37th International Public Finance Conference/TR

PROCEEDINGS BOOK

October 12-15, 2023, Antalya / Türkiye

ekin

37. International Public Finance Conference / Türkiye
Uluslararası Maliye Sempozyumu / Türkiye
12 - 15 October 2023 / Antalya

37th INTERNATIONAL PUBLIC FINANCE CONFERENCE/TR

October 12–15, 2023
Antalya / Türkiye

Editors

Prof. Dr. Ufuk SELEN

Prof. Dr. Adnan GERÇEK

EKİN
Basım Yayın Dağıtım
Bursa – 2023

© 2023 Ekin Basım Yayın Dağıtım

E-ISBN : **978-625-6559-88-2**

Publisher : **EKİN Basım Yayın Dağıtım**
Şehreküştü Mah. Cumhuriyet Cad.
Durak Sok. No: 2 Osmangazi / BURSA
Tel.: +90 224 220 16 72 - 223 04 37
Fax.: +90 224 223 41 12
e-mail: info@ekinyayinevi.com
www.ekinkitap.com

Date of publishing : 05.12.2023

37th International Public Finance Conference/Türkiye Organizing Board

Prof. Dr. Ufuk SELEN	Bursa Uludağ University, Türkiye (Chair)
Prof. Dr. Adnan GERÇEK	Bursa Uludağ University, Türkiye (Co-Chair)
Assist. Prof. Dr. Feride BAKAR TÜREGÜN	Bursa Uludağ University, Türkiye (Co-Chair)
Prof. Dr. Kadir Yasin ERYİĞİT	Bursa Uludağ University, Türkiye (University Academician Representative)
Prof. Dr. Metin ERDEM	Bursa Uludağ University, Türkiye
Prof. Dr. Mircan TOKATLIOĞLU	Bursa Uludağ University, Türkiye
Prof. Dr. Mehmet YÜCE	Bursa Uludağ University, Türkiye
Prof. Dr. M. Erkan ÜYÜMEZ	Anadolu University, Türkiye
Prof. Dr. Filiz GİRAY	Bursa Uludağ University, Türkiye
Prof. Dr. Selçuk İPEK	Çanakkale 18 Mart University, Türkiye
Prof. Dr. Emrah FERHATOĞLU	Eskişehir Osmangazi University, Türkiye
Prof. Dr. Tolga DEMİRBAŞ	Bursa Uludağ University, Türkiye
Prof. Dr. Burçin BOZDOĞANOĞLU	Bandırma 17 Eylül University, Türkiye
Prof. Dr. Tarık VURAL	Bolu Abant İzzet Baysal University, Türkiye
Assoc. Prof. Dr. Canatay HACIKÖYLÜ	Anadolu University, Türkiye
Assoc. Prof. Dr. Harun KILIÇASLAN	Bursa Uludağ University, Türkiye
Assist. Prof. Dr. Zuhal AKBELEN	Bursa Uludağ University, Türkiye
Assist. Prof. Dr. Reyhan LEBA	Bursa Uludağ University, Türkiye
Assist. Prof. Dr. Zeynep KARAL ÖNDER	Anadolu University, Türkiye
Assist. Prof. Dr. Halil SERBES	Bursa Uludağ University, Türkiye
Res. Assist. Dr. Çağlayan TABAR	Bursa Uludağ University, Türkiye
Res. Assist. Muhammed ÇELİK	Bursa Uludağ University, Türkiye
Res. Assist. Tolga SEZDİ	Bursa Uludağ University, Türkiye
Res. Assist. Ali TORUN	Bursa Uludağ University, Türkiye
Res. Assist. Ayşegül YÜCEL	Bandırma 17 Eylül University, Türkiye
Res. Assist. Kendal DENİZ	Çanakkale 18 Mart University, Türkiye

T.C.
BURSA ULUDAĞ ÜNİVERSİTESİ REKTÖRLÜĞÜ
Personel Daire Başkanlığı

Sayı: E-65189485-903.07.02-124051 28.08.2023
Konu: Yurt İçi Görevlendirme (Prof. Dr. Kadir Yasin ERYİĞİT)

İKTİSADİ VE İDARİ BİLİMLER FAKÜLTESİ DEKANLIĞINA

İlgi : 25.08.2023 tarihli ve E-19350533-900-9084 sayılı yazınız.

Fakülteniz Dekan V. Prof. Dr. Kadir Yasin ERYİĞİT'in Maliye Bölümü tarafından 12-15 Ekim 2023 tarihleri arasında Rox Royal-Kemer/Antalya'da düzenlenecek olan "37th International Public Finance Conference/Türkiye Sempozyumu"na kurum akademisyen temsilcisi olarak katılmak üzere 2547 sayılı Kanun'un 39. maddesi uyarınca 12-15 Ekim 2023 tarihleri arasında yolluk-yevmiye ödenerek görevlendirilmesi Rektörlüğümüzce uygun görülmüştür.

Bilgilerinizi ve gereğini rica ederim.

Prof. Dr. İrfan KIRIŞTIOĞLU
Rektör a.
Rektör Yardımcısı

Bu belge, güvenli elektronik imza ile imzalanmıştır.
Belge Doğrulama Kodu:EZwfQeMuBkC3KCOWaS0Lkw Belge Doğrulama Adresi: https://udos.uludag.edu.tr/Teyit/

BUÜ Rektörlüğü Görükle Kampüsü 16059 Nilüfer/BURSA
Telefon No: 0224 294 01 00 Faks No: 0224 294 01 15
e-Posta: akademik@uludag.edu.tr İnternet Adresi: www.uludag.edu.tr
Kep Adresi: uludag.rektorluk@hs03.kep.tr
Bilgi için: Elmas AKIN
Şef
Telefon No: 0224 294 01 25

Bu belge UDOS ile hazırlanmıştır.

1/1

International Public Finance Conference/TR Scientific Board (2022-2025)

Prof. Dr. Aykut HEREKMAN	Anadolu University, Türkiye (Honorary President)
Prof. Dr. Adnan GERÇEK	Bursa Uludağ University, Türkiye (President)
Prof. Dr. Metin TAŞ	İstanbul Gedik University, Türkiye (Vice President)
Prof. Dr. M. Erkan ÜYÜMEZ	Anadolu University, Türkiye (Vice President)
Prof. Dr. Alicja BRODZKA	Wrocław University of Economics, Poland
Prof. Dr. Amanda KING	Georgia Southern University, USA
Prof. Dr. Binh TRAN-NAM	UNSW Australia Business School, Australia
Prof. Dr. Burçin BOZDOĞANOĞLU	Bandırma 17 Eylül University, Türkiye
Prof. Dr. Christos KOLLIAS	University of Thessaly, Greece
Prof. Dr. Danuše NERUDOVÁ	Mendel University in Brno, Czech Republic
Prof. Dr. Elif SONSUZOĞLU	Kıbrıs İlim University, KKTC
Prof. Dr. Emrah FERHATOĞLU	Eskişehir Osmangazi University, Türkiye
Prof. Dr. Erich KIRCHLER	University of Vienna, Austria
Prof. Dr. F. Alfredo García PRATS	Universitat de València, Spain
Prof. Dr. İhsan Cemil DEMİR	Afyon Kocatepe University, Türkiye
Prof. Dr. İrfan BARLASS	İstanbul University, Türkiye
Prof. Dr. Jinyoung HWANG	Hannam University, South Korea
Prof. Dr. João Félix Pinto NOGUEİRA	IBFD, Netherland
Prof. Dr. John T. KING	Georgia Southern University, USA
Prof. Dr. Malcolm SAWYER	Leeds University, UK
Prof. Dr. Robert W. McGEE	Fayetteville State University, USA
Prof. Dr. Roberto CELLİNİ	University of Catania, Italia
Prof. Dr. Sacit Hadi AKDEDE	İzmir Bakırçay University, Türkiye
Prof. Dr. Selçuk İPEK	Çanakkale 18 Mart University, Türkiye
Prof. Dr. Selim Ateş OKTAR	İstanbul University, Türkiye
Prof. Dr. Tarkan ÇAVUŞOĞLU	Hacettepe University, Türkiye
Prof. Dr. Vito TANZI	International Monetary Fund, USA
Prof. Dr. Zeynep ARIKAN	Dokuz Eylül University, Türkiye
Prof. Dr. Ziyaettin BİLDİRİCİ	Anadolu University, Türkiye
Assoc. Prof. Dr. Canatay HACIKÖYLÜ	Anadolu University, Türkiye
Assoc. Prof. Dr. Cihan YÜKSEL	Mersin University, Türkiye
Assoc. Prof. Dr. Gamze YILDIZ ŞEREN	Tekirdağ Namık Kemal University, Türkiye
Assoc. Prof. Dr. Neslihan KARATAŞ DURMUŞ	Ankara Yıldırım Beyazıt University, Türkiye
Assoc. Prof. Dr. Yasin ACAR	Bilecik Şeyh Edebali University, Türkiye
Assist. Prof. Dr. Aslıhan ÖZEL ÖZER	Manisa Celal Bayar University, Türkiye
Assist. Prof. Dr. Özcan ERDOĞAN	Kütahya Dumlupınar University, Türkiye
Assist. Prof. Dr. Özlem TÜMER	Niğde Ömer Halisdemir University, Türkiye

Themes & Topics

1. PUBLIC FINANCE THEORY
Public Revenue
Public Expenditures
Public Debt
Public Goods
Externalities
Tax Theory
Tax Burden
Tax Incidence
Tax Psychology
Tax Compliance
Fiscal Incentive System
R & D Expenditures
Local Government Finance
Taxpayers Behaviour
Tax and Foreign Direct Investment
Emerging Economies and Public Finance

2. TAX LAW
Principles of Taxation
Taxpayer's Obligations
Taxpayer's Rights
Taxation Process
Tax Crimes and Faults
Solution of Tax Disputes
Tax Administration
Tax Auditing
Tax Jurisdiction
Tax Enforcement
International Taxation
Individual Taxation
Corporate Taxation
Transfer Pricing
Tax Avoidance
Tax Legislative Updates
E-Taxation System
Financial Sector Taxation

3. FISCAL POLICY
Fiscal Policy
Public Economics
Public Sector Balance
Economic Crisis and Fiscal Policy
Economic Development and Taxation
Welfare Economics and Optimal Taxation
Welfare Economics and Economic Development
Welfare Economics and Income Distribution
Debt Burden and Economic Stability
Political Institutions and Fiscal Capacity
Income Inequality and Public Policies
Market Failures and Public Policy
Innovation and Public Policy
Efficiency in Public Sector
Quality of Public Services

4. BUDGET and FISCAL PLANNING
Public Budget
Budget Systems
Principles of Budget
Budget Process
Budget Applications
Budget Auditing
Budget Right
Fiscal Planning
Participatory Budgeting
New Budgeting Approach
Fiscal Transparency and Accountability
Treasury Operations
Public Procurement Procedures
Public Enterprise and Privatization

Programme

Opening Ceremony	**16.00-16.45**	**12 October 2023**	**1st Day**
Ufuk SELEN **Kadir Yasin ERYİĞİT**	Chair of Organizing Board Dean of Faculty of Economics and Administrative Sciences, Bursa Uludağ University		

Keynote Speaker	**17.00-17.50**	**12 October 2023**	**1st Day**
Prof. Ricardo GARCIA ANTON	Tax Incentives in Combating Disasters		
Guest Speaker	**18.00-18.50**	**12 October 2023**	**1st Day**
Faruk GÖZÜBÜYÜK	Use of Behavioral Public Policies in the Financial Field and Their Reflections		

Session I-A	**9.00-10.30**	**13 October 2023**	**2nd Day**
Chair: **Prof. Dr. Doğan ŞENYÜZ**			
Taner ERCAN	Evaluation of Incentives within the Scope of the State Supports Decision in Investments Specific to the Mining Sector and the Issues that are Special in Practice		
Emre AKIN	Supplementary Tax in Terms of Startups: Exception on Premium on Issued Shares		
Zeynep ARIKAN **Ahmet İNNECİ**	Tax Policies in Preventing Brain Drain and Encouraging Reverse Brain Drain		
Güneş Çetin GERGER **Atakan GERGER** **Devrim ŞAVLI**	The Survey Study about Sustainable Energy Policies and Financial Incentives for Carbon-Free Energy Sample of MOSB		

Session I-B	**9.00-10.30**	**13 October 2023**	**2nd Day**
Chair: **Prof. Dr. Naci Birol MUTER**			
Aslıhan ÖZEL ÖZER **Gökçe KAFKAS**	Public Financing Issues surrounding Civil Society Organizations within the context of Disasters Management: Public Supports and Remedies (The Case of AKUT)		
Emine YÖNEY **Binhan Elif YILMAZ**	Goals, Objectives and Realities: Disaster Management Scorecard for Public Institutions		
Kemal ÇELİK	Cash Wage Support as a Fiscal Tool in The Fight Against Natural Disasters in Türkiye		
Öznur YUVALI **Hakan AY**	Impact of Natural Disasters on Companies' Tax Planning Processes		

Session I-C	**9.00-10.30**	**13 October 2023**	**2nd Day**
Chair: **Prof. Dr. E. Figen ALTUĞ**			
Yelda YÜCEL **Ayşegül YAKAR ÖNAL** **Özgün AKDURAN EROL**	Türkiye's Central Government Budget in the Light of Human Rights and Gender Responsive Budgeting		
Ahmet TANER	Digitalization in Audit: The impact of Digital Transformation on External Audit System		
Recep Emre ERİÇOK	Fiscal Sustainability Debates in the Health System: The Case of Türkiye		
Mustafa BİÇER	Political Accountability within the Context of Power of Purse in the Turkish Presidential Government System		

Session I-D	**9.00-10.30**	**13 October 2023**	**2nd Day**
Chair: **Prof. Dr. Veli KARGI**			
Kendal DENİZ **Fatma TAŞ**	The Impact of the Digitalization Process on the Fundamental Elements of Taxation in Selected Countries and Implications for Türkiye		
Ayşegül YÜCEL	Digital Transformation of Tax Management: Global Implementation and Evaluations For Türkiye		
Hüda CARDA **Burçin BOZDOĞANOĞLU** **Özgür BİYAN**	The Role of Artificial Intelligence in the Digitalization of Tax Auditing		
Nagihan ERDAL **İhsan Cemil DEMİR**	Determinants of Public Finance Awareness in Türkiye		

Keynote Speaker	**11.00-12.00**	**13 October 2023**	**2nd Day**
Prof. David WILDASIN	Open Economy Public Finance: Competition and Cooperation Among and Within Nations, with Applications to Disaster Policy		

Session II-A	**14.00-15.30**	**13 October 2023**	**2nd Day**
Chair: **Prof. Dr. Zeynep ARIKAN**			
Burçin BOZDOĞANOĞLU	Digital Legacy Dimension of Crypto assets and Evaluation from a Tax Perspective		
Ali Osman YILMAZ **Mustafa Erkan ÜYÜMEZ**	Can Tax Compliance of Taxpayers be Improved with Artificial Neural Networks?		
Orçun AVCI	The Effects of Big Data Technology on Taxation in Türkiye		
Esra UYGUN	The Role of Digitalization on Tax Transparency: An Assessment in Terms of the Beps Action Plan 13		

Session II-B	**14.00-15.30**	**13 October 2023**	**2nd Day**
Chair: **Prof. Dr. Sacit Hadi AKDEDE**			
Yasin ACAR	Earthquake and Elections: Evidence from Türkiye		
Reyhan KARABABA	Integrating Gender Perspective into Medium-Term Plans and Budgets at the Local Level: A Comparative Study of Berlin and Istanbul		
Mustafa KAHVECİ	Unmet Health Demand Under Public Provision in Türkiye: Who Cannot Access Health Service in Türkiye and Why?		
Arkan YUSUFOĞLU	Making the Earthquake Tax Work		

Session II-C	**14.00-15.30**	**13 October 2023**	**2nd Day**
Chair: **Prof. Dr. Mircan TOKATLIOĞLU**			
Harun KILIÇASLAN	Resilience Against Disasters: Efficiency in Resource Distribution and Strengthening the Local Fiscal System		
Tuba GEZER	Insurance as a Financing Tool in the Management of Natural Disasters		
Süleyman KASAL	Geopolitical Risks and Fiscal Policy: An Analysis on Turkish Economy		
Şeref Can SERİN **Murat DEMİR**	Fiscal Buffers Against Fiscal Liabilities Created by Natural Disaster: A Proposal for Turkiye		

Session II-D	**14.00-15.30**	**13 October 2023**	**2nd Day**
Chair: **Prof. Dr. Ayşe YİĞİT ŞAKAR**			
Nilay AKBULUT **Mehmet YÜCE** **Ramazan GÖKBUNAR**	The Assessment of The Effect of Pressure and Interest Groups on Fiscal Legislation in terms of Poverty Relief		
Burak PİRDAL **Haldun ÇOLAK**	The Link Between Fiscal Transparency and Macroeconomic Dynamics		
Songül AKYILDIZ	Electoral Economy in Türkiye Examining the in the Framework of the Post-2000 Elections		
Hatice ALTINOK	The Analysis of Public Debt Stock by Using System Dynamics		

Session III-A	**16.00-17.30**	**13 October 2023**	**2nd Day**
Chair: **Prof. Dr. Ziyaettin BİLDİRİCİ**			
Doğan GÖKBEL	Protection of the Whistleblower in Tax-Related Whistleblowing		
Ahmet KAVAK Ziyaettin BİLDİRİCİ	Is it Necessary to Discuss Tax Regulations Related to Capital Reduction?		
Sadık AYDOĞAN Ali BALKI Erhan ÇELİK	Tax Perception of Owners of Immovable Property Income: The Case of Burdur Province		

Muharrem ÇAKIR	Adapting to Change: Taxation of Tiny House

Session III-B	**16.00-17.30**	**13 October 2023**	**2nd Day**
Chair: **Prof. Dr. Naci Tolga SARUÇ**			
İsa SAĞBAŞ **Erhan ÇELİK**	Governing The Commons and Its Contribution to Economy: A Case Study of Aydın Koçarlı		
Mete DİBO **Emre ÖZYERDEN**	Analysis of Flypaper Phenomenon in Türkiye in the Framework of Political Effect		
Ebru KARAŞ	Examining the Effect of Transfer Expenditures on Income Distribution: The Case of Comparative Country		
Cevat TOSUN **Mete DİBO**	The Effect of Public Sector Size on Economic Growth in the Scope of Public Employment		

Session III-C	**16.00-17.30**	**13 October 2023**	**2nd Day**
Chair: **Prof. Dr. Süreyya SAKINÇ**			
Hakan BAY **Zeynep ARIKAN**	Evaluation of The Earthquake Tax Introduced by The Law No. 7440 In Terms of Constitutional Taxation Principles		
Meltem İRTEŞ GÜLŞEN	Tax Reliefs After Natural Disasters and Tax Management		
Erdinç ALP	The Situation of Relatives of the Missing People in Kahramanmaras Centered Earthquakes in Terms of Tax Legislation		

Session III-D	**16.00-17.30**	**13 October 2023**	**2nd Day**
Chair: **Prof. Dr. Tarık VURAL**			
Emre ÖZYERDEN	Behaviourally Informed Policies: An Evaluation on Fiscal Policies in Türkiye		
Yusuf CENGİZ **Naci Tolga SARUÇ**	Public Acceptability of Congestion Charge at the Centre of Istanbul		
Hasan Hüseyin ALEÇAKIR **Zeynep KARAL ÖNDER**	Descriptive Literature Review On The Laffer Curve		
İbrahim KESİCİ	Comparison of Income Groups in Türkiye in Terms of Human Capital Expenditure Ratios		

Session IV-A	**9.00-10.30**	**14 October 2023**	**3rd Day**
Chair: **Prof. Dr. Metin ERDEM**			
Şebnem TOSUNOĞLU	The Impact of Natural Disasters on Debt Sustainability: How Can Costs Be Managed?		
Göksel KARAŞ	Analysis of the Relationship Between Budget Deficit and Balance of Payments in Türkiye (1975-2020)		
İhsan Cemil DEMİR **Merve MALAK**	Effect of Indirect Taxes on Poverty		

Metin ALLAHVERDİ	Developing Tax Performance Index Methodology: The Case of Türkiye

Session IV-B	**9.00-10.30**	**14 October 2023**	**3rd Day**
Chair: **Prof. Dr. S. Ateş OKTAR**			
Mehmet GÜNEŞ **Emine KIZILTAŞ UZUNALİ**	Universal Basic Income Approach and Its Applicability in Türkiye: An Evaluation from Fiscal Policy Perspective		
Gülşen GEDİK	Corporate Social Responsibility in Global Reporting Initiative Standards and Taxation		
Birol UBAY	International Cooperation in the Taxation of the Sharing and Gig Economy		
Hülya KABAKÇI KARADENİZ	The Comparison of the Valuable Housing Tax with the Greece and France Practices and the Proposal of a Model		

Session IV-C	**9.00-10.30**	**14 October 2023**	**3rd Day**
Chair: **Prof. Dr. Serpil AĞCAKAYA**			
Abdurrahman TARAKTAŞ	Evaluation of Public-Private Partnerships (PPPs) Practices for Enhancing Disaster Preparedness		
Erdal EROĞLU **Mine AYDEMİR DEV**	Local Government Finance in Disaster Danagement: A Bibliometric Analysis and Future Research Directions		
Halil SERBES	Do Natural Disasters Provide Opportunities for Learning? A Study on Türkiye's Earthquake Reality		

Session IV-D	**9.00-10.30**	**14 October 2023**	**3rd Day**
Chair: **Prof. Dr. Celali YILMAZ**			
Bediha Sultan ZIVALI **Hüseyin DİRİCAN**	Public White Elephant Syndrome: The Evaluation of Some Country Examples		
Rabia Selinay DEĞİRMENCİ **Eda YEŞİL**	Effects of Fiscal Policy on Preventive Health Services Effect: An Evaluation on Türkiye-European Union Countries		
Dilara ÇAKMAKOĞLU **Nazmiye TEKDEMİR** **Pelin Varol İYİDOĞAN**	Universal Basic Income Approach and Its Applicability in Türkiye: An Evaluation from Fiscal Policy Perspective		

Session V-A	**11.00-12.30**	**14 October 2023**	**3rd Day**
Chair: **Prof. Dr. Mustafa Erkan ÜYÜMEZ**			
Murat İNCE	A Discussion on Dispute Resolution in the Context of the Court of Accounts and the Council of State		
Nuray Aşcı AKINCI	Law No. 7440: Compliance of the Additional Tax with Equality Analysis Test Standards		
İsmail Cengiz EREK	Evaluation of Turkish Court of Accounts' Judgment In Terms of Reasonable Time		

Ömer Faruk BAYRAKCI	Evaluation of the Plan Regarding Making Lease Agreement over the E-Government Gateway in terms of Tax Law

Session V-B	**11.00-12.30**	**14 October 2023**	**3rd Day**
Chair: **Prof. Dr. Burçin BOZDOĞANOĞLU**			
Osman Cenk KANCA **Rahmi YAMAK**	Testing the Olivera-Tanzi Effect for the Turkish Economy: ARDL Method		
Yusuf YAKŞİ **Şebnem TOSUNOĞLU**	Economic and Political Determinants of External Debt: A Comparative Analysis for Countries with Different Income Level		
Sevim Yaman GÜÇLÜ **Sacit Hadi AKDEDE**	The Socio-economic Factors and Legal Regulations Effecting Private School Preferences in Provinces: An Investigation From the Perspective of Public Economics		
Seher GÖKPINAR **Burak SERTKAYA** **Mehmet SONGUR**	The Relationship Between Human Development and Public Expenditures: New Evidence From Developed and Developing Countries		

Session V-C	**11.00-12.30**	**14 October 2023**	**3rd Day**
Chair: **Prof. Dr. Yusuf KARAKOÇ**			
Ayşe YİĞİT ŞAKAR	The Importance of Financial Incentives for Blue Bonds in Fighting Against Disasters		
Iraz Haspolat KAYA **Emre ENGÜR**	Evaluation on the Use of Discounted Corporate Tax as a Financial Instrument in Disaster Periods		
Serhat KURT **Doğan BOZDOĞAN**	Incentives for the Disaster Reconstruction Fund as Tax Expenditure Evaluation		
Özgür Mustafa ÖMÜR	Contingent Obligations to Increase Financial Resilience Against Disasters		

Session V-D	**11.00-12.30**	**14 October 2023**	**3rd Day**
Chair: **Prof. Dr. İhsan Cemil DEMİR**			
Tolga SEZDİ **Gizem ZEREN**	Evaluation of Income Tax Tariff in Türkiye from the Perspective of Justice in Taxation for Wage Earners		
Ayşe Miray ALTAY **Erhan GÜMÜŞ**	Evoluation of the Legality of the Effective Repentance Provisions of the Tax Procedure Law in light of relevant decisions from the Constitutional Court and the ECtHR		
Yetkin Kaan GENÇTÜRK	Tax Liability of the Legal Representative within the Framework of the Periodicity Principle		
Furkan KILINÇ	An Evaluation on Value Increment Share (VIS) in Disaster Risk Reduction		

Session VI-A	**14.00-15.30**	**14 October 2023**	**3rd Day**
Chair: **Prof. Dr. Metin TAŞ**			
Yusuf KARAKOÇ	The Effect of Force Majeure on Durations in Financial Law		
Müslüm GÜMÜŞ **Mustafa Erkan ÜYÜMEZ**	Taxational Truth: Shadow Metaphor		
Serkan AĞAR	TPL 359 Dilemma in the Oil Market		
Kamil KARATEPE	Tax Amnesties in Turkey: As a Means of Primitive Accumulation and Wealth Transfer		

Session VI-B	**14.00-15.30**	**14 October 2023**	**3rd Day**
Chair: **Prof. Dr. Emrah FERHATOĞLU**			
Nisa YAZICI AYDEMİR **Yüksel ÇAĞDAŞ** **Eyüp AKBULUT** **Çağrı İŞLER**	Exploring the Link Between Fiscal Autonomy and Performance in Turkish Universities		
Tarkan ÇAVUŞOĞLU **Erica POMA**	Exploring the Satisfaction of Democracy in the Pandemic Emergency: a Focus on Economic Stress and the Role of Institutions		
Mian Sajid NAZIR	The Nexus Between Information Asymmetry, Risk and Governance in Public and Private Sector Projects		
Desislava KALCHEVA	Budget Planning at Local Level in a Period of Crisis: The Case of Bulgaria		

Session VI-C	**14.00-15.30**	**14 October 2023**	**3rd Day**
Chair: **Prof. Dr. Özhan ÇETİNKAYA**			
Adem DEMİRBOZAN **Arınç BOZ**	The Effect of Kahramanmaraş Earthquakes in Türkiye on Tax Revenues		
Zümre ERCAN	Public Policies In The Struggle Against Natural Disasters: Comparison of 1999 Gölcük Earthquake and 2023 Kahramanmaraş Centered Earthquakes		
Ebru BİLGİN **Zerife YILDIRIM**	Relationship Between Environmental Tax and Ecological Footprint: An Empirical Investigation on Turkiye and Selected EU Member Countries		

Özge ÖMÜR	Regulation on Income and Corporate Tax Base Deduction of Donations and Aids Made After Disasters

Session VI-D	**14.00-15.30**	**14 October 2023**	**3rd Day**
Chair: **Prof. Dr. Selçuk İPEK**			
Gülay AKGÜL YILMAZ **Gözde NALBANT EFE**	Tax and Similar Financial Obligations in the Framework of Financial Problems of Women's Entrepreneurship in Türkiye		
Osman GEYİK **Gamze YILDIZ ŞEREN** **Yusuf YAKŞİ**	The Impact of Tax Education on Tax Awareness: An Experimental Study in Diyarbakır		
Erkam SARI **Sacit Hadi AKDEDE**	Political Preferences in Tax and Benefit Morale: Do Right-wing and Left-wing Voters Have Different Costs to Public Finances?		
Ali Fuat URUŞ	Taxpayer Psychology in Earthquake Experienced Cities in Türkiye: A Review of Studies in the Literature		

Plenary Session	**16.00-17.30**	**14 October 2023**	**3rd Day**
General Meeting of The Congress			

Tax Incentives in Combating Disasters

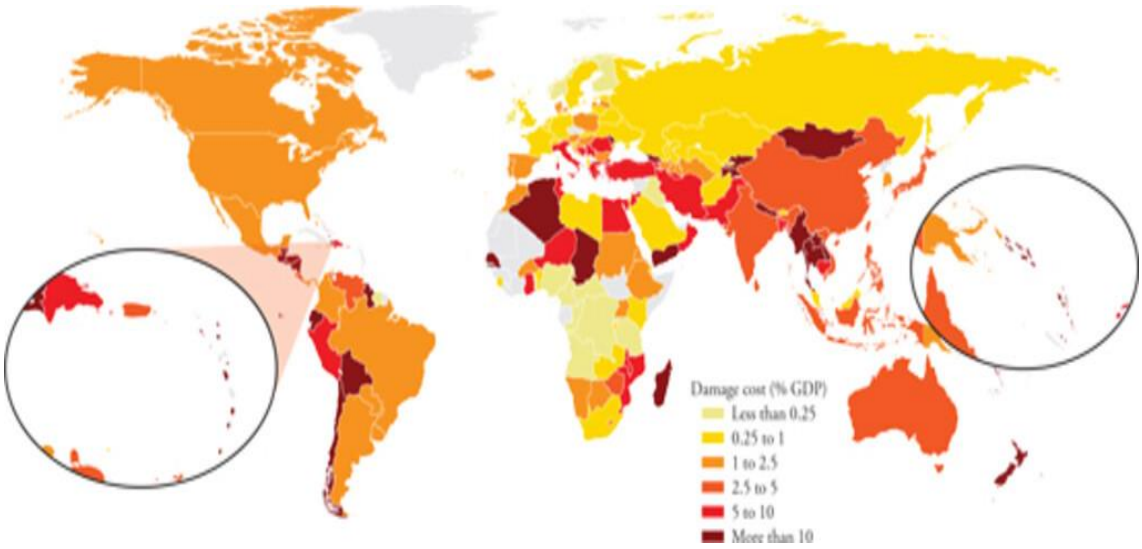
Ricardo Garcia Anton[1]

Agenda

- Fiscal measures for natural disasters
- Tax expenditure (tax incentives) as a solution?
- BEPS Action 5
- Pillar 2 and incentives (general overview)
- Pillar 2 and incentives (natural disasters)

Natural Disasters

- Natural disasters + climate change – earthquakes, floods, tornado
- 50,000 victims (Turkey/Syria) 15 million people affected Reconstruction - $ 45 billion
- Morocco earthquake 5,000 victims Reconstruction - $11.7bn
- Substantial economic deficits
- Low-income countries tend to suffer disproportionately



@IMF. Natural Disasters: Maximum Damage (Maximum annual impact, 1950–2015, in percent of GDP)

[1] Assist. Prof. Ph.D, Tilburg University, School of Economics and Management, Department of Tax Economics, ORCID: 0000-0002-0823-3170, R.GarciaAnton@tilburguniversity.edu

- Natural disasters raise government expenditure by an average of 15 percent and lowered revenue by about 10 percent over the five years following a disaster, leading to a substantial increase in the overall budget deficit (Melecky and Raddatz 2011).

Reaction of the States

1 – Direct financial aid – Public Finance/Fiscal buffers

- Immediate recovery from damage for both humanitarian and economic reasons

2 – Tax expenditure (tax incentives, tax relief)

- tax measures are more suitably employed to provide long-term benefits in order to encourage investment in businesses that have been affected by natural disasters, especially to replace damaged business assets and infrastructure

Natural disasters – public finance

How to Manage the Fiscal Costs of Natural Disasters (IMF, 2018)

Solutions in the area of public finance:

1) Flexibility across budget chapters

2) Contingency financing plans (self-insurance and debt instruments

3) Build **fiscal buffers** in the budget (reserve up % - notional fiscal buffer for use during a future disaster)

Fiscal buffers (direct grants)

- Continued financed by contributions from income and corporate tax (Austria)
- Financed ad-hoc by debt (Germany)
- Indonesia/Japan

Fiscal measures for natural disasters

New one-time taxes

- One-time additional individual/corporate income tax, vehicle tax, real estate tax,
- Concerns – distribute the economic burden among all the population/ only several sectors should bear the economic burden?
- Turkish Constitutional Court (TCC) in its landmark decision in K.2001/63 (29 Mar. 2002)-
- Prof. Billur Yalti – financial burden must be spread among population (2020).

Tax expenditure

- Reaction of Governments is **tax expenditure** (individuals and corporations)
- We focus on corporations for this presentation
- In Turkey - The **force majeure provisions** apply for taxpayers in the following places: Adana, Adıyaman, Diyarbakır, Elazığ, Gaziantep, Hatay, Kahramanmaraş, Kilis, Malatya, Osmaniye, and Şanlıurfa. The provisions are generally in place for the period from 6 February 2023 to 31 July 2023.
    - Bad and doubtful debts (debts subject to litigation/unpaid debts) – are expenses for tax purposes
    - Exemption on the Turkish one-time additional tax (5%-10%)
    - Exemption on income withholding tax on salaries for employees working in R&D centers in the areas affected
    - Investment incentives regimes for the areas affected
- In other countries - New Zealand (2011) – increased % in depreciation assets, full deduction of losses on destroyed buildings/ Japan (2011) – special deductions (tax credits up to 100% of the taxable base, special depreciation rates on assets; Italy (2016) tax credits for renovation costs

- **Italy – earthquake L'Aquila (2009)**
- Special Urban Zone – *La Zona Urbana di L'Aquila (2012)*
    - Favorable tax regime for small and micro enterprises which carry out their activities in the area
    - Companied not subject to liquidation or to bank
    - Exemptions of corporate income tax for the first years of activities and then the exemption is limited to a decreasing % of income. The exemption is granted up to **EUR 100,000 of income of activity carried out in the ZFU**



    - Exemption – regional tax on productive activities (IRAP) up to an amount of EUR 300,000 and property tax
    - Tax credits calculated on the basis of the costs of acquired assets in favor of enterprises investing in 140 municipalities of the regions affected by the earthquake

- The deductions (i.e. tax credits on re-investment), reductions on the taxable base (i.e. accelerated depreciation) – **REDUCTION EFFECTIVE TAX RATE OF CORPORATIONS**
- The International Monetary Fund (IMF) – Caution with tax expenditure (run counter principles good tax policy and trigger distortions of competition) - 2015 Report
    - Investment would have been undertaken without them
    - Many low-income countries use **costly tax holidays and income tax exemptions** to attract investment, while investment tax credits and accelerated depreciation yield more investment per dollar spent
    - Cost-base incentives rather than profit-based ones
    - Involvement of stakeholders - Analysis of costs/benefits to debate country's policy priorities
    - More transparency (prescribed in the law)
    - Fight against corruption practices (eliminate discretionary incentives)
    - More coordination among countries (code of conduct)

BEPS Action 5

- **RISK** - Some incentives granted for natural disasters could become permanent/ creation of Special Economic Zones like in Italy (L'Aquila) (preferential tax regimes)
- The OECD Forum on Harmful Tax Practices (FHTP) has been conducting reviews of preferential regimes since its creation in 1998 to determine if the regimes could harm the tax base of other jurisdictions.
- Targeting IP regime (Patent box). In 1998 Report - OECD
    - Non-taxation or low taxation of income derived from geographically mobile activities (financial activities)
    - The tax regime constitutes an exception (ring-fencing)
    - Transparency standards are not met (i.e. lack of clarity as to the criteria for applying the regime or lack of supervision).
    - No exchange of information.
- All members of the BEPS Inclusive Framework must implement BEPS Action 5 – minimum standard
- Definition of **preferential tax regime**
    - a) An artificial definition of the tax base.
    - b) Failure to adhere to international transfer pricing principles.
    - c) Foreign source income exempt from residence country taxation.

- d) Negotiable tax rate or tax base.
- e) Existence of secrecy provisions.
- f) Access to a wide network of tax treaties.
- g) The regime is promoted as a tax minimization vehicle.
- h) The regime encourages operations or arrangements that are purely tax-driven and

involve no substantial activities.

- BEPS 5 requires economic substance to get the tax benefit (nexus approach for IP regimes)
- BEPS Monitoring (2023)– Turkey (not harmful tax regime
- Problems – specific regime to revitalize areas affected by natural disasters could trigger harmful competition
  - Consolidate in time (more than 10 years)
  - Exemptions in CIT – link to the renovation and favor substantive work in the areas affected, **BUT avoid the temptation of creating a harmful preferential tax regime**
    - Headquarter regime
    - Holding company
    - Distribution and service center
    - Financing and leasing regime
    - Shipping regime

Pillar 2 and Incentives

- Granting tax incentives to companies in devasted areas by a natural disaster could have problems from the perspective of Pillar 2
- OECD/G20 Statement on a two Pillar Solution to Address the tax challenges from digitalization of the economy (2021)
- Pillar 1 – create taxing rights for the Market jurisdiction
- Pillar 2 – create a global minimum tax (15%)

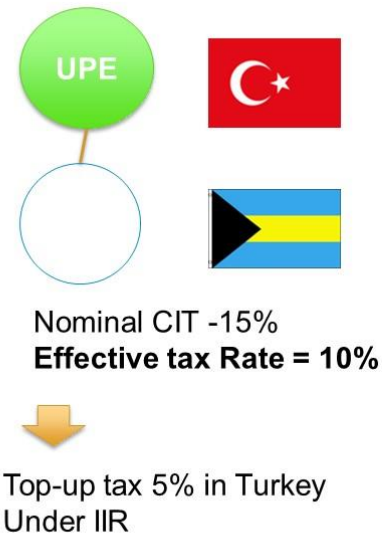


- GLOBE rules apply to MNEs group with a revenue threshold of **EUR 750 million**
- Calculate the Effective tax rate per jurisdiction (ETR) – jurisdictional blending
  - EFR = Covered taxes (taxes on income/profit) / Net global income (net income/loss entities)

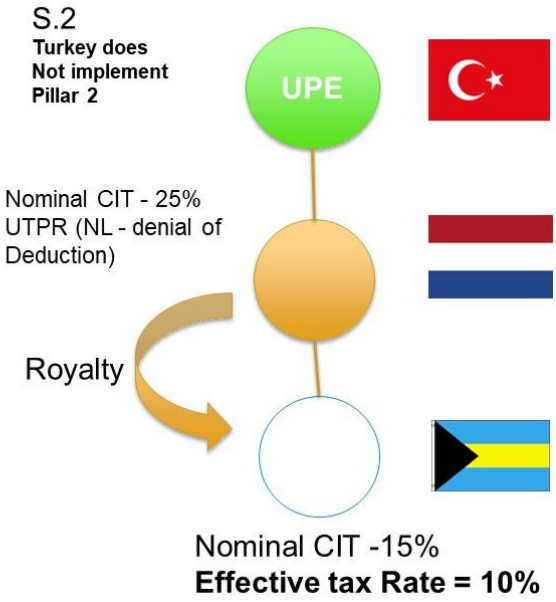
  If ETR < 15%, GLOBE rules apply (top-up tax)

- Pillar 2 (GLOBE) consists of two interlocking domestic rules: income inclusion rule (IIR) and undertaxed payment rule (UTPR)
- IIR imposes a top-up on a parent company in respect to a constituent entity's low taxed income
- UTPR denies deductions to the extent that its low tax income is not subject to tax under IIR (backstop rule – if country of UPC has not implemented Pillar 2

S.1



S.2



- GLOBE rules aim to stop tax competition/ prevent race to the bottom – eliminate incentives if the ETR < 15%
- In S1, The top-up tax (in the previous example) –
  - 5% is applied by Turkey (IIR) **on the excess profit (the net Global Income in Bahamas) reduced by a substantive carve-out**
- **Substantive carve-out** – routine profits from substantive activities are not subject to the top-up tax
- SUM OF: 5% of payroll costs of employees + 5% value of tangible Assets (property, equipment, natural resources)

Pillar 2 and Incentives natural disaters

- Pillar 2 (GLOBE) has an impact on the design of incentives for natural disasters (Risks)
    - Example - Accelerated depreciation and immediate expensing (bad doubts/assets) do lead to temporary differences (caused by the timing issues) **that could cause the ETR to fall below the minimum rate (15%)**
    - The implementation of QDMTT – allow the State to reduce CIT (be attractive), but also benefit companies that are not subject to Globe (< EUR 750 million)

- Some policy issues to design incentives under Pillar 2 constraints:
    - Pillar 2 (revenue threshold EUR 750 million) – design tax incentives that affect small/medium-sized enterprises not subject to Globe rules
    - The application of the QDMTT (lower CIT) but affect all entities, so it can trigger revenue loss
    - International shipping tax incentives are excluded from GLOBE– not really used in case of natural disasters
    - Concentrate tax incentives in other taxes (no CIT) – for example personal income tax and property taxes. Move to non-covered taxes
    - Qualified refundable tax credits (refund the amount of unused credit) and non-tax subsidies (government grants) are treated in the GLOBE formula for ETR as income (denominator) = less impact!

