of tax assessment, finalized taxes and penalties, and the disclosure of overdue taxes and fines by the Ministry of Finance.

The provisions of the Misdemeanors Code on judicial protection against administrative sanction decisions are applicable unless there is a contrary provision in other laws. Considering the situation in terms of administrative sanctions for tax misdemeanors, it can be mentioned that there are special provisions regarding judicial protection. The conclusion that the VUK accepts the tax penalty in the form of administrative fines imposed as a result of tax loss misdemeanor and irregularity misdemeanors is also reached from the interpretation of other provisions. For example, the title of the third part of the Law is “Implementation, Payment and Abolition of Tax Penalty”. Some other provisions containing expressions such as "calculation and amount of tax penalty" are also proof of this. In that case, if the tax penalty is viewed from the perspective of VUK, only administrative fines will be considered and the authority to apply against these penalties will be the tax courts. On the other hand, the problem of duty will be encountered in the ways of applying for administrative sanctions other than administrative fines. In the study, this subject will be examined and the sanctions other than the administrative fines stipulated in the law in return for tax misdemeanors, the ways of judicial protection against these sanctions, and the judicial branch and authority in charge will be tried to be revealed by considering the judicial decisions on this issue.

Keywords: tax misdemeanor, sanction, application mechanism, competence
JEL Code: K34, K39, H21, H29

1. Introduction

Behaviors that disrupt, threaten or disrupt the functioning of the social order are met with a reaction by the bodies authorized to impose sanctions. The reaction in question is inevitable in order to ensure the healthy continuation of the order. It is at the discretion of the legislator that which acts will be sanctioned at what rate. Depending on the changes in social life, technological developments, transformation in the understanding of justice and awareness of law over time, the legislator may decriminalize some acts as well as introduce new crimes. In addition, it can also change preferences in the characterization policy of existing crimes. Decriminalization can be achieved by completely removing the de facto, which is currently met with a penal sanction, from positive law; It may occur in the form of removing it from the penal laws and introducing it into another branch of law (such as administrative law) (Bayraktar, 1984: 198). Today, the legislature authorities abandon the tendency to criminalize minor acts by excluding them from the penal code (Kangal, 2022: 31). Misdemeanor refers to the typical and unlawful act for which administrative sanctions are envisaged in the law. Misdemeanors are also acts that constitute injustice, but in return, administrative sanctions are applied, not penalties or security measures. The existence of the definition of misdemeanor brings the concept of administrative sanction to the fore. For this reason, it is very important to determine what the administrative sanction is and its legal nature.

2. Administrative Sanction and Administrative Measure

The direct definition of Administrative Sanctions, which gives its name to the third part of the Misdemeanor Law, is not made, its scope is stipulated in Article 16 titled "Types of Sanctions". Accordingly, administrative sanctions to be applied in return for misdemeanors consist of administrative fines and administrative measures. The clearest conclusion to be reached from the first paragraph of the article is that an administrative fine is a misdemeanor sanction, but not an administrative measure. For this reason, it is necessary to explain what the administrative measure is in order to reach a conclusion about administrative sanctions. In the second paragraph of Article 16, the legislator stated that administrative measures by way of sampling are the transfer of property to the public and other measures included in the relevant laws.

Administrative measures can generally be expressed as the part of administrative sanctions other than administrative fines. Terminologically, precaution is teb, meaning preparation, before an action or action rather than after it has taken place.

According to ULUSOY, administrative measures mainly refer to administrative sanctions envisaged to prevent disruption of public services and other administrative activities and

to ensure their proper functioning, as well as to prevent disruption of public order (Ulusoy, 2013: 9). For this reason, in administrative measures, the elements of putting an end to the violation, not continuing the violation, stopping, preventing, ensuring the repetition of the violation, that is, prevention, are at the forefront, not the elements of reproof, expiation, inflicting pain, that is, deterrence. Administrative measures; There are various types such as temporary blocking, withdrawal of administrative permission, temporary confiscation of goods.

2.1. Types of Tax Misdemeanors

The purpose of tax crimes and misdemeanors and the sanctions foreseen for them is to ensure that the tax laws are applied in a timely and appropriate manner (Şenyüz, 2022: 59) . Because the timely and complete payment of tax debts means the realization of public interest through the collection of tax revenues, which constitute the main source of public services. The tax relationship that begins between the State and the taxpayer with the realization of the taxable event is a debt relationship that takes place within the public law. However, in this relationship, apart from the material duty that means paying the tax, there are also many procedural and formal duties that can be directly or indirectly related to this duty. The duty dimension of the tax relationship is so advanced that the concept of taxpayer is used in tax law, which includes the taxpayer, taxpayers and people who are somehow involved in the tax relationship. The administration, which is the active side of the tax relationship, is trying to collect its receivables on the one hand, and on the other hand, it determines the behaviors contrary to the duties and puts them under sanctions. The purpose of these sanctions can be broadly stated as the protection of the tax administrative order.

The concept of misdemeanor is not used in the Tax Procedure Law No. 213. What constitutes tax misdemeanors is reached as a result of the interpretation of the provisions in the doctrine. With a systematic interpretation, it is possible to look for faults in the Fourth Book of the Law entitled “Penal Provisions”. Likewise, misdemeanors of Tax Loss and Irregularity are arranged in this book. However, it would be more accurate to determine the misdemeanors regulated in the Law in accordance with the definition of misdemeanor made in the Misdemeanor Law. Accordingly, it will be necessary to examine whether there are injustices for which administrative sanctions are foreseen in order to protect the tax-administrative order in the provisions of the TPL. From such a point of view, it will be seen that there are other misdemeanors besides tax loss and irregularity misdemeanors, which are covered by administrative fines in the TPL.

As an example of these;

* In the event that the "Transportation note, delivery note and invoice are not present in the vehicle, these documents are given to the officers authorized to attend in subparagraph e of Article 127 of the Law titled "Purpose and Authority" in the First Part of the Seventh Part titled "Attention and Inspection". to detain the transport vehicles from traffic until the presentation of the goods, to keep the goods waiting until the identification of the owner of the transported goods, and to keep them under preservation, will be liquidated.) authority

* In the Second Book of the Law titled Taxpayer's Homework, Part One titled "Notifications", Part One titled Starting to Work, included in the fifth paragraph of Article 153/A, it is stated that among the members of the profession who operate within the scope of the Law No. A penalty of temporary suspension from professional activity for a period of three years is applied to those who are determined by the examination report and whose situation has been finalized. In the implementation of this penalty, the procedures in the Law No. 3568 shall be applied." application; In the 12th paragraph of the same article, "Except those listed in the first paragraph and the use of false or misleading documents due to their content, those who commit the acts listed in Article 359 are announced in accordance with the procedures and principles determined by the Ministry of Finance. Announcements made in this context are not considered a violation of tax privacy. If the act is committed within the body of a legal entity or an unincorporated entity, these are also announced. judgment can be given.

* The 3rd paragraph of the 5th article of the Law titled Tax Privacy: "The taxpayers' declarations, which are the basis for the tax assessment, the finalized taxes and penalties, and the amounts of taxes and penalties that are not paid even though they are overdue, can be disclosed by the Ministry of Finance. The Ministry of Finance may delegate this authority to the local authority (Rençber, 2017: 64).

3. Application Against Tax Misdemeanor Sanctions

The judicial review of the administration is the result of the idea that the individual should be protected because of his weakness against the administration. One of the sine qua non of the principle of the rule of law, the administration's adherence to the law is possible by auditing it. In particular, administrative sanctions are the dispositions of the public authority that have negative effects and consequences on individuals, and the legal control of whether these are given in accordance with the law is very important in terms of providing legal security to individuals. Likewise, the Constitution states that "Judicial remedy is open against all kinds of actions and transactions of the administration." There are provisions that regulate the supervision of the administration in the constitutional dimension, especially the first paragraph of Article 125, which has the provision of.

Tax courts in accordance with Article 6 of the Law No. 2576, titled Duties of Tax Courts:

a) Cases related to taxes, duties and fees and similar financial obligations and their hikes and penalties and tariffs pertaining to the general budget, special provincial administrations, municipalities and villages,

b) Cases regarding the implementation of the Law No. 6183 on the Procedure of Collection of Public Receivables on the issues in subparagraph (a),

c) Solves the works given by other laws.

Tax courts are the courts of first instance for the disputes listed in this article. In addition, these courts are organized and serve as special courts in the administrative judiciary branch.

A conclusion can be reached with the determination of the legal nature of the sanctions of these misdemeanors, in the case of judicial application and duty, against the misdemeanors in the TPL for which administrative sanctions other than administrative fines are envisaged. Accordingly, in case of detection of books, documents and evidence that are outside of the legal books and documents and that constitute an indication of tax loss, in clause 127/c of the TPL, "to receive them", in clause e, "Transportation note, delivery note and in case the invoice is not in the vehicle, to detain the transport vehicles from traffic until the presentation of these documents, to keep the goods waiting and to keep them under protection until the identification of the owner of the transported goods, if the owner of the transported goods is not known," in Article 153/A, A temporary suspension of professional activity for a period of three years shall be imposed on those who are found to have participated in these acts of those whose liability has been terminated due to certain circumstances, and those whose status has been finalized." Sanctions are administrative measures. These administrative measures, whose legal qualifications are administrative acts, have a unilateral and executive character, which is established by the administration equipped with public power privileges by following administrative procedures, aimed at producing legal results. For this reason, those whose interests have been violated against these measures, which are considered to be unlawful, should file a case with the administrative courts within sixty days in accordance with Article 7 of the Procedure of Administrative Justice Act. As a result, the courts in charge of this judicial application are the administrative courts that have the task of resolving the annulment cases. In the event that the concerned parties file a case with the tax court, the tax court should decide upon the first examination that the case file be sent to the competent court by rejecting the case in terms of duty in accordance with Article 15/1-a of the Procedure of Administrative Justice Act.

4. Conclusion

The provisions of the Misdemeanors Code on judicial protection against administrative sanction decisions are applicable unless there is a contrary provision in other laws. Considering the situation in terms of administrative sanctions for tax misdemeanors, it can be mentioned that there are special provisions regarding judicial protection. The resolution of disputes falling under the jurisdiction of tax courts is subject to the procedures set forth in the Administrative Procedure Law No. 2577. tax courts; It resolves the cases related to the general budget, special provincial administrations, municipalities and villages, taxes, duties and fees and similar financial obligations and their hikes and penalties and tariffs, the cases regarding the implementation of the Law No. 6183 on the Collection of Public Claims and the works given by other laws. In this case, determining the scope of the tax penalty will also pave the way for the determination of the remedy that can be taken against the said penalties.

As a result, the concept of tax penalty in TPL should be taken into a clearer framework after the adoption of the Misdemeanor Law. If the legislator desires the tax courts to control the administrative measures other than administrative fines, the addition of the phrase "and administrative sanctions" to Article 6 of the Law No.

References

Journals/Periodicals;

Bayraktar, K. (1984). "Decriminalization Movement in Criminal Law", İÜHFM, pp.180-194.

Books;

Kangal, Z. (2022). Misdemeanors Law,Ankara,Adalet Press

Ulusoy, A. (2013). Administrative Sanctions, İstanbul, Onikilevha Press

Şenyüz, D. (2022). Tax Criminal Law, Bursa, Ekin Press

Rençber, A. (2017). Tax Misdemeanors in Terms of the General Theory of Misdemeanor, İstanbul, Oniki Levha Press.

APPLICABILITY OF THE MUTUAL AGREEMENT PROCEDURE IN TAX PENALTY WITH THE RIGHT TO RECONCILIATION AND SUE

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Abstract

Mutual agreement procedure, included in Turkish tax law with article 46 of Law No. 7338, was added to the fourth book titled "Penal Provisions" of Tax Procedure Law No. 213 in 2021. In this procedure, the taxpayers or the state on the other side of the agreement can apply for a taxation transaction that is inconsistent with a double taxation avoidance agreement that has been duly entered into force. The mutual agreement procedure, which was added to the domestic legislation as a separate procedure, has brought other criticisms as it has already existed in double taxation avoidance agreements for many years (usually between articles 24 and 26). The lack of secondary legislation yet makes it difficult to penetrate this procedure. For this reason, firstly, the relevant parts of The Organization for Economic Co-Operation and Development Model Tax Convention, which is an international guide, and the double taxation avoidance agreements to which Turkey is a party will be examined. Later in the study, by the deductive method, the legal nature of this procedure, which was introduced last year, will be explained in terms of domestic legislation. Finally, uncertainty and ineffectiveness classification will be made. The study aims to identify potential conflicts that may arise and to offer solutions for them.

Keywords: Mutual agreement procedure, reconciliation, right to sue, tax criminal law.
JEL Code: H20, K33, K34.

1. Introduction

The taxation relationship is a relationship that strictly adheres to the principle of legality within the scope of article 73 of the Constitution. For this reason, it is important to analyze the meaning of a new legal provision within the scope of the prohibition of expansionary interpretation in accordance with the purpose of the law in order to prevent possible disputes for the parties of the taxation relationship. For this reason, in this study (although there is no new regulation in tax law), the mutual agreement procedure that was 'newly added' in 2021 with article 46 of the Law No. 7338 to the Tax Procedure Law (TPL) No. 213 will be examined. The addition of this method to the fourth book of TPL titled "Penal Provisions" will be discussed separately within the scope of the systematic interpretation method. The procedure, as a regulation, has a systematic that should be considered together with the right to apply to reconciliation and the right to file a lawsuit. As a matter of fact, the right to apply to the mutual agreement procedure gives the taxpayers rights under certain conditions within the scope of peaceful solutions. This situation has created a tripartite relationship that did not exist before in tax law. In this respect, it is aimed to examine the remedies in the triangle of mutual agreement-reconciliation-sue, which is a new framework.

This procedure, which is important within the scope of article 90 of the Constitution titled *"Approval of international agreements"*, contains regulations that may be subject to many disputes due to the differences in application conditions. As a matter of fact, the rules, which include various ways against concrete events that arise in the taxation relationship, have been systematized in a different way for the first time in terms of the TPL, with the phrase *"...with allegation that there are strong indications that it will be taxed..."*. For this reason, the issue of what is meant by 'strong indication', which is not defined by the legislator, and how it is limited, is an issue that needs to be clarified in order to keep this procedure away from arbitrary practices. For this reason, in this study, it is aimed to examine the mutual agreement procedure within the scope of various interpretation methods, primarily grammatical interpretation, then systematic and historical interpretations. In addition, it is another aim of the study to deal with the situations in which the rights to apply to reconciliation and to sue can and cannot be applied together, and to propose solutions for the problems that may arise or may arise.

2. Legal Nature of Mutual Agreement Procedure

The mutual agreement procedure gives the right to apply to the taxpayers or the state on the opposite side of the agreement in the presence of a double taxation avoidance agreement that has been duly put into effect (Oktar, 2022:189). Although these

agreements agree on certain issues, they are not detailed regulations in terms of their scope, so as not to allow disputes (Yaltı, 2015:310).

This procedure is already known internationally, thanks to the OECD's 'Model Tax Convention' guide (OECD, 2017:21-22; OECD, 2015: C(25)-1; OECD, 2020; OECD, 2013:23-24). In addition, this procedure has been regulated in detail in 90 double taxation agreements to which Turkey is a party.