Jurisdictional blending for GLOBE ETR calculation

- Mixing of high-taxed and low-taxed income
- Moderate the effect on highly profitable activities



The substantive-based income inclusion

- GLOBE focuses on excess income (intangible-related income)
- The carve-out – design a Economic Zone in an area with economic substance

Conclusions

- Public finance (buffers) versus Tax expenditure
- Tax expenditure – IMF (criticisms) + BEPS Action 5 and Pillar 2 – make state re-design their tax policies
- Pillar 2 – effects of the interlocked rules (IIR, UTPR, QDMTT)
- Policy suggestions for tax incentives in areas affected by natural disasters
    - Design tax incentives for small and medium-size companies out of scope of GLOBE
    - Use refundable tax credit/direct subsidies (income in the formula) – less impact
    - QDMTT – allow to reduce CIT
    - Design economic zones with substance (jurisdictional blending + substance carve-out)

Using Behavioral Public Policies to Ensure Voluntary Tax Compliance

Faruk Gözübüyük[1]

Abstract

As in the rest of the world, behavioral approaches are used in public policies in Turkey and these approaches are included in top policy documents. The Revenue Administration carries out studies to review and evaluate all applications and services offered to taxpayers with a behavioral public policies approach in a way that will increase taxpayers' tax awareness and voluntary compliance, to produce medium and long-term behavioral insight policies and to support them with experimental studies on the applicability of these policies.

Keywords: Voluntary tax compliance, behavioral public policy, nudge, behavioral approaches, the impact of behavioral approaches on tax practices.

JEL Codes: H20, H24, H29

1. Introduction

Behavioural approaches are used in public policies especially in OECD countries, in the world in general and in Turkey as well, and these approaches are included in top policy documents. As it is known, voluntary tax compliance is the correct, timely and complete fulfilment of tax obligations of natural and legal person who are taxpayers in accordance with the existing tax laws.

The Turkish Revenue Administration carries out studies to review and evaluate all practices and services offered to taxpayers with a behavioural public policy approach in order to increase tax awareness and voluntary compliance of taxpayers, to produce medium and long-term behavioural insight policies and to support these policies with experimental studies on their applicability. In this study, the impact of behavioural approach policies on ensuring voluntary tax compliance is explained through the examples of the world and the Turkish Revenue Administration.

2. Application of Behavioural Approaches to Public Policy

The notion of behavioral approach policies, also known as behavioral insight, has gained global recognition and usage, particularly in the past few years.

The integration of behavioural economics principles into public policies has become a priority agenda item in countries with the impact of the Nobel Prizes in Economics awarded in 2002 and 2017. With their studies, behavioural economists have demonstrated the necessity for countries to direct individuals to make more rational decisions and to integrate behavioural

[1] Vise Commissioner of Turkish Revenue Administration, Ministry of Treasury and Finance Revenue Administration, ORCID: 0009-0004-7937-2436, fgozubuyuk@gelirler.gov.tr

insight (nudge) approaches into public policies. They have systematically revealed the cognitive limitations that are frequently encountered in people's decision-making processes and have developed proposals for the integration of certain insights derived from behavioural economics findings into policy making. They examined how the public and private sectors should use behavioural science to guide people to make better decisions.

Behavioural insight policies are complementary policies that increase the effectiveness of existing policies and are created on the basis of concrete knowledge and understanding of how people behave in practice by understanding the biases in decision-making processes rather than how people should behave in theory.

The application of behavioural approaches to public policies is becoming more and more widespread in the world and in Turkey. Countries use behavioural approaches instead of existing public policies or as a complement to existing public policies and aim to transform individual behaviour into a form suitable for policy objectives.

Behavioural approach policies are used in many areas such as increasing tax compliance, combating poverty, reducing unemployment, increasing personal savings and participation in insurance plans, increasing productivity in labour markets, promoting and improving health, increasing enrolment and attendance in education, increasing energy savings.

3. Examples of Behavioural Approach Policies in the World and Turkey

The behavioural approach has become a tool increasingly used by governments around the world, especially in recent years. In July 2010, the Behavioural Insights Team-BIT was established within the UK Cabinet Office and became the first behavioural insights team to be officially launched in the world.

The behavioural approach has become a tool adopted by many governments and private companies around the world, especially by multinational organisations such as the OECD, the World Bank and the United Nations. Many countries, institutions and organisations around the world are implementing behavioural insights approaches either by establishing organisational units within their own organisations or by receiving support from organisations specialised in this field.

According to the 2020 Form of Tax Administration (FTA) Survey, one third of FTA member countries use behavioural insights to fulfil their mission. For example, the Behavioural Insights Team (BIT) has carried out more than 780 projects and conducted at least 400 randomised control trials in many countries in respect of 2018. In addition, countries such as the USA, France, Australia, Spain, Belgium, Costa Rica, etc. are carrying out important studies in this field.

The implementation of behavioural approach practices in our country started with the establishment of the Department of Behavioural Public Policies and New Generation Technologies in the Ministry of Trade in November 2017. In the Turkish Revenue Administration, the implementation of behavioural approaches in public policies started with the establishment of the Behavioural Public Policy Development and Implementation Directorate within the Taxpayer Services Department in 2021.

In order to apply these approaches to public policies and to measure the effectiveness of these policies, the Turkish Revenue Administration conducts randomised control experiments by tax type and prepares action reports, and at the same time designs studies for taxpayer services where these policies will be applied.

Some of the studies in which behavioural approaches are carefully and rigorously evaluated in order to change specific and highly significant taxpayer behaviours and to evaluate interventions in a robust manner are given below.

- Awareness Study for Taxpayers who will submit declarations through the 2021 Ready Declaration System
- Information Study for the Payment of MVT Debt within the Scope of Restructuring Law No. 7326
- Information Study to Remind the 1st Instalment Payment of MVT for the Year 2022
- Informing the Taxpayers who are required to make a declaration through the Ready Declaration System for the Year 2022
- Information Study to Remind the 2nd Instalment Payment of MVT for the Year 2022
- Informing Taxpayers via SMS during the Prosecution Process
- Informing the Taxpayers who submitted their Income Tax Declaration and did not pay the 1st Instalment
- Informing Income Taxpayers who do not submit their VAT Declaration and those who submit but do not pay their VAT Declaration
- Voluntary Compliance Study for New Taxpayers

The interventions made by the Turkish Revenue Administration in tax declaration and collection processes by using behavioural approach policies have led to significant increases in tax collection/assessment rates and new taxpayer registration.

4. Conclusion

Behavioural public policies have started to be used intensively within the scope of voluntary tax compliance of taxpayers in the Revenue Administration in our country as in the whole world. In this context, in all tax processes from the initiation of tax liability, filing of declarations, payment of tax, forced collection processes and other duties and obligations; letters, SMS, e-mail or other communication channels are used effectively as a system that nudges taxpayers in advance and guides their behaviour positively. The Turkish Revenue Administration continues its activities in cooperation with international organisations, particularly the OECD, and by following the developments in this field in the world.

Evaluation of Incentives within the Scope of the State Supports Decision in Investments Specific to the Mining Sector and the Issues that are Special in Practice

Taner Ercan[1]

Abstract

The growth, development and increase in employment of a country is possible by reaching the targets to be determined within the framework of economic development and growth policies. In order to achieve the determined goals, the state expects the stakeholders in the economic life to contribute to the development goals in the activities, sectors and areas where they can create added value. While doing this, investment incentive programs are among the tools that the state basically resorts to. With the said investment incentive systems, it aims to achieve the economic goals it has determined, to reduce regional development differences, to increase foreign direct investments, to support advanced technology investments and to make investment planning on the basis of economies of scale. The investment incentive system, which has found application in different titles for many years in Turkey in this regard, has been shaped within the framework of the 2012/3305 Numbered Decision on State Aids in Investments with the latest regulation. The investment incentive decision is basically shaped on regional and general incentive applications and priority and strategic investment incentives. “Mining and mineral exploration investments”, which are within the scope of “priority investments”, which are evaluated within the framework of investments for the production of high-tech products, are important. The promotion of mines at every stage of our lives has a distinctive feature in line with the said decision. In this context, the main purpose of the study is to evaluate the tax incentives within the scope of the state aid decision, other supports and the specific issues in practice in investments specific to the mining sector.

Keywords: Investment, Mining Industry, Incentive System, Incentive.
JEL Codes: P33, L72, O31.

1. Introduction

The growth, development and employment of countries in the economic framework is possible by reaching the targets they have determined within the scope of economic development and growth policies. In order to achieve the predetermined goals in this direction, the state expects the stakeholders in the economy wheel to contribute in line with the goals of economic development in activities, sectors and fields where they can create added value. In this process, there are many tools that the state basically resorts to in order to achieve economic development goals, among which the leading investment incentive programs are. The state aims to achieve the economic goals it has determined with investment incentive systems, to reduce regional development differences, to increase foreign direct investments, to support advanced technology investments and to make investment planning on the basis of economies of scale. The investment incentive system, which has found application under different headings for many years on investment incentives in Turkey, has been shaped within the framework of the Decision on State Aids in Investments with the latest regulation. The investment incentive

[1] Assoc. Prof. Ph.D, Kırklareli University, Department of Public Finance, ORCID: 0000-0001-9647-0127, taner.ercan@klu.edu.tr

decision has been shaped mainly in the context of regional and general incentive practices and priority and strategic investment incentives. Additional exceptional support was provided to certain sectors and strategic investments that would reduce imports. “Mining and mineral exploration investments”, which are evaluated within the framework of investments for the production of high-tech products and included in the scope of “priority investments”, are among the investment support topics that are extremely important in this regard. In this direction, there are some application differences specific to mining activities in the decision. The promotion of mines at every stage of our lives has a distinctive feature in line with the said decision. In this context, the main purpose of the study is to evaluate the tax incentives, other supports, and the issues that are specific in practice at the executive stage, which are included in the decision of state aid in investments within the framework of the mining sector.

2. The Place of Incentive and Investment Concepts in the Context of the Historical Process in Turkiye

In general terms, investment in terms of usage area; The directing of economic variables to a certain channel in order to make a profit can be expressed as an activity of providing value by using it in line with the said purpose (Balçık, 1992: 2). The concept of investment varies with its application areas and is classified at different levels, these are; gross investment-net investment, stimulated investments-autonomous investments, real investments-financial investments, infrastructure-superstructure investments, public investments-private sector investments, compulsory investments and extended investments (Dağ and Çelik, 2018: 865). Incentive can be expressed as financial and non-material support, encouragement and assistance provided by the state through various methods in order to ensure that a certain economic activity develops faster than its counterparts (Zee, et.al., 2002: 1498). According to the definition of OECD, incentives are “government measures prepared to affect the size, region and sector of an investment by affecting the cost or potential profit of an investment or by changing the risks associated with the investment” (Çatal, 2010: 289). In the context of another definition, incentives are “tax incentives to provide tax relief and privileges to certain economic elements or activities by making changes in tax legislation in order to achieve predetermined macroeconomic targets” (Shah, 1995, 2). As it can be understood from these definitions, there is the idea of directing resources to more beneficial, beneficial, effective and productive areas in terms of the country's economy at the root of the concept of incentive. The important point in the process is the ratio between the economic outputs of the supported areas and the public revenues given up in return for the concessions made due to the incentives. A beneficial incentive system can be mentioned if the targeted levels and goals in the economy have been achieved due to the incentives given, and if these are higher than the public revenues that are given up (Tekin, 2006: 301). Many countries in the world have established incentive systems consisting of various instruments, especially by considering investments and the element of investments in the context of international competition. In the historical process, the incentives applied to protect domestic industries from foreign unfair competition, new direct capital needs with the effect of globalization, new market and raw material demands, low-cost production and new technology needs have a structure that encourages foreign investors, entrepreneurs and foreign trade. (Erdoğan, 1990: 3). When the historical process of incentives applied in Turkey is examined, it is observed that there are some incentive systems focused on investment, production, export, regional development levels and foreign direct investment in different periods (Kutlar and Cemal, 1996: 12). Although the first regulation in this direction during the Ottoman Empire was the "Encouragement-i Industry Law Provisioning" dated 14.12.1913, the basic handling of the process goes back to the "Islah-ı Industry Commission" established in 1863. An important development regarding investment incentives in Turkey is the "incentive system

numbered 2009/15199, which was published in the Official Gazette dated 16 July 2009 and numbered 27290" (Tuncer, 2009: 2). The system in question was planned as an incentive system that regulates the support of provinces with incentive tools by examining their qualifications and capacities first and taking into account their potential in this direction. Although the incentive system numbered 2009/15199 was wider than previous incentive systems and approaches, it could not respond to the rapid developments encountered in economic life as expected. For this reason, in order to eliminate the economic risks and to produce high-tech, high-quality strategic products, to ensure the continuity of growth rates in line with macro targets, to replace imports and to use external resources effectively, the incentive system numbered 2009/15199 is more efficient and is encouraged. The need for a new regulation that increases the elements of In this respect, with the "Decision on State Aids in Investments" published in the "Official Gazette dated 19 June 2012 and numbered 28328", new arrangements were made in the existing incentive system and the number of regions was increased to 6. Within the framework of the Decision numbered 2012/3305, “in line with the targets envisaged in the development plans and annual programs, directing savings to investments with high added value, increasing production and employment, encouraging regional and large-scale investments and strategic investments with high research and development content, which will increase international competitiveness, and encourage international direct investments. It is aimed to increase regional development disparities, to reduce regional development disparities, to support investments and research and development activities for clustering and environmental protection” (2012/3305, 2012: 1).

3. Arrangements in the Decision on State Aids for Investments Numbered 2012/3305 within the Scope of Mining Sector

In 2012, after the legal changes, an important step was taken to encourage the mining sector and the "Decision of the Council of Ministers on State Aids in Investments dated 15.06.2012 and numbered 2012/3305" was published. In the decision, a special regulation was made for the mining sector. As stated in clause g of article 17 of the decision numbered 2012/3305, “mineral extraction and/or mineral processing investments” are included among priority investments in this context. Thus, investments made within the framework of mining were given the opportunity to benefit from the incentives within the 5th Region, regardless of where or in which region of the country they are located. However, in the relevant article of the decision, “I. group mines and gravel investments defined in the Mining Law No. 3213, and the extraction and/or processing investments to be made in the province of Istanbul” are excluded (2012/3305, 2012: 17). Within the framework of the decision, many important support elements were brought to “mineral extraction and/or mineral processing investments”. Incentives and supports provided for the mining sector within the scope of the decision numbered 2012/3305; It is “customs tax exemption, value added tax exemption, tax reduction, interest support, employer's insurance premium support and insurance premium worker's share support (sixth region)”. Among the most important of these supports is tax deduction for entrepreneurs who operate in the mining sector and invest. Pursuant to the provision titled “tax reduction” of the decision numbered 2012/3305, “In the investments to be made within the scope of regional incentive applications, income or corporate tax is applied with a discount at the rates specified below, within the framework of Article 32/A of the Law No. 5520, until the projected contribution amount is reached” (5520, 2006: 32/A).

4. Conclusion

An important change, different from the previous regulations in the Decision on State Aids in Investments numbered 2012/3305, is the inclusion of the mining sector among the "priority investment issues". The mining industry is indispensable for the world and national economy, it is a sector that we benefit from at every stage of life and that contributes to many business areas. Therefore, it has a privileged place in economic life. Turkey is among the leading countries in the world in terms of mineral diversity and reserves, but the orientation of these ores to economic life and export is very low within the economic capacity. Therefore, it is necessary to support the sector in order to increase the production of mineral raw materials and to make serious contributions to the country's economy with ore enrichment investments. The sector has a special structure consisting of natural resources that require large capitals, involve risky R&D processes, do not allow freedom to choose investment areas and are subject to depletion of capital. Due to these characteristics, they should not be taxed like businesses in any sector, and sector-specific tax policies should be applied. With the decision numbered 2012/3305, important steps have been taken in this regard, but there are some issues that need to be improved and renewed within the framework of changing and developing economic conditions. These issues should be considered as outlined below. Necessary arrangements should be made regarding the elimination of the disadvantage of the intermediary institution with interest support in article 13 of the Communique No. 2012/1, inclusion of ore enrichment facilities established for the mining sector within the scope of strategic investments in the incentive decision, SSI incentive for expansion investments, and inclusion of support for state rights in mines in the decision. Public resources will be directed to appropriate and correct sectors. In addition, thanks to the incentives in line with the realities in the national and world economy, it will be possible to make a higher level of contribution to the economy with the efficiency and efficiency to be provided in the distribution of public resources through incentives and supports.

References

Balçık, B. (1992). *Yatırım Projelerinin Hazırlanması ve Değerlendirilmesi*, Konya: Mimoza Yayınları.

Dağ, M., Çelik, M. (2018). "Yatırım Teşvikleri Nedir? Kavram ve Kapsamı Üzerine Bir Değerlendirme", *Bitlis Eren Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 7(2), 863-875.

Zee, H.H., Stotsky J. G. and Ley Eduardo L. (2002), "Tax Incentives for Business Investment: A Primer for Policy Makers in Developing Countries", World Development, 30(9), 1497-1516.

Çatal, F. (2010). "Devlet Teşvikleri ve Erzurum' da Tarihsel Bir Uygulama Örneği". Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi. 24(4), 289-296.

Shah, A. (1995). *Fiscal Incentives for Investment and Innovation*, New York: Oxford University Press.

Tekin, A. (2006). "Vergi Teşvikleri ve Ekonomik Etkileri", *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, 16, 301-316.

Erdoğan, A. (1990). *Sanayileşmede Teşvik Sistemleri*, İstanbul: TÜSİAD Yayınları.

Kutlar A., Cemal Ö. (1996). *Kalkınmada Öncelikli Yörelerdeki Teşvikli ve Teşviksiz Yatırım Uygulamaları*, Elazığ: Çağ Matbaacılık.

Tuncer, S. (2009). *Dört Bölgeli Yeni Yatırım Teşvik Sistemi*. Lebib Yalkın Mevzuat Dergisi, 69, 344 http://www.lebibyalkin.com.tr/dergi_icerik_p.asp?dicerik_id=124, (28 Nisan 2023).

Yatırımlarda Devlet Yardımları Hakkında Karar. (2012/3305). Resmi Gazete 28328, 19.06.2012.

5520 Sayılı Kurumlar Vergisi Kanunu, (2006, 13 Haziran), Resmi Gazete (Sayı 26205).

Supplementary Tax in Terms of Startups: Exception on Premium on Issued Shares

Emre Akın[1]

Abstract

Initiatives combining new ideas with technology or R&D activities and turning them into business are described as startups. These new ventures draw attention with the investments they receive and grow rapidly and turn into important economic businesses. The capitals that the new ventures have received from outside together with the investments bring the premium on issued shares gain and its exception. However, after the February 2023 earthquake in Turkey, the supplementary tax on the corporate tax introduced by the Law No. 7440 to finance extraordinary expenditures came into effect, containing the exception of premium on issued shares. This supplementary tax, which will be charged only once, on the exceptions and deductions related to the corporate income of 2022, will affect the startups directly. Thus, 10 percent of the capital received by the startups in 2022 will be paid to the treasury as tax within the scope of premium on issued shares exception. However, since the procedures for showing premium on issued shares in the accounting and corporate tax returns differ, it may result in not declaring the income and not paying the supplementary tax (in violation of the law).

Keywords: startup, capital venture, premium on issued shares, supplementary tax, exception on premium on issued shares
Jel Classification: H26, H83, M41

1. Introduction

The word “startup” is not legally defined in Turkiye. It is more commonly translated as an initiative or a new venture in Turkey. However, in practice, the concept of startup can be defined as a business that is about to be incorporated or has been incorporated in order to generate commercial income by putting forward a business idea and at the same time is suitable for finding investors in the future. These businesses are concentrated in areas such as mobile applications, internet and computer games, cloud-based software, and obtain the necessary investment to grow from investors who invest in these areas.

At this point, the investments received by startups were subject to a one-off supplementary tax in 2023. Although supplementary tax does not target startups, they will be subject because they generate emission premiums in return for the investments they receive. Since the procedures for showing the emission premiums in the accounting and corporate tax tax return differ, it may result in not declaring the income and not paying the supplementary tax (contrary to the legislation).

The article examines the supplementary tax introduced for the purpose of combating disasters in terms of its reflection in the startup ecosystem and tax implementations.

[1] Ph.D, Turkish Tax Research Foundation. The Ministry of Treasury and Finance, Tax Council, ORCID: 0000-0002-8086-5172. emreakinv@gmail.com

2. Supplementary Tax and Startups: Premium On Issued Shares

2.1. How Premium On Issued Shares Appears for Startups?

Turkey has an important place in terms of the country's economy,[2] attracting more than USD 1 billion in investments in recent years and contributing significantly to direct investments. Although there are various calculations, the investment amount exceeded USD 1.74 billion in 2022, the highest level in Turkey. In fact, Turkey is home to the world's largest and most invested startups in the computer and computer-based gaming sector.[3]

Startups sell their shares for much more than their nominal value. There are two reasons for this. First, they consider its present value of cash flows and future potential income. Second is that in order not to affect the voting, management and dividend rights to their detriment to a great extent and not to lose control of the company, companies want to sell the shares they issue at a price above their nominal value when making capital increases. They sell the new shares issued during the capital increase to investors at a price above the issue value (nominal value). In this case, the first owners of the startups that put forward the new idea continue to have rights and control, but they obtain the large capital brought by the new investor for their financial needs and growth. This transaction (profitable sale of shares for more than their nominal value) is called an emission premium for tax purposes.

Since the emission premiums arising in this way are also exempt from corporate tax, the entire investment (increased/acquired capital) can be used to meet the needs of the company. However, with the supplementary tax introduced by Law No. 7440, 10% of these emission premiums must be paid as tax. The supplementary tax, which is expected to be transferred to the Treasury in 2023, can be estimated at 174 million dollars when calculated over the approximate investment amount received in 2022.

2.2. Disruptions Arising from supplementary Tax

As of the date of this article, the Ministry of Treasury and Finance has not published any statistics on the collection of the supplementary tax, nor has it published any data on the accrual and collection of the supplementary tax corresponding to the emission premium within the supplementary tax.

When new ventures (startups) receive investments from the investment community, they sell the capital they raise at a value above the nominal value, resulting in an emission premium. The term "emission premium" is defined in the General Communiqué on Corporate Tax Serial No. 1. Article 5/1-ç of the Corporate Tax Law No. 5520 states that "The portion of the price of the shares issued by incorporated companies during their establishment or capital increase exceeding the nominal value" is exempt from (corporate) tax.

According to the uniform chart of accounts within the scope of the General Communiqué on Accounting System Application No. 1, "520. PREMIUMS on ISSUED SHARES: Amounts resulting from the sale of newly issued shares at a premium are tracked in this account." According to the uniform accounting plan explanations, emission premiums would not be transferred to the income statement accounts by being tracked in the balance sheet account and therefore would not be reflected in the tax return. However, in the Corporate Tax Circular No. 6, it is stated that "commercial profit will be recorded in the line of commercial profit, this

[2] Statistics of countries. https://dealroom.co/guides/global-venture-capital-monitor accessed in 03.05.2023

[3] Startup Centrum, https://startupcentrum.com/tr/rapor/2022-turkish-startup-ecosystem-investment-report accessed in 03.05.2023

amount will include all corporate profits including exceptions and discounts, amounts not tracked in the books in this way will be added to the "Not Legally Acceptable Expenses" (add-back) (KKEG) line, then emission premiums "will be written in the relevant exception line". Emission premiums are followed in the No. 520 Stock Issuance Premiums account, but they are subject to deduction by first adding them to the KKEG line on the tax return and then writing them into the Emission Premium exception line.

Article 10/27 of Law No. 7440, which introduced the supplementary tax, states that "An supplementary tax at the rate of 10% is calculated and paid on the discounts and exemptions deducted in the corporate tax return." According to this provision, supplementary tax at the rate of 10% on the exemptions (such as emission premium) deducted on the tax return will be collected to cover extraordinary public expenditures. In the Law No. 7440 General Communiqué No. 3 on the Restructuring of Taxes and Some Other Receivables, "(2) In accordance with the regulations in Law No. 5520 and other Laws, it is essential that the exemptions and discounts that are entitled to be shown in the return, and the supplementary tax accrued due to the discounts and exemptions that are not shown in the tax return or shown in the tax return but not included in the discounts / exemptions lines is collected together with the tax loss penalty and default interest.", it is not possible to avoid supplementary tax by not showing the emission premium in the tax return. According to this provision, qualifying for the exemption is deemed sufficient to pay supplementary tax.

In this context, the emission premium is a transaction that is not already recognized as income in the accounting system. Therefore, in essence, it is a transaction that is not recognized as income. Such emission premiums are used for the needs of the company and are not actually passed on to the shareholders. However, since it increases the shareholders' equity, it is considered that it is regulated as an exception in the corporate tax law in order to leave no room for doubt.

Despite the different interpretations on the nature of the emission premium, it is an investment amount that is necessary to meet the needs of the companies and to ensure the planned growth. Moreover, in the accounting system, it is recorded as capital reserves as a part of capital (equity). Thus, this resulted in the taxation of capital, causing both an inconsistency in the technique of income taxation and a disadvantageous position of investment amounts under the supplementary tax burden.

2.3. Startup Ecosystem after Supplementary Tax

In Turkey, as in the world, startups are usually formed digitally, providing goods/services over the internet, without having a large tangible asset (workplace, store, factory, etc.). For example, a gaming startup that has received millions of dollars of investment can provide services with a small number of employees from wherever there is a computer. Thus, it can be very easy and fast for companies to move to another country as a legal center. Investments made by foreign investors are also deterred by the supplementary tax. Although no statistics are available yet, interviews with sector representatives indicate that this is the case.

Although the lawsuits filed regarding the supplementary tax have not been concluded yet, it is known that many startups have filed suit due to the supplementary tax imposed on the premiums on issued shares.

There will be a dispute between taxpayers and the tax authority on whether the emission premium should be sufficient to show in the accounting system or should be added to the related line in the tax return. This situation also might be found via risk analysis. For this

reason, taxpayers may be referred to an investigation on the possibility of tax loss. Cross-checking financial statements and tax returns is one of the risk analysis methods. On the other hand, written, visual and online news are also filtered in the risk analysis system, and news that may cause tax loss are referred for review. In this context, risky taxpayers can be identified from the news that startups have received investments, even though the risk is not detected in their financial statements and tax returns even though they earn emission premium earnings.

3. Conclusion

Emission premiums are a natural consequence of so-called startups after they receive investment. Today, emission premiums are most often mentioned for startups. These new initiatives should be supported and used as an important attraction in the new economic order. In fact, the emission premium earnings exemption, which was an advantage for startups in this context, has tended to turn into a disadvantage with the supplementary tax.

In my opinion, the most negative impact of the supplementary tax will be on the startup ecosystem. It is experienced by industry stakeholders that there is a tendency to discourage investments to be attracted from abroad or that these companies tend to be established abroad instead of Turkey. It should be ensured that these capital inflows, which are direct investments, are not adversely affected. At the same time, although it is known that the companies in this scope have filed a lawsuit against the supplementary tax arising from the emission premium earnings exemption, it is considered that there is a possibility that they may be subject to tax inspection in the future due to the difference in accounting and tax return.

In this case, the economic function of taxes used to finance extraordinary expenditures should also be taken into account.

References

Tax Procedure Code, No. 213

Corporate Income Tax Code, No. 5520

Commercial Code, No. 6102

7440 No. Law on Restructuring of Certain Receivables and Amending Certain Laws

Global Venture Capital Guide. (2023). https://dealroom.co/guides/global-venture-capital-monitor , 03.05.2023

Startup Centrum. (2023). https://startupcentrum.com/tr/rapor/2022-turkish-startup-ecosystem-investment-report , 03.05.2023

Tax Policies in Preventing Brain Drain and Encouraging Reverse Brain Drain

Zeynep Arıkan[1] **Ahmet İnneci**[2]

With globalisation, the removal of borders between countries has enabled the free movement of goods, capital and services without any restrictions. Developments in technology in the globalising world have led to a change in the traditional understanding of work and the widespread use of remote working; artificial intelligence applications and developments in the internet of things have led to the emergence of a new working order. This situation has directly affected the qualified labour force. The development in information and communication technologies has enabled the qualified labour force to perform a job by working remotely without being tied to any place. However, qualified labour force may migrate from one country to another country due to expectations for higher wages, expectations for living standards, expectations for research and development opportunities, high tax rates, low wages, limited opportunities for research and development activities, concerns about the future, etc. The migration of qualified labour force to another country for various reasons and starting to work in that country is called brain drain.

With brain drain, there is a transfer of qualified human capital power from developing countries to developed countries. As a matter of fact, qualified labour force will shape the future of a country, especially in economic and social terms, create added value and contribute to the country's progress towards becoming a developed country. Countries are in an effort to attract qualified labour force to their own countries. In addition to this, it is seen that countries have recently made various arrangements to prevent the migration of qualified labour and the return of those who migrate. At this stage, tax policies are used as a tool for both preventing brain drain and encouraging reverse brain drain.

A suggestion on taxation of brain drain has been made by Bhagwati. Bhagwati suggested that in order to reduce the problems caused by brain drain, an additional income tax should be imposed on the earnings of the migrating skilled labour force in the countries they migrate to and the taxes collected in this way should be directed to the developing country for development expenditures. However, Bhagwati's suggestion has not been implemented. Today, countries are in an effort to prevent the migration of qualified labour force to other countries through tax incentives such as tax exemptions and exceptions, tax deductions and to ensure the return of those who have already migrated. For example, tax exemptions in countries such as Italy, Greece, Sweden, the Netherlands and France; fixed tax rate instead of progressive income tax tariff in countries such as Spain, Denmark and Finland; tax exemption in Poland; and tax exemptions and tax reductions in Turkey aim to prevent brain drain and reverse brain drain and brain gain.

[1] Prof. Ph.D., Dokuz Eylül University, Faculty of Economics And Administrative Sciences, Department of Public Finance, zeynep.arikan@deu.edu.tr

[2] Lecturer Ph.D., Pamukkale University, Çivril Atasay Kamer Vocational High School, Department of Finance-Banking and Insurance, Public Finance Program, ahmetinneci@gmail.com

The main objective of this study is to reveal the role and effectiveness of tax policies in preventing brain drain and encouraging reverse brain drain and brain gain. In this context, the study focuses on the tax policy preferences of 10 European countries, including Turkey, especially for reverse brain drain and brain gain. In the study, firstly, the concept of brain drain and its causes are explained and then the tax incentives used by selected countries for brain drain are analysed. When we look at the country practices, it is seen that tax incentives are applied both to prevent brain drain and to encourage reverse brain drain and brain gain. Developed and high-income countries such as Denmark, the Netherlands and Sweden focus more on brain gain. As a matter of fact, these countries have high levels of welfare, economic stability, offer high incomes to skilled people and for these reasons, they do not face the risk of brain drain. Therefore, these countries try to attract skilled people from other countries by focusing on brain gain instead of preventing brain drain and encouraging reverse brain drain.

Tax incentives provided by countries for brain drain may cause various problems in tax systems. Incentives for brain drain lead to the formation of a privileged group of taxpayers subject to a special tax regime and undermine the principles of equality and justice. In addition, the incentives given by countries especially for brain gain cause a race to the bottom in income taxes. When we pay attention to the tax incentives applied in our country, it is seen that the goal of preventing brain drain is at the forefront. Our country should not be left out of the race in this regard with the tax and other incentives to be implemented.

Keywords: Brain Drain, Reverse Brain Drain, Tax Incentives

The Survey Study about Sustainable Energy Policies and Financial Incentives for Carbon-Free Energy Sample of MOSB

Güneş Çetin Gerger[1] **Atakan Gerger**[2] **Devrim Şavlı**[3]

Abstract

The growing impact of global warming has increased the global trend towards renewable energy resources instead of fossil fuel-based energy consumption, particularly in the EU, and has brought the circular economy to the fore. As a result, energy systems and policies around the world are changing rapidly. In this study, the financial incentives for sustainable energy sources and zero carbon energy in Turkey and in the world, the current regulations, and the problems that make it difficult to comply with the European Green Deal were evaluated through a survey of companies in Manisa and Izmir.

The sample selection for the survey was determined as the companies located in the Manisa Organised Industrial Zone and the companies located in Izmir affiliated to the Aegean Region Chamber of Industry. As a result of the statistical analysis to be carried out, the status and attitudes of the companies in terms of green energy use, their current problems, and awareness in terms of sustainable economy were determined.

Keywords: Sustainability, Green Energy, Carbon Tax, EU Green Deal, Fiscal Incentives, Circular Economy
JEL Codes: K34, C42,Q48, Q01

1. Introduction

As part of the circular economy, it has become a necessity to prefer green energy sources instead of polluting energy. Therefore, financial incentives to develop clean energy sources and regulations on carbon taxes are among the instruments used to accelerate this transformation. In Turkey, the use of renewable energy resources has been encouraged within the framework of the Renewable Energy Law, Investment Incentive Plan, which entered into force in 2005. In 2016, the Regulation on Renewable Energy Resource Areas was published. In addition, Turkey's goal of becoming carbon neutral by 2050 in line with the transition to a low-carbon economy with the EU Green Deal brings with it many constraints, especially for the manufacturing industry. In the study, firstly, the importance of circular economy and renewable energy is evaluated. After discussing the situation of renewable energy sources in the world, financial incentives for renewable energy and Turkey's situation, a survey was conducted with companies in various industries in the field of circular economy and government incentives within the scope of sustainable energy. The survey evaluated the attitudes, compliance, and perceptions of the firms regarding the existing regulations. The results obtained were statistically analyzed. It was tried to identify Turkey's shortcomings in the industrial field in terms of circular economy compared to the global scale.

[1] Prof. Ph.D, Manisa Celal Bayar Üniversitesi, ORCID: 0000-0002-5823-7866, gunes.cetin@cbu.edu.tr
[2] Ph.D, Alp Verimlilik Yazılım Ar-Ge Danışmanlık San. ve Tic. Ltd. Şti. ORCID: 0000-0002-3782-7613, atakangerger@alpverimlilik.com
[3] Ph.D, (INTRAC MIP)-UNDP, ORCID: 0000-0003-1216-7265, devrim.savli@undp.org

2. Circular Economy and Renewable Energy

Circular economy is an approach that aims to reduce environmental pollution and aims to establish a circular relationship between resource use and waste (Rizos et al., 2017: 4).

To realize the circular economy, the European Union renewed and expanded the Circular Economy Action Plan (CEAP) in 2020. According to the plan, the EU's transition to a circular economy will reduce pressure on natural resources and create sustainable growth and employment. In this context, the European Union has prepared a roadmap covering the structural and technological changes required for a sustainable economy by 2050 (Bianco, 2018: 238).

By promoting the use of renewable energy sources, the circular economy model helps to reduce environmental pollution through the reuse and recycling of waste. The fact that renewable energy resources can be provided within national resources, in terms of reducing foreign dependence in this context and contributing to the circular economy, and its superior aspects such as its environmentally friendly structure have caused it to gain an important place among today's energy resources. These resources are solar, wind, biomass, hydroelectric, geothermal, hydrogen and wave energy. These resources are energy resources that are re-existing at a faster rate than they are consumed (Özarslan & Bayraç, 2018:382).

In 2022, the leading countries in terms of renewable energy installed capacity were China, the USA and Brazil. In Turkey, the potential for renewable energy resources is high and the use of these resources can be increased. Renewable energy sources in Turkey include wind, solar, biomass and geothermal. As of the end of June 2022, the installed capacity based on wind energy is 10.81% of the total installed capacity. According to the Solar Energy Potential Atlas of Turkey (GEPA), the share of solar energy-based electricity in total installed capacity is 8.35%. The installed capacity based on biomass and waste heat energy is 2.14% of the total installed capacity by the end of June 2022. Turkey ranks first in Europe in terms of geothermal potential and is the fourth country in the world in terms of installed capacity. In Turkey, its share in total installed capacity is 1.66% (https://enerji.gov.tr/eigm-yenilenebilir-enerji-kaynaklar-ruzgar).

3. Financial Incentives and Legislation for Renewable Energy in Turkey

The legal infrastructure for the support of green energy in Turkey was established with the Law No. 5346 on the Utilization of Renewable Energy Resources for Electricity Generation. Law No. 5346 emphasizes renewable energy sources such as solar, wind and geothermal alternatives. Manufacturing industry companies can meet their own energy needs by choosing the most appropriate of these sources. The Regulation on Renewable Energy Resource Areas reflects Turkey's aim to promote sustainability and domestic production in the energy sector. The Regulation encourages the domestic production or procurement of high-tech components used in electric power generation facilities based on renewable energy sources. The Regulation regulates the processes for the establishment of renewable energy resource areas (RERA) and the rapid allocation of these areas to investors. The European Union's (EU) Green Deal is an ambitious framework that aims to transform the continent into a carbon neutral economy by 2050. It places a strong emphasis on promoting and supporting renewable energy sources.