For example, according to article 25 of the agreement signed with the United States (USA), if a taxpayer is taxed or thinks will be taxed in violation of this agreement, this taxpayer can take the problem to the state of residence or the contracting state. Moreover, in this consultation process, direct communication was allowed in order to minimize the time stretches due to bureaucracy (art. 25/4). There are opinions that evaluate the provisions of the agreement with the USA as a kind of reconciliation procedure (Başak, 2022:89).

In the study, it has been seen that, unlike the rules examined among the G7 countries, the limit of tax base increase has been added to the scope of the general provisions of the mutual agreement procedure in the agreement with Canada. When we look at the original text and protocols of 90 double taxation avoidance agreements that Turkey is a party to and that are in force today, it has been determined that although the OECD approach and all agreements have parallel provisions, especially in terms of durations, there is no unity in practice. This situation is especially to the detriment of multinational companies. Even in the agreements to which the member states of the European Union are parties, this union could not be achieved. For example, the application period to this procedure is 3 years following the first notification of the taxation contrary to the provisions of the agreement in Austria, Germany, Spain, Lithuania, Latvia, Greece; It is 5 years in Macedonia, 2 years in Italy and 1 year in China. Apart from this, domestic law rules apply for periods not specified in the agreement (Revenue Administration, 2019).

In terms of tax penalties, the legal nature of the mutual agreement procedure is the same as the domestic legislation. For example, in the agreement between the USA and Turkey, the penalties, fines and interests stipulated in the domestic legislation are also included in the scope of the agreement. However, in cases where the agreement does not cover tax penalties even though it is included in the TPL (as per article 90 of the Constitution), tax penalties cannot be included in the scope of the mutual agreement procedure. For example, in the agreement signed with New Zealand, it was emphasized that tax penalties are out of scope in the protocol signed regarding the article 2 of the agreement with the following statement: “Taxes within the scope of the agreement will

not cover the tax penalty or interest charged according to the domestic legislation of both states"[1].

Another important issue in this regulation, which came in last year, is that taxpayers' applications are handled with the claim that there are strong indications that they are or will be taxed in violation of a double taxation agreement to which Turkey is a party. The emphasis here, in the context of the grammatical interpretation method, is the expression 'strong indication'. The fact that this expression, which is not in the systematic of the VUK, is not defined in the law or secondary legislation makes it difficult to penetrate this procedure. In addition, it makes it difficult to match the application conditions with concrete material events, based on the prohibition of expansionary interpretation.

3. The Interaction of The Right to Apply to The Mutual Agreement Procedure and The Rights to Apply to Reconciliation and Sue

The legal nature and consequences of the mutual agreement procedure should be considered together with two separate rights, the right to sue and the right to reconciliation. As a matter of fact, in this procedure, which has been newly added to the TPL, apply to sue, the existence of a sue, apply to reconciliation, and the existence of a previously applied reconciliation create different legal consequences.

According to the additional article 17 of TPL and the following articles, in case of a sue before applying for mutual agreement procedure, the application to be made will suspend the examinations to be made in the tax court. In case of an examination or a decision, the outcome of the mutual agreement procedure will be taken into account. In case the case is concluded, no reconciliation can be applied and no mutual agreement procedure can be applied. As a matter of fact, judicial decisions are binding on both the taxpayer and the Administration. However, if a possible double taxation situation arises

[1] Agreement protocol article 1. However, in the article 26 titled "help in tax collection" in the main text of the agreement, the scope of the term loan is defined after it is stated that the states that are the parties to the agreement will help each other in the collection of their receivables. Accordingly, the term receivable refers to all kinds and definitions of taxes, interests, administrative penalties and collection costs related to this amount taken on behalf of the states, unless they are contrary to this agreement or another legal document to which the parties are a party. In this respect, tax penalties are also included in the scope of this article 26. The fact that the Protocol article is titled "Relating to Article 2 of the Agreement" does not resolve the confusion on this issue. As a matter of fact, article 2 is one of the introductory articles defining the taxes within the scope of this agreement (see: Agreement between the Republic of Turkey and the Government of New Zealand for the Prevention of Double Taxation in Income Taxes and Preventing Tax Evasion, Official Gazette No. 27889 and dated 29.03.2011 https://www.gib.gov.tr/sites/default/files / international_mevzuat/TURKCE_METIN/YENIZELLANDA.pdf, 27.10.2022.).

in the event of the implementation of the decision regarding the case, the mutual agreement procedural way will be opened to a limited extent for the counter-adjustments to be made by the opposing state (Revenue Administration, 2019:15).

If the Revenue Administration (Gelir İdaresi Başkanlığı – GİB) makes a mutual agreement with the state on the other side of the agreement, this situation is notified to the taxpayer. The taxpayer must notify the Revenue Administration within 30 days from the date of notification whether or not he accepts the agreement. Although the two states have agreed, the taxpayer's silence during this period does not mean tacit acceptance. Failure of the taxpayer to respond in due time will mean that the agreement has not been accepted.

As can be seen, the right of refusal given to the taxpayer shows that the decision regarding this procedure is not binding due to its legal nature. In this respect, the taxpayer's right to apply to other remedies in the domestic legislation remains the same. What is open to criticism here is that the decision is not binding and the authorities do not have to reach a decision (Revenue Administration, 2019:13-14).

Just like in the process of sue, the application to the mutual agreement procedure in the process of application to reconciliation has a legal nature that delays the conclusion of the request for reconciliation. However, unlike here, an optional right is presented to the taxpayer. In the additional article 17 of the TPL, the taxpayer is given the right to demand a settlement without waiting for the result of the agreement. If the taxpayer makes such a request within the scope of this right, it is deemed to have abandoned to apply to the mutual agreement procedure. In order to prevent arbitrary use of this right of rescission, a security mechanism has been added to the aforementioned provision. In this context, after being deemed to have given up, the taxpayer's again application to the mutual agreement procedure was blocked.

4. Conclusion

Mutual agreement procedure, as added to TPL, includes various procedural rules within the scope of priority-later order regarding reconciliation and sue. Because, although the mutual agreement procedure closes the means of sue and reconciliation for the agreed amounts, as a general rule, it offers taxpayers an optional right, just like in other administrative solutions.

Considering that Turkey is currently a party to the double taxation avoidance agreement with 90 countries, the existence of this procedure will gain meaning by increasing its functionality. Although the mutual agreement procedure is frequently used in double taxation avoidance agreements, there was a situation where taxpayers did not know the existence of their own rights due to their inability to penetrate these agreements

(Orhan, 2016:54). In this respect, although this regulation in the TPL does not bring about a mutual agreement procedure from scratch, it makes sense in terms of ensuring the effectiveness of existing rights and raising the awareness of the taxpayer[1]. However, in the study, the negative aspects were examined rather than the positive aspects. In this context, it is possible to collect the criticisms regarding the acceptance of the procedure in domestic law under two main headings as 'ineffectiveness' and 'uncertainty':

The absence of a minimum time limit, the absence of a definite agreement obligation and non-binding, the use of the arbitration method as a time control mechanism, the unlimited optional right to the taxpayer (one-way waiver condition), the uncertainty of the priority-later order of the application remedies, the provision of a large number of optional rights to the individuals. Issues such as the lack of a security mechanism against abuse in the use of rights are among the criticisms that can be brought in terms of ineffectiveness. Issues such as procedural uncertainty, lack of secondary legislation, lack of unity of approach, scope uncertainty regarding receivables other than the receivables under the TPL, the uncertainty of the outcome of the tax loss penalty imposed due to tax evasion acts, and the inability to embody the expression "strong indication" are among the criticisms that can be brought in terms of uncertainty.

[1] In addition, the following topics were examined in the full text of the study: Competence in terms of the right to apply for reconciliation and the right to sue, mutual analysis in terms of similar provisions of the settlement and mutual agreement procedure, the legal nature of the expression 'strong indication' since there is no secondary legislation yet, uncertainties and solutions arising from the fact that it is too early to achieve unity of jurisprudence, the necessity of determining the optimum time in the administrative process, applicability of the arbitration procedure in the OECD approach for Turkey, the legal nature of the mutual agreement procedure for a receivable not covered by the TPL, the availability of this mutual agreement procedure in customs duties, despite the excess of optional rights offered to the taxpayer, the limits cannot be determined sharply, the systematic correctness/incorrectness of the place in the 4th book of the TPL to which this procedure is added, how much innovation this 'new' procedure can bring, the meaning of this procedure in terms of the principle of simplicity, the consequences of not having any priority-later order in the application to the procedure, necessary security mechanisms to prevent abuse of these procedural remedies.

References

Başak, L. (2022). "7338 Sayılı Kanun ile Vergi Usul Kanununa Yeni Gelen Bir Müessese: Karşılıklı Anlaşma Usulü", *Vergi Sorunları*, 400, pp.87-101.

Oktar, S. A. (2022). *Vergi Hukuku*, İstanbul, Türkmen.

Orhan, H. (2016). "Vergi ihtilaflarının Barışçıl Çözümü", *KPMG, Sorumlu Vergicilik*, (Ed.) Koçer B., İstanbul, Günce, pp.45-63.

Yaltı, B. (2015). "Vergi Anlaşmalarında Karşılıklı Anlaşma Usulü: Türkiye Deneyimi", *Vergi Uyuşmazlıklarının Çözümü: Barışçıl Mekanizmalar*, *Uluslararası Vergi Hukuku Konferansları Serisi-3* (*'Mutual Agreement Procedure in Tax Treaties: Turkish Experience", Settlement of Tax Disputes: Alternative Mechanism, International Tax Law Conferences Series-3'),* (Ed.) Yaltı B. Istanbul, Beta, pp. 309-340).

Agreement between the Government of the Republic of Turkey and the United States of America for the Prevention of Double Taxation in Income Taxes and Preventing Tax Evasion. (1997). Official Gazette No. 23200 and dated 14.12.1997, https://www5.tbmm.gov.tr/tutanaklar/KANUNLAR_KARARLAR/kanuntbmmc081 /kanuntbmmc081/kanuntbmmc08104312.pdf , (22.10.2022).

Agreement between the Republic of Turkey and Canada for the Prevention of Double Taxation in Taxes on Income and Wealth and Prevention of Tax Evasion. (2011). Official Gazette No. 27809 and dated 08.01.2011, https://www.gib.gov.tr/sites/default/files/uluslararasi_mevzuat/TURKCE_METIN/CANADA.pdf , (23.10.2022).

Agreement between the Republic of Turkey and the Government of New Zealand for the Prevention of Double Taxation in Income Taxes and Preventing Tax Evasion. (2011). Official Gazette No. 27889 and dated 29.03.2011 https://www.gib.gov.tr/sites/default/files /international_mevzuat/TURKCE_METIN/YENIZELLANDA.pdf , (27.10.2022.

Law No. 7338, 14.10.2021, Official Gazette: 26.10.2021/31640.

OECD. (2013). Action Plan on Base Erosion and Profit Shifting, OECD Publishing. http://dx.doi.org/10.1787/9789264202719-en , (22.10.2022).

OECD. (2017). Articles of The Model Convention [As They Read On 21 November 2017], Article 25/1, https://www.oecd.org/ctp/treaties/articles-model-tax-convention-2017.pdf , (18.10.2022).

OECD. (2019). *Model Tax Convention on Income and on Capital 2017 (Full Version)*, OECD Publishing, Paris, https://doi.org/10.1787/g2g972ee-en , (23.10.2022).

OECD. (2020). "2020 Mutual Agreement Procedure Statistics" https://www.oecd.org/tax/dispute/mutual-agreement-procedure-statistics.htm , (26.10.2022).

OECD. "Action 14 Mutual Agreement Procedure" https://www.oecd.org/tax/beps/beps-actions/action14/ , (22.10.2022).

Revenue Administration /Gelir İdaresi Başkanlığı – GİB. (2019), Çifte Vergilendirmeyi Önleme Anlaşmalarında Yer Alan Karşılıklı Anlaşma Usulüne İlişkin Rehber, (Guidance on Mutual Agreement Procedure in Double Taxation Avoidance Agreements) https://www.gib.gov.tr/sites/default/files/fileadmin/CifteVergilendirme/KAU_Kilavuzu2019.pdf , (15.09.2022).

Revenue Administration, (Gelir İdaresi Başkanlığı – GİB). https://www.gib.gov.tr/sites/default/files/fileadmin/CifteVergilendirme/KAU_Tablo2019.pdf, (15.09.2022).

Tax Procedure Law No. 213, 04.01.1961, Official Gazette 10-11-12.01.1961/10703-4-5.

Action of Rescission in Tax Execution Law in Terms of Right of Property and Right to Defence

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Abstract:

The action for rescission is an institution regulated both in the Code of Enforcement and Bankruptcy and the Code on Collection Procedure of Public Claims (Law No. 6183), aiming for the rescission of the disposition acts of the debtor which are violating of the rights of his creditors, before or during the enforcement proceedings. Since there is no restriction on the debtor's power of disposition before the beginning compulsory execution process, it is possible for the debtor to make dispositions that may harm the creditors. Considering the close relationship between public receivable and the public service finance, it is important that these acts are subject to rescission in order to protect the public receivable. Thus, the action for rescission is stated in the Law No. 6183 in between Articles 24-31. This regulation is made in parallel with the regulations related to the action for rescission in Articles 277-284 of the Code of Execution and Bankruptcy which is the general law on the collection of receivables. As a matter of fact, in the general preamble of the Code No. 6183, this issue is stated as "The provisions of the Code of Enforcement and Bankruptcy are originated provided that they do not contradict the nature and structure of the public receivables". In tax enforcement law, since the enforcement process of tax receivables is subject to Code No. 6183, these regulations are also valid for transactions carried out between taxpayers and the taxpayer tax administration.

According to Article 27 of the Code No. 6183, granting and gratuitous acts made within two years backwards from the due date or after the maturity date of debtors, who have not paid their public debts, those who do not declare their property in due time, who declare that they do not have any property, and who declare that they do not have enough to meet their debts, are null and void. In the 28th article of this Code, it is regulated that some disposition acts are "granting". Therefore, if any disposition act within the scope of this article is realized, it will be considered as granting without the need for any other evaluation. The disposition acts made between close relatives are accepted as one of the dispositions considered as granting. Therefore, disposition acts made between blood relatives up to the third degree (including this degree), spouses and in-law relatives up to the second degree (including this degree) are considered as granting.

A similar provision is included in the Code of Execution and Bankruptcy, No. 2004. One of the dispositions in the provision of granting regulated in Article 278 of the Law No. 2004 is the savings made between close relatives as in the Law No. 6183. According to the regulation before the annulment decisions of the Constitutional Court, a disposition made up with relatives by blood and in-law to the third degree (including the third degree), descendants and ascendants, between spouses, and between the adopter and adopted child, shall be accepted as granting, and if they are realized

within two years before the foreclosure or insolvency or bankruptcy, it could be annulled. Constitutional Court annulled the regulation regarding the “transactions made with blood relatives up to the third degree (including this degree) has the provision of granting” on 11.07.2018 by the decision numbered 2018/84. By the judgment of the Constitutional Court dated 16.12.2021 and numbered 2021/97, the regulation including the dispositions made between the spouses; and by the judgment of the Constitutional Court dated 26.01.2022 and numbered 2022/4, the regulation “providing the dispositions made with the ascendants and in-laws up to the third degree as granted” annulled. In the justification of the annulment decisions, generally the violation of the right to property and the right to defence is emphasized. However, it is stated in these provisions that not giving the parties the opportunity to bring proof of salvation disrupts the balance between public interest and personal interest and also violates the principle of proportionality, which is necessary for the limitation of fundamental rights and freedom.