4. Opinions and Evaluation of Companies in Manisa and İzmir on Renewable Energy Incentives and Green Energy Use

4.1. Method

A questionnaire was prepared to assess the effectiveness of renewable energy policies and financial incentives for the manufacturing industry in Turkey and to determine the awareness of firms on the use of renewable energy. The target group of this survey included 753 SMEs and large enterprises in Manisa and İzmir provinces with NACE code manufacturing (between 10 and 32). IBM SPSS Statistics 22 and IBM AMOS 23 software packages were used to analyze the data.

4.2 Survey Results

In the study, Cronbach's α value was calculated as 0.753. In addition, the analysis of variance showed that the scale was additive (Nonadditivity: F: 0.427 and p-value: 0.514>0.05). Since none of the twenty questions reduced the reliability of the questionnaire (Cronbach's Alpha if item deleted > 0.5 for all questions), no question was deleted. When the participating companies are analyzed; 56.3% of the companies are large enterprises (Number of Employees +250 and Balance Sheet > 500M TL) and 43.7% are SMEs (50 > Number of Employees < 250 and Balance Sheet < 500M TL). When the ownership structure of the firms is analyzed; 77.5% of the firms are domestic, 16.9% are foreign, 4.2% are domestic and foreign partnerships and 1.4% are foundation firms. 54.9% of the companies are from the main industry and 45.1% from the sub-industry.

The responses to the question "What is the most important challenge your organization faces in the transition to renewable energy?" are shown in Table 1.

Table 1. What is the Most İmportant Challenge in the Transition from Fossil Fuels to Renewable Energy?

	What is the most important challenge in the transition from fossil fuels to renewable energy?											
	Not available	OIZ Rules	Difficulties finding a reliable supplier	Difficulty in sharing costs, responsibilities, and profits with the owner in the business we are renting	Facilitating the self-consumption model in terms of legislation will increase unlicensed production capacities. The most important problem is the lack of land for capacity connection permits.	Lack of available land and long-term self-pay financing for investments in SPPs etc.	Difficulties in legal regulations (We are not allowed to install SPP on our roof because the transformer capacity is full in our region)	Return on investment is very slow	Lack of knowledge on renewable energy	Inadequate incentives for renewable energy	Renewable Energy Investments Increase Production Costs	TOTAL
Choose the size of your company?												
Large enterprises	1	1	1	0	1	0	0	14	3	7	12	40
SMEs	0	0	1	1	0	1	1	5	1	13	8	31
TOTAL	1	1	2	1	1	1	1	19	4	20	20	71

The answers to the question "Which of the financial incentives within the scope of renewable energy does your organization benefit from?" are shown in Table 2.

Table 2. Which of the Financial Incentives within the Scope of Renewable Energy does Your Organization Benefit from?

	Which of the financial incentives within the scope of renewable energy does your organization benefit from?												
	Waste Heat Recycling Investment Incentives	Waste Heat Recycling Investment Incentive, Turbine Generator and Wind Blade Manufacturing Investment Incentive, Wind Energy Investment Incentive	No Information	I don't know	Solar Energy SPP Investment Incentive	Solar Energy SPP Investment Incentive, Efficiency Enhancing Project (VAP) Support	None of them	None, electric vehicles and charging stations	None of them can apply for any incentives because we cannot get a SPP permit.	Incentive for Wind Energy WPP Investment	Productivity Improvement Project Support	Investment Incentive	Total
Choose the size of your company?													
Large enterprises	0	1	0	1	10	3	21	0	0	1	2	1	40
SMEs	1	0	1	0	12	0	14	1	1	0	1	0	31
TOTAL	1	1	1	1	22	3	35	1	1	1	3	1	71

“Do you think renewable energy incentives should be a priority for government policies?” All participants answered yes to the question.

Based on the analysis of multiple-choice questions, the analysis of the 20-question Likert type question in the survey was carried out. The highest score in the survey (mean: 4.789; standard deviation: 0.5047) was '4.8. 'The types and amounts of incentives for renewable energy consumption should be increased' is the question. Then ‘4.10. The question 'Transition to renewable energy is an urgent need' (mean. 4.648; standard deviation: 0.5631) is included.

5. Conclusion

According to the results of the survey conducted to assess the effectiveness of renewable energy policies and financial incentives for the manufacturing industry in Turkey, approximately 56% of the surveyed enterprises are large enterprises. The most important challenges faced by their organizations in the transition to RE are as follows; the return on investment is too slow, there are not enough incentives for RE investments, and RE costs increase production costs. Among the financial incentives within the scope of renewable energy, SPP investment incentive is the most utilized by the organizations. Finally, to the question "Do you think that renewable energy incentives should be a priority for government policies?" all respondents answered yes. For the manufacturing industry, investments in green technologies and innovation will increase their competitiveness while also helping them reduce their environmental footprint and facilitate compliance with the European Green Deal.

References

Bianco, M. (2018). Circular Economy and WWTPs: Water Reuse and Biogas Production. In A. Gilardoni (Ed.), *The Italian Water Industry* (237-257): Springer.

Kirchherr, J., Reike, D. & Hekkert, M. (2017). Conceptualizing the Circular Economy: An Analysis of 114 Definitions. Resources, Conservation & Recycling, 127, 221-232. https://doi.org/10.1016/j.resconrec.2017.09.005

Özarslan, B., & Bayraç, H.N. (2018). Türkiye'de Rüzgâr Enerjisinin Ekonomik Büyüme Üzerindeki Etkisi: ARDL Sinir Testi Yaklaşimi. *Akademik Araştırmalar ve Çalışmalar Dergisi* (AKAD).

Pearce, D.W. and R.K. Turner (1990), *Economics of Natural Resources and the Environment*, Hemel Hempstead: Harvester Wheatsheaf.

Su, B., Heshmati, A., Geng, Y. & Yu, X. (2013). A Review of the Circular Economy in China: Moving from Rhetoric to Implementation. *Journal of Cleaner Production*, 43, 215-227. http://dx.doi.org/10.1016/j.jclepro.2012.11.020

Vasileios Rizos, V. R., Katja Tuokko, K. T., & Arno Behrens, A. B. (2017). The Circular Economy: A review of definitions, processes and impacts. *CEPS Research Report No 2017/8*, April 2017.

L. Cronbach, Coefficient alpha and the internal structure of tests, *Psychometrika*, 16 (1951), 297–334.

R. DeVellis, *Scale Development: Theory and Applications: Theory and Application*, Sage, Thousand Oaks, CA, 2003.

K. Jöreskog and D. Sörbom, *LISREL 8 User's Reference Guide; PRELIS 2 User's Reference Guide*, Scientific Software International, Chicago, IL, 1993.

K.A. Bollen, *Structural Equations with Latent Variables*, John Wiley & Sons, New York, NY, 1989.

K. Schermelleh-Engel, H. Moosbrugger, and H. Müller, Evaluating the fit of Structural Equation Models: Test of Significance and Descriptive Goodness-of-fit Measures, *Methods Psychol*. Res.Online 8(2) (2003), 23–74.

L. Hu and P.M. Bentler, Cutoff criteria for fit indexes in covariance structure analysis: Conventional Criteria versus New Alternatives, Struct. Equ. Model.: *A Multidiscip*. J. 6(1) (1999), 1–55. doi:10.1080/10705519909540118

Public Financing Issues surrounding Civil Society Organizations within the context of Disasters Management

Aslıhan Özel Özer[1] **Gökçe Kafkas**[2]

Abstract

Non-governmental organizations (NGOs) are organizations that do not exist within official institutions and carry out activities independently; operate for political, social, cultural, legal, and environmental issues through lobbying, persuasion, and actions; accept their employees and members voluntarily; are non-profit and meet their income through donations and/or membership payments, play an important role in the disaster management process in our country. Within the framework of this role, NGOs need to have sufficient financing for disaster management. Henceforth the study aims to evaluate the public support provided to NGOs within the scope of the concept of tax expenditures in the specific case of AKUT, which is the organization that provides intermediate-level search and rescue team standards for Turkey by the International Search and Rescue Advisory Group (INSARAG), the organization that sets international standards in the field of search and rescue teams in the world.

Keywords: Disaster Management, Tax Incentives, Tax
JEL Codes: H29, H84

1. Introduction

Disaster management is planned to ensure coordination and protect people's lives, property, and the environment during emergencies such as natural disasters or human-made crises. In this process, state institutions, non-governmental organizations, and other stakeholders come together and conduct joint activities. In the disaster management process, CSOs usually conduct various relief activities in addition to search and rescue activities and help those in need. However, it cannot be not easy to provide sufficient financing for these activities. Funding for civil society organizations comes from diverse sources other than voluntary donations. Government agencies provide funding to support the activities of CSOs through different methods such as direct grants, project-based funding, or tax exemptions. Our study aims to evaluate the tax incentives granted to NGOs within the framework of the AKUT Association and Foundation in the light of the Turkish tax legislation and the answers given to the questions asked to AKUT officials and to make some suggestions.

2. CSOs and Financing Problem

To be able to comprehend those organizations that constitute a third sector other than the public and private sectors, standardized concepts are used to define civil society, voluntary organizations, non-governmental organizations (NGOs), non-governmental organizations

[1] Assist. Prof. Ph.D, Manisa Celal Bayar University, Ahmetli Vocational College of Social Sciences, Accounting and Tax Applications Program, ORCID: 0000-0003-4827-2702, aslihanozel@yahoo.com, aslihan.ozel@cbu.edu.tr
[2] Lecturer, Ph.D., Manisa Celal Bayar University, Ahmetli Vocational College of Social Sciences, Office Management and Executive Assistant Program, ORCID: 0000-0001-5212-7925, gokce.kafkas@cbu.edu.tr

(NGOs), non-governmental organizations (NGOs), aid organizations, tax-exempt organizations, charities, third sector organizations, independent sector, non-profit organizations, and social sector organizations. These conceptual differences may also vary by country and the scope of civil society organizations may vary within each concept (Kalkınma Sürecinde Sivil Toplum Kuruluşları Özel İhtisas Komisyonu Raporu, 2018: 4-5).

The relevant Turkish legislation concerning the problematized matter is firstly regulated in Article 33 of the 1982 Constitution under the title of Freedom of Association: "Everyone has the freedom to form associations without prior authorization, and the freedom to become a member or to withdraw from membership." The provisions of this article also apply to foundations.

Mainly, the regulations are included in Articles 56-100 of the Turkish Civil Code No. 4721 and Law No. 5253 on Associations. Regulations on Foundations are also found in Articles 100-117 of the same Law and Law No. 5737 on Foundations. According to Law No. 5737 on Foundations, the institution responsible for the management, supervision, control, and representation of foundations in Turkey is the General Directorate of Foundations.

In 2003, the Department of Associations was established as the main service unit within the Ministry of Interior to conduct affairs and procedures related to associations. The Department of Associations was transformed into the Directorate General of Civil Society Relations by the Presidential Decree No. 17 published in the Official Gazette No. 30534 dated 13.09.2018.

2.1. AKUT's Foundation and Development

In 1994, a group of mountaineers who knew the mountains well but had limited knowledge about search and rescue came together and founded AKUT in 1995. The association completed its official establishment on March 14, 1996, under the name "AKUT Search and Rescue Association". Since 1999, AKUT has been a member of INSARAG, the Search and Rescue Advisory Board under the umbrella of the United Nations. According to INSARAG standards, AKUT has been classified as a "Heavy Search and Rescue Team" and a "Medium Search and Rescue Team", and in 2011, AKUT received this certificate in the "Classified Medium Level Team" group. In 2018, AKUT completed the EU ModEX exercise, which took place at the same time as the "INSARAG" re-evaluation exam held in Montana, Bulgaria, and became the first urban search and rescue team from Turkey to enter the European Civil Protection Mechanism (EUCPM).

AKUT is primarily financed by voluntary donations In addition to donations, there are also trainings (Disaster Preparedness and Search and Rescue Training, Emergency Management Systems), humanitarian aid, drills (Evacuation Drills, Fire Drills, Emergency Drill), seminars (Earthquake Awareness Seminar, Basic Disaster Awareness Seminar, Personal Protective Equipment Seminar, Adaptation to Nature Seminar) and certificates or invitations, in-kind donations and income from the "Basic Disaster Awareness" booklet (https://akutvakfi.org.tr/nasil-kurumsal-destek-olabilirim/) (Erişim tarihi: 06.07.2023).

3. Tax Incentives Provided to Public Benefit Associations

3.1. Concept of Public Interest and Acquisition of Public Interest Status

Public benefit status is essentially a matter of fiscal regulation. The incentive for a public benefit activity can only come from taxation schemes that confer privileges within the legal

framework and, in some cases, from various forms of governmental grants provided that there is a direct state benefit. As far as the exchange of these benefits is concerned, public benefit organizations are subject to strict legal scrutiny to ensure that they use their assets for the public good (TÜSEV, 2004: 4).

According to Article 48 of the Regulation on Associations, associations working in the public interest are determined by the proposal of the Ministry and the decision of the President of the Republic upon the opinion of the Ministry of Treasury and Finance and the relevant ministries, if any. For an association to be considered a public benefit association, it must have been in operation for at least one year, and the purpose of the association and the activities it undertakes to realize this purpose must be of a nature and extent that will yield results beneficial to the society.

3.2. Evaluation of Tax Incentives Provided to Public Benefit Associations

Associations granted the status of public benefit association are granted certain facilities by the Tax Laws, which are explained below.

3.2.1. Value Added Tax Exemption

According to Article 17 of the Value Added Tax Law No. 3065, "Cultural and Educational" services and "Social Purpose" goods deliveries and services rendered by public benefit associations are exempt from value-added tax.

3.2.2. Inheritance and Gift Tax Exemption

Article 3(a) of Law No. 7338 on Inheritance and Gift Tax regulating exemptions stipulates that public benefit associations are exempt from inheritance and gift tax (Article 3-a of Law No. 7338 on Inheritance and Gift Tax).

3.2.3. Real Estate Tax

Buildings belonging to public benefit associations are permanently exempt from building tax according to Article 4/e of the Real Estate Tax Law No. 1319 and from land tax under Article 14/c of the Real Estate Tax Law No. 1319, provided that they are not rented out and are not owned by or allocated to enterprises subject to Corporate Tax (Real Estate Tax Law No. 1319, art.4/e-m.14/c).

3.2.4. Stamp Duty

According to Article 9 of the Stamp duty Law No. 488 and paragraph 17 of the section titled "V. Papers related to institutions" of the table numbered (2) annexed to the Law, which specifies the papers exempted from stamp duty, public benefit associations are exempt from stamp duty in terms of the papers issued in all kinds of transactions and the stamp duty must be paid by them.

3.2.5. Fee Exception

The fourth part of Law No. 492 on Fees regulates Land Registry and Cadastre Fees, and Article 59 titled "Transactions Exempted from Fees" includes the exemption related to

associations. Pursuant to Article 59/b of the relevant Law, the transactions requiring registration and annotation of the real estates and other real rights to be acquired by the associations beneficial to public interests and the transactions requiring registration and annotation of the real estates and other real rights to be acquired by the facilities belonging to these associations and the facilities and their abandonments are exempted from the fee.

The mentioned exemption provision is exclusive to the real estate acquisition and registration transactions and other transactions requiring annotation of associations that meet the conditions stipulated in the Law, and do not cover the sale and transfer of real estate and other real rights of the aforementioned associations (HK No. 492, Art. 59/b)

3.2.6. Deduction of Donations and Aids to Public Benefit Associations

The regulations regarding donations and grants to public benefit associations and foundations granted tax exemption by the President are as follows:

3.2.6.1. Deduction of Donations and Aids to Public Benefit Associations under Income Tax Law

Donations and grants made by income taxpayers to public benefit associations and foundations granted tax exemption by the President of the Republic, within the conditions specified in Income Tax Law No. 193, can be deducted in determining the income tax base. In this context, pursuant to Article 89/4 of the Income Tax Law, donations and aids made to public benefit associations and foundations granted tax exemption by the President of the Republic in return for a receipt not exceeding 5% (10% for priority regions for development) of the income to be declared, can be deducted from the income to be declared in the income tax return in determining the income tax base (Income Tax Law No. 193, Article 89/4).

3.2.6.2. Deduction of Donations and Aids to Public Benefit Associations in terms of Corporate Tax Law

Donations and grants made by corporate taxpayers to public benefit associations and foundations granted tax exemption by the President of the Republic, within the conditions specified in the Corporation Tax Law No. 5520, can be deducted in determining the corporate tax base. In this context, pursuant to Article 10/1-c of the Corporate Tax Law, up to 5% of the total amount of donations and grants made to public benefit associations and foundations granted tax exemption by the President of the Republic against receipt can be deducted from the corporate income in determining the corporate tax base, provided that it is shown separately on the corporate tax return (KVK No. 5520, art.10/1-c).

4. The Case of AKUT

Within the scope of our study, the following 6 questions were asked to 33 provincial team leaders and AKUT Foundation President Ali Nasuh Mahruki.

1. What are the sources of income of your association/foundation other than donations?

2. Are you aware of public incentives related to the association/foundation? If yes, which public incentives do you benefit from?

3. Do you think that public incentive- forces you to make concessions?

4. Are you aware of tax incentives related to the association/foundation?

5. Are you aware of the incentives granted by the Ministry of Foreign Affairs, and the Presidency of the European Union for your association/foundation?

6. Would you like public incentives to be increased? If yes, which of the following do you think public support should be?

A. In-kind grants (building, machinery, tools, equipment)

B. Logistical incentives (tax incentives for vehicle lease-purchases, donations, etc.…)

C. Tax reductions or exemptions in purchase and sale transactions

D. Clarification of relevant legislation

E. Tax exemptions

F. Other / specify.

Questions were submitted through AKUT Association headquarters and Ali Nasuh Mahruki, first in consultation and then by e-mail.

5. Conclusion

Within the scope of our study, the questions sent to 33 provincial team leaders and AKUT Foundation President Ali Nasuh Mahruki could not be answered sufficiently due to various constraints.

In light of the responses received, it is seen that the equipment and training sales realized through AKUT Training and Consultancy Ltd., which is a subsidiary of AKUT Foundation constitute the income sources of the foundation apart from donations. Since the foundation does not have the status of a 'tax-exempt foundation', it was stated that they cannot benefit from support and incentives. It was reported that they were aware of the European Union's support related to the foundation. In response to question 6, they underlined that they think that public incentives should be provided within the framework of in-kind incentives, logistical support, and tax exemptions, assuming that they are in a position to benefit from public incentives.

When the answers given to the questions asked about the AKUT association are evaluated; it is affirmed that one of the public incentives of the association, other than donations, is related to the buildings where they are located. It is observed that the headquarters of the general association are used by the central government, while the association buildings in the provinces are donated by local governments. It is also expressed that they are aware of public support since they have the status of a public benefit association, but they are not aware of the support of the European Union Presidency. In response to the question "Would you like to see more public support in particular?", positive answers were given within the framework of the demand for in-kind and logistical support.

References

AKUT Vakfı. Nasıl Kurumsal Destek Olabilirim?, https://akutvakfi.org.tr/nasil-kurumsal-destek-olabilirim/, (06.07.2023)

Cumhurbaşkanlığı Kararnamesi. (2018, 13 Eylül). *Resmi Gazete* (Sayı No: 30534), https://www.resmigazete.gov.tr/eskiler/2018/09/20180913.htm, (02.07.2023).

Damga Vergisi Kanunu. (1964, 11 Temmuz). *Resmi Gazete* (Sayı No: 11751), https://www.mevzuat.gov.tr/mevzuatmetin/1.5.488.pdf, (12.07.2023).

Dernekler Kanunu. (2004, 23 Kasım). *Resmi Gazete* (Sayı No: 25649), https://www.mevzuat.gov.tr/mevzuatmetin/1.5.5253.pdf, (06.07.2023).

Dernekler Yönetmeliği. (2005, 31 Mart). *Resmi Gazete* (Sayı No: 13576), https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=8038&MevzuatTur=7&MevzuatTertip=5, (08.07.2023).

Emlak Vergisi Kanunu. (1970, 11 Ağustos). *Resmi Gazete* (Sayı No: 10231). https://www.mevzuat.gov.tr/mevzuatmetin/1.5.1319.pdf, (11.07.2023).

Gelir Vergisi Kanunu. (1961, 6 Ocak). *Resmi Gazete* (Sayı No:10700), https://www.mevzuat.gov.tr/mevzuatmetin/1.4.193.pdf, (15.07.2023).

Harçlar Kanunu. (1964, 17 Temmuz). *Resmi Gazete* (Sayı No: 11756), https://www.mevzuat.gov.tr/mevzuatmetin/1.5.492.pdf, (13.07.2023).

Kalkınma Bakanlığı. (2018). Kalkınma Sürecinde Sivil Toplum Kuruluşları. Özel İhtisas Komisyonu Raporu Yayın No: KB: 3020 - ÖİK: 801. Ankara.

Kanun Hükmünde Kararname. (2018, 9 Temmuz). *Resmi Gazete* (Sayı No: 30473), https://www.resmigazete.gov.tr/eskiler/2018/07/20180709M3.htm, (09.07.2023).

Katma Değer Vergisi Kanunu. (1984, 2 Kasım). *Resmi Gazete* (Sayı No: 18563), https://www.mevzuat.gov.tr/mevzuatmetin/1.5.3065.pdf, (10.07.2023).

Kurumlar Vergisi Kanunu. (2006, 21 Haziran). *Resmi Gazete* (Sayı No: 26205), https://www.mevzuat.gov.tr/mevzuatmetin/1.5.5520.pdf, (15.07.2023)

Türk Medeni Kanunu. (2001, 8 Aralık). *Resmi Gazete* (Sayı No: 24607), https://www.mevzuat.gov.tr/mevzuatmetin/1.5.4721.pdf, (03.07.2023).

Türkiye Cumhuriyeti Anayasası. (1982, 9 Kasım). *Resmi Gazete* (Sayı No: 17863), https://www.mevzuat.gov.tr/mevzuatmetin/1.5.2709.pdf, (02.07.2023).

Türkiye Üçüncü Sektör Vakfı. (2004). Dernek ve Vakıflara İlişkin Karşılaştırmalı Kamu Yararı Raporu. TÜSEV Yayın No: 31. İstanbul.

Vakıflar Kanunu. (2008, 27 Şubat). *Resmi Gazete* (Sayı No: 26800). Erişim adresi: https://www.mevzuat.gov.tr/mevzuatmetin/1.5.5737.pdf, (06.07.2023).

Veraset ve İntikal Vergisi Kanunu. (1959, 15 Haziran). *Resmi Gazete* (Sayı No: 10231), https://www.mevzuat.gov.tr/mevzuatmetin/1.3.7338.pdf, (11.07.2023).

Goals, Objectives and Realities: Disaster Management Scorecard for Public Institutions

Emine Yöney[1] **Binhan Elif Yılmaz**[2]

Abstract

The disaster management strategies of organisations are contingent upon their institutional structure and capability. Since 2009, disaster management activities in Turkey have been consolidated under a unified structure, with the Disaster and Emergency Management Presidency designated as the responsible institution. This study employs a document scanning technique, one of many qualitative research methods, to evaluate the plans, programmes and performances of the public institutions positioned as "Main Solution Partner" in the execution of the Turkey Disaster Response Plan. The disaster management records of the institutions exhibit several deficiencies according to this study. These include insufficient data sharing, a need to update objectives, targets and performance indicators, as well as inadequacies in cooperation and coordination. The priority areas that need to be addressed by the institutions to resolve these issues are risk analysis, disaster plans, effective implementation of disaster plans, training and awareness-raising, cooperation, and optimization of budgets.

Keywords: Disaster Management, Performance Evaluation, Institutional Capacity.
JEL Code: H11, H12, H84

1. Introduction

Due to Turkey's geographical and geological features, it is susceptible to continual natural disasters, requiring actions to lessen their negative effects. Hence, it is crucial for public institutions to strategically prepare and implement pre-disaster risk reduction measures, promptly respond during crises, and carry out post-disaster recovery and reconstruction efforts in alignment with contemporary disaster management techniques. The approach taken by institutions to disaster management varies depending on their organisational structure and capacity. Such organisations undertake various activities, including the development of disaster scenarios for pre-disaster preparation, taking measures to mitigate the impacts of disasters, as well as conducting disaster management training and formulating management plans. In Turkey, these tasks are assigned to the Disaster and Emergency Management Authority (AFAD), which operates under the Turkish Disaster Response Plan (TDRP).

TDRP is a planning document formulated to address natural and technological disasters, epidemics, terrorist attacks, and other comparable emergencies that could potentially arise in the country. Public institutions are mandated to prepare for their roles and obligations under the TDRP framework, which categorises institutions into two types, namely "Main Solution Partners" and "Support Solution Partners".

TDRP is a planning document formulated to address natural and technological disasters, epidemics, terrorist attacks, and other comparable emergencies that could potentially arise in the country. Public institutions are mandated to prepare for their roles and obligations under the TDRP framework, which categorises institutions into two types, namely "Main Solution Partners" and "Support Solution Partners".

[1] Assist. Prof. Ph.D, Harran University, ORCID: 0000-0002-9370-6584, emineyoney@harran.edu.tr
[2] Prof. Ph.D, Istanbul University, ORCID: 0000-0002-7939-7818, binhan@istanbul.edu.tr

This study focuses on institutions referred to as "Main Solution Partners" within the TDRP framework. The study utilises document analysis as a qualitative research method. In this context, we analysed the relevant documents from all of the main institutions involved in the solution.

2. Disaster and Emergency Management Authority (AFAD)

The assessment of AFAD relied on the Annual Report for 2021 and 2022, the Strategic Plan for 2019-2023, and the Performance Programme Report for 2022. From these documents, the following SWOT analysis for AFAD was derived:

Table 1: SWOT Analysis of AFAD

Strengths	Weaknesses	Opportunities	Threats
• AFAD is a prominent organization engaged in combating natural disasters in Turkey. • AFAD boasts advanced technological infrastructure and training programmes. • Additionally, it is provisioned with emergency response teams, search and rescue teams, and a host of other sophisticated equipment. • This ensures that AFAD can promptly and efficiently respond to disasters across Turkey.	• AFAD's staffing is inadequate for an organisation covering a vast region of Turkey. • The organisational structure of AFAD can impede prompt and efficient decision-making in certain instances. • Additionally, AFAD's budget may not be enough for the constant renewal and updating of emergency response equipment.	• AFAD could provide assistance during natural disasters overseas. • This could be achieved through collaborative efforts with institutions and NGOs in developing a more robust and efficient disaster response network. • Following technological advancements, AFAD could also invest in cutting-edge emergency response equipment.	• Turkey's geographical location makes it prone to frequent natural disasters. • AFAD responds to a variety of severe natural disasters, which may hinder organisation performance if personnel and equipment are inadequate. • The organisation's capacity to respond to disasters may be restricted by external factors such as economic crises, which could negatively impact AFAD's budget.

The INSARAG (International Search and Rescue Advisory Group) criteria were employed to evaluate the SWOT analysis. The organisation should enhance its disaster preparedness and management features. Its equipment and hardware criteria have been successful. Moreover, the team's performance, operational efficiency and logistic support are commendable. The organisation has been successful in terms of cooperation and coordination.

Upon analysis of the performance indicators for the Institution in 2021, a percentage performance indicator index was generated. The Institution scored 77.75 out of 100 on the success index derived from this analysis.

Following the INSARAG criteria assessment, AFAD was found to have varying levels of achievement in factors that include capacity building, emergency management, coordination and cooperation, sustainability and financing, equipment and materials, personnel training, exercises and learning, technical standards and procedures, search and rescue, logistic support, and disaster risk reduction.

Upon conducting an analysis through SWOT, performance indicators and INSARAG criteria, it may be concluded that AFAD must enhance its equipment and material supplies, increase the number of activities dedicated to reducing disaster risks, and improve volunteer training.

3. Turkish Red Crescent

The study revealed the absence of a consistent performance evaluation scheme for emergency disaster response. Performance can be measured using indicators like the number of vehicles and equipment, the time taken for disaster and first response, the rate of delivering on-site services, the time taken for distributing aid, and the efficiency in managing resources.

4. Ministry of Interior

As a policy recommendation for the Ministry of the Interior, it is crucial to raise awareness of the significance of the issue and allocate additional resources towards disaster preparedness. It is imperative to increase the portion of the Ministry's investments allocated to disaster awareness-raising initiatives in relation to the total project expenditures.

5. The Republic of Turkiye Directorate of Communications

No information was found regarding the specific definitions of the communication and coordination tasks of the Disaster Communication Group under the Presidency within the context of TDRP, nor the objectives and their respective sub-divisions. However, policy recommendations can be made based on the Presidency's role as the main partner in the Communication Group within TDRP. These recommendations include the establishment of a digital platform for disaster communication, data analysis and management in data centres, development of mobile applications, digital emergency meetings, and digital disaster training.

6. Ministry of Transport and Infrastructure

Upon analysis of the 2019-2023 Strategic Plan of the Ministry, it is apparent that the targets for mitigating disasters have been revised. There is no indication as to whether timing tests and drills have been carried out in order to achieve the targets set in performance programmes for the repair of transport infrastructure damaged by disasters. Similarly, no information is available regarding equipment renewal and disaster training activities included in the performance programmes.

There are deficiencies in reporting on some issues. To address these, a reporting policy could be implemented to ensure preparedness against disasters by incorporating disaster scenarios and emergency response plans into the Ministry's performance programmes. Regular drills should also be held. In addition, it is recommended to establish a target for renewing essential equipment for rapid response following transport infrastructure damage. Furthermore, precise steps should be taken to achieve this, and the outcomes ought to be reported as performance indicators.

7. Ministry of Energy and Natural Resources

In the Ministry's annual report (2022), the objectives for enhancing institutional capacity were presented. Upon analysing the data, it appears that the Ministry's efforts to increase disaster and emergency management capacity have been fruitful. Nevertheless, evaluating the effectiveness of these activities necessitates performance measurement and data analysis.

8. Ministry of Environment, Urbanisation and Climate Change

In the Medium Term Programme (2024-2026), the previously excluded title "Disaster Management" was introduced for the first time, attributed to the earthquakes in Kahramanmaraş and Hatay. In the MTP, the aim is for urban economies to contribute to sustainable growth by preventing the accumulation of people and production factors in areas with high disaster risk.

As per the Ministry's Strategic Plan (2019-2023), urban regeneration works were commenced in 81 provinces. However, the data indicates that the progress of urban regeneration is below par. In order to enhance the effectiveness of the urban regeneration process, setting of prioritised targets and implementing more effective measures is crucial.

9. Ministry of Health

One of the three strategic aims outlined in the 2019-2023 Strategic Plan of the Ministry of Health concerns the management of disasters. The shortage of specialised service centres and insufficient level of intensive care units are pressing issues demanding immediate attention. To address these challenges, conducting regional analyses and expanding specialised services may enhance the delivery of effective and high-quality services.

10. Ministry of Family and Social Services

The Ministry has shared documents that identify psychosocial support services as targets and provide information on their availability during disasters. To enhance the effectiveness of these services, further studies are necessary for their development, strengthening and wider dissemination. Coordination of services is crucial and can be achieved by raising awareness and strengthening training programmes in the community.

11. Ministry of Agriculture and Forestry

The Ministry for Natural Disasters' activities require more detailed inclusion in the strategic plan, annual report, and performance program. Evaluation of activities lacking performance indicators is unreasonable.

12. Ministry of Treasury and Finance

There is currently no available data regarding the activities performed by the ministry on disaster management, their impact, success rate, which regions they have been implemented in, or which action plan has been applied. Therefore, policy recommendations such as disaster insurance, emergency planning, education, and awareness campaigns can be proposed regarding the situation.

13. Conclusion

This study analyses the objectives, targets, and performance of public institutions operating in Turkey concerning natural disasters. Specifically, we examine 11 "Main Solution Partner" institutions listed in the Turkish Disaster Response Plan, assessing their preparedness and institutional capacities for natural disasters based on their current strategic plans, performance reports, and performance programmes.

The study highlights that there are variations in disaster management capabilities among public institutions in Turkey. Whilst some institutions are well-equipped to handle disasters and effectively respond to them, others require improvement in this aspect. Therefore, surveys conducted by public institutions on their disaster readiness level are highly valuable, yet their preparedness level remains inadequate in terms of efficacy. Notably, earthquakes and other recent natural disasters have highlighted the need for additional measures to enhance the level of readiness.

In a nation such as Turkey, where the danger of earthquakes is substantial, it is imperative to enhance the collaboration and coordination among the responsible institutions. Each organisation in the role of the primary solution partner should reassess the following steps to counter natural disasters: risk analysis, disaster planning, disaster plan efficacy, training and awareness, coordination, and funding.

References

AFAD. (2019). AFAD Stratejik Plan 2019-2023. Güncellenmiş versiyon (2021). *T.C. İçişleri Bakanlığı Afet ve Acil Durum Yönetimi Başkanlığı. Ankara. https://www.afad.gov.tr/afad-baskanligi-stratejik-plani, (21.05.2023).*

AFAD. (t.y.). 2021 İdare Faaliyet Raporu. https://www.afad.gov.tr/kurumsal-raporlar, *(21.05.2023).*

AFAD. (t.y.). 2022 İdare Faaliyet Raporu. https://www.afad.gov.tr/kurumsal-raporlar, *(21.05.2023).*

AFAD. (t.y.). 2022 Yılı Performans Programı. https://www.afad.gov.tr/kurumsal-raporlar, *(21.05.2023).*

T.C. Aile ve Sosyal Hizmetler Bakanlığı. (2022). 2022 Yılı Performans Programı. https://www.aile.gov.tr/media/97614/2022-performans-programi.pdf, *(10.08.2023).*

T.C. Aile ve Sosyal Hizmetler Bakanlığı. (2022). 2022-2026 Stratejik Planı. *T.C. Aile ve Sosyal Hizmetler Bakanlığı Strateji Geliştirme Başkanlığı.* Ankara. https://www.aile.gov.tr/media/97044/stratejik-plan.pdf, *(09.08.2023).*

T.C. Aile ve Sosyal Hizmetler Bakanlığı. (t.y.). 2022 Yılı Faaliyet Raporu. Strateji *Geliştirme Başkanlığı.* https://www.aile.gov.tr/media/129482/ashb_2022-idare-faaliyet-raporu.pdf, *(09.08.2023).*

T.C. Cumhurbaşkanlığı İletişim Başkanlığı. (2022). 2020-2024 Stratejik Plan. Güncellenmiş Versiyon 2022. *Strateji Geliştirme Dairesi Başkanlığı.* Ankara. https://www.iletisim.gov.tr/images/uploads/dosyalar/%C4%B0leti%C5%9Fim_Ba%C5%9Fkanl%C4%B1%C4%9F%C4%B1_2020-2024_Stratejik_Plan%C4%B1_%28G%C3%BCn cellenen%29.pdf, *(18.08.2023).*

T.C. Cumhurbaşkanlığı İletişim Başkanlığı. (t.y.). 2021 Yılı Faaliyet Raporu. *Strateji Geliştirme Dairesi Başkanlığı.* Ankara. https://www.iletisim.gov.tr/images/uploads/dosyalar/%C4%B0leti%C5%9Fim_Ba%C5%9Fkanl%C4%B1%C4%9F%C4%B1_2021_Y%C4%B1l%C4%B1_I%CC%87dare_Faaliyet_Raporu.pdf, *(18.08.2023).*

T.C. Cumhurbaşkanlığı İletişim Başkanlığı. (t.y.). Performans Programı 2022. https://www.iletisim.gov.tr/images/uploads/dosyalar/performans-programi-2022.pdf, *(18.08.2023).*

T.C. Cumhurbaşkanlığı Strateji ve Bütçe Başkanlığı (2023). Orta Vadeli Program (2024-2026). https://www.sbb.gov.tr/wp-content/uploads/2023/09/Orta-Vadeli-Program_2024-2026.pdf, (7.10.2023)

T.C. Çevre ve Şehircilik Bakanlığı. (t.y.). 2019-2023 Stratejik Plan. https://webdosya.csb.gov.tr/db/strateji/icerikler/csb_2019-2023-stratej-kplan-11-20191108155418.pdf, *(01.08.2023).*

T.C. Çevre, Şehircilik ve İklim Değişikliği Bakanlığı. (2023). 2022 Yılı İdare Faaliyet Raporu. https://webdosya.csb.gov.tr/db/strateji/icerikler/csidb-2022-yili-idare-faaliyet-raporu-20230322085624.pdf, *(01.08.2023).*

T.C. Çevre, Şehircilik ve İklim Değişikliği Bakanlığı. (t.y.). 2023 Yılı Performans Programı. https://webdosya.csb.gov.tr/db/strateji/icerikler/2023-yili-performans-programi-20230131125229.pdf, *(01.08.2023).*

T.C. Enerji ve Tabii Kaynaklar Bakanlığı. (2023). 2022 Faaliyet Raporu. https://enerji.gov.tr//Media/Dizin/SGB/tr/Faaliyet_Raporlari/2022/ETKB2022FR.pdf, *(10.09.2023).*

T.C. Enerji ve Tabii Kaynaklar Bakanlığı. (t.y.). *2019-2023 Stratejik Planı.* http://www.sp.gov.tr/tr/stratejik-plan/s/1971/Enerji+ve+Tabii+Kaynaklar+Bakanligi+2019-2023, *(26.05.2023).*

T.C. Enerji ve Tabii Kaynaklar Bakanlığı. (t.y). 2023 Performans Programı. https://enerji.gov.tr//Media/Dizin/SGB/tr/Performans_Programlari/2023PP.pdf, *(10.09.2023).*

T.C. İçişleri Bakanlığı. (t.y.). 2019-2023 Stratejik Planı. https://www.icisleri.gov.tr/kurumlar/icisleri.gov.tr/IcSite/strateji/ŞEREF/Stratejik-Yonetim/ICISLERI-BAKANLIGI-2019_2023-STRATEJIK-PLANI.pdf, *(13.08.2023).*

T.C. İçişleri Bakanlığı. (t.y.). 2021 Yılı İdare Faaliyet Raporu. *T.C. İçişleri Bakanlığı* Strateji *Geliştirme Başkanlığı.* https://www.icisleri.gov.tr/kurumlar/icisleri.gov.tr/IcSite/strateji/raporlar/faaliyet_raporlari/2021-YILI-IDARE-FAALIYET-RAPORU.pdf, *(13.08.2023).*

T.C. İçişleri Bakanlığı. (t.y.). 2023 Yılı Performans Programı. *T.C. İçişleri Bakanlığı* Strateji *Geliştirme Başkanlığı.* https://www.icisleri.gov.tr/kurumlar/icisleri.gov.tr/IcSite/strateji/performans-programi/2023_performans_programi.pdf, *(13.08.2023).*

T.C. Sağlık Bakanlığı. (2022). 2019-2023 Stratejik Planı (Güncellenmiş Versiyon 2022). *T.C. Sağlık Bakanlığı Yayın No: 1223.* https://sgb.saglik.gov.tr/Eklenti/35748/0/tc-saglik-bakanligi-2019-2023-stratejik-plani-guncellenmis-versiyonupdf.pdf, *(11.09.2023).*

T.C. Sağlık Bakanlığı. (t.y.). 2021 Faaliyet Raporu. https://sgb.saglik.gov.tr/Eklenti/42666/0/2021-faaliyet-raporupdf.pdf, *(11.09.2023).*

T.C. Sağlık Bakanlığı. (t.y.). 2022 Yılı Performans Programı. https://sgb.saglik.gov.tr/Eklenti/ 42482/0/2022-yili-performans-programi-31012022pdf.pdf?_tag1=9E7D668EA1139B97B47F3F9462006AA0DCE00A11, *(11.09.2023).*

T.C. Tarım ve Orman Bakanlığı. (2022). 2019-2023 Stratejik Plan. Güncellenmiş Versiyon (2022). *T.C. Tarım ve Orman Bakanlığı, Strateji Geliştirme Başkanlığı.* https://www.tarimorman.gov.tr/SGB/Belgeler/stratejikplan.pdf, (14.07.2023).

T.C. Tarım ve Orman Bakanlığı. (2023). 2022 İdare Faaliyet Raporu. Ankara. https://www.tarimorman.gov.tr/SGB/Belgeler/Bakanl%C4%B1k_Faaliyet_Raporlar%C4%B1/TOB%202022%20YILI%20I%CC%87DARE%20FAALI%CC%87YET%20RAPORU.pdf, (14.07.2023).

T.C. Ulaştırma ve Altyapı Bakanlığı. (2022). 2021 Yılı Ulaştırma ve Altyapı Bakanlığı Faaliyet Raporu. https://www.uab.gov.tr/uploads/announcements/ulastirma-ve-altyapi-bakanligi-2021-yili-faaliyet/2021-yili-uab-faaliyet-raporu.pdf, (21.07.2023).

T.C. Ulaştırma ve Altyapı Bakanlığı. (t.y.). 2019-2023 Stratejik Plan. https://www.uab.gov.tr/uploads/pages/stratejik-yonetim/uab-2019-2023-stratejik-plani-16-10-2019.pdf, (21.07.2023).

T.C. Ulaştırma ve Altyapı Bakanlığı. (t.y.). 2022 Yılı Performans Programı. https://www.uab.gov.tr/uploads/pages/yatirim-performans-programlari/performans-programi-2022.pdf, (21.07.2023).

Türk Kızılay. (2021). 2021 Yıl Sonu Değerlendirme Toplantısı. İstanbul. https://www.kizilay.org.tr/Upload/Dokuman/Dosya/2021_yilsonu_v3_28aralik_son-29-12-2021-09503974.pdf, *(08.07.2023).*

Türk Kızılay. (2022). 2021 Faaliyet Raporu, https://www.kizilay.org.tr/Upload/Dokuman/Dosya/turk-kizilay-2021-faaliyet-raporu-11-05-2022-98842565.pdf, *(26.05.2023).*

Türk Kızılay. (2023). 2022 Faaliyet Raporu. https://www.kizilay.org.tr/Upload/Dokuman/Dosya/kizilay-2022-dernek-faaliyet-raporu-web-934mb--06072023-06-07-2023-40357192.pdf, *(23.09.2023).*

Türk Kızılay. (t.y.). 2021-2030 Stratejik Plan. https://www.kizilay.org.tr/Upload/Editor/files/T%C3%BCrk%20K%C4%B1z%C4%B1lay%202021-2030%20Stratejik%20Plan%C4%B1-T%C3%BCrk%C3%A7e.pdf, *(09.07.2023).*

Türk Kızılay. (t.y.). 2022 Yılı Faaliyet Raporu. https://www.kizilay.org.tr/Upload/Dokuman/Dosya/kizilay-2022-dernek-faaliyet-raporu-web-934mb--06072023-06-07-2023-40357192.pdf, *(08.07.2023).*

Cash Wage Support as a Fiscal Tool in The Fight Against Natural Disasters in Türkiye

Kemal Çelik[1]

Abstract

In the first quarter of the 21st century, Turkey faced two major disasters that affected millions of people. The first of these disasters is the Covid-19 pandemic, which is considered a biological disaster. The second is an earthquake disaster that occurred on 6 February 2023. Turkey has implemented a series of financial and economic measures to mitigate the adverse effects of these two disasters in various fields. One of these measures is the implementation of the cash wage support, which was first implemented across Turkey in April 2020 in the aftermath of the Covid-19 pandemic, and then reintroduced in February 2023 in order to mitigate the effects of the earthquake on economic and social life only in the ten provinces affected by the earthquake centered in Kahramanmaraş, where a state of emergency was declared. In this context, the application of cash wage support as a financial instrument in combating disaster is the subject of this study. In this study, the concept of cash wage support, its importance, its purpose, who can benefit from it and for how long, how many people have benefited from this opportunity to date, how much payment has been made to those who deserve it, and what are the deficiencies and weaknesses of the application have been tried to be explained by taking into account the relevant legislation and ministerial statements and by making use of official statistics, bulletins and reports published by the Turkish Employment Agency, which is responsible for the implementation of the cash wage support application, and data obtained from other secondary sources. In the conclusion part of the study, although it is criticised that the cash wage support provided to employees who meet certain conditions is far below a minimum amount that is worthy of human dignity, it is concluded that cash wage support makes an important contribution to the survival of wage earners who have been unemployed for a certain period of time during Covid-19 and the earthquake disaster. On the other hand, in these periods of inflationary process, the cash wage support amounts should be updated again rapidly. In the study, it is suggested that more inclusive, income-increasing and permanent measures should be put into practice, taking into account that these and similar fiscal measures are temporary practices in combating disasters.

Keywords: Disaster, Covid-19, Kahramanmaraş Earthquake, Financial Measure, Cash Wage Support
JEL Codes: E62, H53, J65

1. Introduction

Throughout history, humanity has been confronted with numerous events that have affected the quality of life, social life and security at different levels. It is inevitable that disasters occurring worldwide will seriously affect people and daily life. Disasters, which can be briefly defined as the destruction caused by various natural events, are climatic, geological, meteorological, meteorological, hydrological, biological, social and technological adverse events that cause economic losses and adverse effects on human health and safety. In economic terms, disasters have a reducing effect on capital stock and national income on a global or national scale. (Akar, 2013: 186). The inadequacy of non-governmental organisations and companies in the fight against disasters in order to prevent the interruption of economic relations increasing with the globalisation process after the disasters and thus to compensate for the global welfare losses has made it necessary for public authorities and international organisations to regulate

[1] Assist. Prof. Dr. Recep Tayyip Erdogan University, Faculty of Economics, Department of Public Finance, https://orcid.org/0000-0001-8963-2079, kemal.celik@erdogan.edu.tr

economic and social life. Financial and economic instruments such as credit and liquidity supports, direct income supports, tax reductions and postponements, regional and sectoral incentives, debt restructuring, energy subsidies, employment and social policy incentives are widely used in combating disasters (Koç & Yardımcıoğlu, 2020: 129). In order to mitigate the negative effects of the global pandemic Covid-19 and the earthquakes of 6 February on economic and social life, Turkey has put in place a series of financial instruments in the fight against disaster. In particular, important legal arrangements have been made in the Unemployment Insurance Law No. 4447 and the Labour Law No. 4857 to protect employment, support employers and employees and redesign working life. In addition, Laws No. 7226, 7244, 7252 and 7256 introduced fiscal and social measures for the borrowing market, labour market, tax regulations and facilities for taxpayers, postponement, suspension or restructuring of certain receivables and tourism. Finally, the Presidential Decree No. 125 on the Measures Taken in the Field of Labour and Social Security under the State of Emergency introduced new regulations on short-time working, employment protection (prohibition of termination), social security and the provision of cash wage support. In this context, this study will examine the cash wage support practice, which was first implemented by İŞKUR for the first time by the Ministry of Labour and Social Security in order to protect employment and provide minimum income support after the Covid-19 pandemic, and then used as a financial instrument in the earthquake disaster, the epicentre of which occurred in Pazarcık and Elbistan districts of Kahramanmaraş on 6 February 2023.

2. Income Support Programmes for Passive Labour Market

In order to reduce income losses due to unemployment caused by macroeconomic instabilities, to provide individuals with a minimum level of basic income security and to support employers, İŞKUR carries out passive labour market income support programmes such as unemployment allowance, short-time working allowance, wage guarantee fund payments, compensation for job loss, part-time work allowance and cash wage support (İŞKUR, 2023a: 104 -11). Within the scope of the State of Emergency declared for three months, limited to 10 provinces in the earthquake region, after the pandemic we are facing with a global epidemic and the Kahramanmaraş-based earthquake, which is considered as the disaster of the century, companies that have to terminate or reduce their economic activities are entitled to the short-time working allowance, the scope of which has been expanded and the conditions for benefiting from which have been facilitated, employees who work within the scope of unemployment insurance and quit their jobs benefited from unemployment allowance, and insured employees who were taken on unpaid leave by the employer and could not benefit from short-time working allowance benefited from the cash wage support programme to be covered by unemployment insurance and paid by İŞKUR (Atış & Ölçer, 2022: 127; İŞKUR, 2022: 107).

3. Concept and Importance of Cash Wage Support

Cash wage support is a financial support provided by the state to citizens who are on unpaid leave due to the pandemic and cannot benefit from short-time working allowance or who are dismissed from work and remain unemployed for a certain period of time in order to reduce the effects of the Covid-19 pandemic on economic and social life (Ünal, 2023:30). During the Covid-19 period, existing regulations on working life have been revised to protect wages and employment, the scope and conditions for benefiting from income support programmes have been eased, and workers who were not previously covered by social protection have been

secured with new practices such as cash wage support (Eser, 2022:93). Cash wage support is extremely important as it maintains the balance in the labour market, protects the existing income and welfare arising from the labour market during the Covid-19 period and after the earthquake, prevents the possible contraction in employment by keeping individuals connected to the labour force, and provides minimum income security to people with no income by preventing mass unemployment (Özdemir, 2020: 306; Bülbül, 2022: 57).

4. Cash Wage Support in Practice

4.1. Cash Wage Support During Covid-19

In order to protect employment during the Covid-19 pandemic, between March 2020 and July 2021, employees who could not be dismissed due to the prohibition of termination between March 2020 and July 2021, who were placed on unpaid leave by their employers but could not benefit from the short-time working allowance, who could not benefit from unemployment benefit because they did not meet the conditions for unemployment benefit and who did not receive an old-age pension from any social security institution, were paid cash wage support for the period during which they were on unpaid leave or unemployed during this period, not exceeding the period that could not be terminated, to be covered by the unemployment insurance fund (Nazlı, 2020: 259; İŞKUR, 2023b). For 2020, the daily payment was determined as 39.24 TL, for 2021, 47.70 TL until April, and 50.00 TL per day after April (Bulut, 2022: 42). For 2020, the amount of cash wage support to be paid monthly (30 days) is 1,168.27 TL net after deducting stamp tax (Yiğit, 2020: 286). In 2020, when the net minimum wage was 2,324 TL, it should be said that the cash wage support amount remained low. In some studies conducted after the implementation of cash wage support, the majority of the employees who benefited from the support found the amount of support insufficient, stating that they had difficulties in sustaining their current lives and that they were in search of additional income-generating work (Gümüş & Belber,2021: 2189). For this reason, it was frequently requested that cash wage support should be at least at the minimum wage level in order to provide a decent income (Aydın, 2020: 197). In order to prevent the abuse of the support in question, if it is determined that the worker benefiting from the support is actually working, the employer will be imposed an administrative fine in the amount of the monthly gross minimum wage determined on the date of the act, per worker and separately for each month of employment, and the cash wage support to be paid will be collected from the employer together with interest (Uzuner & Ekşi, 2020: 318). The general health insurance premiums of those benefiting from cash wage support were also covered by the Unemployment Insurance Fund during the period they benefited from the support.

4.2. Cash Wage Support during the State of Emergency

Provisional Article 24 of the Unemployment Insurance Law No. 4447 in order to mitigate the effects of the earthquake on economic and social life in 10 provinces affected by the earthquake centred in Kahramanmaraş on 6 February 2023 and declared a state of emergency on 8 February 2023, according to Articles 27 and 28 and Article 4 of the Presidential Decree No. 125, it has been decided to pay cash wage support from the Unemployment Fund during the State of Emergency (3 months) to employees who have an employment contract as of the date of the earthquake but whose employment contract has been terminated due to the closure of the workplace due to the effects of the earthquake and who cannot benefit from unemployment allowance and who do not receive an old-age pension from any social security institution, and to those who cannot benefit from short-time working allowance due to not meeting the

necessary premium conditions although the employer has applied for short-time working (İŞKUR, 2023b,2023c). For 2023, the daily payment was determined as 133.44 TL. For 2023, the amount of cash wage support to be paid monthly (30 days) is 3,972.82 TL net after deducting stamp tax. In order to minimise the impact of the earthquake on employment, the period of benefiting from the cash wage support was extended again for 3 months with the Presidential Decree No. 7410 dated 29 July 2023. Cash wage applications are made to İŞKUR by the employer for those within the scope of short-time working and by the insured unemployed for those within the scope of unemployment insurance, and the cash wage support is paid to the unemployed on a monthly basis on the fifth of each month. For those within the scope of short-time working, if the employer provides false information and documents, the overpayments made are collected from the employer together with legal interest. For those covered by unemployment insurance, cash wage support is stopped in case of employment in the same or another workplace, and overpayments made due to the worker's own fault are taken from the worker with legal interest. The general health insurance premiums of those who benefit from cash wage support are also covered by the Unemployment Insurance Fund during the period they benefit from the support (Certain Measures in the Field of Labour and Social Security under the State of Emergency, 2023).

4.3. Number of People Benefiting from Cash Wage Support and Amount of Payments

Millions of employees and unemployed were supported to the extent allowed by budgetary means with the cash wage support implemented after the Covid-19 pandemic and also after the earthquake disaster. From April 2020 to 31.08.2023, more than 3.2 million people benefited from this support and a total of 14.7 billion TL was paid to the beneficiaries (See: Table 1).

Table 1: Number of Beneficiaries of Cash Wage Support and Payments

Years	2020		2021		2022		2023	
Months	Number of People	Payment Amount (Thousand TL)	Number of People	Payment Amount (Thousand TL)	Number of People	Payment Amount (Thousand TL)	Number of People	Payment Amount (Thousand TL)
January	-	-	859.894	1.057.550	37	89	0	0
February	-	-	752.431	999.308	20	136	51.757	138.399
March	-	-	761.552	993.276	26.895	11.503	71.131	286.988
April	880.088	441.907	862.895	1.136.085	0	0	59.281	224.478
May	1.204.110	1.267.828	996.727	1.352.952	55	238	38.749	36.709
June	1.235.859	1.130.612	771.374	1.109.718	0	0	2.768	3.042
July	812.643	784.494	54.464	88.407	110	172	2.716	3.672
August	736.815	788.910	6.938	14.080	0	0	1.513	1.544
September	669.167	708.565	695	1.772	0	0	107	158
October	604.254	629.937	505	1.293	106	121		
November	698.753	726.094	193	352	0	0		
December	701.411	747.316	200	878	77	485		
Total	**2.291.754**	**7.225.663**	**805,352**	**6.755.671**	**22.977**	**12.743**	**82.158**	**694.991**

*****Due to retrospective updates, the number of people may vary.

Note 1: Payment amounts do not include GHI premiums paid on behalf of individuals, Stamp Duty and transaction costs.

Note 2: Since more than one payment is made in a month for cash wage support payments, there are changes in the number of people paid and the amount of payments due to updates.

Note 3: July and August data are provisional realisations and will be revised as the evaluations regarding the applications are completed.

Source: İŞKUR, 2023b.

5. Conclusion and Recommendations

Although the Covid-19 pandemic is essentially an epidemic, it has had serious economic, social and political consequences on a global scale. It is known that the earthquake of 6 February, which is considered as the disaster of the century, had similar consequences especially for Turkey. Türkiye took some fiscal measures to protect employment, production and domestic demand through compensatory and inclusive support programmes both during the pandemic and after the 6 February earthquakes. In particular, in order to protect employment, prevent disruption of working life and protect the minimum income level of employees, the right to unpaid leave was granted to the employer with the prohibition of termination during both Covid-19 and the state of emergency after the earthquake, and cash wage support was introduced by adding a new one to income support programmes in order to prevent workers from suffering during these processes. During the Covid-19 period, the dismissal rate among registered workers due to the prohibition of termination remained at a very low level. Although some registered workers were covered by cash wage support to alleviate the negative effects of the sharp decline in production and hence labour demand on the labour market, this led to a significant decline in individuals' wage incomes. It is important to increase the cash wage support to the level of the minimum wage in order to provide a decent income to the worker on unpaid leave. Since one of the conditions for receiving cash wage support is to work within the scope of unemployment insurance, this wage support should be considered as payments made within the scope of social security rather than social assistance, and in this context, the amount of cash wage support should be increased with the effect of the inflationary process. Individuals who benefit from cash wage support experience wage losses as well as premium day losses and this situation causes victimisation for employees in retirement. In order to eliminate this victimisation, it is essential to compensate for the periods benefiting from the cash wage support by introducing the possibility of borrowing for the missing premium days and earnings with a legal regulation. In addition, the fact that the period during which the employees benefit from the cash wage support is not counted both from the periods spent working in terms of entitlement to annual paid leave and from the service period based on severance and notice pay is a serious shortcoming of the cash wage support for employees. As a result, cash wage support, which is used as a financial tool in the fight against disasters, can be considered as a very appropriate practice in terms of providing an income support that will provide a minimum level of subsistence for the lives of the employees in these troubled periods when there is a greater need for a social state understanding.

References

Akar, S. (2013). “Doğal Afetlerin Kamu Maliyesine ve Makro Ekonomiye Etkileri: Türkiye Değerlendirmesi”, *Yönetim ve Ekonomi Araştırmaları Dergisi*, 11 (21), 185-206.

Atış, A.G & Ölçer, D. (2022). “Küresel Pandemi Koşullarında İstihdam ve Cinsiyet Farklılığı”, *Sosyal Beşerî ve İdari Bilimler Alanında Uluslararası Araştırmalar X*, (Ed.) Karaman D., İstanbul: Eğitim Yayınevi, 117-130.

Aydın, U. (2020). “Covid-19 Pandemisi; İş ve Sosyal Güvenlik Hukuku Alanında Yarattığı Sorunlar ve Çözüm Önerileri”, *İstanbul Aydın Üniversitesi Hukuk Fakültesi Dergisi*, 6 (2), 181-214.

Bazı Kanunlarda Değişiklik Yapılmasına Dair Kanun. (2020, 25 Nisan). Resmî Gazete (Sayı: 31080 (Mükerrer)). Erişim Adresi: https://www.resmigazete.gov.tr/eskiler/2020/03/20200326M1-1.htm.

Bazı Alacakların Yeniden Yapılandırılması ile Bazı Kanunlarda Değişiklik Yapılması Hakkında Kanun. (2020, 11 Kasım). Resmi Gazete (Sayı: 31307). Erişim Adresi: https://www.resmigazete.gov.tr/eskiler/2020/11/20201117-1.htm.

Bozkurt, Ö. & Uzuner, E. (2023). "Esnek Çalışma Uygulamalarının Ücret Sistemlerinde Ortaya Çıkardığı Sorunların Belirlenmesine Yönelik Bir Araştırma", *İşletme ve İktisat Çalışmaları Dergisi*, 11 (2), 1-16.

Bulut, H. G. & Demir, M. (2022), "Covid-19 Pandemisi Sürecinde Türkiye'de Uygulanan Sosyal Destek Politikaları", *İşletme ve Girişimcilik Araştırmaları Dergisi*, Aralık (1), 36-47.

Bülbül, O. G. (2022). "Amaç, Kapsam, Finansman ve Yeterlilik Açısından Fesih Yasağı-Nakdi Ücret Desteği Politika Bileşeni". *21. Çalışma Ekonomisi ve Endüstri İlişkileri Kongresi*. 21-23 Ekim 2022. Eskişehir.

Dijital Mecralar Komisyonu Kurulması ile Bazı Kanunlarda Değişiklik Yapılması Hakkında Kanun. (2020, 23 Temmuz). Resmî Gazete (Sayı:31199). Erişim Adresi: https://www.resmigazete.gov.tr/eskiler/2020/07/20200728-15.htm.

Eser, D. (2022). "Covid-19 Küresel Salgın Döneminde Ücretin Korunması", *Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 24 (1), 93-118.

Göktaş, N. (2023). "Covid-19 Salgınının İşsizlik Üzerindeki Etkisi: TÜİK ve İŞKUR Verileri Üzerinden Bir Değerlendirme", *Biga İktisadi ve İdari Bilimler Fakültesi Dergisi*, 4 (1), 29-40.

Gümüş, S.E & Belber, B.G. (2021). "Covid 19 Salgınının Butik Otel İşgörenleri Üzerindeki Etkisi: Göreme Örneği", *Nevşehir Hacı Bektaş Veli Üniversitesi SBE Dergisi*, 11 (4), 2175-2195.

İş Kanunu. (2003, 10 Haziran). *Resmi Gazete* (Sayı: 25134). Erişim Adresi: https://www.resmigazete.gov.tr/eskiler/2003/06/20030610.htm#1.

İŞKUR (2022). Türkiye İş Kurumu 2021 Yılı Faaliyet Raporu. Erişim Adresi: https://media.iskur.gov.tr/63685/2021-yili-faaliyet-raporu.pdf.

İŞKUR (2023a). Türkiye İş Kurumu 2022 Yılı Faaliyet Raporu. Erişim Adresi: https://media.iskur.gov.tr/67302/2022-yili-faaliyet-raporu.pdf.

İŞKUR (2023b). Türkiye İş Kurumu Genel Müdürlüğü İşsizlik Sigortası Fonu Bültenleri. Erişim Adresi: https://www.iskur.gov.tr/kurumsal-bilgi/yayinlar/

İŞKUR (2023c). İŞKUR Bültenleri. Erişim Adresi: https://www.iskur.gov.tr/kurumsal-bilgi/yayinlar/

İşsizlik Sigortası Kanunu. (1999, 25 Ağustos). *Resmî Gazete* (Sayı: 23810). Erişim Adresi: https://www.resmigazete.gov.tr/arsiv/23810.pdf.

Koç, İ & Yardımcıoğlu, F. (2020). "Covid-19 Pandemi Sürecinde Uygulamaya Konulan Mali Tedbir ve Teşviklerin Karşılaştırmalı Analizi: Türkiye ve Seçilmiş AB Ülkeleri Karşılaştırması", *Siyaset, Ekonomi ve Yönetim Araştırmaları Dergisi*, 8 (2), 123-152.

Nazlı, S. (2020). "Covid-19 Salgınının Ekonomik ve Sosyal Etkilerinin Azaltılması Hakkında Kanunun İş Hukukuna Yönelik Hükümlerinin Değerlendirilmesi", *İstanbul Medipol Üniversitesi Hukuk Fakültesi Dergisi*, 7 (1), 251-271.

Olağan Üstü Hal Kapsamında Çalışma ve Sosyal Güvenlik Alanına İlişkin Alınan Tedbirlere Dair Cumhurbaşkanlığı Kararnamesi. (2023, 22 Şubat). *Resmi Gazete* (Sayı: 32112). Erişim Adresi: https://www.resmigazete.gov.tr/eskiler/2023/02/20230222-7.pdf.

Özdemir, C.S. (2020). "Korona Virüs (Covid-19) Salgını Kapsamında Her Yönüyle Nakdi Ücret Desteği", *Mali Çözüm Dergisi*, 30 (160), 297-306.

Taymaz, E. (2020). Covid-19'un İktisadi Etkileri, *Türk Tabipleri Birliği Covid-19 Pandemisi Altıncı Ay Değerlendirme Raporu*, 662-671.

Uzuner, E. & Ekşi, M. (2020). Fesih Yasağının İş güvencesi, Nakdi Ücret Desteği ile Kısa Çalışma Ödeneği Kapsamında Değerlendirilmesi", *Mali Çözüm Dergisi*, 30 (161), 311-320.

Ünal, M. (2023). *Understanding the Effects of Government Transfers During the Covid-19 Pandemic on Poverty and Inequality in Türkiye*. Middle East Technical University Social Sciences Institute. Ankara.

Yeni Koronavirüs (COVİD-19) Salgının Ekonomik ve Sosyal Hayata Etkilerinin Azaltılması Hakkında Kanun ile Bazı Kanunlarda Değişiklik Yapılmasına Dair Kanun. (2020, 16 Nisan). *Resmi Gazete* (Sayı: 31102). Erişim Adresi: https://www.resmigazete.gov.tr/eskiler/2020/04/20200417-2.htm.

Yiğit, Y. (2020). "Bireysel İş Hukuku Açısından Zorlayıcı ve Zorunlu Sebeplere Bağlı Olarak Ortaya Çıkan Çalışma Koşullarının Yeni Koronavirüs (Covid-19) Nedeniyle Gerçekleştirilen Son Yasal Değişiklikler Bağlamında Değerlendirilmesi, *İstanbul Üniversitesi Hukuk Mecmuası*, 78 (2), 265-297.

Impact of Natural Disasters on Companies' Tax Planning Processes

Öznur Yuvalı[1] **Hakan Ay**[2]

Abstract

Tax planning, which requires a certain expertise, can be affected by changes in tax legislation, the financial and economic policies of the state, as well as more subjective factors such as changes in the management level of the company, its financial situation, and the company's perspective on tax. One of the factors affecting tax planning is natural disasters. After the disaster, there are changes in the state's revenue and expenditure policies, and this means that a new tax planning process and strategies are introduced for both the companies in the disaster area and the companies outside the disaster area. In this context, the study aims to determine the effect of the changing sociological and economic situation after the natural disaster that occurred on February 6, 2023 in Turkey and affected 11 provinces, on the tax planning behavior of companies. In the study, 10 companies operating in the earthquake zone were interviewed using the semi-structured interview method. While 5 of the companies responded to the questions via e-mail, 5 answered the questions via phone call. The answers obtained from 18 questions were analyzed and evaluated using qualitative analysis method. After the interviews, it was determined that the companies did not have an ongoing tax planning process. It was also determined that they paused their tax planning processes for a while as a result of the declaration of force majeure after the earthquake.

Keywords: Natural disaster, tax planning, tax policies
JEL Codes: E6-H2

1. Introduction

Tax planning refers to the methods and strategies that taxpayers apply within legal limits in order to reduce their tax burden. In particular, companies can use exemptions and exceptions, tax deductions and tax incentives and advantages applied by the state as a tool in tax planning. In this context, companies need to closely follow tax policies that enable tax planning and benefit from appropriate tax advantages. Although companies try to carry out a planned process, tax planning is affected by the changing financial policies of the state, the general economic conjuncture of the country, and internal company policies. One of the situations that create unexpected changes in tax planning is natural disasters. Because after a natural disaster, first of all government change their tax policies, and then this change affects taxpayers' tax planning processes. Although there are many studies in the literature on the effects of natural disasters, there are not enough studies on their effects on tax planning. In this context, the aim of this study is to analyze the effects of natural disasters on companies' tax planning processes. The study investigates the impact of two major earthquakes which epicenter is Kahramanmaraş in Turkey on February 6, 2023, on local companies operating in the region. In the study, where semi-structured interview method was used, interviews were conducted with 10 companies in the provinces affected by the earthquake and the results were analyzed with the qualitative analysis method. In the first part of the study, the conceptual framework of tax planning and the effects of natural disasters on tax planning are explained. In the last part of the study, relevant literature and analysis findings are included.

[1] Lecturer, Muğla Sıtkı Koçman University, ORCID: 0000-0002-3104-1273, oznuryuvali@mu.mu.edu.tr
[2] Prof. Ph.D., Dokuz Eylül University, ORCID: 0000-0001-7140-2750, hakan.ay@deu.edu.tr

2. The Relationship Between Tax Planning and Natural Disaster

Tax planning is defined as a strategic approach that companies undertake to reduce the taxes, they will pay by applying a wide range of activities, mechanisms and methods, while remaining within legally acceptable limits (Cooper & Nguyen, 2019:1). Tax planning generally includes reducing taxable income, increasing deductions, and taking advantage of tax credits (Sun et al, 2020:512). Companies that make tax planning consciously can reduce their tax burden and tax costs, reduce financial constraints, create an advantage over their competitors, and develop alternative policies by creating more flexible commercial policies, without being exposed to penal action (Eroğlu & Eftekin, 2015:241). Accordingly, a business that makes tax planning will be in a more advantageous position in an increasingly competitive environment compared to a business that does not make tax planning, as it pays less taxes and reduces its costs (Peker & Kılıçer, 2017: 902). Although tax planning is a subject identified with taxpayers, tax planning is not a practice applied only by taxpayers. States can also carry out tax planning in order to effectively implement tax policies and increase tax revenues. When we look at it from this perspective, the tax planning carried out by taxpayers to pay less tax is called micro tax planning, and the tax planning carried out by the state to collect more taxes is called macro tax planning (Eroğlu & Eftekin, 2015:240). In addition to all these, the tax advantages offered by states that want to attract direct foreign investments to their countries in an increasingly competitive environment also provide opportunities for companies in terms of tax planning (Coopera & Nguyen, 2019:1).

While businesses are doing tax planning, they may encounter some situations that prevent them from doing tax planning. The erosion of the principle of legal security, frequent changes in tax legislation, the cost of tax planning, economic and political conjuncture, and uncertainties regarding fiscal policy can make tax planning difficult or impossible (Peker & Kılıçer, 2017:901). Natural disasters are also one of the factors affecting tax planning. Tax policies for natural disasters can be related to a concrete natural disaster, or they can be mitigating the effects of possible natural disasters. The first form of tax policies for a natural disaster is the imposition of additional taxes that affect everyone throughout the country in order to meet the financing needs, while the second form is tax policies that reduce the tax duties of taxpayers damaged by a natural disaster (Ünsal, 2016:2). In both cases, companies' tax planning processes are affected by new tax decisions.

3. Literature and Method

3.1. Literature

In his study, Ünsal (2016) examined tax policies to meet the financing needs after natural disasters. In his study, the tax policies implemented after the Marmara Earthquake and Van Earthquake in Turkey were evaluated. In his study, Akar (2013) examined the effects of natural disasters on both public finance and macroeconomy. In his study, Hayrullahoğlu (2022) examined the additional taxes that came into force in Turkey after the 1999 earthquake to finance earthquake expenditures. In his study, Rasmussen (2004) made an intercountry comparison and found that natural disaster costs were higher in developing countries than in developed countries. In their study, Adrian et al. (2022) examined the effect of natural disasters on corporate tax avoidance through drought. Runyan (2006), in his study, discussed the effectiveness of small businesses in crisis management after natural disasters. In his study, the response of small businesses in the Gulf region of the USA to Hurricane Katrina was analyzed through interviews and qualitative analysis methods.

3.2. Method

In the study, a semi-structured interview method was used to measure the effects of the earthquakes that occurred on February 6, 2023 on local companies in the region and the reflections of these effects on the companies' tax planning processes. In the study, semi-structured interviews were conducted with 10 companies operating in various provinces affected by the earthquake. During the interview, a total of 18 questions were asked to the companies to determine the economic and social effects of the earthquake, to see the effects of tax regulations and to measure the impact on tax planning processes before and after the earthquake. While 5 of the companies preferred to answer the questions via e-mail, answers were received by phone calls to 5 companies. Among the companies participating in the interviews, 1 is an individual, 3 are joint stock companies, and 6 are limited companies and were selected from different cities and sectors. The main criterion in the selection of companies was that they continued their activities in the provinces affected by the earthquake. In this context, 3 of the interviewed companies participated in our study from Kahramanmaraş, 3 from Adana, 1 from Adıyaman, 1 from Hatay, 1 from Şanlıurfa and 1 from Gaziantep.

4. Conclusion

As a result of the interviews in the study, it was determined especially small and medium-sized companies, did not have a regular tax planning process, while large companies only carried out relatively tax planning. The main reason for this situation is that most of the companies do not know the conceptual content of tax planning and do not have enough information about what they can do in this regard. Companies' past tax payment habits and fear of audit have been seen as other factors that restrict tax planning. Due to the declaration of force majeure in the region after the earthquake, tax duties of companies were suspended for a while. It has been determined that companies do not need additional tax planning because the postponements, interest-free and installment payment practices cause the tax burdens of companies to decrease in their natural course, in other words, tax planning activities decreased in this process. In addition, it has been observed that companies request the deletion of their tax debts or an exemption rather than the postponement of their tax debts. In another study, this subject can be expanded by investigating the effects of not only earthquakes but also other natural and man-made disasters on tax planning of both taxpayers and the state. Finally, by investigating why companies do not do tax planning, we can contribute to the development of tax planning in our country.

References

Adrian, C. Garg, M., Pahm, A. V., Pang, S-Y. and Truong, C. (2022). Do Natural Disasters Affect Corporate Tax Avoidance? The Case of Drought, *Journal of Business Ethics* (2023) 186:105–135.

Akar, S. (2013). Doğal Afetlerin Kamu Maliyesine ve Makro Ekonomiye Etkileri: Türkiye Değerlendirmesi, *Yönetim ve Ekonomi Araştırmaları Dergisi,* Sayı:21, ss 185-206.

Cooper, M. & Nguyen, Q. T. K. (2019). Understanding the interaction of motivation and opportunity for tax planning inside US multinationals: A qualitative study, *Journal of World Business* 54 (2019) 101023.

Eroğlu, O. & Eftekin, Ö. Ö. (2015). Vergi Planlaması Çerçevesinde Uzlaşma Kurumu. *Ekonomik ve Sosyal Araştırmalar Dergisi*, 11 (2), 233-250.

Hayrullahoğlu, B. (2022). Türkiye'de Deprem Harcamalarının Finansmanı Amacıyla Yürürlüğe Konulan Vergilerin İncelenmesi, *Mehmet Akif Ersoy Üniversitesi İktisadi Ve İdari Bilimler Fakültesi Dergisi*, Cilt: 9 Sayı: 1 s.102-120, Mart 2022.

Kılıçer, E. & Peker, İ. (2017). Vergi Planlaması ve İşletmeleri Vergi Planlaması Yapmaya Yöneltebilecek Uygulamalar, *Akademik Bakış Dergisi* Sayı: 61 Mayıs-Haziran (2017) 900-911.

Rasmussen, T. N. (2004). Macroeconomic Implications of Natural Disasters in the Caribbean, *IMF Working Paper* Western Hemisphere Department, December.

Runyan, R. C. (2006). Small Business in the Face of Crisis: Identifying Barriers to Recovery from a Natural Disaster, *Journal of Contingencies and Crisis Management,* Volume 14 Number 1, ss 12-26, March 2006.

Sun, Jie; Makosa, Lewis; Yang, Jinkun; Yin, Fangyuan; Sitsha, Lovemore. (2023). Does corporate tax planning mitigate financial constraints? Evidence from China, *International Journal of Finance & Economics*. Jan2023, Vol. 28.

Ünsal, H. (2016). Doğal Afetlere Yönelik Vergi Politikaları ve Türkiye Uygulamalarının İncelenmesi, *İGÜSBD*, Cilt: 3 Sayı: 2 Ekim 2016.

Türkiye's Central Government Budget in the Light of Human Rights and Gender Responsive Budgeting

Yelda Yücel[1] **Ayşegül Yakar Önal**[2] **Özgün Akduran Erol**[3]

Abstract

The Human Rights Budget approach aims to establish a budgetary framework that ensures no individual is subjected to discrimination. Human Rights Budget draws from normative human rights frameworks and incorporates core human rights into the budget process and cycle. Gender Responsive Budgeting holds a unique position among rights-based approaches as it advocates for public policies and budgets to be geared toward eradicating gender discrimination. The study focuses on the analysis of the integration of core human rights, namely the right to education, healthcare, housing, and employment, within the framework of the 2023 Central Government Budget, where gender inequalities cross-cut all dimensions. Our methodology involved multiple stages, including analyzing the gaps in rights, the level of political effort, and the adequacy of public resources. In this context, we scrutinized the Budget Preparation Guide for 2023-2025, Budget Circular 2023, and specifically, 67 programs. The findings of our analysis reveal that out of the total budget allocations, 44 percent, consisting of 34 programs, can be associated with equality and rights perspectives. We present the budget allocations for each of these programs. Our study highlights the need for the development of central government budget programs in Turkey in terms of rights and gender equality.

Keywords: Human Rights Budget, Gender Responsive Budgeting, Performance Based Program Budget, Turkey
Jel Codes: H5; H610; O530

1. Introduction

International Covenant on Economic, Social and Cultural Rights (ICESCR)[4] its Article 2(1) makes the governments responsible for the realization of human rights with the maximum available resources that they possess[5], and render them responsible for enacting gender equality in the enjoyment of all rights through Article 3. In public finance, a novel approach called Human Rights Budgeting (HRB) takes its foundations from the international rights frameworks. It envisages the formation of public budgets considering the principles of non-discrimination and leaving no one behind. A more established approach with a longer span of theory and practice, Gender Responsive Budgeting (GRB) has close interactions with human rights as it defends the idea that public budgets and policies should serve the dismantling of deeply rooted

[1] Assoc. Dr., İstanbul Bilgi University, Faculty of Business, ORCID: orcid.org/0000-0002-1744-341X, yelda.yucel@bilgi.edu.tr
[2] Assoc. Dr., Istanbul University, Faculty of Political Sciences, ORCID: 0000-0002-8661-1587, aysg1@istanbul.edu.tr
[3] Assist. Dr., Istanbul University, Faculty of Political Sciences, ORCID: 0000-0003-4576-017X, ozgun.akduran@gmail.com
[4] Turkey signed the Treaty dated 3 January 1976 on 15 August 2000 and put it into effect on 23 December 2003. https://insanhaklarimerkezi.bilgi.edu.tr/tr/content/120-ekonomik-sosyal-ve-kulturel-haklara-iliskin-uluslararas-sozlesme/
[5] "Each State Party to the present Covenant undertakes to take steps, individually and through international assistance and cooperation, especially economic and technical, to the maximum of its available resources, to achieve progressively the full realization of the rights recognized in the present Covenant by all appropriate means, including particularly the adoption of legislative measures." https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-economic-social-and-cultural-rights

gender inequalities in society. In this respect, it deserves a special place among the rights-based approaches (Downes, 2020). Our study will examine the Central Administration Budget of Turkey (2023) through a rights-based perspective, treating gender inequalities as one of the main forms of human rights violations. The study limits its human rights scope to education, health, accommodation and employment due to the broad range of rights. It discusses how public policies were framed in these areas in the 2023 Budget, along with their implications for gender equality.