Besides, the Constitutional Court discussed the request for annulment of the expression "payments made in a way other than money and usual means of payment" in Article 279 of the Code No. 2004, on the judgment dated 16.12.2021 and numbered 2021/97. The Court rejected this request citing the proof of salvation in article 279/2. Then, pursuant to article 279/2 of the Code no. 2004, if the third party with whom the debtor has acted disposition can prove that he did not know the situation of the debtor, the action for rescission will not be heard. On the other hand, in article 29 of Law No. 6183 titled as "Other dispositions deemed invalid”, except for the annotations given to the title deed in order to strengthen personal rights, the same dispositions included in article 279 of Law No. 2004 are subject to annulment; however, unlike Article 279 of Law No. 2004, the possibility of presenting proof of salvation is not regulated here.

Although the Law No. 6183 is for public receivables and the Law No. 2004 is for private receivables, the annulment decision about one of the two regulations, including similar kindship relations and which was made to prevent the creditors from being harmed by the disposition of the debtor, will bring along discussions in terms of the other. For this reason, it is necessary to evaluate the article 28 of the Law No. 6183 in the context of principle of equality, the right to property, the right to defence and also the principle of protection of the public receivable. Furthermore, although it regulates the similar dispositions, it is necessary to discuss the article 29 of the Code No. 6183, which does not provide the opportunity to bring proof of salvation the unlike article 279 Code No. 2004.

Quality Education as a Sustainable Development Goal

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Abstract:

Education is one of the basic arguments necessary for the realization of sustainable development. It enables people to lead a healthy life, to get rid of poverty and to reduce inequalities, and thus it is seen that it contributes to the economy of the country as well as to individuals in many areas. In the Sustainable Development Goals, quality education is defined as 'providing quality education that inclusive and equals everyone and offers lifelong education to everyone'. Although a general definition is made in this way, it is not possible to determine a single curriculum or a list of criteria for quality education. Because it differs according to the social, economic and cultural characteristics of the countries and time. In addition, applicable objective elements for qualified education in the international arena are determined. Within the framework of the sustainable development goals, the aim is to provide inclusive and quality education and to promote lifelong learning opportunities for all. It is aimed to realize various indicators under the title of qualified education. In this context, providing free and qualified education to all girls and boys, ensuring that all women and men have equal access to accessible and qualified technical education, vocational education and higher education including university, eliminating gender inequalities in education and ensuring that disadvantaged groups have equal access to education at all levels and education in order to contribute to sustainable development, it is aimed to gain all the knowledge and skills in this regard. In order to achieve these goals, there is a need for qualified teachers, learning tools and the creation of safe and supportive learning environments. Education is a basic human right. In this framework, equal access to free and compulsory inclusive and quality education should be provided to all. The right to education provides a basis for the realization of other rights. At the same time, poverty reduction and full employment can be achieved through education. Thus, providing a life worthy of human dignity will also contribute to sustainable development. Countries will need to allocate a significant portion of their state budgets to education expenditures in order to guarantee the right to education for individuals. These expenditures should be made to inclusive all individuals and to eliminate inequalities. If education expenditures are not used in investments for qualified education, it causes waste of resources and prevents the achievement of the goals set in education. Creating and implementing an inclusive public policy in the field of education, which is a public good, requires a social effort. It enables individuals to be included in economic and social life by revealing their potential. In this context, students, families, educators and non-governmental organizations also play an important role. The high number of young people and educated individuals in the development of countries is a great advantage in terms of employment and income generation capacity. Ensuring an increase in welfare depends on individuals receiving a qualified and continuous education in that country and contributing to economic growth with the knowledge and skills they gain in this way. In this context, the education level of the society is the most important element of productivity increase and socio-economic development. However, positive effects cannot be realized due to the inefficient use of resources, the existence of inequalities between regions and the lack of equal opportunities in education. The number of children still out of

school in some regions of the world is alarming. The fact that the rates of girls and boys are not equalized in schooling necessitates policies for the education of girls. The Sustainable Development Goals determined by the United Nations have been adopted by targeting the year 2030. However, the COVID-19 epidemic causes economic, social and political crises in countries, making it difficult to reach the targets. In this context, one of the most affected areas is education. Existing education inequalities become more evident with the epidemic. It is seen that not every child starts life with the same opportunities and the consequences of this affect their whole life. In this period, the children of low-income families who do not have equipment such as internet or computer cannot benefit from distance education sufficiently, and children who need special education cannot access education opportunities. This situation negatively affects the productivity and development of both individuals and countries. The aim of the study is to examine whether individuals are reached in education services for sustainable development goals, how their qualifications and inclusion are provided, and to what extent education expenditures are made. Organizing educational institutions in countries in order to create a qualified education system and providing more inclusive, equal and free education opportunities especially for disadvantaged groups will contribute to the social and economic structures of countries.

Keywords: Education, Development, Welfare, Inequalities

JEL Codes: I24, I28, O10

Tax Load in Turkey and Evaluation of Tax Load in Terms of Tax Types (2006-2020 Years)

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Abstract:

One of the most important duties of today's nation states is to offer public services in line with the expectations of citizens with the idea of public interest. The state needs certain financial resources in order to fulfill its expected duties. Taxes are one of the most frequently used resources of the state in the provision of public services. There is no single definition of the concept of tax. The concept of tax, which is a historical and social event, has been defined many times from past to present. The main reason for this is that the concept of tax has been given various meanings over time and it is an important fiscal policy tool used to realize economic, social and political purposes, as well as the "fiscal purpose" expressed as providing public revenues. Although it has different definitions, if a tax definition is made by taking into account its comprehensive and current purposes and functions; "Tax is the money received by the state or other public administrations authorized to tax from the state, in accordance with the law and duly, in accordance with the solvency of real and legal persons, under legal force, free of charge and on a non-refundable basis, in order to finance public expenditures." (Ay, 2018: 137). While fulfilling the financial, economic, social and political objectives of the tax, which we have mentioned above, an effective tax system should be established that will minimize the loss of welfare in the economy but provide high tax revenue. In order to establish an effective tax system, the composition of taxes and their share in total tax revenues should be close to each other; In particular, it is necessary to distribute the tax burden among taxpayers in a fair and balanced way. In addition, broadening the tax base; taking measures to prevent tax losses and evasion and to reduce the informal economy; making tax laws clear and understandable, etc. arrangements need to be made. The "tax burden" has a special importance in the creation of an effective tax system. The concept of tax burden does not have a single definition, but has separate definitions that concern the general economy, sectors and regions. Although there are various sub-definitions regarding tax burden, tax burden is briefly defined as the ratio of taxes and similar obligatory payments paid within a period to the income obtained in the same period or the money collected as tax income (Nadaroğlu, 1996: 262). The tax burden is a function of the tax paid and its ability to pay (Aksoy, 2011: 270). In other words, the tax burden is directly proportional to the tax paid and inversely proportional to the ability to pay. Therefore, factors such as the structure of the tax system, exceptions-exemptions, tax reflection, tax evasion, incentives, tax avoidance are the factors affecting the tax burden (Erdem, vd. 2013: 162). In addition to these factors, there are also non-tax concepts that affect the tax burden. Informal economy, state aids for investments, per capita income level and public financing costs can be added to non-tax concepts that affect the tax burden eklenebilir (Erdoğan, 2013: 54- 157). Tax is an indisputable burden for the payer, but the tax burden, which is directly proportional to the amount of tax paid, can be felt both psychologically and materially by the taxpayer. In the literature, the tax burden felt materially is called the objective tax burden, while the tax burden felt psychologically is called the subjective tax burden (Aksoy, 2011: 270). While it is possible to calculate the objective tax

burden numerically, it is very difficult to calculate the subjective tax burden. Tax burden is an important concept in terms of achieving the basic goals of economies such as justice in income distribution, economic stability, economic growth and development kavramdır (Günay, 2007: 5). For this reason, when determining the tax policy of a country, not only the tax laws, but also the tax burdens of various taxes should be evaluated together. In the study, annual activity reports, budget revenues, various tax statistics etc. published by the Revenue Administration in Turkey. The Turkish tax system has been evaluated by considering the general budget tax revenues of our country between the years 2006-2020, the tax burden and the tax burden according to tax types, with the tables prepared on the basis of. The findings of the study, as can be seen in the tables, are in the first place in the distribution of the general budget tax revenues, the taxes on consumption. This tax is followed by taxes on income and taxes on wealth and wealth transfer. When we look at the tax burden, it is seen that there is not much change in Turkey's total tax burden between 2006 and 2020. The total tax burden found as a result of the ratio of gross tax revenues/GDP; It was realized as %19.0 in 2006 and increased to %20.2 in 2010; however, it is observed that the total tax burden started to decrease again in 2015 and decreased to %19.8, and the said decrease continued in 2020 and the total tax burden was realized as %19.5. Again, similar results are seen in the total tax burden calculated as a result of the ratio of net tax revenues/GDP. While the total tax burden was %17.3' in 2006, the total tax burden increased to %18.0'in 2010. In 2015, the total tax burden started to decrease again and decreased to %17.3, the said decrease continued in 2020 and the total tax burden was realized as %16.5. Here, the tax burden is very important, especially according to tax types. The tax burden on VAT and SCT, which is in the group of taxes on consumption as seen in the tables, is higher than the tax burden on other taxes. While the tax burden on income tax was %4.0 and the tax burden on corporate tax was %1.6 in 2006, the tax burden on VAT (Internal VAT + VAT on imports) tax, which is included in the group of taxes on consumption, was %6.4. The tax burden on the SCT tax was realized as % 4.7. In 2020, the tax burden on income tax is %4.0, the tax burden on corporations is %2.2; The tax burden on VAT (Internal VAT + VAT on imports), which is included in the group of taxes on consumption, was %6.4, and the tax burden on SCT tax was %4.1. According to the findings, it was concluded that the composition of the general budget tax revenues in our country shifted towards the taxes collected on consumption, this shift especially disrupted the fair and balanced distribution of the tax burden among the taxpayers, causing the principle of justice in taxation to be damaged, and at the same time negatively affected the view of the taxpayers towards the tax system and the tax administration. has been reached.

Keywords: Tax, Turkish Tax System, Tax Burden

JEL Codes: H1, H2, H20

THE DIGITAL PERMANENT ESTABLISHMENT CONCEPT IN INTERNATIONAL TAX LAW

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Abstract

With the digitalization of the economy, digital business activities carried out by multinational companies (MNCs) have begun to take an important place in general economic activities. Accordingly, cross-border mobility of digital goods and services has increased, and production and structuring based on intangible assets has gained importance. Importantly, it has become possible for MNCs to operate in more than one country without the need for a physical presence. This has resut in the inability of the states of sources to tax the profits derived from cross-border digital business activities. The concept of permanent establishment (PE), which tax nexus between profit and the state of source has been shown as a primary justification.

The concept of PE is used to include a fixed place where the economic activity is carried out and a dependent agent to be considered as a PE. At this point, the PE requires the physical presence of the MNCs in the source country. This leads to the conclusion that the concept of PE, which requires physical presence, does not provide an adequate tax nexus.

For the aforementioned problem of taxation of digital business activities, various proposals were made in OECD's BEPS Initiative, which was initiated in 2013, the package titled "Fair Taxation of the Digital Economy" published by the European Commission in 2018 and OECD's Two Pillar Approach (BEPS 2.0) which was introduced in 2020. The concept of the digital PE based on significant economic or digital presence are within the scope of these proposals.
With this study, it is aimed to discuss the concept of the digital PE proposed as a tax nexus in the taxation of profits from digital business activities carried out by MNCs. In line with this purpose; recommendations, proposals and determinations of international organizations and institutions, especially OECD and European Commission, national regulations and national and international tax law doctrine. In this study, it has been concluded that the current PE concept is insufficient to link tax nexus with the source country, since MNCs operate without physical presence and The digital PE concept, which is correctly defined and bordered at the point of eliminating this deficiency, will provide the needed connection, but it needs consistent national practice and international acceptance.

Keywords: Digital, permanent establishment, tax nexus, economic presence, digital presence
JEL Code: F23, K33, K34

1. Introduction

Nowadays, companies, whether national or multinational companies, are taxed on their profits from their activities. The sources from which companies gain profit are economically diverse. For example; profit can be gained from capital, as well as from labor or land. In MNCs where economic activities are internationalized, capital, labor, land and entrepreneurs can be located in different countries (Richter, 2019: 4). Likewise, MNCs can operate in more than one state in the process from idea and branding to marketing towards a good or service. Accordingly, MNC's profits can spread to more than one country (Ordower, 2021: 129). The spread of MNC's profits to more than one country depending on the mobility of production factors and activities may result in taxation of profits by more than one states (Christians, 2012: 1414-1415). At this point, MNCs may be faced with double taxation and international tax law should be get involved in order to prevent this situation. In the international tax law, the rules by which one of the states agrees to give priority to the other in taxation of profits come into prominence (Ault, 2013: 1197).

The traditional approach to taxing the profits of MNCs is to subject it to business taxation on returns from its investments in the jurisdictions. In this context, it is accepted that MNC's profit theoretically can be taxed in four jurisdictions: (1) country where the shareholders reside, (2) Country where the headquarters is located, (3) Country where the affiliated businesses and PE are located, and (4) Country where customers reside or goods and services are sold to final consumers (Devereux & Vella, 2018: 5). However, international tax law requires a genuine link between taxable income and the state for the allocation of taxing power, i.e. tax nexus. The tax nexus is used to refer an adequate link between the state and the taxpayer and often grouped on the basis of the taxpayer's political or economic allegiance to the state (Lang, 2021: 23-24).

Tax nexus consists in economic allegiance with source and residence principles in the taxation of profits. First of all, the principle of residence comprises the link between a resident state and the taxpayer and justification for the tax claim on the taxpayer's worldwide income (Monsenego, 2012: 76). The source principle is considered as a secondary link (especially in the taxation of profits from cross-border activity), while the residence principle refers the primary link in the taxation of profits. According to the source principle, a taxpayer (even if not resident) can be taxed on the profits gained in the jurisdiction of the source state (Nemchenko, 2021: 22). As a rule, the profits of a non-resident taxpayer in the jurisdiction is considered by way of the PE (Elliffe, 2021: 6-7).

In international tax law, the concept of PE is defined as including all facilities or buildings needed for business purposes or employees who carry out some important activities related to the company, in other words, based on physical presence (Nemchenko, 2021: 27). However, it is stated that the current PE definition does not fulfill the needs with the digitalization of the economy. This is explained by the increase in activities called digital services and digital business models that allow MNCs to operate in markets without a physical presence (Fuest, 2020: 9). MNCs can operate without a PE, market

goods or services, and carry out international cross-border transactions virtually as a result of the use of digital technology. For example, a MNC can operate in a market jurisdiction without any physical presence through a website, as in online advertising and social networking platforms. Moreover, these activities can be operated without human interference with technological developments such as cloud computing, big data analytics and artificial intelligence (Terada-Hagiwara et. al., 2019: 3). Because current international tax rules allow the source state to tax the profits of non-residents only if it establishes a PE in the form of a fixed establishment or permanent representative (Richter, 2022: 2). Proposals for the digital PE based on significant economic or digital presence are suggested for this reason.