2. Methodology

HRB should rely on normative human rights frameworks and the stages of the budget cycle should incorporate human rights principles and ideas (UNHR, 2017). Integrating a rights-based perspective into the public policies and budgetary process requires certain conditions. To cite some of them, these are: Public policy processes must be transparent, participatory and inclusive; public authorities should be accountable; policies must not lead to discrimination; instead, they must serve the empowerment of people (UNHR, 2017; SHRC, 2019). For this purpose, maximum available resources should be used and alternative resources should be mobilized where necessary. In addition to this broad framework, the 2030 Sustainable Development Goals and the 2015 2015 Addis Ababa Action Agenda provided leverage to the signatory governments to commit to using the fiscal policies to enable targets rooted in human rights norms and agreements.[6].

The departure point of the methodology of this study is the holistic approach developed by the Center for Economic and Social Rights (CESR, 2012) for rights-based assessments. This approach is called OPERA, referring to the four-dimensional evaluations of rights in terms of outcomes, political effort, resources and other assessments. CESR measures enjoyment levels of rights with the available development indicators in the first stage and reflects on discrimination in those national indicators. In the second stage, the authors assess the policy efforts of the governments through the examination of their compliance with the human rights treaties and agreements that the governments are party or signatories to. Here, the evaluation involves the search for the existence of the signed treaties and the evidence for the potential of the public provision of goods and services to enable rights. The third step involves examining whether the resources are utilized according to maximum available resources (MAR) principles. Finally, in the last step, other socio-economic factors that can hamper the implementation of rights beyond the government's control and the government's capacity and determination are discussed.

We adopted the OPERA method and searched for the gender gaps in Turkey using international development indicators of the United Nations Development Fund's Human Development Index (HDI) and Gender Development Index (GDI) in the first step. Our observations verified the fact that gender gaps in Turkey persisted and they were stubbornly high, despite an improvement over the years. The second stage, where international agreements and local laws were scrutinized, provided a more optimistic picture of the political commitment to rights: Turkey was signatory or party to many of the significant national and international commitments in the fields of education, health, employment and accommodation and this legal framework provided a conducive environment for GRB and HRB implementations (Akduran vd., 2018; Akın & Türkçelik, 2018; Kızılırmak vd., 2022; Tan, 2018; Toksöz, 2020; Toksöz

[6] For SDGs: https://sdgs.un.org/goals; for 2015 Addis Ababa Action Agenda: https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2051&menu=35

ve Memiş, 2018). Due to the space limitations in this publication, we only present the third step in our analysis in detail in the following section and examine the competence of Türkiye's 2023 Performance Based Budget in the selected rights spaces and in alleviating gender gaps. As of 2023, 67 programs were evaluated using the 2023-2025 Budget Preparation Guide (SBB, 2022b) and 2023 Budget Circular (SBB, 2022a) to look for possible answers to the following questions: Were there any references to gender equality and human rights frameworks? To what extent the rights to education, health, accommodation and employment were integrated into the programs? Were targets and indicators defined related to these areas? The answers to these questions led us to focus on 34 programs associated with equality and rights perspectives. The following section questions the resource and capability sufficiency of these programs.

3. Findings

The 2023 Budget Circular states the purposes of the Performance Based Budget that started in 2021 in Türkiye at the central level. Among them are fiscal transparency, associating public resources with targets, priorities and outcomes and harmonizing the public budgets with international budgeting frameworks (SBB, 2022a: 139). The 2023 Budget Law Proposal reflects the priorities of public service provision and expenditures (p. 139). The social security, education, health, employment, and poverty alleviation programs, by their nature, are linked to fundamental human rights and the share of allocations to these programs in the budget is non-negligible at 33 percent.

When examined through our evaluation matrix of equality rights, we find 34 programs among 63 (for which information is available in the budgetary documents considered)[7]. These programs either explicitly referenced gender equality and/or human rights, or they included gender equality and/or human rights indicators. (44 percent of the total budget, see Figure 1). Of these programs, only nine of them (Protection and Strengthening of the Family, Active and Healthy Aging, Participation of the Disabled in Social Life and Special Education, Human Rights, Employment, Women's Empowerment, Rural Development, International Development Cooperation, Poverty Fight and Social Assistance) can be associated with gender equality. In addition, only five programs have gender equality indicators (Employment, Women's Empowerment, Preventive Health, Secondary and Basic Education). All these programs had some reference to human rights.

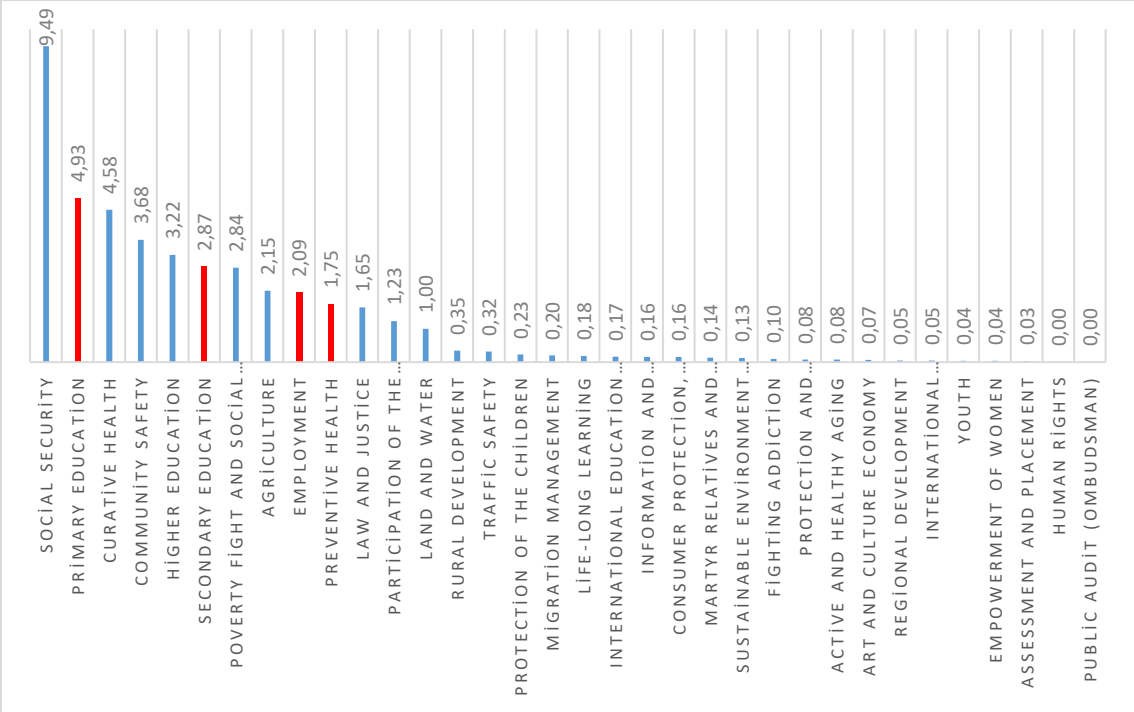
The most prominent programs within the scope of the relationship between gender equality and fundamental rights are those directly target education, health and employment (Primary Education, Secondary and Higher Education, Curative Health and Preventive Health and Employment). However, there is no program that we can directly associate with the right to housing. On the other hand, the most important program that can be strongly associated with the equality perspective and rights is the Women's Empowerment program. However, this program ranks 56th among all with a share of 0.04 percent of the budget. In addition, the Human Rights program receives almost zero percent of the budget.

When we evaluate our gender equality and human rights criteria, only two programs are worth discussing: "Women's Empowerment" and "Employment" programs. However, the employment program received 2.1 percent of the budget, while the Women's Empowerment program's share was 0.04 percent. As such, the budgetary resources allocated to these

[7] Chapter 4 of the 2023 Budget Justification, entitled Programme Performance Information, does not include information on the "Management of Treasury Assets and Liabilities", "Management and Support Programme," and "Presidency" and "Legislative" programs. Therefore, we excluded these four programs from our analysis.

programs, which we expect to include an equality and rights perspective, are pretty low. On the other hand, for example, the Social Security program, which had a relatively high share of 9.5 percent of the budget, is not associated with gender equality and no gender indicators have been identified. Although the total budget share of the leading programs focusing on education is around 11 percent, the gender dimension of this fundamental right needs to be improved. A similar situation applies to health expenditures, where the share of health programs in the budget is 6 percent.

Figure 1: Programs Standing Out at the Intersection of Equality and Rights in the Budget (2023) (% share in the budget)*



Source: Author's calculations based on SBB, 2022a: 139. * Shares of 34 programs related to human rights and gender equality in the budget are presented.

4. Conclusion

Introduced in 2021 at the central government level in Turkey, the Performance Based Program Budget provides a suitable framework for analyzing the budget in line with international budgeting approaches such as GRB and HRB. Our study examined the reflections of the rights to education, health, housing and employment on the central government budget at the intersection of gender inequalities and evaluated the programs. We found that slightly more than half of the 63 programs were associated with fundamental human rights concepts and human rights indicators. Among the fundamental rights, education and health are more prominent than employment and housing rights. However, only nine of these programs are related to gender equality. Compared to the gender equality approach, references to rights are more common in budget programs. Overall, programs need to be enhanced in terms of gender equality. In addition, programs other than education, health and employment related to fundamental rights have low budget shares and they have either weak or no gender equality linkages.

When assessed in conjunction with the criteria of inclusion of commitments to equality and rights concurrently, the incorporation of performance indicators aligned with this viewpoint, and the sufficiency of resources allocated from the budget, it can be asserted that the programs in the 2023 central government budget fall considerably short of fulfilling these criteria together. Turkey's programs within the central government budget require enhancement through an approach centered on human rights and particularly, women's rights perspective need to be strengthened. Additionally, there is a necessity to identify programs that align with genuine expectations and priorities of the society, as well as to allocate ample resources for the effective implementation of these initiatives.

References

Akduran, Ö., Yakar Önal, A. & Günlük Şenesen, G. (2018). *Gender Equality in Access to Urban Rights and Services*. Ankara: CEİD.

Akın, A. & Türkçelik, E. (2018). *Gender Equality in Access to Health Services*. Ankara: CEİD.

CESR (Center for Economic and Social Rights). (2012). *Assessing Fiscal Policies from a Human Rights Perspective: Methodological Case Study on the Use of Available Resources to Realize Economic, Social and Cultural Rights in Guatemala*. https://www.cesr.org/sites/default/files/assessing.fiscal.policies.from_.a.human_.rights.perspective_1.pdf, (27.03.2023).

Downes, R. (2020). "Designing and Implementing Gender Budgeting: A Path to Action", *OECD Journal on Budgeting*, (2), 67-97.

Göğüş Tan, M. (2018). Gender Equality in Education. Ankara: CEİD.

Kızılırmak B., Memiş, M. ve Toksöz, G. (2022). *Türkiye'nin Toplumsal Cinsiyet Eşitliği Performansı, 2000-2019*. Ankara: CEİD, UNDP Türkiye Ofisi.

SBB (Strateji ve Bütçe Başkanlığı). (2022a). *2023 Yılı Bütçe Gerekçesi*. https://www.sbb.gov.tr/wp-content/uploads/2022/10/2023-Yili-Butce-Gerekcesi_17102022.pdf, (31.03.2023).

SBB (Strateji ve Bütçe Başkanlığı). (2022b). *2023-2025 Dönemi Bütçe Hazırlama Rehberi*. https://www.sbb.gov.tr/wp-content/uploads/2022/09/2023-2025_ButceHazirlama Rehberi_tum.pdf, (31.03.2023).

SHRC (Scottish Human Rights Commission). (2019). *Human Rights Budget Work. Briefing Paper.* https://www.scottishhumanrights.com/media/1905/hrbw-paper-1-vfinal.pdf, (27.03.2023).

Toksöz, G. & Memiş, E. (2018). Gender Equality in Employment. Ankara: CEİD.

Toksöz, G. (2020). *İstihdamda Toplumsal Cinsiyet Eşitliği Haritalama ve İzleme Çalışması: 2017-2020 Güncellemesi*. https://dspace.ceid.org.tr/xmlui/handle/1/978 adresinden erişildi, (31.03.2023).

UNHR (United Nations Human Rights). (2017). *Realizing Human Rights through Government Budgets*. https://www.ohchr.org/en/publications/special-issue-publications/realizing-human-rights-through-government-budgets, (27.03.2023).

Digitalization in Audit: The impact of Digital Transformation on External Audit System

Ahmet Taner[1]

Abstract

Digital technologies change the strategic priorities and business models of audit institutions as internal control, financial processes, accounting and auditing. Digital transformation, also defined as Industry 4.0, has an impact on the audit profession with new and rapidly developing technologies such as big data analysis, block chain, artificial intelligence, cloud computing, internet of things, machine learning, and augmented reality. Pursuant to Law No. 5018 and Law No. 6085, Turkish Court of Accounts (TCA) performs the duty of external audit in public financial management system. Within this duty, it gives an audit opinion on the completeness, accuracy and reliability of the financial statements prepared by public administrations. In this context, the planning, implementation, reporting and monitoring stages of audits by TCA are carried out on the Audit Management Program (SayCAP) . Data necessary for financial auditing are obtained directly from the sub-systems of the Integrated Public Financial Management System designed by The Ministry of Treasury and Finance to the VERA system developed by the TCA . In this study, both the basic stages of business management in SayCAP and the processes of obtaining and analyzing financial data of public administrations in the VERA system are evaluated, and the quality of audit scenarios in terms of their contribution to the audit are assessed.

Keywords : Digitalization , Financial Audit , Integrated Public Finance Management Information System
Gel Codes : H83, 033, G32

1. Introduction

Digitalization has impact on audit along with other functions of administration, creating a transformative effect on both the purpose of auditing and its methods and tools. Audit institutions adopted new strategies to lead the rapid and comprehensive change processes in technology and information avoiding the risks brought by digitalization and making it easier to benefit from the opportunities it offers. Digitalization has influence many aspects of audit , from the methods and approaches used in auditing to the basic stages of auditing, from evidence collection techniques to reporting processes, and helps to ensure efficiency and effectiveness in auditing.

TCA carries out the financial audit methodology together with compliance audit within the scope of regularity audit. The financial audit methodology essentially aims to achieve reasonable assurance on the completeness, accuracy and reliability of the financial reports and statements . For this, there is a need for complete, appropriate and timely access to financial data produced by public administrations and their accurate analysis.

Financial transaction and activities, such as accounting records and personnel payments, of public administrations, which is subject to external audit, are transferred monthly by the TCA from central systems such as the Integrated Public Financial Management Information System to the Unified Data Retrieval System (BVAS). Apart from this, an audit management system (SayCAP), developed by the Court of Accounts, is also used to electronically realize basic phases of audit without the use of paper. This study aims to examine the business principles of the VERA

[1] Assoc. Prof. Dr. , Turkish Court of Accounts, https://orcid.org/0000-0003-1925-795X , ataner@sayistay.gov.tr

and SayCAP systems of TCA as an example of digital transformation in auditing and to evaluate the effectiveness of these systems.

2. Information Technologies and Their Effects on Auditing

With the opportunities offered by globalization, digitalization has become a phenomenon that the whole world thinks about. The development of information technologies often represents a great opportunity for both public and private institutions (Mancini etc. , 2017:3). In this context, digital technology has been changing both the strategic priorities and management models such as internal control, financial processes, accounting and auditing.

The digital transformation has made it essential for the nature and methods of audit to change (Otia, 2020: 253). Nowadays, when it is not possible to audit a large number of data recorded electronically using traditional methods, it is inevitable to use information technologies in the evidence collection, evaluation and audit process for a higher quality and continuous audit (Celayir and Celayir, 2020). Digital transformation, a defined as Industry 4.0, has radically changed the business principles and priorities of the audit profession with new and rapidly developing technologies such as blockchain, big data analysis, artificial intelligence, cloud computing, internet of things, machine learning, and augmented reality (Deloitte, 2017:10; Gul, 2017).

Digitalized business processes and information technologies requires a methodological change in auditing. Apart from traditional methodologies such as financial audit, compliance audit and performance audit, new audit methodologies such as information systems audit have begun to develop. It is possible to see the reflections of digitalization in auditing more concretely in financial statement audits.

3. Turkish Public Financial Management: Integrated Public Financial Management Information System

In Turkish Public Finance Management System, information technologies are widely used in the fulfillment of the basic activities and transactions regulated in PFMC No. 5018. Public institutions make use of information systems in delivering services. The Ministry of Treasury and Finance has developed The Integrated Public Financial Management Information System to enable these systems to interact with each other and share information when necessary. The main purpose of this system is to provide automation systems used in the processes related to financial transactions, with new technological opportunities such as electronic documents, electronic signatures and automatic accounting (Treasury and Finance, 2022; Türkay, 2018.)

4. The Increasing Importance of Information Technologies in Audit by TCA

Within the scope of the regularity audit by TCA, audit opinions are given on reliability and accuracy of the financial statements, based on the public administration accounts and related documents. In a regularity audit, an audit opinion is formed by obtaining reasonable assurance about the completeness and accuracy of financial statements and reports. In their financial statements prepared with the applicable financial reporting framework, management implicitly or explicitly makes assertions regarding the recognition, measurement, presentation and disclosure of the various elements of financial statements and related disclosures. management makes a number of explicit or implicit assertions regarding the recording,

measurement, presentation and disclosure of various elements and related statements regarding the financial statements. The aim of the auditor in financial audit, which is a type of attestation engagement, is to obtain evidence regarding whether the management statements in the financial statements are presented correctly and fairly (ISA, 315).

The fact that Turkish Court of Accounts Law No. 6085 changed significantly the nature and scope of audit by TCA. In financial audit, in order to reach an audit opinion based on reasonable assurance, it is necessary to determine and implement procedures for financial transactions affecting the financial statement in the public administration. In accordance with the relevant legislation and regulations, public administrations are obliged to prepare their financial reports and statements electronically and submit them for audit. The spread of information systems in the public sector as well as in the private sector has enabled the execution, recording and classification of both financial statements and reports, as well as the activities and transactions on which they are based, in electronic format (TCA, 2018:31-32).

5. Digital Tools Used in External Audit

5.1. Audit Management Program (SayCAP)

SayCAP is basically intended to help the planning, management, documentation, review, reporting and recording of audits electronically without the use of paper. All stages of the audit are carried out on this system. The planning, implementation, reporting and monitoring stages of the audit have been designed in accordance with the sub-phases in the Regularity Audit Guide. The planning phase consists of the sub-phases of understanding auditee, determination of class of transaction (account areas) and determination of materiality, risk assessment, control tests, evaluation of the planning work and audit program. The implementation phase consists of field work and review sub-phases. SayCAP's reporting module has also been created to ensure that audit reports comply with international standards, guides and other regulatory procedures (TCA, 2021).

Although the SayCAP management system is open to continuous development in the light of information and data coming from the field regarding auditing, some of the procedures in audit program are defined manually by auditors. In order for the system to function correctly and effectively and to provide the necessary analysis / reporting to the institution's management, the coding, procedure title and content of each procedure need to be in line with the previously defined format and structure.

5.2. Obtaining Data for Audit from Auditee

In accordance with the PFMC No. 5018 and the TCA Law No. 6085, there are many public administrations with different budget types, which are under audit of the TCA. Since, by its nature, audit engagement is intended to provide assurance to the relevant target users, it is of great importance that the data necessary for the audit be accurate and reliable. It is clear that there is a need for complete, accurate, reliable and valid accounting data. In this context, various principles have been adopted for the regular receipt of accounting data from both general budget public administrations and administrations with other budget types.

The financial statements of public administrations, the accounting transactions of which are carried out in the new Financial Management System (Government Accounting Information System), are received from this system to VERA on a monthly basis. The personnel payroll data of public administration who use the Public Personnel Expenditure Management System are received monthly via database connection.

5.3. TCA Data Analysis and Business Intelligence System (VERA)

In order to store the financial data of public administration and to perform the analysis needed, "Data Analysis and Business Intelligence System" (VERA) has been designed and introduced by TCA. This system uses Oracle BI Business Intelligence Software, which works with a central data warehouse structure. Accounting data of public administrations are received electronically and made available to auditors by uploading VERA (TCA, 2020:4).

VERA is a flexible program open to development. A number of new functions can be created with the coding feature. The data in the databases of the administrations is taken into the data warehouse of TCA and then this data is structured as data sets and data cubes, taking into account their relationships with each other. Structuring the data as data sets/data cubes is carried out to ensure that VERA works quickly and effectively. The data is then made available to end users within the limits of their authorization through the VERA program. Auditors access this system in accordance with the authorization defined for them.

5.4. Data Analysis and Reporting

There are two different analysis types in the VERA System: Fixed and Variable. Fixed analyzes can be performed by running scenarios defined by the Data Analysis Group Department. Variable analyzes are original analyzes that auditors will make through methods such as filtering, comparison, adding functions and recalculation (TCA, 2020:16).

Current fixed analysis;

- ✓ Data validation analyzes
- ✓ Financial statement analysis
- ✓ Accounting books and tables
- ✓ Interoperable accounts
- ✓ Accounting scenarios
- ✓ Personnel expense scenarios (specific to Central Government accounts)
- ✓ Risk scenarios (specific to municipal accounts)
- ✓ Sampling practices are as follows.

6. Conclusion

Digitalization has a transformative impact on audit activities and processes, as in all areas of corporate governance processes. In the financial audit, as a part of Regularity Audit, TCA has been using digital technologies to respond to emerging needs in this field.

SayCAP and VERA make significant contributions to the rapid and effective realization of audit processes in TCA. The coding of audit finding in SayCAP is of great importance in terms of both standardizing the findings and correct analysis and monitoring of the audit results. In order for the system to function correctly and effectively, the coding for each finding must be in the format and structure previously defined for the procedure in question. For this, there is a need to ensure correct coding by making the quality control processes carried out by the group head effective. In the VERA system, where the financial statements and records of the institutions are analyzed, the dynamic analysis tools developed by the audit teams themselves are as important as the existing static analyses. In particular, the risk analyzes carried out by audit teams accordingly will help detect risky transactions in the account area examined and identify potential errors.

Reference

Celayir, D. ve Celayir, Ç. (2020), Dijitalleşmenin Denetim Mesleğine Yansımaları, *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi,* 7(6), 128-148.

DELOITTE. (2017), *Blockchain Technology and Its Potential Impact on the Audit and Assurance Profession*, Deloitte Development LLC.

Gül, Hüseyin (2017 Gül, Hüseyin (2017) , Dijitalleşmenin Kamu Yönetimi ve Politikaları ile Bu Alanlardaki Araştırmalara Etkileri , *Yasama Dergisi,* 36, Temmuz-Ağustos-Eylül-Ekim-Kasım-Aralık , Sayı 36, ss. 5-26.

MINISTRY OF TREASURY AND FINANCE. (2017), Integrated Public Financial Management Information System Policy Document and Action Plan (2017-2020), Ankara.

MINISTRY OF TREASURY AND FINANCE. (2022), https://muhasebat.hmb.gov.tr/kaynak-prinsipler .

IFAC ISA 315 (2019) Identifying and Assessing the Risks of Material Misstatement, https://www.iaasb.org/publications/isa-315-revised-2019-identifying-and-assessing-risks-material-misstatement (10.09.2023)

INTOSAI ISSAI 2200 (2019). *Financial Audit Principles,* Turkish Court of Accounts: https://www.sayistay.gov.tr/files/2281_ISSAI_200-Mali_Denetim_ilkeleri_Turkce_ve_ingilizce.pdf (10.09.2023)

Mancini, R. Lamboglia, NG Castellano and K. Cors (2017), Trends of Digital Innovation Applied to Accounting Information and Management Control Systems D *Reshaping Accounting and Management Control Systems New Opportunities from Business Information System,* Edited by katia Corsi, Nicola giuseppe Castellano, Rita Lamboglia, Daniela Mancini, Springer .

Otia, Javis Abua Oath Enrico Bracci (2022) , Digital Transformation and The Public Sector Auditing: The SAI's Perspective, Financial Accountability & Management, https://doi.org/10.1111/faam.12317

TCA (2018), *Düzenlilik Denetim Rehberi* V.4, Sayıştay Başkanlığı, Ankara

TCA (2020), *VERA (TCA Data Analysis and Business Intelligence System) User Manual* V.2, (10.09.2023)

TCA (2021) , SayCAP Handbook, https://saycap.sayistay.gov.tr/ (10.09.2023)

Türkay, İ.(2018), "Kamuda Bütünleşik Kamu Mali Yönetim Bilişim Sistemi", https://vergialgi.com/kamuda-butunlesik-kamu-mali-yonetim-bilisim-sistemi Erişim Tarihi: 07.07.2023

Fiscal Sustainability Debates in the Health System: The Case of Türkiye

Recep Emre Eriçok[1]

Abstract

The discussions about fiscal sustainability in health systems constitute one of the most important agenda items in recent years. The developments, such as the ageing population, technological advances, the increase in health expenditures triggered by COVID-19, the Russia-Ukraine war, rising inflation, a weakening growth outlook, and increasing borrowing costs, raise concerns regarding the fiscal sustainability of health systems.

In this study, which was prepared to examine the fiscal sustainability of the health system in Türkiye and compare it with other OECD countries, the concept of fiscal sustainability in the health system was first investigated. Then some determinations have been made regarding the factors that threaten or support fiscal sustainability by examining various indicators about the fiscal sustainability of the health system in Türkiye and other OECD countries.

The results obtained from the study reveal that the rapid increase in health expenditures in Türkiye is met by the fast pace of growth in GDP and doesn't pose a significant risk in terms of fiscal sustainability in the budget. However, Türkiye's health system faces a number of challenges that may affect the fiscal sustainability of health expenditures in the future. In addition to developing rational solutions to the problems encountered in overcoming these difficulties, it is critical to evaluate potential efficiency areas in all processes of the health system.

Keywords: Health System, Fiscal Sustainability, Health Expenditures, Health Expenditure per Capita, Ratio of Health Expenditures to GDP
JEL Codes: H51, I10, I11

1. Introduction

Nowadays, health systems face significant challenges in terms of fiscal sustainability. In addition to the increasing and ageing population, many factors (the prevalence of chronic diseases, increased long-term care costs, increased use of new and expensive technologies, the impact of pandemic, etc.) increase health expenditures. Providing the necessary financing to meet increasing health expenditures is considered a fundamental factor in sustainable, innovative, and flexible health systems.

For a health system to provide efficient and quality health services, it must be fiscally sustainable. According to the Institute for Health Metrics and Evaluation (IHME) data, in 2020, when COVID-19 was effective, global health expenditures increased by 7,6 percent compared to the previous year, constituted approximately 11 percent of global GDP with 9,9 trillion dollars, and reached a new peak. Estimates indicate that a significant increase in health expenditures will be required in the coming decades. Therefore, it is becoming more important to have sufficient fiscal and physical resources to meet the health needs of society now and in the future.

In this context, in this study prepared to examine the fiscal sustainability of the health system in Türkiye and to make comparisons with other OECD countries, the concept of fiscal

[1] Assist. Prof. Ph.D, İstanbul University, ORCID: 0000-0001-8216-0398, reericok@istanbul.edu.tr

sustainability in the health system was first examined. Subsequently, various fiscal sustainability indicators regarding the development of health expenditures in the world and Türkiye and the shares of these expenditures in GDP and budget were analysed, and data on the fiscal sustainability of the health system in Türkiye were tried to be presented comparatively. In the conclusion, the findings obtained from the study are briefly summarised.

2. The Concept of Fiscal Sustainability in Health Systems

Nowadays, fiscal sustainability is accepted as the fundamental factor in macroeconomic stability and sustainable growth. The concept of fiscal sustainability, which emerged in the 1980's, doesn't have a generally accepted definition internationally. During the historical development process, various definitions have been made that highlight different features of the concept of fiscal sustainability.

According to the widely used OECD definition, fiscal sustainability is expressed as "the ability of a government to maintain public finances at a credible and serviceable position over the long term" (OECD, 2015: 25).

In Türkiye, the concept of fiscal sustainability is mostly defined as "the ability of a government to maintain its current expenditures, taxes, and other fiscal policies in the long term". The concept of fiscal sustainability in the health system is expressed as "the ability of the health system to collect the necessary amount of resources to fulfill its expected responsibilities and to fulfill its responsibility to maintain and improve the health status with the resources it collects." (T.C. Kalkınma Bakanlığı, 2014: 93).

3. Evaluation of the Health System in Türkiye in Terms of Fiscal Sustainability

Although there are no general criteria to measure and evaluate fiscal sustainability in health systems, generally the ratio of health expenditures to GDP, health expenditures per capita, annual average growth rates of GDP and health expenditures per capita, the share of health expenditures in budget revenues and expenditures, comparison of health expenditures and GDP average growth rates, etc. indicators are used. In this study, an attempt was made to evaluate the fiscal sustainability of the health system in Türkiye by using similar indicators.

3.1. Development of Health Expenditures in the World

Between 1995 and 2020, global health expenditures increased by an average of 3,9 percent annually, reaching 9,9 trillion dollars, or 10,8 percent of world GDP. In the same period, the increase in health expenditures per capita remained limited to 2,6 percent. This situation reveals that the demand for health services is increasing faster than health expenditures.

In 2020, when COVID-19 was effective, global health expenditures increased by 7,6 percent compared to the previous year, while the increase in health expenditures per capita was 6,8 percent. In the same year, the ratio of global health expenditures to GDP increased by 1,1 points and reached its highest level ever at 10,8 percent.

The limited available data released by the World Health Organisation (WHO) shows that countries allocate a significant portion of public expenditures to COVID-19 related activities. In 2020, health expenditures related to COVID-19 accounted for an average of 8 percent of government health expenditures and an average of 1 percent of total general government expenditures (WHO, 2022: ix).

Table 1. Global Health Expenditures

	Global Health Expenditures (Trillion $)	Global Health Expenditures per Capita ($)	Global Health Expenditures/GDP (%)
1995	3,8	656	8,3
2019	9,2	1.180	9,7
2020	9,9	1.260	10,8
2021	10,3	1.300	10,7
2022	9,9	1.240	10,0
2023	10,2	1.270	10,0
2050	16,9	1.830	12,9

Source: Institute for Health Metrics and Evaluation, 2023.
Note: Data after 2020 are estimates.

Global health expenditures, which increased significantly in 2020 due to the impact of COVID-19, showed a similar trend in 2021. In 2021, according to the estimates made by IHME, global health expenditures increased by 4,4 percent to 10,3 trillion dollars, and health expenditures per capita increased by 3,2 percent to 1.300 dollars. In the same year, the share of global health expenditures in GDP is expected to decrease by only 0,1 points to 10,7 percent compared to 2020.

In addition, according to the estimates made by IHME, global health expenditures are expected to continue to increase every year after a 3,9 percent decline in 2022 and reach 16,9 trillion dollars in 2050. In the same year, global health expenditures per capita are expected to be 1.830 dollars, 44,1 percent higher than the level in 2023. In 2050, the ratio of global health expenditures to GDP is estimated to be 12,9 percent.

3.2. Development of Health Expenditures in Türkiye

Health expenditures in Türkiye increased by an average of 16,1 percent annually from 24,3 billion TL to 353,9 billion TL from 2003, when the Health Transformation Programme was implemented, to 2021. In the same period, while the average annual increase in public health expenditures was higher (16,7 percent), it remained more limited in private health expenditures (14,1 percent).

The decisive role of the public sector in health expenditures has become more evident. From 2003 to 2021, the public sector share in health expenditures increased by 7,3 points, from 71,9 percent to 79,2 percent, reaching the highest rate in the post-2012 period. Considering that the average public sector share in health expenditures in OECD countries is 76,3 percent, it is understood that the role of the public sector is much more evident in Türkiye (OECD, 2023).

A large portion of health expenditures in Türkiye are covered by the Social Security Institution and the Central Government. Unlike the Continental Europe, the share of local governments is very small. While the decisive role of the public sector increased from 2003 to 2021, the share of private health expenditures decreased from 28,1 percent to 20,8 percent. On the other hand, out of pocket health expenditures, which have a share of 15,9 percent of total health expenditures, increased by 40,5 percent in 2021.

Table 2. Health Expenditures in Türkiye

(Million TL)	2003		2021	
	Amount	Share (%)	Amount	Share (%)
Total Health Expenditures	24.279	100,0	353.941	100,0
General Government	17.462	71,9	280.220	79,2
Central Government	6.317	26,0	111.180	31,4
Local Governments	482	2,0	1.975	0,6
Social Security Institution	10.662	43,9	167.065	47,2
Private Sector	6.817	28,1	73.721	20,8
Households	4.482	18,5	56.342	15,9
Other (1)	2.335	9,6	17.380	4,9

Source: TÜİK, 2022.

(1) "Other" health expenditures cover health expenditures of insurance institutions, non-profit organizations serving households and other enterprises.

While current expenditures constitute a large portion of health expenditures, the share of investment expenditures remains quite limited. From 2003 to 2021, the share of current expenditures decreased from 97,5 percent to 93,5 percent, whereas the share of investment expenditures increased by 4 points, but it still has a very small share at 6,5 percent (TÜİK, 2022).

Hospital expenditures constitute nearly half of total health expenditures. From 2003 to 2021, while the share of hospitals increased by 14,2 points, another significant item was medical goods, although its share decreased in the intervening period (13,2 points). In 2021, providing of ambulatory health care and public health practices also increased their share significantly, with 9,4 percent and 9,2 percent, respectively, due to the effect of vaccination (TÜİK, 2022).

3.3. Fiscal Sustainability Indicators Regarding the Health System: Türkiye and Other OECD Countries

According to OECD data, while the ratio of health expenditures to GDP in 2022 is 9,3 percent on average in OECD countries, Türkiye has the lowest rate among 38 countries at 4,3 percent. The rate, which was 4,6 percent in 2020 and 2021, decreased slightly in 2022 (OECD, 2023). According to TÜİK data, the ratio of total health expenditures to GDP in 2021 is 4,9 percent. The average for the period 2003–2021 is 5 percent. Considering that the OECD average between 2015 and 2022 is 9 percent, Türkiye has very low rates.

According to OECD data, health expenditures per capita based on purchasing power parity in Türkiye increased by 17,2 percent compared to the previous year and reached 1.827 dollars in 2022 (OECD, 2023). Despite these increases, health expenditures per capita in Türkiye are almost 1/4 of the OECD average.

In the 2003–2022 period, health expenditures increased above economic growth in the majority of OECD countries. Following the 5,8 percent increase in health expenditures per capita in the 2003–2009 period, the slowdown in the 2009–2019 period (3,5 percent) was determined by the recession in many OECD countries after the global financial crisis, as well as the decreases in health expenditures due to the austerity policies in some countries (especially Greece, Ireland, Italy, Portugal, and Spain). The 8,3 percent increase in the 2019–2022 period reflects the effects of the pandemic. There is a similar trend in Türkiye (8,1 percent, 4,2 percent, and 14,1 percent, respectively). However, the increase rates are above the OECD average (OECD, 2023).

In 2021, the share of health expenditures in general government expenditures was 16,2 percent on average in the OECD. While the highest rate belongs to the USA with 22,9 percent, this rate is also over 20 percent in Ireland, Czechia, Japan, and the UK. The lowest rate is in Switzerland with 7,8 percent (OECD, 2023). There is no information about Türkiye in OECD data. Therefore, for Türkiye, an attempt was made to make evaluations using the central government budget sizes published by the Republic of Türkiye Ministry of Treasury and Finance.

While the share of health expenditures in central government budget expenditures in Türkiye was at an average level of 4 percent in 2006–2008, it remained at 1 percent or below for many years and increased to 6-7 percent in 2021 and 2022 due to the effect of the pandemic. When the functional distribution of central government budget expenditures in 2022 is examined, it is seen that health expenditures rank sixth with a share of 6,5 percent and have surpassed defence services in the last two years (TCHMB, 2022).

Although the burden of public health expenditures on the budget (their share in central government budget revenues and expenditures, tax revenues and non-interest expenditures) has increased in recent years due to the effect of the pandemic, these rates are slightly above the 2006-2021 average. In addition, the growth rates of health expenditures and GDP in Türkiye were very close to each other.

3. Conclusion

Although the burden of health expenditures on the budget has increased slightly in Türkiye in recent years, especially due to the impact of the pandemic, the fact that the increase in health expenditures is met by the fast pace of growth in GDP doesn't pose a significant risk in terms of fiscal sustainability. In addition, the development of health expenditures in Türkiye in terms of various indicators is quite moderate compared to other OECD countries.

However, although the share of health expenditures in GDP remains below the OECD average, especially with the contribution of the young population, there are some difficulties that may affect the fiscal sustainability of the health system in Türkiye. Among these difficulties: city hospitals, the number of health staff, the outward migration trend in the health sector, the increasing emphasis on new health technologies, the increase in expenditures on medicine and treatment instead of preventive health, the importance of personalised treatment and medicines, the fact that the share of the elderly population that was 9,7 percent in 2021 will rise above 16 percent in 2040, etc. issues stand out.

In this context, in order to ensure the fiscal sustainability of the health system in Türkiye in the future, it is necessary to develop rational solutions in many areas (patient referral chain, contribution fees, complementary health insurance, quality-cost dilemma, fiscal sustainability of university hospitals, qualified medical education, performance system regarding doctors, rational drug use, health tourism, domestic production of health products and technologies, etc.) and to evaluate potential efficiency areas in all processes of the health system.

References

IHME (Institute for Health Metrics and Evaluation) (2023). *Financing Global Health 2021: Global Health Priorities in a Time of Change*, Seattle, WA: IHME, 2023, https://vizhub.healthdata.org/fgh/, (09.09.2023).

OECD (Organization for Economic Co-Operation and Development) (2015). *Fiscal Sustainability of Health Systems Bridging Health and Finance Perspectives*, OECD Publishing, Paris, https://read.oecd-ilibrary.org/social-issues-migration-health/fiscal-sustainability-of-health-systems_9789264233386-en#page1, (21.08.2023).

OECD (Organization for Economic Co-Operation and Development) (2023). *Health Statistics Database*, https://stats.oecd.org/Index.aspx?ThemeTreeId=9, (16.08.2023).

T.C. Hazine ve Maliye Bakanlığı (TCHMB) (2022), *Merkezi Yönetim Bütçe İstatistikleri*, https://ms.hmb.gov.tr/uploads/sites/3/2023/07/Merkezi-Yonetim-Butce-Giderleri-Gerceklesmeleri-Eko_Fonk-1.xls, (12.07.2023).

T.C. Kalkınma Bakanlığı (2014). *Sağlık Hizmetlerinin Etkinliğinin Artırılması ve Mali Sürdürülebilirlik Özel İhtisas Komisyonu Raporu*, Ankara, https://www.sbb.gov.tr/wp-content/uploads/2022/08/Onuncu-Kalkinma-Plani-Saglik-Hizmetlerinin-Etkinliginin-Artirilmasi-ve-Mali-Surdurulebilirlik-Ozel-Ihtisas-Komisyonu-Raporu.pdf, (23.08.2023).