2. Permanent Establishment (PE) Concept in International Tax Law

It is possible to determine the definition and scope of the PE concept within the framework of the Model Tax Conventions (MTC) designed for the prevention of double taxation. However, considering the subject of the study, it would be more appropriate to consider the concept of PE only through the OECD's MTC.

The concept of PE is defined in the first paragraph of Article 5 of the MTC. Accordingly, the PE means "*a fixed place of business through which the business of an enterprise is wholly or partly carried on*". The fixed places to be considered as PE are specified illustratively in the second paragraph of Article 5 of the MTC. According to this, the scope of the PE includes "*place of management, branch, office, factory, workshop, mine, oil or gas well, quarry or any other place of extraction of natural resources, building site or construction or installation project only if it lasts more than twelve months*".

The issue of whether the permanent representative will be accepted as a PE is specified in the fifth paragraph of Article 5 of the MTC. According to this;

> "*…a person is acting in a Contracting State on behalf of an enterprise and, in doing so, habitually concludes contracts, or habitually plays the principal role leading to the conclusion of contracts that are routinely concluded without material modification by the enterprise, and these contracts are a) in the name of the enterprise, or b) for the transfer of the ownership of, or for the granting of the right to use, property owned by that enterprise or that the enterprise has the right to use, or c) for the provision of services by that enterprise, that enterprise shall be deemed to have a permanent establishment in that State…*"

In the light of this information, it can be said that the concept of PE is divided into three categories in Article 5 of the OECD's MTC. The first category is the "*physical location/situation*" criteria defined in paragraph 1 and specifically listed in paragraph 2 (place of management, branch, office, etc.). The second category is the "*deemed contract or relationship*" criterion. This includes the permanent representative rules discussed in paragraph 5 of Article 5. The third category is the criterion of "*temporary or physical presence*". This requirement is in parallel with the physical location criterion. In paragraph 2 of Article 5, it is stated that a construction site will be considered a workplace if the construction or installation project lasts at least 12 months. At this

point, it is accepted that a PE should have a certain degree of continuity and should not be completely temporary by definition (Elliffe, 2021: 92).

In this respect, it seems possible to say that the PE generally indicates a temporary, stable geographical/physical connection with a state (Nemchenko, 2021: 27). Therefore, the presence of buildings such as offices, factories or facilities and employees performing activities that clearly demonstrate that they are a crucial part of the business requires physical presence (Navarro, 2022: 3).

3. Inufficiency of PE Concept Against Digitalisation

It is stated that with the digitalization of the economy, the current international tax rules are insufficient in terms of taxation of profits. At this point, it is argued that the current PE definitions do not meet the requirements. The main reason for this is digital activities and digital business models that allow MNCs to operate in markets without a physical presence (Fuest, 2020: 9). For example; in business-to-user models, although some minor activities such as data collection, customer support, local marketing are carried out at the users location, the main link to taxation is in the country of residence of the parent company which enters into direct contractual relationships with users. While current rules attribute profit to the company that develops and maintains its information technology infrastructure and software for tax purposes, significant profits is not attributed to the parent company's PE. Moreover, there is no allocation of taxing power to market states where there is no PE. In business-to-business models, current tax rules attribute most of the profits for tax purposes to the parent company that develops, appropriates, and maintains information technology infrastructure and software. If there are businesses, a small part of the profits are attributed to them, depending on the sales agreements with the customers. Moreover, there is no allocation of taxing power to market countries where there is no PE. Solution proposals for this problem bring forward the allocation of taxing power to market states with the concept of digital PE (Elliffe, 2021: 85).

4. Theoretical Basis of Digital PE

Theoretically, it is stated that a state can tax non-residents in terms of two basic principles/approaches, even if it does not have a physical presence. The benefit principle and value creation based on the economic allegiance of non-residents. First of all, The benefit principle necessitate the allocation of taxation authority to a state if it contributes to the conduct of business activities in its jurisdiction (Li et. al., 2019: 13). It is recognized that a state contributes to be carried out digital activities in three areas:

(1) C*ontribution to technological infrastructure*: This includes individuals with appropriate devices such as appropriate telecommunications infrastructure, Wi-Fi and broadband, and computers and smartphones.
(2) *Contribution to the legal system*: This includes payment for business transactions, promoting intellectual property rights such as trademarks and ensuring a competitive and favorable business environment.

(3) *Contribution of users to digital activity*: This includes users' utilization of social media such as designing or providing content and their contributions to direct and indirect network effect, such as utilization of user datas by companies in activities such as targeted advertising (Elliffe, 2021: 33-34). In the light of this information, when a non-resident company benefits from the areas where it contributes to the market state, it can underpin for the taxation based on the benefit principle.

Secondly, value creation is accepted as a new version or view of the benefit principle (Hey, 2018, 204). As a rule, value creation is used to refer profit, and it is stated that the factors that play an active role in the creation of profit in terms of allocation of taxing power should be taken as a basis in taxation. These factors can be attributed to the activities undertaken by the employees, the effect of the market, legal, physical and technological infrastructure. At this point, it allows connection without physical presence in the taxation of digital MNCs, especially due to the effect of the market/customers/users (Elliffe, 2021: 37).

5. Proposals for Digital PE

5.1. OECD's BEPS Initiative

In its final reports on BEPS Action Plans in 2015, the OECD did not directly include a proposal for the digital PE. However, in the draft of discussion of BEPS Action 1 dated 24.03.2014. It was suggested that fully dematerialized digital activities could generate a (digital/virtual) PE if digital MNCs do not have a physical presence in a country but maintain their digital presence in that country's economy. According to this approach, factors such as the frequency of digital transactions and the number of users can be considered in the acceptance of digital presence, and a website can be considered as a digital/virtual PE (OECD, 2014).

5.2. European Commission: "Fair Taxation of the Digital Economy"

The European Commission published a package titled "*Fair Taxation of the Digital Economy*" in 2018 in order to harmonize the taxation of profits and value creation. This package mainly consists of two proposals. The first proposal includes the realization of a joint reform of the corporate tax rules for the creation of significant digital presence in addition to the existing PE rules. In this context, the concept of digital PE in article 4 of the proposal is based on the acceptance of an important digital presence as a new nexus for corporate tax. In this context, all companies that are taxpayers anywhere in the world are considered to have a significant digital presence if they provide digital services through a digital interface and meet one or more of the following conditions (thresholds):

(1) The proportion of annual revenue from the supplied of digital services to users in a Member State exceeds EUR 7.000.000,

(2) The number of users of one or more of those digital services who are located in a Member State exceeds 100.000,

(3) The number of business contracts for the supply of any such digital service that are concluded by users located in a Member State exceeds 3 000.

Finally, in terms of the thresholds set in 1 and 2, if a user uses a device to access the digital interface where digital services are provided and the state in which the device is used can be determined by that device's IP address or any more accurate geolocation method, the user is deemed to be resident in that state (European Commission, 2018).

5.3. OECD's Two-Pillar Approach

The Two Pillars Approach (BEPS 2.0), which was discussed by the OECD in January 2020, essentially follow the goal of reallocating taxing powers across jurisdictions on a global scale (Schön, 2019: 1). BEPS 2.0 essentially contains a two-pillar structure. Pillar One focuses on the allocation of taxing powers on MNC's profits at the international level, and focuses on reviewing the tax nexus rules. Therefore, it is possible to say that the Pillar One is directly related to this study (OECD, 2019a).

The Pillar One under BEPS 2.0 deals with the introduction of new criteria (thresholds) for the taxation of (digital) MNCs to determine the economic allegiance with jurisdictions and the allocation of taxing powers to market jurisdictions. This approach aims to transcent the requirement of physical presence. Regarding the Pillar One, OECD came up for discussion three different proposals regarding the allocation of powers (OECD, 2019b):

(1) *User participation proposal*: It focuses on the value created by MNCs having a relevant and significant user base and requesting data and content from users. This offer applies to highly digitized MNCs where user participation is a critical component of value creation: For example; such as social media platforms, search engines, online marketplaces.

(2) *Marketing intangibles proposal*: This proposal which focuses on all MNCs, whether highly digitized or not, addresses situations where a group of MNC to reach a jurisdiction through a remote or limited local presence to develop a user base and marketable intangibles. At this point, it envisages the allocation of taxing power to jurisdictions where intangible assets linked to a foreign company's customer base generate profits.

(3) *Significant economic presence proposal*: This proposal recognizes that a non-resident MNC has a significant economic presence based on factors that attest to its interaction with a jurisdiction through digital technology. At this point, it is considered sufficient (1) existence of a user base and related data entry, (2) the capacity of digital content produced in the jurisdiction, (3) billing and collecting in local currency; (4) maintaining a website in the local language; (5) responsibility for the final delivery of goods to customers or providing other support services such as after-sales service, repair and maintenance by the

business, or (6) ongoing marketing and sales promotion activities, online or otherwise, to attract customers for the acceptance of an important economic presence.

In the light of these proposals, OECD has proposed a new nexus rule for the allocation of taxing power to market states: If the MNCs gain at least EUR 1.000.000 in profit from the market jurisdiction, the profit is allowed to be allocated to the jurisdiction, but for jurisdictions with a GDP less than 40 billion euros, the nexus rule is set at EUR 250.000. While calculating the profit, the last market jurisdiction where the goods or services are used or consumed are considered (OECD, 2021).

6. Conclusion

With the digitalization of the economy, MNCs add a new dimension to their business activities with new digital business models: MNCs can carry out its activities without the need for a fixed place such as a building, facility or a person such as a permanent representative in a state. Depending on this situation, the current PE concept in international tax law, which establishes the tax nexus between the state and the taxpayer, becomes disputable in the taxation of non-resident taxpayers. Because the concept of PE is defined and its scope is determined based on physical presence in current international tax law rules. Therefore, states cannot tax profits from business activities carried out without a physical presence in their jurisdictions.

This problem, which arises in terms of taxation of profits, brings with it digital PE proposals based on significant economic or digital presence in terms of certain thresholds/factors. Primarily significant economic or digital presence refers to the purposeful and continuous interaction of a MNC with a jurisdiction through digital services provided by digital technology or the users to whom the services are provided. The acceptance of an economic or digital presence as a digital PE is determined according to predetermined thresholds (based on profit from jurisdiction or users in jurisdiction) that refer to digital business activity.

In the light of this information, the concept of digital PE can be defined as a workplace that is considered to exist (virtually) for taxation purposes, but it does not exist physically, if a company's digital business activities for users in a jurisdiction reach a certain weight and importance depending on the threshold and factors such as the number of users, total revenue, website, etc.

At this point, it should be emphasized that the tax thresholds and factors required for the acceptance of the digital PE have been determined differently by the OECD and the European Commission at different times, and each one is open to discussion. However, it would be appropriate to state that the concept of the digital PE needs stable national practices and international acceptance. Also the dimension that the OECD BEPS 2.0 Initiative brings and will bring to the concept of the digital PE, depending on negotiation and analysis, is important.

References

Ault, H. J. (2013). "Some Reflections on the OECD and the Sources of International Tax Principles", *Tax Note International*, 70 (12), pp. 1195-1201.

Christians, A. (2012). "How Nations Share: The Role of Law in Creating and Resolving International Tax Disputes", *Indiana Law Journal*, 87 (4), pp. 1407-1453.

Devereux, M. & Vella, J. (2018). "Value Creation as the Fundamental Principle of the International Corporate Tax System", European Tax Policy Forum Paper.

Elliffe, C. (2021). *Taxing The Digital Economy: Theory, Policy and Practice*, Cambridge Tax Law Series, Cambridge University Press.

European Commission. (2018). Proposal for a Council Directive Laying Down Rules Relating to the Corporate Taxation of a Significant Digital Presence, https://ec.europa.eu/taxation_customs/business/company-tax/fair-taxation-digital-economy_en, (25.10.2022).

Fuest, C. (2020). "The Concept of Taxation in the Place of Value Creation – An Economic Perspective", *EATLP Congress 2020*, Vienna.

Hey, J. (2018). "Taxation Where Value is Created and the OECD/G20 Base Erosion and Profit-Shifting Initiative", Bulletin for International Taxation, 72, pp. 203-208.

Lang, M. (2013). *Introduction to The Law of Double Taxation Conventions*, Netherlands, IBFD.

Li, J., Bao, J. & Li, H. (2019). "BEPS and the Emerging Global Approach to Taxing Multinational Enterprises", Re-Imagining Tax for the 21st Century: Inspired by the Scholarship of Tim Edgar, February 8-9, 2019 Toronto.

Monsenego, J. (2012). *Taxation of Foreign Business Income within the European Internal Market*, Amsterdam, IBFD.

Navarro, A. (2022). "The Allocation of Taxing Rights under Pillar One of the OECD Proposal", (Ed.) Florian H. & Georg K., *The Oxford Handbook of International Tax Law*, Oxford University Press, 2022 (fortcoming).

Nemchenko, K. (2021). "*Whether Nexus Rules under EU Commission Proposal of Significant Digital Presence Rules is Compatible with Separate Provisions of International Tax Law"*, (Master Thesis), Lund University, Lund.

Ordower, H. (2021). "Uniform International Tax Collection and Distrıbution for Global Development, A Utopian BEPS Alternative", *Columbia Journal of Tax Law*, 12 (2), pp. 126-171.

Organisation for Economic Co-operation and Development. (2014). *Addressing the Tax Challenges of the Digital Economy: Actıon 1: 2014 Deliverable*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris.

Organisation for Economic Co-operation and Development. (2017). *Model Tax Convention on Income and on Capital 2017 (Full Version)*, OECD Publishing, Paris.

Organisation for Economic Co-operation and Development. (2019a), *Policy Note - Addressing the Tax Challenges of the Digitalisation of the Economy*, OECD/G20 Base Erosion and Profit Shifting Project,

https://www.oecd.org/tax/beps/policy-note-beps-inclusive-framework-addressing-tax-challenges-digitalisation.pdf, (25.10.2022).

Organisation for Economic Co-operation and Development. (2019b). *Public Consultation Document - Secretariat Proposal for a "Unified Approach" under Pillar One*, OECD Publishing, Paris.

Organisation for Economic Co-operation and Development. (2021). *OECD Secretary-General Tax Report to G20 Finance Ministers and Central Bank Governors (2021)*, Italy, http://www.oecd.org/tax/oecd-secretary-general-tax-report-g20-finance-ministers-october-2021.pdf, (15.10.2022)

Richter, W. F. (2019). "Aligning Profit Taxation with Value Creation", CESifo Working Paper No. 7589.

Richter, W. F. (2022). "Granting Market Countries the Right to Tax Profit Without Physical Nexus", CESifo Working Paper No. 9556.

Schön, W. (2019). "One Answer to Why and How to Tax the Digitalized Economy", Max Planck Institute for Tax Law and Public Finance Working Paper 2019-10.

Terada-Hagiwara, A., Gonzales, K. & Wang, J. (2019). "Taxation Challenges in a Digital Economy—The Case of the People's Republic of China", Asian Development Bank Briefs No: 108.