TÜİK (Türkiye İstatistik Kurumu) (2022). *Sağlık Harcamaları İstatistikleri 2021*, https://data.tuik.gov.tr/Bulten/Index?p=Saglik-Harcamalari-Istatistikleri-2021-45728#:~:text=Toplam%20sa%C4%9Fl%C4%B1k%20harcamas%C4%B1%202021%20y%C4%B1l%C4%B1nda,milyon%20TL%20olarak%20tahmin%20edildi., (10.07.2023).

WHO (World Health Organization) (2022). *Global spending on health: rising to the pandemic's challenges*, Geneva: WHO Publications, https://iris.who.int/bitstream/handle/10665/365133/9789240064911-eng.pdf?sequence=1, (18.08.2023).

Political Accountability within the Context of Power of Purse in the Turkish Presidential Government System

Mustafa Biçer[1]

Abstract

The institutional and legal structure of the political accountability system based on the parliamentary government model that has been implemented in Turkey for almost a century changed after the General Elections and the Presidential Elections held on 24 June 2018. Henceforward, Turkish government system on the parliamentary model has turned into a presidential type of government system, called the Presidential Government System. With the Presidential Government System, the executive power and function has passed to the President, who is directly elected by the citizens and also has no political responsibility or accountability to the Parliament. Following this transformation, the political meaning of the budget and final account process with the political accountability system have been fundamentally affected.

In this study:

- First of all, after establishing a theoretical framework on the axis of power of purse with political accountability in representative democracy, the effectiveness of representative bodies on the budget will be evaluated according to presidential and parliamentary government systems in the world.

- Subsequently, we will focus on the effectiveness of the Turkish Grand National Assembly on the budget will be analyzed on the axis of the power of purse with the political accountability during the five-year period (2019-2023) in that time the presidential government system actually implemented.

Keywords: Presidential government system, political accountability in Turkey, power of purse.
JEL Codes: H10, H61, D70

1. Introduction

As a result of the struggles to limit the fiscal authorities of the absolute political power, the power of purse, which is a considerable cornerstone in the institutionalization of representative democracy, has embodied itself on the political accountability mechanism, which is the parliamentary approval and political supervision. In its 200 years historical advancement of modern state, political accountability, in line with the principle of separation of powers, has become the key institutional existence of representative democracy, regardless of government systems. The political accountability design in government systems has a fundamental function in establishing the check and balance between state organs. In representative democracy, this political accountability function is defined in terms of government/president, parliament and voters, regardless of the government system.

The institutional and legal structure of the political accountability system in Turkey has changed with the Constitutional Amendment Law No. 6771 dated January 21, 2017. This Constitutional Amendment Law adopted by a plebiscite on April 16, 2017. Thereafter, the dual structure of the executive body, the President and the Council of Ministers, has turned into a

[1] Ph.D, TBMM Directorate of Laws and Decisions, ORCID ID: 0000-0002-3655-0907, GSM: 505 212 4297, mustafabicer69@yahoo.com.tr

presidential type of government system. This new government system has called the "Presidential Government System (PGS)" that all the executive power is concentrated in the President elected by the people.

The most important transformation in the new government system, which was actually passed after the General Elections and the Presidential Elections held on 24 June 2018, has been experienced in the political accountability of the executive power. Previously, executive power and function was undertaken by the prime minister with the council of ministers established with a vote of confidence received from Grand National Assembly of Turkey (GNAT), had collective and individual political responsibilities to the Parliament. With the PGS, this executive power and function has passed to the President, who is directly elected by the citizens and also has no political responsibility to the GNAT. In this new model, the political, legal and institutional structure of the public-decision making system has also changed. After this transformation, the political meaning of the budget and final account process, which is the resource allocation process of public policies, with the political accountability system have been fundamentally affected.

In the PGS, the constitutional provision in Article 7 of the Constitution stating that “Legislative power is vested in the Grand National Assembly of Turkey on behalf of Turkish Nation and this power shall not be delegated.” has not changed. However, in Articles 104, 106 and 123 of the Constitution, the President is empowered to issue a Presidential Decree, which has the force of law, in areas such as the execution of executive transactions, establishing and abolishing ministries, establishing a public legal entity, determining the procedures and principles for the appointment of senior public administrators. With these powers, the President has gained an important position in the process of enacting public policy decisions at the constitutional level. However, no political accountability towards the Parliament has been envisaged in this new government system.

2. The Main Features of Political Accountability in the Turkish Presidential Government System

With the 2017 Constitutional Amendment, significant transformations were taken place in the political accountability system, because of the President, who is sole the political representative of the executive branch, is directly elected by the citizens. Since the Presidency and the GNAT do not originate from each other in PGS, there is no longer a relationship of political responsibility (Gözler, 2019:857). Because there is a strict separation of powers between the executive branch and the parliament in presidential systems. In addition to that there is no interpellation and vote of confidence mechanism in presidential systems (Gözler, 2019:683). For this reason, with the 2017 Constitutional amendments, constitutional regulations were made to separate the organic tie between the GNAT and the executive branch.

With the transition to PGS, there has been a significant transformation in the field of political responsibility with the interpellation and vote of confidence mechanisms peculiar to the parliamentary government system. Within this scope; Article 99 regulating interpellation, article 110 and 111 regulating the vote of confidence with no-confidence mechanism, and articles 112 regulating the political responsibilities of the Prime Minister and ministers, of the Constitution have been abolished. In the new government system, vice presidents and ministers are appointed by the President. Therefore, in terms of political responsibility, vice presidents and ministers are responsible to the President according to Article 106 of the Constitution. That is, ministers have no political responsibilities towards the GNAT in PGS.

In the PGS, the responsibilities of the President, vice presidents and ministers towards the GNAT are defined as criminal, not political (Gözler,2019:697-698). The criminal liability of the President is regulated in the 105th article of the Constitution, and the criminal liability of the vice presidents and ministers is regulated in the 106th article of the Constitution. However, in these articles, the quorum required to open a parliamentary investigation against the vice presidents and ministers and to bring them before the Supreme Criminal Tribunal have been envisaged to be quite high (for opening investigation three fifths and for brought before supreme court two thirds of the total number of members). Due to these quorums, the possibility of using the parliamentary investigation procedure is very low. When we look at presidential system, the quorum for parliamentary investigation is regular number of members. For example, in the USA, the vote of the absolute majority of the total number of members of the House of Representatives is sufficient for the president or a minister to operated the impeachment mechanism (Gözler;2019:695). In PGS, the duty of the Vice President or minister who is convicted by the Supreme Criminal Tribunal of a crime that prevents him from being elected as a result of a Parliamentary investigation ends. For this reason, parliamentary investigation in PGS is a more effective control tool than other methods of obtaining information and supervision listed in Article 98 of the Constitution. However, considering both the high voting quorum regarding the investigation process and the need to assert a crime related to his/her duty, it is not possible to use this mecanizm effectively against a minister or vice president (Gözler, 2019:698).

3. Controversial Topics within the Scope of the Power of Purse in the New Political Accountability System

After the 2017 Constitutional amendment, two debates have gained importance in terms of political accountability. The first of these is about the phrase which GNAT is to "supervise the Council of Ministers and ministers", which was included in Article 87 of the Constitution and was removed by the 2017 Constitutional Amendment. It is argued that not regulating this phrase as "supervising vice presidents and ministers" weakens the political accountability mechanism in the PGS. The second arises at the point of authority granted to the executive body in the Constitution regarding provisional budget implementation.

First controversial issue: After the 2017 Constitutional amendment, the defiency to make a regulation compatible with PGS, instead of the phrase "supervising the Council of Ministers and ministers" defining a certain area of authority in Article 87 of the Constitution, have been considered contrary to the GNAT's Power of Purse. The question that arises at this point is whether the authority of the GNAT to supervise the executive branch has been abolished? Or whether it weakens the effectiveness of the power to supervise the executive branch? Let's discuss this question.

PGS is designed around the basic institutional and political facts of the presidential model in Turkey. Therefore, there is no organic relationship between the Parliament and the President, who is the only political representative of the executive branch. The President is elected directly by the people and is accountable to the citizens through elections in this new government system. This design is a correct approach based on a pure presidential model. However, since the President can also be the leader of a party, it is not possible to say that he/she does not have an organic connection with the Parliament. On the other hand, in PGS, the GNAT can obtain information about the public policies carried out by the executive body through parliamentary inquiry, general debate, parliamentary investigation and written question listed in Article 98 of the Constitution. In these parliamentary supervision ways, GNAT can supervise

executive body. Therefore, it is claimed that the phrase "supervising the Council of Ministers and ministers" in Article 87 of the Constitution can be changed to "supervising the vice presidents and ministers" (Gözler, 2019:664) is not contrary to the presidential system. With this phrase change, ministers and vice presidents who use budget appropriations could be ensured political accountable to the GNAT for the public policies they carry out. Thus, a strong constitutional basis could be established for the GNAT to effectively use the means of obtaining information and supervising provided for in Article 98 of the Constitution.

The second discussion is based on whether the constitutional authority granted to the executive body to implement a provisional budget in case the budget law cannot be put into effect in due time is contrary to the power of purse that traditionally belongs to the parliament. With the 2017 Constitutional amendment, the authority to issue a provisional budget, which belonged only to the GNAT in the previous government system, was also granted to the Executive body in case the GNAT could not enact a provisional budget law. In Article 161 of the Constitution; If the budget law cannot be put into force within due period, the provisional budget law shall be enacted. If the provisional budget law cannot also be enacted, the budget of the previous year shall be applied increasingly as per the revaluation rate until the new budget law will be adopted. The main difference of this constitutional regulation from the temporary budget practice in the previous government system is that the executive branch is given the authority to implement a the provisional budget through an administrative action in case the the provisional budget law is not enacted by GNAT. In addition to that, another important difference in provisional budget implementation is that a temporary period is not foreseen in provisional budget implementation and an upper limit is not imposed in determining provisional budget appropriations.

4. The strength of the Grand National Assembly of Turkey in exercising own the Power of Purse in the Period Between (2019-2023)

The (2019-2023) period covers the five years in which CBHS is actually implemented. In this period, legislative and supervision activities peculiar to PGS were carried out in GNAT. In this period, according to Article 161 of the Constitution, which contains provisions regarding the discussion and approval of the budget, the GNAT used its authority to approve the budget and final accounts arising from its power of purse. In fact, no fundamental changes have been made in Article 161 of the Constitution other than the way the budget is presented and the provisional budget implementation.

According to Article 161 of the Constitution, The Plan and Budget Commission, which is a constitutional commission, has unlimited authority to make suggestions that increase expenses or reduce revenues in the budget. Despite this constitutionally unlimited authority, the Planning and Budget Commission has never been able to exercise its authority to make changes on budget appropriations in this five years period. Starting from the 2019 budget, which is the first budget made in the new government system, no changes have been made to the budget appropriations, including the 2023 budget[2].

In addition to not making any changes to the budget appropriations, the period for discussion and approval of the budget and final account bill proposals in the Commission and the Plenary of the GNAT has also become shorter. According to Article 161 of the Constitution, GNAT is given 75 days for the discussion and approval of budget and final account bill proposals.

[2] Collected from the Planning and Budget Commission Reports of the Central Government Budget Proposals for the years 2019, 2020, 2021, 2022 and 2023. https://www.tbmm.gov.tr/Yasama/KomisyonRaporlari-Sonuc,

However, the budget process in the GNAT is being completed in less than the 75 days required in the constitution.

5. Concluding Remarks

In this study, the following issues came to forward in the field of budget and supervision authority of the GNAT.

1. The budget discussion and approval process in the Commission and the GNAT Plenary is completed in 30-35 days, less than the constitutionally stipulated 75 days, and the GNAT cannot assume a decisive role on budget appropriations, despite its constitutionally unlimited authority.

2. The fact that the phrase "supervising the Council of Ministers and ministers", which was included in Article 87 of the Constitution and was removed from the text of the article with the 2017 Constitutional Amendment, was not regulated as "supervising the vice presidents and ministers" has weakened the political accountability mechanism in the PGS.

3. In Article 161 of the Constitution, the right vested to the president to issue a provisional budget in case the GNAT cannot enact a budget or a provisional budget law is contrary to the power of purse that belongs to the parliament in the theory of representative democracy.

References

ABD Elçiliği (2023), *Amerika Birleşik Devletleri Anayasası*, https://tr.usembassy.gov/wp-content/uploads/sites/91/abd-anayasasi.pdf, (20.09.2023).

Atiyas İ. ve Sayın Ş. (1997) *Siyasi Sorumluluk, Yönetsel Sorumluluk ve Bütçe Sistemi: Bir Yeniden Yapılanma Önerisine Doğru*, Türkiye Ekonomik ve Sosyal Etüdler Vakfı Yayını.

Biçer M. (2017), *Türkiye'de Kurala Bağlı Maliye Politikası ve Bütçe Hakkı Temelinde Parlamentonun Etkinliği* Ankara Üniversitesi Sosyal Bilimleri Enstitüsü, (yayınlanmamış doktora tezi), Ankara.

Erdoğan M., (2010), *Anayasal Demokrasi*, 8. Baskı, Siyasal Kitabevi.

Gözler K. (2019) *Türk Anayasa Hukuku*, 3. Baskı, Ekin Kitabevi.

KARAHANOĞULLARI Y., (2011), "ABD'nin Federal Bütçe Süreci", *Maliye Dergisi*, Sayı: 160,269-288.

Sobacı M. Z., Miş N. ve Köseoğlu Ö. (2018) "Türkiye'nin Yeni Yönetim Modeli ve Cumhurbaşkanlığı Teşkilatı", Say: 206, *SETA Perspektif*.

TBMM (2019), *ABD Kongresinde Yasama, Denetim Ve Bütçe Süreçleri*, Tbmm Araştırma Hizmetleri Başkanlığı Yayın No: 11.

Teziç E. (1986), *Anayasa Hukuku*, Beta Yayınları, 1. Baskı, İstanbul

Wehner J. (2009) *Legislatures and the Budget Process: The Myth of Fiscal Control*, Final Version, manuscript, 4 December.

Yılmaz H. H. ve Biçer M., (2010), "Parlamentonun Bütçe Hakkını Etkin Kullanımının Yeni Bütçe Sistemi Çerçevesinde Değerlendirilmesi", *Maliye Dergisi,* Ocak-Haziran 2010, Sayı 158, pp. 201-225.

The Impact of the Digitalization Process on the Fundamental Elements of Taxation in Selected Countries and Implications for Turkey

Kendal Deniz[1] **Fatma Taş**[2]

Abstract

Despite the increase in revenues generated from digital economic activities with the digitalization of the economy and the addition of new concepts, institutions and principles in the economic structure, new problems arise every day in the taxation of revenues generated in the economic structure and new concepts by tax authorities. One of the main reasons for the emerging problems is that tax administrations do not have the technological infrastructure to monitor and detect the values created or transactions made in new business models. Another reason is that the existing tax laws are insufficient in taxing new concepts and institutions in the economic structure since they take into account the economic values and working patterns of the period in which they were prepared. This situation has revealed the need to redesign tax laws in accordance with the digitalization process in order to ensure fairness in taxation and to prevent revenue losses and/or to obtain new sources of revenue. In this direction, first of all, the essential elements of taxation such as taxpayer, subject matter, tax-generating event, tax rate, exemptions and exceptions should be redefined in line with the new meanings gained as a result of the effects of the digitalization process. As a matter of fact, determining the new meanings of the essential elements of tax in the digitalization process is important for the regulation of formal and substantive tax law. The purpose of this study is to reveal the changes brought about by the digitalization process in the taxpayer, tax subject, tax responsible and taxable event, which constitute the essential elements of tax, on the basis of country examples. In this context, in this study, the legal regulations regarding the essential elements of tax in various countries are presented, the current regulations in Turkey are examined and suggestions are made regarding the regulation of the essential elements of tax in the tax reform process.

Keywords: Digitalization, Digital Transformation, Digital Tax, Fundamental Elements of Tax.
JEL Codes: H25, H26, K34.

1. Introduction

With the digitalization process, data has been expressed in computer bits, and the use of the internet and mobile networks in society has become increasingly widespread. This transformation in the social structure has inevitably necessitated changes in the economic structure. In order not to fall behind in global competition, businesses have started to include digital technology and increasing data flows, which have developed with the digitalization process, more in their production and decision-making processes. Thus, digital technology and data have transformed from being a side factor to a key actor in production and decision-making processes, leading to the development of new digital business models where value is created around digital technology and data (UNACTAD, 2019: 39). This has also changed the way of doing business and working, traditional business models have started to transform around digital

[1] Res. Assist., Çanakkale Onsekiz Mart University, Department of Public Finance, ORCID: 0000-0002-5864-6539, kendaldeniz@comu.edu.tr (correspond author)
[2] Prof. Ph.D., Çanakkale Onsekiz Mart University, Department of Public Finance, ORCID: 0000-0001-5588-661X, fatmatas@comu.edu.tr

technologies, and physical goods and services have been replaced by digital goods and services. In addition, the access of digital goods and services to global markets has become easier, and the consumption and transportation patterns of digital goods and services have also changed. With this change, as the digitalization process has become widespread in the economy, the share of digital economic activities in the world economy has increased.

Existing tax laws are insufficient to tax digital economic activities since they are prepared by taking into account the concepts and institutions related to traditional economic activities. However, in order to ensure fairness in taxation and to prevent the loss of tax revenues, it is important to reorganize tax laws to cover the concepts and institutions of digital economy. In this context, the purpose of this study is to reveal the new meanings of the fundamental elements of taxation in the face of the concepts and institutions emerged by the digital economy and the regulations made in line with the country practices. In line with this purpose, the study first examines the general concepts related to digitalization, then examines the changes in the essential elements of tax in the context of country practices, and concludes with recommendations on the reorganization of the essential elements of tax in Turkey.

2. General Explanations on the Concept of Digitalization

2.1. The Concept of Digitalization and Its Basic Elements

There is no standard definition agreed upon in the literature on the concept of digitalization. In the literature, the concept of digitalization is sometimes interpreted narrowly as digitization and sometimes broadly as digital transformation (Brennen and Kreiss, 2014). On the other hand, the concepts of digitization, digitalization and digital transformation refer to different concepts. Digitization is the conversion of data into digital format by encoding it in binary number systems expressed in 0 and 1. Digitalization can be expressed as interconnections that result in innovation and change in existing activities using digital technologies and digital data. Digital transformation is a broader concept that refers to the economic and social effects of digitization and digitalization (OECD, 2019: 18).

Although there is some confusion over the concept of digitalization, there is a consensus on the key elements or technologies that drive changes in the economic and social structure. These technologies include blockchain, 3D printing technology, 5G technology, internet of things, cloud computing, robotics, artificial intelligence and big data (OECD, 2019: 18).

2.2. Digital Platform-Based Business Models as New Business Models Emerged by Digitalization in the Economy

Digital platforms are generally defined as "a digital place that allows users to interact with each other more easily and cheaply, creating new value or exchanging existing value" (Evans, 2016: 6). Unlike physical platforms, digital platforms have taken their activities to a global scale by building a trust mechanism between users through data and digital technologies, reduced transaction costs by providing users with the opportunity to match much more easily and efficiently and scaled rapidly by taking advantage of network effects (Belleflamme and Peitz, 2021: 11). In this way, digital platforms have become an important actor in the economy by achieving great market power with different business models in different sectors (Karagülle, 2020: 6)

3. The Impact of Digitalization on the Fundamental Elements of Tax

The new concepts, institutions and principles emerging in the social and economic structure of digitalization not only affect many branches of law, but also tax law, providing many new opportunities to tax parties, but also facing several challenges. This situation necessitates the reorganization of the existing tax laws, which cover the events occurring in economic life, to cover the relationships and concepts in the emerging digital social and economic structure (Hilgendorf, 2018: 11). In this context, digitalization will eventually affect all aspects of formal and substantive tax law, leading to the transformation of tax law. Although the taxpayer, tax responsible, tax subject, taxable event, tax base, exceptions and exemptions and tax rate constitute the essential elements of tax, only the taxpayer, tax responsible, tax subject and taxable event will be discussed in this study.

The concept of taxpayer is defined in the Tax Procedure Law as a natural or legal person who owes tax according to the tax laws. In terms of being a taxpayer in the definition, the law seeks to be a real and legal person, but in other tax laws, some entities such as business partnerships that are not real and legal persons are also included in the scope of taxpayers. With digitalization, discussions have emerged on the definition of artificially intelligent robots as taxpayers, which is a new technology emerged by digital technologies, in addition to the taxpayers existing in the existing laws. Especially as artificially intelligent robots have started to replace humans in the workforce, it is proposed to tax artificially intelligent robots by granting them electronic personality in order to protect human labor (Gedik, 2020: 30). However, when the country practices are examined, it is seen that there is no legal regulation in the EU, the United States of America (USA), South Korea and Italy, where there are draft regulations. In addition, with digital technologies, companies can now earn income without having a physical presence in the source country. The ability of companies or businesses to earn income without having a physical presence in the source country leads to a change in the nature of the taxpayer. Although various approaches to taxation of the taxpayer in the source country have been proposed, such as user participation, significant economic presence and intangible rights, there is no agreed approach.

The concept of tax responsible is the person who is accountable to the creditor tax office for the payment of tax. The digitalization process makes the tax liability of digital platforms more important than the liability institution in the existing tax laws. The reasons for this are that a significant portion of sales of goods and services are made through platforms, they have a large amount of customer data, they can eliminate fiscal measures, and the taxes of sellers below the fiscal threshold can be accessed (OECD, 2021; OECD, 2020).

The concept of tax subject refers to the legal and actual situations on which the tax is levied. With the use of digital technologies in economic activities, many digital economic activities have emerged and they are excluded from tax as they are not regulated in tax laws. In this study, digital goods and services, crypto assets and sharing economy activities related to digital economic activities are discussed.

Taxable event is defined as the actual or legal situation that must occur according to tax laws for the tax receivable to arise. The change in the production and consumption patterns of goods and services with digitalization has changed the ways of income generation and delivery of goods and services. Therefore, the need to reorganize the taxable event in tax laws in accordance with the new digital activities has emerged.

4. Conclusion

There are no internationally agreed standard definitions of the basic concepts of digital technologies and the new concepts, principles and institutions that digital technologies create in the economic structure. While this situation makes it difficult to define tax-related concepts in tax laws, countries have started to harmonize their tax laws with these concepts. In this context, when the regulations regarding the essential elements of the tax in Turkey are examined, it can be said that the regulations are quite limited, and there is only a regulation within the scope of the Digital Services Tax. In this context, in order to tax artificial intelligence robots regarding the concept of taxpayer, the concept of robot should be defined by specifying its characteristics and a tax personality should be established accordingly. The responsibility of digital platforms as a taxpayer should be reorganized. Introducing a financial threshold at the point of responsibility of digital platforms will contribute to the more effective fulfillment of notification and collection functions and the obligation of platforms to share information will contribute to the prevention of unrecorded activities. As a tax subject, crypto assets, digital products, sharing economy and gig economy activities should be defined in accordance with the digital economic structure. In line with these definitions, the taxable events related to these activities should also be reorganized. However, the fact that digitalization changes economic activities very rapidly may prevent a regulation from achieving the desired purpose in taxation before long. In order to cope with the constant changes brought about by digitalization, the establishment of a binding commission to follow technological changes may become an important requirement for harmonization of tax laws.

References

Gedik, G. (2020). "Robotlara Karşı Gerçek Kişilerin Korunması Açısından Robot Vergisi Önerisi", *Marmara Üniversitesi Hukuk Fakültesi Hukuk Araştırmaları Dergisi,* 26 (1), 24-48.

OECD (2019), *Going Digital: Shaping Policies, Improving Lives,* OECD Publishing, Paris, *https://doi.org/10.1787/9789264312012-en.*

OECD (2020). *Tax Administration 3.0: The Digital Transformation of Tax Administration*, Forum on Tax Administration, OECD, Paris.

OECD (2021), *The Impact of the Growth of the Sharing and Gig Economy on VAT/GST Policy and Administration*, OECD Publishing, Paris, *https://doi.org/10.1787/51825505-en*.

Hilgendorf, E. (2018). "Digitization and the Law – a European Perspective", Eric Hilgendorf/Jochen Feldle (eds.), *Digitization and the Law*, Germany: Nomos, 9-20.

Karagülle, O. A. (2020). *Dijital Platformlarda Rekabet Gücünün Belirlenmesi,* Rekabet Kurumu Uzmanlık Tezleri Serisi No: 171.

Evans, D. S. (2016). "Multisided Platforms, Dynamic Competition, and the Assessment of Market Power for Internet-Based Firms", *Coase-Sandor Working Paper Series in Law and Economics*, No. 753.

Belleflamme, P., and Peitz, M. (2021). *Platforms: Definitions and Typology. In The Economics of Platforms: Concepts and Strategy*. Cambridge: Cambridge University Press. doi:10.1017/9781108696913.003.

Brennen S. and Kreiss, D. (2014). Digitalization and Digitization, https://culturedigitally.org/2014/09/digitalization-and-digitization/ (29.10.2023).

UNCTAD, (2019). *Digital Economy Report 2019: Value Creation and Capture: Implications for Developing Countries*, Geneva.

Digital Transformation of Tax Management: Global Implementation and Evaluations For Türkiye

Ayşegül Yücel[1]

Abstract

The study was written to evaluate the digitalization process in tax management. Digital transformation in political, economic, and legal fields is also important for tax management. Firstly, the concept of tax management is explained in the study. After explaining the necessity of tax management to undergo a digital transformation in the face of the digital economy, examples of countries that have made important studies in digitalization are given. Following these country examples, Türkiye's digital transformation in tax management was mentioned and various deficiencies were identified. Although studies have been carried out in the name of digital transformation in Turkish tax management, it is necessary to draw a good road map for a simultaneous transformation with global practice in the future and to continue development. should be considered in the future.

Keywords: Tax Management, Digitalization, Tax Administration, Digital Economy.
JEL Codes: H20, K15, K34

1. Introduction

Digitalization has occurred with the global spread of digital devices and designs produced as a result of technological developments. With digitalization, a new and unique economy has emerged and new business models have emerged. As a result of the difficulties in tracing the source and transactions of different economic models emerging with digitalization, difficulties in taxation have started to be experienced. It is seen that classical taxation principles are insufficient in solving problems such as the difficulty in tracking transactions carried out with digital assets, the difficulty in taxing cross-border transactions of digital platforms, etc. Reasons such as the decrease in tax collection rates due to weakened economic relations in the pandemic and the decrease in the rate of audits in the workplace with the widespread use of remote working also encourage digitalization. Therefore, tax administrations must improve their infrastructure and enter a system-oriented digital transformation process.

2. The Concept Of Tax Management

Tax management is a sub-concept of the concept of financial management; tax-related It refers to legal regulations, tax administration and tax judgement process (Akdoğan, 2020:195). Tax management has both organisational and procedural meanings it is possible to say. The concept, taxation institutions and taxation process (Mutlu, 1998: 7).

When the Turkish tax legislation is analysed, it is seen that there is no definition of tax management does not exist. Article 4 of the Tax Procedure Law No. 213 states that the tax office "is the department that identifies the taxpayer, assesses, accrues and collects the tax." (Mutlu, 1998: 7).

[1] Res. Assist., Bandırma Onyedi Eylül University, Department of Public Finance, ORCID: 0000-0001-9577-4348, ayucel@bandirma.edu.tr

3. Digitalization Of Tax Management

3.1. General Framework

Tax management has entered a radical change process with digitalization. This change is both It means both the structural reform of tax administrations and the improvement of administrative process management. Digital transformation in tax management is not only country-based but also a global transformation is targeted. However, the process of integrating digital tools into tax management does not take place simultaneously in every country.

Although each country is at a different stage, the digitalization process passes through similar paths. Filing and accounting transactions, which first started in an electronic environment, started to continue in the form of an electronic audit and evaluation process in the following period (Marchenko, 2022: 128). On a global scale, it is seen that the transfer of books and documents related to the taxation process to the electronic environment and e-declarations have become widespread.

The OECD and the European Union carry out the most comprehensive and regular studies on digitalization prepare reports and set certain criteria for the digital transformation of tax management. Among the reports, the OECD has prepared the most comprehensive and detailed digitalization plan. This plan is also taken as a reference in the EU and most other countries' plans.

Although the studies differ from each other, the global digital transformation proceeds on the main axis determined in the OECD's Tax Administration 3.0 report dated 2020. According to the OECD report, the level of development of tax offices has 3 stages. The first of these is Tax Administration 1.0. At this stage, there is a paper-based, slow and costly tax administration. Tax Administration 2.0, which is the next step, is the stage that can be called e-administration, where it is possible for the tax administration to increase efficiency and effectiveness by using digital data and technology tools, public and private sector cooperation at the point of digitalization, and easier detection of problems in workflows. 3.0 is the stage in which interconnected taxpayer-tax administration ecosystems are created and automatic and uninterrupted taxation is realized. At this stage lies the ideal of creating an automated system where tax just happens." (OECD, 2020). The main purpose of the report is to realize a taxation process that is integrated into the natural systems of taxpayers. The true digitalization of tax management should involve not only the adoption of new tools and technologies but also a comprehensive legal and institutional transformation.

3.2. Building Blocks of Digital Transformation

A specific roadmap for digital transformation has been drawn up by the OECD and its building blocks are has been created. These are respectively;

- Building Block 1: Digital Identity

Taxpayers are securely registered in the tax system and taxpayers It provides functionality by connecting natural systems to each other. Global practice examples: Thailand: National Digital Identity Project, Canada - Community Volunteers Income Tax Programme Identity Verification Team (OECD, 2023).

- Building Block 2: Taxpayer Contact Points:

It enables taxpayers to communicate with the tax administration when necessary, and provides these points embedded in the natural systems of taxpayers. Global practice examples: Hungary - Supporting flat-rate taxation (OECD, 2023), Denmark - APIs for Submitting VAT Returns (SOAP Web Services) (OECD, 2022).

- Building Block 3: Data Management and Standards:

Effective data management of the administration in order to increase tax compliance and reduce administrative burden framework for tax rules. Global practice examples: Australia - Real Time Online Controls (OECD, 2022), Türkiye - Applying Behavioural Insight (OECD, 2023).

- Building Block 4: Tax Legislation and Implementation:

It refers to the transformation of tax laws into a form that can be integrated into digital systems and added to the natural systems of taxpayers. Italy - Business Intelligence Portal (OECD, 2023), Brazil Smart Litigation Project (OECD, 2022).

- Building Block 5: New Skill Sets:

The planning of new skills for the development and operation of a new digital tax authority with little human intervention and much support from digital tools. Global practice examples: Sweden - Risk Assessment, Argentina - Risk Profiling (OECD, 2022).

- Building Block 6: Governance Frameworks:

To ensure the realization of digital transformation in cooperation with tax offices and data provider platforms at national and international levels.

4. The Case of Türkiye

The first step towards digitalization of tax management was the Tax Administration Full Automation Project (VEDOP) of 1998. The project aims to extend the IT application covering traditional tax office functions to tax offices by using IT and to establish a regional and central communication network structure (GİB, 2023: 21). With the second phase VEDOP-2 and the third phase VEDOP-3, which started in 2007, e-VDO (Internet Based Tax Office Automation) applications, 449 tax office directorates and 585 property directorates were included in the scope of automation as of 2010 (GİB, 2023: 21). At this point, the digitalization of Turkish tax management continues with many applications such as e-declaration, e-collection, e-invoice, e-ledger, e-notification, e-polling, ready declaration system, interactive tax office (GİB, 2023: 99).

As tax administration in Türkiye is digitalizing, the number of documents available in electronic environment is increasing year by year. However, the fact that many traditional tax office services are fully available in electronic environment is insufficient to say that digital transformation in Türkiye is at the expected level. Because it is seen that Türkiye still has problems in terms of the necessity of recording everything at the very basis of digital transformation. The existence of problems in combating the informal economy prevents the development of services in electronic environment. According to the OECD's Tax Administration report dated 2023, the percentage of active income taxpayers to the total population in 2021 is 28.6%. Although this situation is not a direct sign of the existence of an informal economy, it may provide a perspective that there are problems about losses and evasions. However, reasons such as the lack of legal and economic regulations and taxation of digital assets created by the digital economy show that Türkiye is lacking at this point in the global digital tax authority studies. Moreover, according to IMD's World Digital Competitiveness report dated 2022, Türkiye

ranks 54th among 63 countries. The lack of studies to comprehend a new value creation process shows that the digitalization of the tax office is only the transfer of services to the electronic environment, and suggests that Türkiye is still at the 2.0 stage according to the maturity level in the OECD's 3.0 report.

5. Conclusion

Since the 1990s, Türkiye has carried out many studies for digital transformation in tax management. It is seen that many e-services are provided to taxpayers with the transition from traditional administrative understanding to the electronic environment. However, it seems that Türkiye's digitalization level has not yet reached the desired level on an international scale. In order to ensure data flow in the global and digital world and for effective tax management Türkiye should continue its efforts by strengthening its infrastructure in accordance with the new data tools according to the strategic plan it has determined.

Moreover, according to the 2023 Digital State Review Türkiye repodigitalizationtion in tax management started in 1999. Thanks to the use of data and technology in taxation, many e-services have been offered over the years. These applications have functions such as making the application, organizing documents, requesting information, etc. According to the report, more inclusive and innovative projects are also desired to be carried out with the cooperation of taxpayers and tax offices. Although many services are currently provided through e-government applications, the Revenue Administration has started to work on providing all services through a single platform, the Digital Tax Office project.

Beyond moving the traditional tax office of Türkiye to the electronic environment, other revisions are needed to catch up with the standards of other countries. needs. For this purpose, the Tax Procedure Law and related basic laws should be updated in terms of taxation of the digital economy. Tax law legislation, which is deficient in the taxation of the digital economy, should be reviewed. Many classical approaches, especially taxation principles, which are insufficient in taxing new economic businesses and models, should be revised. The revision to be made in this regard will both facilitate following the global economy and practices and reduce informality.

Secondly, economic and legal arrangements should be made regarding digital assets and global practices should be followed for the taxation of the digital economy. Türkiye should also take the initiative at this point in the face of the fact that most countries make regulations for taxation without wanting to be deprived of the value created by digital assets. The fact that those who earn from digital assets do not pay tax both increases informality and undermines fairness and equality in taxation, putting the burden of the entire tax system on the low-income taxpayer group.

Considering that the ultimate goal of digital tax management is globally interconnected digital tax authorities, all efforts to achieve this goal should be carried out in cooperation with international tax authorities. In particular, studies should be carried out on data sharing and control, and audit activities should be increased.

For a tax system that is seamless and integrated into the natural systems of taxpayers, the importance of the human factor should also be considered. In order to establish an effective tax management system in cooperation with digital tools and the human factor, the personnel employed should receive various pieces of training on digitalization in order to increase their technological literacy and should be supported with various projects.

Finally, the fundamental rights and freedoms of taxpayers should also be protected. Since there will be a large data sharing, regulations should be made to prevent the consequences that violate the private lives of taxpayers. Especially in the case of data sharing between countries, a protective and attentive attitude should be displayed at the point of sharing the private information of taxpayers. There should be sanctions for any digital system in which taxpayer information is shared unauthorized and openly. The continuous collection of information on taxpayers by the administration allows tax administrations to find data that even the taxpayer does not know and even use this information to profile taxpayers. Thanks to big data processing and sharing technology, this situation may also be available to other public institutions.

References

Akdoğan, A. (2020). Kamu Maliyesi (21. b.). Ankara: Gazi Kitabevi.

GİB. (2023). 2022 Faaliyet Raporu. Ankara: GİB.

GİB. (2023). 2023 Yılı Performans Programı Raporu. Ankara: GİB.

Marchenko, L. (2022). Digitalization of the Tax Administration System in Ukraine Taking Into Account the Experience of Developed. Economic Analysis, 127-134.

Mutlu, F. (1998). Vergi Yönetimi Kavramı Örgütlenmesi ve Ülkemiz Açısından Etkinlik Sorunu. Ankara: Gazi Üniversitesi SBE.

OECD. (2020). Tax Administration 3.0: The Digital Transformation of Tax Administration. Paris: OECD . OECD (2020), Tax Administrahttp://www.oecd.org/tax/forum-on-tax-administration/publications-and-products/ tax-administration-3-0-the-digital-transformation-of-tax-administration.htm adresinden alındı

OECD. (2022). Tax Administration 2022: Comparative Information on OECD and other Advanced and Emerging Economies. Paris: OECD Publishing. OECD (2022), Tax Administration 2022: Comparative Information on Ohttps://doi.org/10.1787/1e797131-en. adresinden alındı

OECD. (2023). Digital Government Review of Türkiye: Towards a Digitally-Enabled Government. Paris: OECD Publishing.

OECD. (2023). Tax Administration 2023: Comparative Information on OECD and other Advanced and Emerging Economies . Paris: OECD Publishing. https://doi.org/10.1787/900b6382-en. adresinden alındı

The Role of Artificial Intelligence in the Digitalization of Tax Audit and Its Possible Effects on Taxpayer Rights

Hüda CARDA[1] **Burçin BOZDOĞANOĞLU**[2] **Özgür BİYAN**[3]

Abstract

With Industry 4.0, which is described as the last link of digital transformation, the use of digital money, the spread of robots, and technologies such as NFT and metaverse based on blockchain have rapidly entered all areas of life. Artificial intelligence (AI), one of these technologies, affects every aspect of life directly or indirectly. Artificial intelligence technology plays an active role in increasing performance and efficiency. In this sense, artificial intelligence, which can be used in every field, has also started to be used in tax audits carried out by the financial administration. However, when this situation started to come into contact with taxpayer rights during tax audits, it brought about discussions on this issue. This study examines how much artificial intelligence applications used during tax audits affect taxpayer rights. As a result of the study conducted with the literature review method, it was determined that a more efficient and effective audit will be made by using artificial intelligence in tax audits, but it will be in very close contact with taxpayer rights in terms of issues such as tax privacy, obtaining personal data, accessibility to the algorithms used by artificial intelligence technology and ultimately non-discrimination. has been made.

Key Words: Artificial intelligence, Taxpayer rights, Tax audit.

Jel Codes: H29, K10, M42.

1. Introduction

With the acceleration of the digitalization process, many transactions can be carried out in a much shorter time and at less cost through new technologies used in almost every field. Artificial intelligence technologies, which are among these new technologies, involve storing, obtaining, and using data through algorithmic means, etc. It is a tool that becomes active in almost every field by using these methods. Revenue Administrations also stand out as one of the administrations that prefer and widely use the use of artificial intelligence in this digitalization process. In particular, these administrations have increasingly started to benefit from this technology during tax audits. On the other hand, the use of this technology brings new problems to the agenda. It has been noticed that issues such as whether the data obtained during the use of artificial intelligence technologies comply with the law, the structure of coordination between public administrations, algorithmic systems used by artificial intelligence during audits, and machine learning touch taxpayer rights in some respects while conducting tax audits. This study examines the use of artificial intelligence in tax audits and its impact on taxpayer rights by including examples of Revenue Administrations.

[1] Independent Researcher (Ms.Sc.), hcarda06@gmail.com, ORCID: 0000-0002-4802-4461.

[2] Prof. Ph.D., Bandırma Onyedi Eylül University, Department of Public Finance, burcindogan@gmail.com; https://orcid.org/0000-0002-9337-2895.

[3] Prof. Ph.D., Bandırma Onyedi Eylül University, Department of Public Finance, obiyan@bandirma.edu.tr; https://orcid.org/0000-0002-0804-9963.

2. Definition of Artificial Intelligence and Related Concepts

2.1. Conceptual Definition

Artificial intelligence is generally expressed in the literature as intelligence displayed by machines that imitate natural intelligence, and it is expressed as devices that perceive their environment and perform actions that reach a higher level in achieving determined goals (Poole, Mackworth, Goebel, 1998: 1). John McCarthy, who is considered the father of this concept, defined artificial intelligence in 1955 as "machines that exhibit intelligent behavior, built by a human" (Kaplan, 2016:1).

At a time when information technologies were just emerging, Alan Mathison Turing asked "Can machines think?" The first steps were taken for the concept of artificial intelligence with the question (Turing, 1950). After the Second World War, a number of people began working independently on intelligent machines. Later, the concept of artificial intelligence was used by Minsky and McCarthy at a "Machine Intelligence" conference in the United States (McCarthy, 2007).

2.2. Concepts Related to Artificial Intelligence

It is useful to include the definitions of some terms frequently used with artificial intelligence technology (Stefano, 2018: 2359):

Robotics: It is the engineering concept used in the production and design of robots. The most important feature of this concept is the use of some robots to perform tasks that are difficult or impossible for humans.

Machine Learning: It is expressed as making computer systems, creating programs and performing actions. Based on current data, computers can predict future behavior and outcomes without the need for human intervention.

Machine Vision: A camera is defined as the technology of converting from analog to digital or using the converted data to provide imaging-based automatic inspection and analysis with the help of digital signal processing.

Robotic Process Automation: It is the use of special computer programs or software robots that automate and standardize repetitive, tedious tasks performed by humans.

Natural Language Processing: It is the programming system applied to analyze, interpret, and manipulate natural language data of computer systems.

3. Process Regarding The Use Of Artificial Intelligence In Tax Audıt

Tax audits, which first started with transactions in physical environments, continue with the use of artificial intelligence, which is the final point of digitalization after effectively using computer-aided systems. Nowadays, the use of machine learning, data mining techniques, and big data analytics in tax audits has begun to gain importance.

One of the most important instruments that form the basis of the fourth industrial revolution is big data analysis. In this regard, big data analytics refers to the completion of the information process by collecting, combining, and processing data obtained from different sources, exceeding the limits of classical data technologies. As a matter of fact, big data

technology offers many opportunities for tax authorities, such as real-time audits, instant audits, risk analysis-oriented audits, and preventive audits (İlgün, 2020: 2).

The use of techniques that determine the behavior of taxpayers and the detection of fraud or tax evasion is one of the focal points of tax audits. For this purpose, tax administrations have focused on using business intelligence as a set of information systems that support decision-making based on other storage, analysis, and data extraction technologies (Mellado-Silva et al., 2020: 5). In this context, artificial intelligence; Data extraction has been an exploration that uses software and large amounts of data to discover meaningful patterns (Atak, 2020: 203).

The use of artificial intelligence technologies is not only used in tax audits but also in accessing the full and complete real information of taxpayers and accelerating the taxation process (assessment-notification-accrual-collection) as it provides fewer errors and lower costs (Turan, 2020:60) ıt shows itself.

4. Evaluation of Terms of Administration and Taxpayer Rights

4.1. Effects of the Use of Artificial Intelligence in Terms of Administration

It is envisaged that the use of artificial intelligence will provide a great benefit in providing full and complete service to taxpayers in making their payments, as well as in creating technical and administrative information (OECD, 2020). The issues that artificial intelligence will contribute to can be listed as follows (CPI, 2018):

1. Compiling, classifying, and revealing data of books, records, and documents, which cause a significant loss of time in tax audits, will be possible much faster thanks to artificial intelligence. For example, China is trying to effectively benefit from artificial intelligence in examining the forms used in transfer pricing (E-Bright Connect, 2023), while Belgium, Spain, the USA, and Canada are trying to effectively use artificial intelligence in detecting fraudulent transactions (Fidelangali, Galli, 2021).

2. Transfer pricing transactions that disrupt international tax competition can be detected faster with the use of artificial intelligence. For example, Deloitte, one of the world's leading audit firms, uses an artificial intelligence application called Argus in these analyses.

3. Since the computer algorithm is not affected by external factors, unlike human nature, the process will occur quickly, clearly, and consistently (Erkan, 2019:64).

4. Data that tax audit staff are likely to miss can be easily detected by artificial intelligence with predictive models, especially the detection of tax evasion. It can even be used to identify legal gaps and take precautions. For example, Norway uses artificial intelligence in transactions related to tax evasion (Fidelangeli, Galli, 2021), and Germany uses artificial intelligence in risky events with its "fully automatic procedure system" (Binder, 2018:1).

5. With artificial intelligence applications, the changes in tax revenues in the future can be predicted realistically. Transactions of potentially risky individuals are subject to immediate auditing, thus preventing deviations in tax revenue estimates.

6. With the use of cloud-based systems by artificial intelligence, taxpayers will be able to provide solutions to difficult-to-understand situations of complex tax legislation and will play a role in increasing tax compliance (Blanchard, 2014).

4.2. Possible Determinations That May Be Problematic in Terms of Taxpayer Rights

The issues that are predicted to cause problems as a result of the use of artificial intelligence technology in tax audits can be listed as follows:

- The first issue in tax audits conducted by artificial intelligence is the principle of non-discrimination. The issue is how the algorithms, which form the core of the working system of artificial intelligence, will take into account the principles of equality and justice, which are the main principles of taxation, and whether this will be shared with the public.

- Secondly, it is the issue of how and in what way the data obtained in tax audits conducted by artificial intelligence will be obtained. When there are situations where there is no transparency and information is not shared, the issue of whether the data obtained is interfering with tax privacy will create a debate, but it may also create problems for the taxpayer to defend himself in disputed situations as a result of the audit.

- Thirdly, it is the issue of determining the procedures and principles in tax audits carried out by artificial intelligence. Will artificial intelligence be able to make decisions without the support of a person (tax inspector)? Or will it ultimately be a tool to be used in rapid analysis, like an auxiliary element? According to these two distinctions, regulations that will require a series of changes in tax procedural law may be needed. It may also be necessary to determine the responsibility of artificial intelligence.

- The fourth issue is whether measures will be taken to ensure that taxpayers know why the decision was made, without restricting their rights of defense, and whether the principle of transparency will be followed in tax audits carried out by artificial intelligence.

- The fifth is the issue of determining the responsibility of the administration in ensuring data security by respecting confidentiality and confidentiality in tax audits carried out by artificial intelligence.

- Sixthly, it is the issue of how much and how the general principles and principles of tax law are/will be taken into account in tax audits carried out by artificial intelligence. What kind of procedure will be used when taxpayers want to know about issues such as which interpretation method is used and whether there is a connection with other branches of law?

5. Conclusion

If artificial intelligence technology is used in tax auditing, it will be a more effective and efficient application for the administration. However, when looking at the taxpayer rights aspect of the issue, it can be seen that there are many issues that need to be taken into consideration. Therefore, while changing the procedures and principles of tax audit trails, it seems necessary to take into account issues that closely concern taxpayer rights, such as tax justice, tax privacy, right to defense, and obtaining data.

References

Alan Turing, (1950), Computing Machinery Intelligence, Oxford University Press, Cilt:59, Sayı:236, 433-460, https://www.jstor.org/stable/2251299, Erişim Traihi:10.07.2023.

Binder, Nadja Braun, (2018), Al and Taxation:Risk Management in Fully Automated Taxation Procedures, AI ve Vergilendirme: Tam Otomatik Vergilendirme Prosedürlerinde Risk Yönetimi - Nadja Braun Binder :: SSRN, 1-12, Erişim Tarihi: 30.09.2023.

CPI (Centre for Public Impact), (2018), Artificial Intelligence in Taxation Case Study on the use of Al in Government, A BCG Foundation, https://www.centreforpublicimpact.org/assets/documents/cpi-cgf-public-engagement-climate-change-case-studies.pdf, Erişim Tarihi: 10.09.2023.

Dave Blanchard, (2014), Finance: Big Data Analytics Offer a Solution to a Taxing Situation, Industry-Week, 63(4), Finance: Big Data Analytics Offer a Solution to a Taxing Situation | IndustryWeek, Erişim Tarihi: 30.09.2023.

Deniz Turan, (2020), Yapay Zeka ve Vergi Uygulamalarına Etkisi, Anadolu Akademi Sosyal Bilimler Dergisi, Cilt:2, Sayı:1, 55-70.

E-Bright Connect, (2023), The Role of Al in Tax Compliance Processes: Accelerating Transformation and Boosting Productivity, The Role of AI in Tax Compliance Processes: Accelerating Transformation and Boosting Productivity (linkedin.com), Erişim Tarihi: 29.09.2023.

Erkan, H., 2009, Türkiye'nin Stratejik Önceliği: AB Ya da Bilgi Toplumu, Stratejik Araştırmalar Dergisi, Sayı:13, 1-20.

Fidelangeli A, Galli F, (2021), Artificial Intelligence and Tax Law: Perspectives and Challenges, 4/2021 CERIDAP, https://ceridap.eu/artificial-intelligence-and-tax-law-perspective-and-challenges/?lng= en, Erişim Tarihi: 20.09.2023.

İlgün, Miraç Fatih, (2020), Vergi Denetim Sürecinde Büyük Veri Analitiği, Siyaset, Ekonomi ve Yönetim Araştırmaları Dergisi, 8(1), 1-24.

Jerry Kaplan, (2016), Artificial Intelligence: What Everyone Needs to Know, Oxford University Press, 1-165.

John McCarthy, (2007), "What is Artificial Intelligence?", http://www-formal.stanford.edu/jmc/whatisai/, Erişim Tarihi: 09.07.2023.

OECD, (2019), Artificial Intelligence in Society, OECD Publishing, Paris, 1-152.

Okan Atak, (2020), Dijitalleşmeyle Birlikte Vergi Denetiminin Gelişimi ve Türkiye'deki Uygulamalar, Bilişim Çağında Vergi Hukuku içinde Ekin Yayınları, 1.Baskı Aralık 2020, 191-230.

Poole, Mackworth, Goebel, (1998), "Computational Intelligence and Knowledge", Chapter 1, https://www.cs.ubc.ca/~poole/ci/ch1.pdf, 1-22.

Rafael Mellado-Silva, Faûndez-Ugalde Antonio, Maria Blanco-Lobos, (2020), Effective Learning of Tax Regulations Using Different Chatbot Techniques, Advances in Science, Technology and Engineering Systems Journal, 5(6), 439-446.

Stefano A.Bini, (2018), Artificial Intelligence, Machine Learning, Deep Learning, and Cognitive Computing: What Do These Terms Mean and How Will They Impact Health Care?, The Journal of Arthroplasty, Vol:33, Issue:8, 2358-2361.

Determinants of Fiscal Awareness in Türkiye
Türkiye'de Mali Farkındalığın Belirleyicileri[1]

Nagihan ERDAL[2] **İhsan Cemil DEMİR**[3]

Abstract

Fiscal policy uses the main instruments of public expenditure, public revenue, borrowing and budgetary policy to realize the objectives of the public economy. Fiscal awareness refers to the public's perception of fiscal policy instruments and fiscal policies. This study aims to identify the determinants of fiscal awareness in Türkiye. In the study, the determinants of fiscal awareness are identified using the main fiscal instruments of public expenditure, public revenue (taxes), borrowing and budget policy. A questionnaire was administered to 1750 people across Türkiye to determine the determinants of fiscal awareness in Türkiye. OLS regression analysis was performed on the results obtained. As a result of the analysis, the determinants of fiscal awareness in Türkiye are education, income level, occupation, religious belief, gender, tax duty, perception of fairness in taxation, tax happiness, perception of wastefulness in public expenditure, fiscal linkage awareness, perception of public expenditure, audit in public expenditure, fair distribution of public expenditure, perception of fiscal transparency, awareness of government borrowing and social acceptance of fiscal policy.

Keywords: Fiscal Awareness, Fiscal Policy, Fiscal Policy Instruments , Social Perception.

JEL Codes: H3 ,Z13, Z18.

1. Introduction

The state's use of each of the fiscal policy instruments for different purposes results in different economic and social effects (Demir, 2017: 254). Measuring the economic impact of fiscal policy is essential in terms of whether the government can stabilize the economy and to what extent it should implement fiscal policy (Ataç, 2012: 55).

In this context, how the general public perceives fiscal policy instruments and fiscal policies is just as important as their economic impact. The public's perception of this issue guides how the state should intervene in economic life through fiscal instruments and policies.

With our research, the determinants of fiscal awareness, which is expressed as the social perception of fiscal policy instruments and fiscal policies implemented in Türkiye, are determined as a result of OLS regression analysis with the survey method data applied to 1750 people. Our research is important in terms of providing data that can help the fiscal policies to be implemented and contribute to the literature.

[1] In this study, data from the dissertation entitled "Factors Determining Fiscal Culture in Turkey: An Empirical Study" under the supervision of Prof. Dr. İhsan Cemil Demir.

[2] 100/2000 CoHE Ph.D Scholar, Afyon Kocatepe University, Institute of Social Sciences, ORCID ID: 0000- 0003-3422-1373, Department of Public Finance, nagihanerdal@hotmail.com (Corresponding author)

[3] Prof. Dr., Afyon Kocatepe University, Faculty of Economics and Administrative Sciences, Department of Public Finance, ORCID ID: 0000-0002-4756-0617, icdemir@aku.edu.tr

2. Fiscal Policy and Fiscal Instruments

Fiscal policy is "The intervention of the state in economic life through the use of fiscal instruments for economic and social purposes." In other words, "The state's use of public expenditures, taxes, borrowing, budget, revenues policy and privatization policy to achieve macroeconomic and social objectives is called fiscal policy" (Demir, 2017: 253). Differences in the economic, social and political structures of countries result in different fiscal instruments to be applied in each economy (Altay, 2017: 241). Economic and social events and developments in economic thought have also made a difference in fiscal policy instruments (Erdem et al., 2021: 604).

Policies that allow the political authority to take measures on the economic situation by giving the political authority broad discretion in the use of fiscal instruments are referred to as "discretionary economic policy." (Aktan et al., 2010:1). On the other hand, the implementation of economic policy by subjecting the discretionary powers granted to the political authority regarding the fiscal instruments to be used in the economic policy to be implemented by the state to constitutional limitations is referred to as "rule-based economic policy." In this case, the political authority implements the economic policy only according to the rules (Aktan et al., 2010: 10).

3. Methodology of the Research

The determinants of fiscal awareness in Türkiye were measured using a survey method. The reason for using the survey method in the research is to measure the public's perception of fiscal instruments and fiscal policies. The determinants of fiscal awareness in Türkiye are determined by OLS regression analysis using the STATA program. The questions were prepared in the questionnaire with the help of the literature and the opinions of experts in the field and were transformed into a scale by us. The developed scale was subjected to pilot application and various analyses and finalized.

With the created scale, a questionnaire was applied to 1750 people between 18 and 65 in seven geographical regions of Türkiye using a quota sampling technique. The scale used in the research consists of demographic questions, multiple choice questions and questions prepared with a five-point Likert scale meaning "1 Strongly Disagree, 2 Disagree, 3 Partially Agree/Somewhat Disagree, 4 Agree, 5 Strongly Agree".

The Cronbach's Alpha coefficient found as a result of the reliability analysis of the questionnaire is 0.884. According to the results obtained, the questionnaire is perfectly reliable for social sciences (Özdamar, 2017: 84).

4. Determinants of Fiscal Awareness in Türkiye

In our research, we first transformed nine scale statements into a single variable to identify the determinants of fiscal awareness in Türkiye. In the analyses, "fiscal awareness," transformed into a single variable, was used as the dependent variable. The average of the dependent variable expressed as fiscal awareness is 3.03. This value indicates that the fiscal awareness of the society is slightly above average.

Four different models were established in the regression analysis to determine the determinants of fiscal awareness in Türkiye. With the established models, the determinants of fiscal awareness analyzed under three different headings: demographic variables, cultural variables and other variables.

4.1. Demographic Variables Determining Fiscal Awareness

The results of regression analysis show that there is a significant relationship between demographic variables such as education, income level, gender and occupational group and fiscal awareness. According to the results of the analysis, as the education level of society increases, fiscal awareness is positively influenced by this increase at the 1% significance level. As the income level of society increases, fiscal awareness is positively influenced by this increase at the 5% significance level. The fiscal awareness of men is more positive than women's at the 1% significance level. The fiscal awareness of people in the laborer occupational group is negative compared to people in other occupational groups at the 5% significance level.

4.2. Cultural Variables Determining FiscalAwareness

Tradition, religious belief and ethnic identity variables were used as cultural variables in the model. A significant relationship was found between traditional religious belief and fiscal awareness. The fiscal awareness of people who value traditions is negative at 10% significance level in the third and fourth models. The fiscal awareness of people who value religious beliefs is positive at the 1% significance level. There is no significant relationship between ethnic identity and fiscal awareness.

4.3. Other Variables Determining Fiscal Awareness

The other variables in the model are tax duty, perception of fairness in taxation, satisfaction with tax administration, tax happiness, perception of wastefulness in public expenditures, awareness of fiscal connectivity, compatibility of public expenditures with individual preferences, audit of public expenditure, fair distribution of public expenditures, perception of fiscal transparency, awareness of government borrowing and social acceptance of fiscal policies.

Among the other variables used in the model, as individuals fulfill their tax duties, fiscal awareness is positively affected at the 1% significance level. As the perception of fairness in taxation increases, fiscal awareness is positively affected by this increase at the 1% significance level in the first three models and the 5% significance level in the fourth model. As the public's satisfaction with the services provided by the tax administration increases, fiscal awareness is positively affected by this increase at the 5% significance level. As society's tax satisfaction increases, fiscal awareness is positively affected by this increase at the 1% significance level.

As the perception of wastefulness in public expenditures increases in Türkiye, fiscal awareness is negatively affected by this increase at the 1% significance level. As the number of individuals who can correctly establish the fiscal link between taxes and public expenditures increases, fiscal awareness is positively affected by this increase at the 1% significance level in the first two models and the 5% significance level in the last two models. As the compatibility of public expenditures with individuals' preferences increases, fiscal awareness is positively affected by this increase at the 1% significance level in the first three models and the 5% significance level in the fourth model. As the perception of control in public expenditures increases, fiscal awareness is positively affected by this increase at the 5% significance level in the first model and the 10% significance level in the third model. As perceptions of fair distribution of public expenditures increase, fiscal awareness is positively affected by this

increase at the 1% significance level in the first three models and the 5% significance level in the fourth model.

As the perception of fiscal transparency increases in society, fiscal awareness is positively affected by the 1% significance level. As the perception that future generations will bear the burden of government debt increases, fiscal awareness is positively affected by this increase in the 1% significance level. As the adoption of fiscal policy by society increases, fiscal awareness is positively affected by this increase at the 1% level of significance.

5. Conclusion

In our research, which we conducted using the survey method to specify the determinants of fiscal awareness in Türkiye is slightly above average. It shows that public awareness of fiscal instruments and policies is not very high.

According to the findings of the study, the determinants of fiscal awareness are education, income level, occupation, religious belief, gender, tax duty, perception of fairness in taxation, tax happiness, perception of wastefulness in public expenditures, fiscal connection awareness ,compatibility of public expenditures with individual preferences, audit in public expenditures, fair distribution of public expenditures, perception of fiscal transparency, awareness of government borrowing and social acceptance of fiscal policies.

Among the demographic variables, education and income levels play an important role in fiscal awareness. Accordingly, individuals with higher levels of education and income have higher fiscal awareness. Among cultural variables, individuals who care about religious beliefs have higher fiscal awareness.

Regarding taxes, as the level of individuals' fulfilment of tax duties, their perception of fairness in taxation, their level of satisfaction with tax administration and their level of happiness when they pay their taxes increase, their fiscal awareness also increases. Regarding public expenditures, the fiscal awareness of the society increases as the perception of wastefulness in public expenditures decreases, individuals become more aware of fiscal linkages, public expenditures are adequately controlled, public expenditures are presented fairly and public expenditures are shaped in line with individuals' preferences.

The increase in individuals' perception of fiscal transparency with the provision of transparency in budget processes increases the fiscal awareness of society. Another determinant of fiscal awareness is the social acceptance of fiscal policies. As societies adopt fiscal policies, individuals adapt to the implemented fiscal policies and as a result, their fiscal awareness increases.

Considering the determinants of fiscal awareness when the government intervenes in the economy with fiscal instruments will increase the success of the fiscal policies implemented. This is because the determinants of fiscal awareness are shaped by public perception. Fiscal policies formulated according to the determinants of fiscal awareness shaped by the perception of society will be easier to adopt and will ensure the effective implementation of fiscal policies.

References

Aktan C. C., Dileyici D. ve Özen A. (2010). "Kamu Ekonomisinin Yönetiminde İki Farklı Ekonomi Politikası Yaklaşımı: İradi ve Takdiri Kararlara Karşı Kurallar". *Mali Kurallar: Maliye Politikası Yönetiminde Yeni Bir Eğilim: Vergi, Harcama, Borçlanma vs. Üzerine Kurallar ve Sınırlamalar.* (Ed.) Aktan C.C. , Kesik A. ve Kaya F., Ankara: Ümit Ofset Matbaacılık, 1-31.

Altay, A. (2017). *Kamu Maliyesi, Teorisi, Gelişimi, Kapsamı*, 3. Baskı. Ankara: Seçkin Yayıncılık.

Ataç, B. (2012). *Maliye Politikası: Gelişimi, Amaçları, Araçları ve Uygulama Sorunları* 9. Baskı. Ankara: Turhan Kitabevi.

Demir, İ.C. (2017). *Kamu Maliyesi* 3. Baskı. Afyonkarahisar: Limit Yayınları.

Erdem, M., Şenyüz D. ve Tatlıoğlu İ. (2021). *Kamu Maliyesi*, 16. Baskı. Bursa: Ekin Yayınevi.

Özdamar, K. (2017). *Ölçek ve Test Geliştirme Yapısal Eşitlik Modellemesi,* 2. Baskı. Eskişehir: Nisan Kitabevi.

Digital Legacy Dimension of Crypto Assets and Evaluation from a Tax Perspective

Burçin Bozdoğanoğlu[1]

Abstract

Internet technology, which has become an indispensable part of human life after the acceleration of the digitalisation process, mobile phones, shopping applications, social media accounts, e-mail accounts, cloud computing and finally cryptocurrencies with blockchain technology have opened the doors of an almost completely digital world. The concept of digital heritage is a new concept in both national and international literature, the source of which is digital assets. Crypto assets, which are included in the concept of digital assets, which can be categorised in different ways within the ever-expanding concept of digital assets, have risen as an interesting new investment area all over the world. The subject of the study is to evaluate the status of crypto assets, which cannot be categorised as money, commodity or intangible asset in our current legislation, and no new definition is made in legal and tax terms, in case of acquisition and inheritance of crypto assets. The study also analyses the status of inheritance transfer tax in cases where the heirs are not aware of the assets of such assets (cryptocurrencies, coins and NFTs), unlike other goods in the property of the deceased, due to the fact that they are not registered in any public record or registry, or even if they are known, they do not have the private passwords of the deceased, within the framework of the definition of crypto assets in the international context.

Keywords: Cryptoasset, NFT, digital legacy, taxation, inheritance tax
JEL Codes: K34, G19, H19

1. Introduction

In today's conditions, the fact that the digitalisation process continues in a different dimension every day causes new concepts to enter our lives, and the fact that these concepts are not defined in the traditional legal order brings the situation of legal disputes to different points and brings up the necessity of some needs and legal regulations at the point of resolution of these disputes.

In this framework, the study will firstly examine the concept of digital heritage and the underlying concept of digital assets, and classify and discuss digital assets in terms of their inheritability. Digital assets produced on the basis of cryptography, distributed ledger technology and similar technology are characterised as crypto assets, and today, cryptocurrencies such as Bitcoin, Ethereum, stable coins, altcoins, tokens and NFTs are considered in the crypto asset category in this context. Since it is known that these assets are an indicator of financial power, in other words, they are convertible into fiat money, they can be subject to inheritance in the category of monetary digital assets and the evaluation of this issue in the context of gaps in inheritance law is another issue included in the study.

The fact that the legal nature, definition and inheritability of crypto assets are uncertain and hesitant issues in the legal sense makes it difficult to make an assessment in case these assets are subject to inheritance tax. As a matter of fact crypto assets, which are included in digital

[1] Prof. Ph.D., Bandırma Onyedi Eylül University, Department of Public Finance, 0000-0002-9337-2895, bbozdoganoglu@bandirma.edu.tr

assets, are not defined in tax laws makes it difficult to determine the status of these assets in the relevant law. On the other hand, there are uncertainties regarding the valuation of these assets in cases where they are inherited or subject to gratuitous transfer.

At this point, the study aims to provide suggestions to the problems that have not yet been solved for taxpayers, especially by taking into account the issues in the specialisation regarding the evaluation of the inheritance tax in case of inheritance of cryptocurrencies by the Revenue Administration.

2. Concept of Digital Legacy and Digital Asset

The use of new digital tools and applications, which are included in our lives every day with the developments in technology, differentiates daily life and changes the elements of earning. In this context, one of the new concepts that have emerged recently with the digitalisation of economic activities and transactions is "digital legacy".

The concept of digital heritage, which can be expressed as the management process of digital assets that have emerged as part of the digitalised daily life routine and the transfer of these assets to the future, is not in a position to be evaluated with the existing legal and tax provisions as a result of the continuous change in this field.

Since this concept, which is defined as "all of the digital assets of the heir, in other words, all of the legal relations of the heir concerning information technology systems, including all electronic data of the heir", (Herzog,2019:2) refers to the entire digital assets, it is important to know which values are within this scope.

It is understood that the concept of "digital legacy" is based on digital assets both in the world and in our country. Therefore, in order to make a clear definition of digital heritage in legal terms, it would be a more accurate approach to determine the scope and boundaries of digital assets and to define the digital values that are suitable for inheritance through inheritance as "digital legacy" (Gürbüz, 2023:848).

Digital assets are defined as "all kinds of digital data in binary form stored on computers or in a cloud over the internet". As a matter of fact, these assets, which are specific to the virtual world and do not have physical characteristics, include e-mail contents, social media and internet accounts, domain names, online game accounts and game characters, usage and rental rights, digital data stored in cloud computing systems, electronic commerce accounts, cryptocurrencies, NFTs (Altındal and Arslan, 2021:320). Considering these elements, digital asset refers to "all kinds of data produced, stored and transferable in digital environment" (Turan Başara, 2023:17).

3. The Statue of Crypto Assets in Digital Assets and Their Subjectivity to Digital Legacy

What is not clear about whether digital assets are included in the assets is that there is no clear statement in the provisions of the Civil Code on inheritance law stating that these assets are also included in the assets. Article 599 of the TCC contains regulations on the acquisition of inheritance, and the said article stipulates that the heirs shall acquire the inheritance as a whole and legally at the time of the death of the heir.

However, in the decision of the Antalya Regional Court of Appeal dated 13.11.2020 and numbered E.2020/1149 and K.2020/905 of the Antalya Regional Court of Justice regarding the evaluation of the e-mail account belonging to the heir and the social media and digital wallet

accounts used in connection with this account as "digital assets" upon the death of the heir's spouse, an evaluation is made within the framework of Article 1 of the TMK since there is no explicit provision in the law regarding the concepts of "digital assets" and "digital inheritance"(Büyüksağdiş vd.,2021:374).

There is a need to classify digital assets in terms of both inheritability and determining the place of crypto assets, which are the subject of the study, within digital assets. In this respect, it is possible to categorize digital assets into two categories based on whether they are based on cryptography and distributed ledger technology or a similar technology. For example, social media account login information and the content in these accounts, cloud storage areas, domain names, e-books, e-magazines that do not use this type of technology can be characterized as non-crypto digital assets.

There are many definitions of crypto assets made by different countries and institutions. However, in recent years, crypto assets, which have become both important financial instruments and a problem that is difficult to follow, have not been defined in a uniform and internationally recognized manner. The definition of crypto asset in the EU Draft Crypto Assets Market Regulation amending EU Directive 2019/1937 is "a digital representation of value and rights that can be transferred and stored electronically using distributed ledger technology or similar technologies" (EU, 2020), and although this definition is not at an internationally agreed level, it has the potential to be a reference as it draws an inclusive and detailed framework. Although there is no regulation at the legal level regarding the definition of crypto assets in our country, the first official step was taken by the Central Bank of the Republic of Turkey to draw a framework with the "Regulation on the Non-Use of Crypto Assets in Payments" published in the Official Gazette dated 16.04.2021. Article 3/1 of the said regulation also states that crypto-assets, which are defined as "intangible assets", are not payment instruments, money, dematerialized money, securities or other capital market instruments.

As in the case of digital assets, there is no explicit provision on whether crypto assets are included in the assets in terms of the TCC, but it is critical for the heirs that they should be included in the estate due to their economic value. At this point, it is stated that it may be possible to create a new and unique category of goods for crypto-assets by making a regulation similar to the expression "natural forces" used in Article 762 of the Civil Code to draw a limit to movable property (Bilgili ve Cengil,2019:18; Kuzeyli Dayanç ve Töremiş: 2022:68).

4. Evaluation of Digital Inheritance of Crypto assets in Terms of Inheritance and Gift Tax

It is not clear where crypto assets are positioned in legal terms, and there is no clear definition in terms of tax legislation. However, it is clear that crypto assets have an economic value as a result of the examination of the provisions of the civil code regarding inheritance law and the evaluation of the concepts of digital inheritance and digital assets. In this respect, it is necessary to examine crypto assets, which are considered as digital assets and therefore a part of digital legacy, in terms of inheritance tax.

Article 1 of the Inheritance Tax Law includes the subject of the tax and stipulates that the goods belonging to the persons who have the nationality of the Republic of Turkey and the transfer of goods in Turkey from one person to another person by inheritance or in any way gratuitously is subject to inheritance tax. The term "property" in Article 2/1-b of the aforementioned Law refers to movable and immovable property and all rights and receivables that can be subject to

property, and Article 5 states that the taxpayer of the tax is the person who acquires property through inheritance or gratuitously.

It is stated that the definition of "property" within the framework of the regulation in the Law includes movable and immovable things that can be subject to property, and all other rights and receivables that can be included in the property. The subject of what is included in this scope is specified in the General Communiqué on Inheritance and Gift Tax Law Serial No. 1. Accordingly, goods are divided into two as movable and real estate.

As stated in the decision of the 6th Civil Chamber of the Antalya Regional Court of Justice, digital assets with economic value are deemed eligible for inheritance within the scope of Article 599/2 of the TCC. In the specialisation dated 23.09.2020 and numbered 60938891-120.01.02.09 (GVK: 3-1)-E.33826 given by the Revenue Administration in the same direction with the aforementioned court decision and in the specific case of cryptocurrencies that fall within the scope of crypto assets, it is clearly understood that crypto assets also have an owner and carry economic value, so they can be subject to inheritance and therefore can be considered within the scope of the subject of inheritance tax.

In the event that crypto assets are subject to inheritance and gift tax, the status of taxpayers may differ according to the status of the places where these assets are traded. In the case of acquisition of cryptocurrency through centralised platforms, in other words, in the event that the deceased has acquired assets on a cryptocurrency platform that has a representative office in Turkey, it is possible for the heirs to claim the said assets from this platform. In the case of transactions on centralised platforms, these transactions actually take place between the platform's customers, and the customers do not need a crypto asset account. Platforms open a current account on behalf of their customers and transactions are carried out through these accounts (Yılmaz Öz, 2022:168). A "custodial wallet" is in question if it is managed by a third party, such as a cryptocurrency platform that has sole access to cryptocurrencies (Turan Başara, 2023:19). Digital wallets where the user can manage the wallet and access it alone, i.e. without the need for any intermediary, are referred to as non-custodial wallets. In this case, the private key of the cryptocurrency wallet and all authorisations within this scope are only in the hands of the user. The customers to whom the crypto assets held in the custodial wallet account belong to are available in the details of the customer current accounts held on the subject platforms. Therefore, when the deceased has an asset in these platforms, the taxpayer of the inheritance and gift tax can be easily determined by determining the heirs to whom the inheritance will be delivered with the inheritance decree (Yılmaz Öz, 2022:168).

In cases where the heir has a crypto asset wallet under its own control, in other words, if it carries out its transactions without any exchange intermediation and stores them in a non-custodial digital wallet, the heirs' awareness of the existence of these cryptocurrencies may not be sufficient to access them. Due to the feature of these digital wallets to provide anonymity to their owners, if the assets in these digital wallets are subject to inheritance, the inheritance transfer tax will be paid only with the voluntary declaration of the heirs. Otherwise, the detection of these assets by the Administration is not possible for the time being. However, in the following period, if it is possible to detect and track these assets in line with technological developments, it will be possible to check whether they have been declared by the heirs since they are within the subject of inheritance and gift tax (Yılmaz Öz,2022:169).

Article 10 of the Inheritance Tax Law (ITL) states that the value of the goods transferred shall be determined in accordance with this article, and in the absence of a provision, the provisions of the Tax Procedure Law (TPL) shall be applied. However, there is no provision regarding the value of crypto assets in both the TPL and the ITL. At this point, in the event that crypto assets are

subject to inheritance and gift tax, although the issues regarding the subject matter of the tax and the taxpayer are somehow clarified, there is no clarity on the value on which the tax will be calculated, in other words, the determination of the tax base.

5. Conclusion

Considering the elements within its scope, it is clear that crypto assets are an indicator of financial power and have economic value. However, there is no regulation on the legal nature of crypto assets in basic laws such as the Turkish Civil Code, Turkish Commercial Code, Intellectual Property Law. It is foreseen that the evaluation of crypto assets by classifying them as money, commodity or intangible asset within the framework of the current legal regulations will not meet the legal and tax requirements, and at this point, it is foreseen that it would be a proper approach to make a new definition by taking into account the characteristics of the assets in question, their intended use, and the speed of development in technology, and to make the regulations regarding taxation within the framework of this definition. In this context, the most fundamental step is to define digital assets, which are constantly developing and changing, as "digital assets" in our tax legislation, including crypto assets.

Therefore, firstly, defining crypto assets as a separate asset class in our tax legislation, determining the valuation criteria according to the characteristics, purposes of use and the markets in which these assets are traded, and making regulations regarding taxation by law will provide a significant solution to the problems experienced in this field.

After this step, in the process to be followed in the inheritance and gift tax, the crypto assets should be valued with the stock exchange market value, if any; in the absence of stock exchange value, they should be valued with the fair value and this valuation should be made by independent and expert experts in this field, the taxation to be realised before the heirs should be linked to the stage before the legal or economic transfer, whichever occurs first, and making arrangements that will not leave any room for doubt regarding the determination of the stock market value and the fair value to be taken into account in the valuation transactions will ensure the healthy functioning of the system.

References

Altındal, H. ve Aslan, E.Y. (2021). Türk Hukukunda Dijital Miras: Karşılaşılan Sorunlar ve Uluslararası Uygulamalar Çerçevesinde Bazı Çözüm Önerileri". Ankara Hacı Bayram Veli Üniversitesi Hukuk Fakültesi Dergisi, C.XXV. Y:2021, Sayı:1,313-351

Bilgili, F. ve Cengil, M. F. (2019). "Bitcoin Özelinde Kripto Paraların Eşya Niteliği Sorunu". https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3432713 , (28.09.2023)

Büyüksağiş, E., Özyiğit, S., Falay Mirkelam, S., Buldağ, İ.E., Okur, M.S. (2021). "Dijital Varlıkların Miras Yoluyla İntikali". Yargıtay Dergisi, Cilt:47, Sayı:2, 337-408.

European Commission (2020). Regulation of the European Parliament and of the Council on Markets in Crypto-Assets, and amending Directive (EU) 2019/1937. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0593 (24.09.2020)

Gürbüz, C.E. (2023). "Dijital Varlıkların Miras Yoluyla İntikali". Marmara Üniversitesi Hukuk Fakültesi Hukuk Araştırmaları Dergisi, Cilt:29, Sayı:1, Haziran:2023, 840-875.

Herzog S. (2019). Nachfolgerecht, Der digitale Nachlass, 2. Baskı. (aktaran İleri, Ç. (2020). "'Dijital Miras'-Alman Federal Mahkemesi'nin 'Facebook' Kararı Üzerine Bir İnceleme". TBB Dergisi, 2020(146), 123-152)

Kuzeyli Dayanç, N. ve Töremiş, E. (2022). "Kripto varlıkların Hukuki Niteliği", Vergi Sorunları, Yıl: 42, Sayı:494, s.63-77.

Turan Başara, G. (2023). "Kripto paralarla İlgili Miras Hukukuna Özgü Meseleler". İnönü Üniversitesi Hukuk Fakültesi Dergisi. 14(1), 15-30.

Yılmaz Öz, T. (2022). "Kripto varlıkların Diğer Vergiler Yönünden Değerlendirilmesi". Vergi Sorunları, Yıl: 42, Sayı:494, s.165-175.

Can Tax Compliance of Taxpayers Be Improved with Artificial Neural Networks?

Ali Osman Yılmaz[1] **Mustafa Erkan Üyümez**[2]

Abstract

Developments in information technologies, trade and business practices are changing. Taxpayers and tax administrations are also affected by these developments. Artificial intelligence-based applications in tax administrations around the world are at different levels. The aim of this study is to determine the contribution of developments in the field of artificial neural networks to taxpayers' tax compliance. In this study, document review, one of the qualitative research methods, will be used as a method. It is seen that many countries such as England, Indonesia, Russia, China, Belgium, Netherlands, and Portugal are carrying out similar studies. It has been determined that tax compliance has been increased with the help of artificial intelligence-based applications in England, Russia, and France. Successful results have been achieved with the Artificial Neural Networks (ANN) Model developed for Indonesia. It has been determined that the practices in Turkey are not yet at a sufficient level. As a result, the Revenue Administration needs to benefit from developments in artificial intelligence-based applications to capture the dynamism of the current conjuncture and increase taxpayers' tax compliance. The development of ANN-based applications should be accelerated through interdisciplinary work.

Keywords: Tax Compliance, Artificial Intelligence, Big Data,

JEL Code: H24, H83.

1. Introduction

Developments in information technologies affect all areas of life. Economic activities and ways of doing business are becoming digital. Therefore, tax administrations use information technologies to increase tax compliance and increase effectiveness and efficiency in tax transactions. Detecting tax non-compliance may become difficult due to the complexity of tax legislation and limited resources and time for tracking tax returns. Therefore, tax administrations need to design and develop their systems to increase tax compliance. Artificial intelligence-based applications in tax administrations around the world are at different levels. Developments in artificial neural networks continue. It is evaluated that artificial neural networks technology will help increase tax compliance. The aim of this study is to determine the contribution and impact of developments in the field of artificial neural networks to taxpayers' tax compliance. In this study, document review, one of the qualitative research methods, will be used as a method. Within the scope of the study, firstly the literature review on artificial neural networks will be given. Identifications and evaluations of artificial neural network-based applications and studies in the tax administrations of countries around the world will be presented. In the perspective of these findings and developments, it is planned to make discussions and evaluations about whether tax compliance can be increased with the help of

[1] Assist. Prof. Ph.D, Karabük University Safranbolu Ş.Y.D. Vocational School Department of Accounting and Tax, ORCID: 0000-0001-7758-1323, aliyilmaz@karabuk.edu.tr

[2] Prof. Ph.D, Anadolu University, Department of Public Finance, ORCID: 0000-0001-7567-3486, meuyumez@anadolu.edu.tr

artificial neural networks in the future. Afterwards, suggestions will be developed regarding what developments can be achieved in artificial neural networks-based applications and how the Revenue Administration in Turkey can benefit from these technological developments in tax compliance of taxpayers.

2. Literature Research

2.1. Artificial Neural Networks

Artificial neural networks have been developed by taking advantage of the way information is processed, used, and worked on nerve cells in the human brain (Ekiz, 2019: 24). Artificial neural networks form the basis of artificial learning algorithms. These networks consist of layers arranged one after the other. These layers create the data input for the next layer. Each layer consists of artificial nerve cells. Following the developments in artificial neural networks, progress has accelerated in this field with the emergence of the concept of "deep learning". The word "deep" within the concept of deep learning has begun to be used to express the large number of layers in artificial neural networks (Doğan, 2023: 13-14). Deep learning is a subset of artificial learning (machine learning). Machine learning is classified in two ways: supervised and unsupervised (Husain, 2019: 18). One of the main advantages of artificial neural networks is that they can work with all types of data. Artificial neural networks designed to solve a specific problem have a flexible structure. It can be retrained according to the change in the problem (Müjdeci, 2015: 60-63). Artificial neural networks and machine learning need data sources (big data). The accuracy, reliability and completeness of this data warehouse are of great importance. In data analysis using artificial neural networks layers are created by humans. Therefore, creating algorithms is of critical importance (Yılmaz & Üyümez, 2023: 211).

2.2. Tax Compliance

States aim to collect tax revenues, which are the largest source of income, in full and on time to provide public services. Tax compliance can be affected by multiple factors such as tax rates, possibility of tax audit, financial restructuring (tax amnesty) laws, tax penalties, tax awareness, tax system and legislation, effectiveness, and approach of tax administrations (Üyümez, 2004: 24). Tax compliance means that taxpayers make their tax declarations completely and on time and present their taxes completely and accurately Taxpayers must have a certain level of arithmetic thinking, reasoning and recording skills in order to carry out tax affairs and transactions (Roth and others, 1989: 21). The primary financial purpose of taxes is to generate resources to finance public services. Diversification in public services causes increases in taxes and tax rates. Increasing taxes also increases the tax burden of taxpayers (Ortaç & Ünsal, 2022:23). Therefore, the increase in tax burden affects taxpayers' tax çömelince. In this case, tax administrations need to work more effectively and efficiently for taxpayers' tax compliance. As a matter of fact, today tax administrations are evolving from a taxpayer-oriented approach to a customer-oriented perspective. For example, after adopting a customer-oriented taxpayer approach by HMRC, it prioritizes activities to increase taxpayer compliance (Yılmaz, 2019: 26-30).

3. Applications and Studies for Tax Compliance

In recent years, tax administrations have begun to use predictive techniques driven by information technologies to help taxpayers fulfill their obligations. It is seen that many countries

such as England, Belgium, Netherlands, Portugal, Russia, Malaysia, Indonesia, China, Mexico, Australia, and Chile are carrying out similar studies to increase tax compliance of taxpayers.

HMRC is trying to become a digital organization. HMRC aims to make it easier for the government, individuals, and businesses to receive their taxes correctly by digitalizing tax transactions (HMRC Policy paper, 2022). In this context, HMRC strives to be the most digitally advanced tax administration in the world, which collects taxpayers' taxes more easily and is more effective and efficient. It utilizes the British Connect System (data mining analysis software). British Connect System works to help detect fraudulent or misleading statements by companies and individuals. It is known that this software increased the collection of at least £3 billion in tax revenues (RSM weekly-tax-brief, 2022).

Artificial Neural Networks (ANN) Model study was used to predict the tax paying behaviors of Indonesian companies. The software is trained to detect the Corporate Tax Turnover Ratio of companies. As a result, the ANN Model predicted companies' tax payment behavior with an average accuracy rate of over 92%. It has been found that Multilayer Perceptron Neural Network based model work also allows companies to identify heterogeneous channels responsible for tax payment behavior (Rosid, 2022: 40-41).

The software "ASK VAT-2"10' is used to monitor value added (VAT) compliance In Russia. VAT tax returns containing information on sales and purchase transactions are filed digitally in XML file format. All incoming data is cross-matched to try to identify abuse risks. Through this software, it was possible to increase the revenue obtained from VAT by 12.2% in 2015 (Burneikaitė, 2019:51).

The French tax administration has identified more than 20,000 undeclared private swimming pools using the AI-based application. Swimming pools were determined from aerial photographs using the software. The identified swimming pools were compared with the land registry database. As a result of this study, additional tax revenue of approximately 10 million euros was achieved (RSM weekly-tax-brief, 2022).

4. Applications and Activities in Türkiye

Development plans, the 2019-2023 Strategic Plan of the Revenue Administration and the Strategy Action Plan to Combat the Informal Economy specify targets for the digitalization of tax transactions.

E-applications used by the Revenue Administration in Türkiye are shown in the table below.

Table 1: Some electronic applications used by the Revenue Administration

E-Invoice, E-Ledger, New Generation Payment Recording Device, E-Archive, E-Attendance System, E-Notification,	E-Ticket, E-Delivery Note, E-Producer Receipt, E-Self-Employment Receipt, Ready Declaration System,	VAT Refund Risk Analysis System, Revenue Institutions Standard Refund System, False Document Risk Analysis Program (SARP), Return Tracking System, Bandrolled Product Tracking System,

The principles regarding the Turkish Digital Tax Office have been determined by the General Communiqué of the Ministry of Treasury and Finance[3]. The Digital Tax Office[4] has become active as of October 7, 2023.

As a result of the activation of the digital tax office, the services offered electronically by the Revenue Administration will be combined under a single roof and taxpayers will be provided with easy, fast and safe access to all applications. Declarations, notifications, letters, petitions, minutes, reports, and other documents will be able to be submitted electronically and the results of the transactions regarding these documents will be presented to the relevant parties electronically.

Although the Digital Tax Assistant (GİBİ)[5] has been implemented, it appears to be a very basic application. It appears that taxpayers make limited contributions to their transactions. As a result, electronic applications aimed at increasing taxpayer compliance are increasing and being developed. However, applications based on artificial neural networks have not been started yet.

5. Conclusion

As stated in country practices, artificial neural network-based applications appear to contribute to tax compliance. Therefore, the Revenue Administration needs to benefit from the developments in information technologies and use them effectively to capture the dynamism of the current conjuncture and increase taxpayers' tax compliance. As a result, with the help of artificial neural networks, it can contribute to the development of taxpayers' ability to diagnose tax compliance, starting from the activity of informing and guiding taxpayers about their rights and responsibilities at the first establishment of their obligations, and then with the help of analyzes on big data about taxpayers. Thus, it can contribute to the reduction of disputes and incompatibilities between the Revenue Administration (GİB) and taxpayers and to the more effective collection of tax revenues. It is necessary to accelerate the development of ANN-based applications through interdisciplinary work.

References

Burneikaitė, I. (2019). “Impact of Tax Technologies on Current and Future Tax Compliance”, 7th International Conference for PhD Students and Young Researchers, 25-26 April 2019, Venue.

Doğan, B. (2023). “Yapay Zeka Nedir? Ne Değildir?”, *İnsan ve Hayat Dergisi,* 160 (6), 12-15.

Ekiz. E. (2019). *Prediction of debt collection behaviour with machine learning techniques: A case study on telecommunication company customers.* Istanbul Technical University (Unpublished Master Thesis), Istanbul.

Husain, A. (2019). *The Sentient Machine the Coming Age of Artificial Intelligence*. (Trans. Dalgakıran, D.). İstanbul: Siyah Kitap.

[3] https://www.resmigazete.gov.tr/eskiler/2023/10/20231007-9.htm
[4] https://dijital.gib.gov.tr/
[5] https://www.gib.gov.tr/node/170911

HMRC Policy paper. (2022). *Policy paper Overview of Making Tax Digital.* https://www.rsmuk.com/insights/weekly-tax-brief/hmrc-uses-artificial-intelligence-to-reduce-the-tax-gap, (02.03.2023).

Müjdeci, A. (2015). *Sosyal Güvenlik Kurumu Prim Toplama Gelirlerinin Yapay Sinir Ağları ile Modellenmesi.* Republic of Türkiye Social Security Institution (Unpublished Specialization Thesis), Ankara.

Ortaç, F.R. & Ünsal, H. (2022). *Vergi Hukuku Genel Hükümler,* 1. Baskı. Ankara: Seçkin Kitabevi.

Rosid, A. (2022). *"Predicting Firms' Taxpaying Behaviour Using Artificial Neural Networks: The Case of Indonesia"* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4185966 (04.01.2023).

Roth, J. A., Scholz, J. T. & Wıtte, A.D. (1989) Taxpayer Compliance. An Agenda for Researc. Vol.1, Philadelphia: University of Pennsylvania Press, Vol.1: 20-21.

RSM weekly-tax-brief, (2022). *HMRC uses artificial intelligence to reduce the tax gap.* https://www.rsmuk.com/insights/weekly-tax-brief/hmrc-uses-artificial-intelligence-to-reduce-the-tax-gap, (04.03.2023).

Üyümez, M. E. (2004). *The Influence of tax penal system on prevention of tax crimes in Turkey*. Anadolu University (Unpublished Ph.D. Thesis), Eskişehir.

Yılmaz, A. O. (2019). *Problems and solution proposals in tax audit: a case study of Turkey*, Anadolu University (Unpublished Ph.D. Thesis), Eskişehir.

Yılmaz, A.O. & Üyümez, M.E. (2023). "Effects of Artificial Intelligence on Tax Inspections" *Current Debates on Public Finance Theory and Practice.* (Ed.) Üyümez, M.E., Hacıköylü, C. Berlin: Peter Lang, 207-218.

The Effects of Big Data Technology on Taxation in Türkiye

Orçun Avcı[1]

Abstract

The basis of taxpayer psychology is the taxpayer's view and perception of tax in taxation process. Among the most important factors or determining variables affecting taxpayers' attitudes and behaviors towards taxes are factors such as voluntary tax compliance, tax ethics, tax awareness, and tax culture level. The topic of the study is to examine academic research on the psychology of taxpayers in cities that suffered earthquakes in Turkey. The purpose of the study is to handle the studies about taxpayer psychology domain on cities where earthquakes occurred. The importance of the study is to bring a new perspective to the subject and to make future predictions by drawing attention to the attitudes and behaviors of taxpayers towards taxes in earthquake regions. In this context, the cities where the last three major earthquakes occurred in Turkey were selected as samples. Literature review was conducted as a method. Based on the findings, the tax burden is heavy, tax rates are high, the tax system is unfair, tax audits and penalties are insufficient, public expenditures are inefficient, public services are ineffective, and tax amnesties discourage paying taxes. Surprisingly, increasing number of immigrants in Turkey has a negative impact on taxpayer psychology. Taken together, efforts are needed for participatory structural reforms in which taxpayers are also included in the taxation process.

Keywords: Taxpayer Psychology, Tax Perception, Tax Compliance, Earthquake Cities
JEL Code: H30, H31, E70, E71, Z13

1. Introduction

Taxpayer psychology refers to all taxpayers' perceptions, attitudes and behaviors regarding taxes and taxation. Internal/personal/demographic (such as age, gender, education, profession, marital status, belief structure, income level) and external/environmental (such as high tax rates, tax burden level, frequency of tax amnesties, deterrence of tax penalties and audits) factors that determine tax perception, attitudes and behaviors. These are also factors that affect tax compliance and tax awareness.

In this study, research in the literature on the psychology of taxpayers in cities, which have experienced the last three major earthquake disasters in Turkey and were heavily damaged by these earthquakes, will be discussed. Thanks to the findings obtained from the studies in the literature specifically for selected earthquake cities, similar and different aspects between the general taxpayer psychology and the psychology of taxpayers living in the region can be determined. The effect of the current tax system and tax practices to taxpayers will offer a future perspective for tax management. In this context, first of all, a short theoretical framework will be presented in the study and then a general evaluation of the literature review and research findings will be discussed.

[1] Ress. Assist. Ph.D, İzmir Kâtip Çelebi University, Department of Public Finance, ORCID: 0000-0002-3716-3298, alifuat.urus@ikc.edu.tr

2. Theoretical Framework

Tax psychology, as a discipline that addresses all dimensions of taxpayer psychology, basically focuses on "tax mentality" and "tax morality". Tax mentality is used for expressing all attitudes and behaviors adopted towards taxation. According to research, issues such as citizens' financial knowledge which enables them to establish a connection between the taxes they pay and the services provided, the approach of the tax administration to taxpayers, the excess of administrative formalities, the frequency of audits and the high level of tax penalties affect the attitudes and behaviors adopted towards taxation. Tax morale, which constitutes another dimension of tax psychology and taxpayer psychology, is used for directly expressing attitudes towards tax evasion. Therefore, tax morale basically focuses on tax losses and evasion (User, 1992: 184-187). Research conducted demonstrates that factors such as tax administration, tax system and perceived tax burden (subjective tax burden), tax awareness, perceptions of compliance, perception of public expenditures, trust in authorities, the state and bureaucrats, institutional quality such as perception of corruption, formal and informal education, gender and belief, willingness to obey and religiosity have a relatively strong effect on tax morale (Torgler vd., 2008: 313; Demir, 2008).

3. Literature Review

Due to its geographical location, Turkey is a country crossed by active fault lines, which have high risk of producing massive earthquakes. Historically, there have been many massive and destructive earthquakes. The 17 August 1999 Gölcük/Kocaeli earthquake and the 6 February 2023 Elbistan and Pazarcık centered Kahramanmaraş earthquakes are the prominent ones. Therefore, the scope of the literature review is based on research on the cities (Kocaeli, Hatay, Gaziantep, Malatya, Adıyaman, Diyarbakır, Şanlıurfa, Adana), where the impact of these earthquakes was great. As a result of detailed research conducted within the scope of the literature review, the findings of selected studies on taxpayers/citizens in cities of the last three major earthquake disasters are given below chronologically (from recent to past) by drawing attention to the findings obtained.

The findings from Ekici's survey conducted with taxpayers in Adana in 2022 are as follows: Increasing tax rates, low income levels, continuity of tax amnesties reduces voluntary compliance with taxes.

The findings from Doğan's survey conducted with taxpayers in Hatay province in 2021 are as follows: Paying taxes is a civic duty. Tax awareness is at a high level. The most important reason for tax evasion is high tax rates. The taxes paid do not return as services to society. Weak enforcement power of tax penalties increases tax crimes. The most important elements that can increase tax awareness are eliminating injustice in the tax system and utilizing public expenditures in order to increase social welfare.

The findings from the survey conducted by Çelik with taxpayers in Kocaeli province in 2019 are as follows: Financial advisors have a higher perception of tax ethics than tradesmen, women have a higher perception of tax ethics than men and those with a higher education level have a higher perception of tax ethics than those with lower education. Increasing tax ethics, awareness and compliance depend on the fair distribution of taxes and public expenditures.

The findings from the survey conducted by Küçükgöz in Gaziantep, Hatay, Şanlıurfa and Kilis provinces in 2019 are as follows: The opinion that Syria origined citizens do not pay taxes is extremely high. The biggest problem is that Syrian origined citizens work for low wages without

insurance. There is a strong desire to access the financial aid provided to Syrian origined citizens (especially among tradesmen).

The finding obtained from the survey conducted by Mutlu and Taşçı for taxpayers in Malatya in 2013 is as follows: The state's customer-oriented approach to the taxpayer has a positive effect on the taxpayer's voluntary compliance with the tax.

The findings of the comprehensive research conducted by Zenginobuz et. al. across Turkey in 2010 are as follows: Paying taxes means having a say in the governance of the country. Tax is a mandatory payment and civic duty for the development of the country. Problems of the tax system in Turkey in accordance with importance are; high taxes on consumption, not high enough taxes on those who earn more and inability to collect taxes due to the informal economy. The most important reasons why taxes cannot be collected regularly are; the unfairness of the tax system, the informal economy and the fact that taxes do not return as services to the society. Tax audits are ineffective.

The results obtained from the comprehensive research conducted by Çiçek et. al. in the Southeastern Anatolia Region (Adıyaman, Diyarbakır, Gaziantep, Mardin, Şanlıurfa) in 2008 are as follows: The tax burden is high and the taxes applied are unfair. The taxes paid are not returned as services and are not used effectively by the government. The most important reason why taxes cannot be paid in full is the high tax rates. This situation pushes taxpayers to evade taxes. Tax evaders are not welcomed. The multitude of formalities regarding tax payments and the incomprehensibility of the legislation reduce tax compliance. The approaches of the tax administration are not liked, but the approaches of the tax inspectors are liked. Honest taxpayers are punished through tax amnesties and this situation also disrupts tax justice. Public expenditures are used wastefully.

4. A General Evaluation of Research Findings

When the research findings are evaluated, the findings can be summarized as follows: Since there was no study conducted specifically for Kahramanmaraş on taxpayer psychology, it could not be included in the review. Other cities; Kocaeli, Hatay, Gaziantep, Malatya, Adıyaman, Diyarbakır, Şanlıurfa, Adana, where three major earthquake disasters occurred in the history of Turkey; were included in the analysis. The research conducted by Zenginobuz et. al., is the most comprehensive study throughout Turkey, makes possible to reveal the general trend and make comparisons.

Based on the findings obtained from this study on a large group of citizens across Turkey, it has been observed that there are similar views regarding tax structure and implementation (such as paying taxes is a civic duty, tax rates and tax burdens are very high, the tax system is not fair, frequent tax amnesties reward those who do not pay, taxes are not adequately reflected in public services, public expenditures are presented ineffectively and used wastefully) among citizens living in cities that experienced earthquakes. Compared to metropolitan cities such as Istanbul and Kocaeli (located in the Marmara Region), in cities where the February 6 earthquakes occurred (mainly located in the Eastern and Southeastern Anatolia Region), tax outlook and tax compliance were found to be lower, and the cost of tax compliance (psychological cost of taxation) was higher. In the findings of the research conducted specifically for the cities where the February 6 earthquakes occurred, unlike the research conducted for other cities, the taxpayers' view towards tax inspection staff was found to be positive. The same taxpayers expressed a negative opinion that offering privileges to Syrian refugees/immigrants disrupts the fair competition.

5. Conclusion

In this study, which examines the previous studies in the literature investigating taxpayer psychology in the cities that experienced the last three major earthquakes in Turkey's history, it is concluded that there are taxpayer structures that are common and different in comparison to Turkey in general and similar and different psychologies even among the cities that experienced three major earthquake disasters. While a similar view prevails among taxpayers regarding the structural features (tax practices) of the Turkish tax system, it has been observed that different views prevail depending on the regional and local structures. Turkish society has a common opinion on issues such as high individual tax burden and tax rates, low tax justice, careful approach to tax audits, penalties and tax amnesties, and proper management of the tax revenues-public expenditures relationship. Another striking result is the impact and consequences of the migration wave on the taxpayers. Considering all these results, the study reveals that there is a need for more participatory structural reforms that include taxpayers to the process.

References

Çelik, Aslıhan (2019). *Vergi Kaçırma Etiği: Kocaeli Bölgesindeki Vergi Mükellefleri Üzerine Bir Araştırma.* Gebze Teknik Üniversitesi Sosyal Bilimler Enstitüsü (Yayımlanmamış Yüksek Lisans Tezi). Gebze.

Çiçek, H., Karakaş, M. & Yıldız, A. (2008). *Güneydoğu Anadolu Bölgesi'nde Vergi Yükümlülerinin Vergiyi Algılama ve Tutum Analizi: Bir Alan Araştırması,* Ankara: Maliye Bakanlığı Strateji Geliştirme Başkanlığı Yayın No:2008/381.

Demir, İ. C. (2008). *Vergi Ahlâkı ve Belirleyenleri Ege Bölgesi Örneği.* Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü (Yayımlanmamış Doktora Tezi). İzmir.

Doğan, G. (2021). *Türkiye'de Gönüllü Vergi Uyumunu Etkileyen Faktörler.* Adnan Menderes Üniversitesi Sosyal Bilimler Enstitüsü (Yayımlanmamış Yüksek Lisans Tezi). Aydın.

Ekici, G. (2022). *Davranışsal İktisat Çerçevesinde Vergiye Karşı Tutumlar*. Çukurova Üniversitesi Sosyal Bilimler Enstitüsü (Yayımlanmamış Yüksek Lisans Tezi). Adana.

Küçükgöz, N. M. (2019). *Suriyeli Mültecilerin İl Ekonomilerine Etkisi: Gaziantep, Hatay, Şanlıurfa, Kilis Örneği.* Sakarya Üniversitesi Sosyal Bilimler Enstitüsü (Yayımlanmamış Yüksek Lisans Tezi). Sakarya.

Mutlu, A. & Taşcı, K. (2013). "Vergi Dairelerinin Mükellefe Davranış Biçimlerinin Vergilemede Gönüllü Uyuma Etkisi: Malatya Örneği", *Elektronik Sosyal Bilimler Dergisi*, 12(45), 214-232.

Torgler, B., Demir, İ. C., Macintyre, A. & Schaffner, M. (2008). "Causes and Consequences of Tax Morale: An Empirical Investigation", *Economic Analysis & Policy,* 38 (2), 313-339.

User, İ. (1992). *Vergilemenin Sosyal Psikolojik Sınırı.* Marmara Üniversitesi Sosyal Bilimler Enstitüsü (Yayımlanmamış Doktora Tezi). İstanbul.

Zenginobuz, Ü., Adaman, F., Gökşen, F., Savcı, Ç. & Tokgöz, E. (2010). *Vergi, Temsiliyet Ve Demokrasi İlişkisi Üzerine Türkiye'de Vatandaşların Algıları,* İstanbul: Açık Toplum Vakfı Yayını.

The Role of Digitalization on Tax Transparency: An Assessment in Terms of the Beps Action Plan 13

Esra Uygun[1]

Abstract

OECD carries out many studies to address global problems caused by digitalization, secure the tax revenues of governments, ensure the fair distribution of the tax burden among taxpayers, and ensure tax transparency internationally. One of the most effective was the "Base Erosion and Profit Shifting (BEPS)" adopted by the OECD in 2013. BEPS, which aims to re-establish international tax rules and is an important development in the field of international taxation, is a comprehensive cooperation initiative and concerns multinational companies and their tax behavior models. Action plan 13 consists of "country-based reporting (CbCR)" to increase tax transparency. The aim of action plan 13 is to minimize tax loss by ensuring tax transparency in multinational companies and thus reducing tax avoidance activities. According to reporting standards, multinational companies are obliged to share information with the tax administrations of all countries where the transactions giving rise to the taxable event took place. The need for country-based reporting has emerged as a result of the international tax system's taxation of profits of multinational enterprises. Country-by-country reporting also sheds light on some unfair tax practices, such as the use of tax havens and profit shifting through transfer pricing.

Keywords: BEPS, multinational company, digitalization, tax transparency
JEL Codes: H20, H26

1. Introduction

Ensuring information sharing between administrations on tax issues is very important in ensuring tax transparency. For this reason, the aim of the study is to evaluate the importance of international information sharing in increasing tax transparency and transparency of digitalization, which has become widespread with the effect of globalization and technological developments. In this context, BEPS action plan 13 is discussed and country-based reporting studies to ensure tax transparency of countries are examined. Country-based reporting stems from the international tax system's supportive feature of minimizing tax liability and attempts to ensure increased accountability of multinational enterprises regarding how profits are allocated to countries through taxation. In addition, making country-based reporting mandatory provides tax administrations with additional information that will allow them to better evaluate the risk of distribution of profits among their fields of activity.

This study consists of three parts. First, the concepts of digitalization, digital economy and tax transparency are explained. Secondly, the activities within the scope of OECD's BEPS Action Plan 13 country-based reporting for international information sharing on tax issues were evaluated. OECD and BEPS are discussed in the study because OECD has a leading role in sharing information on tax issues and BEPS is an important project to create an international framework for preventing tax losses of multinational companies. Finally, a general evaluation was made about the impact of digitalization on tax transparency.

[1] Lecturer, Ph.D, Tokat Gaziosmanpaşa University, ORCID: 0000-0001-5332-0831, uygun.esraa@gmail.com

2. Conceptual Explanations

With the impact of globalization and increasing technological developments, the need for change and transformation has arisen in many areas, especially in the economy. In this process, the concept of digitalization has gained importance. Digitalization is a process that changes entire industries, the nature of innovation, product diversification and producer-consumer interaction. With increasing digitalization, all processes have been moved to the digital environment and systematic work has become easier. In addition, digitalization has increased the elements and capabilities of the economy, led to social changes, affected tax policies and led to major changes and transformations in tax administrations and the implementation of tax laws. However, in this process, traditional taxation rules have become insufficient, many problems have emerged regarding the taxation of the digital economy, and the concept of tax transparency has gained importance. The concept of tax transparency is often used by organizations to provide clarity on complex tax issues and increase stakeholder confidence by providing assurance that a fair share of tax is being paid. At the same time, tax transparency is expressed as disclosing the amount of taxes received by governments and improving cooperation between countries by sharing information about the same taxpayers. Digitalization of the economy has increased the tax losses of states, especially by making it difficult to tax the profits of multinational companies. This has become an increasingly important problem in international taxation. It has become difficult to ensure tax transparency for both tax administrations and multinational companies. It is noteworthy that transparency should be created not only in the transparency of multinational enterprises' own taxation processes, but also by providing more information flow about the regulations made to accommodate multinational enterprises in international taxation.

2.1. Digitalization and Digital Economy

Digitalization is making a business, service or item digital or creating different business opportunities by offering it in a digital environment. At this point, it is necessary to know the difference between the concepts of digitalization and digital transformation. Digital transformation starts with the customer and encourages customers to use technology. Digitalization is the transfer of business processes to the digital environment. Digital economy, based on digital technologies, is defined as the worldwide network of economic activity and commercial transactions provided by information and communication technologies (Rouse, 2017). According to OECD, digital economy is expressed as a superconcept created with digital technologies (OECD, 2012: 5). The digital economy is the result of processes of change brought about by information and communication technologies, which make technology cheaper and more powerful and support the improvement of business processes and innovation in all sectors of the economy (OECD, 2015: 11). Although digital economy first brings to mind electronic commerce (e-commerce), it is not just e-commerce. It is a set of commercial and economic activities that also includes e-commerce. E-commerce is all the activities of purchasing, selling, collecting/processing information and marketing goods and services through electronic networks. In addition to e-commerce, the digital economy also includes online digital advertising and promotional activities, online payment system and advertising revenues obtained from these transactions, and sales of digital goods and services (Yüce and Akbulut, 2018: 110).

2.2. Tax Transparency

Throughout the historical process, there have been significant changes in thoughts regarding the privacy of financial information. Previously, it was the state's responsibility to

convince citizens about what information should not be kept secret and why. Nowadays, citizens have to convince the state about what information should be kept secret and why. The prevailing opinion is that there is no legitimate reason for the confidentiality of information regarding people's financial transactions. The logic of this idea is as follows: "If there is secrecy somewhere, there is fraud", or if there is nothing to hide, there is nothing to fear (Sharman, 2009:718; Aktuğ & Öz, 2021:117). Along with these thoughts, there have been changes in the understanding of transparency. The idea of governments being open and accountable to the public has changed over time, and the concept of tax transparency, which refers to citizens being transparent to the state, has come to the fore.

Tax transparency is seen as an important element in preventing tax losses. Today, with increasing globalization and technological developments, the number of multinational companies has increased and international trade has become widespread. Current national and international tax laws are inadequate to adapt to developing and changing conditions. This situation supports some activities aimed at reducing the tax burden of companies, increases tax losses and evasion, and negatively affects transparency. Non-transparent attempts of multinational companies and their affiliated countries to share their commercial affairs and transactions; It both serves to evade taxes and causes transactions to be carried out ostensibly for the purpose of tax avoidance (Kudrle, 2016: 1154).

In recent studies, tax transparency is discussed from three perspectives. The first is the transparency of taxpayers towards their own administrations, the second is the disclosure of taxpayer information to the public, and the third is the international transparency of tax-related information (Stewart, 2018:12). This study focuses on BEPS Action Plan 13 "country-based reporting", which is intended to prevent tax losses by ensuring international tax transparency.

3. Latest Status on BEPS Action Plan 13

Digitalization and globalization have had a profound impact on economies and people's lives around the world, and this impact has increased in the 21st century. This increase is accompanied by challenges to the rules for taxing international corporate income and profits where economic activities take place, which have been in place for over a century and have created an opportunity for Base Erosion and Profit Shifting (BEPS), requiring policymakers to make bold moves to restore confidence in the system. also brought with it.

As of 2013, the OECD has stepped up its efforts to address increasing public and political concerns about tax avoidance by large multinational companies. For this reason, OECD and G20 countries acted together in September 2013 to develop BEPS Action Plans. In this context, it has identified 15 action plans aimed at ensuring consistency in national rules affecting cross-border activities, strengthening the requirements of existing international standards, and increasing transparency and certainty. BEPS is the first significant renewal in the tax rules applied for a century and aims to tax profits where productive economic activities are carried out and value is created (Uygun & Gerçek, 2018: 36: Uygun, 2023: 472-479).

At this point, although the BEPS application has significantly changed the international tax environment and improved the fairness of tax systems, it has remained inadequate in solving the tax difficulties arising from the digitalization of the economy, which is one of the main problems of BEPS. With a study conducted on October 8, 2021, more than 135 Inclusive Framework members, representing more than 95% of GDP, planned to reform international tax rules and a new solution for the taxation of multinational companies (Uygun, 2022: 95). Member countries have joined a two-pillar solution to ensure that multinational companies pay a fair

share of taxes to operate and profit in today's digitalised and globalized world economy, wherever they are located (OECD, 2021a; OECD, 2021b).

In this study, the effects of digitalization on tax transparency were evaluated by considering the current situation of the countries within the scope of OECD, BEPS Action Plan 13 country-based reporting. For this reason, OECD's Country-by-Country reports were examined. A key component of the transparency pillar of Action Plan 13 (CbC) of the BEPS project is the obligation for all major multinational business groups with consolidated group revenues above an agreed threshold to report to a country. Multinational enterprises are also required to recognize each entity within the group doing business in a particular region and provide an indication of the business activities carried out by each entity (OECD, 2023).

So far, seven reports have been published evaluating the progress reached in country-based reporting. According to the results of the last report published in 2023, country-based reporting is progressing positively (OECD, 2023). In the report, countries were evaluated according to various criteria. These criteria are elements that a region/countries must meet to demonstrate whether the required standards are being appropriately implemented. The structure of each section regarding a specific region/country examined was evaluated according to the following elements (OECD, 2022a): Summary of filing requirements, a table summarizing any published advice, local legal and administrative framework, information exchange, proper use.

The report provides information about the countries/regions that meet/do not meet country-based reporting requirements and the compliance processes with reporting requirements in those countries/regions. The report includes information such as the first reporting fiscal year, consolidated group revenue threshold, filing deadline, local filing requirement, filing permission, date of initial review of the local legal framework. In addition, summary recommendations on the local legal and administrative framework regarding reporting requirements, information exchange and appropriate use of reports are also included. The regions/countries that fulfill the reporting requirements prepared by me by compiling the information in the country-based evaluation report of the OECD (2023) are included in Annex 1. According to the report, 112 countries/regions have met the minimum standards of BEPS action plan 13 regarding country-based reporting. Despite the minimum conditions being met, deficiencies in the practices of some countries have been identified and various suggestions have been made. Recommendations address the local legal and administrative framework, exchange of information and appropriate use of reports. Many countries/regions have started to publish their first reports since 2016 to adapt to the practice. Updates were made in subsequent years (Uygun, 2023: 472-479). According to the information in the OECD (2023) report, although the BEPS action plan is required within the scope of the 13 minimum standards, there are 24 countries[2] that have not yet introduced a requirement for the filing of country-based reports. Recommendations on taking steps towards a local legal and administrative framework to implement country-based reporting requirements in the country/regions in question as quickly as possible, taking steps to ensure that the appropriate use condition is met before exchanging information, and implementing necessary processes or written procedures to ensure the exchange of information. has been found.

[2] Angola, Antigua ve Barbuda, Armenia, Belarus, Botsvana, Brunei Darussalam, Cameroon, Congo, Democratic Republic of the Congo, Dijibouti, Dominica, Eswatini (Kingdom of), Grenada, Haiti, Honduras, Jamaica Liberia, Namibia, North Macedonia (Republic of), Paraguay, Saint Luca, Saint Vincent and the Grenadines, Sierra Leone, Trinidad and Tobago.

4. The Role of Digitalization on Tax Transparency

With digitalization gaining importance, the change required in the elements of the economy has also affected tax policies, revealing inadequacies in the implementation of tax administrations and tax laws. Traditional taxation rules were inadequate in modern transformations and created many problems in taxation, and at this point the importance of the concept of tax transparency emerged. In terms of international taxation, the impact of digitalization on the economy is that it increases the tax losses of states, especially by making it difficult to tax the profits of multinational companies. Tax transparency is seen as an important issue in international taxation because it is an important element in preventing tax losses. With digitalization, it has become difficult to ensure tax transparency for both tax administrations and multinational companies. Non-transparent attempts of multinational companies and their affiliated countries in sharing their commercial affairs and transactions both provide an environment for tax evasion and cause transactions to be carried out ostensibly to avoid taxes.

With globalization, increasing technological developments and digitalization, the number of multinational companies and their volume in trade have expanded. Although this situation creates positive effects in terms of international trade, it also has some negative effects. First of all, with the increase in the number of multinational companies and their volume in trade, goods and capital movements have accelerated, electronic commerce has become widespread, and the volume of international trade has increased. However, in order to reduce their tax burden and increase their profits, multinational enterprises have started to use the transfer pricing method and transfer their profits to countries that apply zero or low taxation, known as tax havens. Transfer pricing negatively affects developing countries that are unprotected in the legal field and within the framework of international agreements, especially in international revenue sharing and resource allocation. In addition, the transfer of a significant part of the world's financial assets to tax haven countries through multinational enterprises and the decrease in taxable income through the transfer pricing method significantly negatively affects the economies of developed and developing countries.

With the innovations brought about by digitalization and the changes in the private and public sectors, existing tax systems have become insufficient in many commercial activities and have supported the increase in tax losses / evasion. These negative effects have forced countries to come together and work to prevent tax losses caused by multinational companies. As a matter of fact, OECD BEPS action plans emerged at this point. BEPS is seen as an important turning point in the fight against tax losses and evasion. With BEPS, he has carried out important work on both improving transparency and ensuring information exchange. Action Plan 13 is one of them.

International organizations primarily focus on ensuring bilateral information exchange agreements in their efforts to ensure transparency. However, the bilateral nature of information exchange agreements, that is, binding only the parties to the agreements, limits the enhancing effects of transparency. Because the fact that bilateral agreements only bind the party countries attracts the attention of multinational enterprises that want to avoid taxes and especially increases the tendency towards tax haven countries. The increasing attractiveness of tax havens has shown the importance of the concept of "transparency" in international tax law (Çamurcu, 2017: 241).

There is a conflict of interest between the state and taxpayers regarding the transparency of tax information. While from the government's perspective, tax is a source of income, from the taxpayer's perspective, it is a loss of income. The more detailed information the state has about taxpayers, the more secure the public tax will be. It can be said that a tax-transparent environment is a requirement for a healthy tax system, as the ability of tax

administrations to access accurate information about taxpayers facilitates the implementation of tax legislation (Aktuğ & Öz, 2021: 117-118).

On the other hand, although in some countries it is seen that information about the taxes paid or not paid by taxpayers is disclosed to the public, in the majority of countries, taxpayers' tax privacy is legally guaranteed. The tax legislation of every country with a modern legal system includes provisions regarding the security and confidentiality of citizens' tax information. For example, in Turkey, Article 362 of the Tax Procedure Law is titled "Violation of tax privacy" and it is stated that those who violate this article will be punished with imprisonment from 1 to 3 years and a judicial fine of up to 5000 days. However, in Turkey, the list of those who are known to the public as "tax brazens" and who have not paid their final debts over a certain amount is announced every year. In addition, the list of those who pay the most taxes is disclosed to the public with the approval of the taxpayers, and these practices are not considered as a violation of tax privacy. Aktuğ & Öz, 2021: 117-118).

At this point, there is no other way than improving coordination and cooperation between tax administrations and countries to increase tax transparency to prevent tax losses. In order for tax administrations to have information about taxpayers with cross-border activities and thus to create a tax-transparent environment, the most important issue for both leading states and multinational organizations is international information sharing on tax issues. International sharing of information on tax issues is possible through agreements signed between countries and coordination between international organizations and countries. Although the expansion of the scope of information sharing between administrations is a positive development in terms of tax transparency in the international arena, it poses serious drawbacks in terms of taxpayers' rights and tax privacy. In order to eliminate these drawbacks, it would be beneficial to create a new definition by determining the limits of tax transparency. It seems that neither the OECD nor the source countries pay much attention to the disadvantages caused by the violation of taxpayer rights and tax confidentiality. This situation arises from the fact that an international system without tax transparency threatens the income of countries. To put it more clearly, when leading states have to choose between taxpayer rights and public revenues, they choose public revenues (Uygun, 2023: 66-70: Uygun, 2023: 485-487).

5. Conclusion

BEPS Action Plan 13 is aimed at providing relevant governments with information on the global distribution of multinational enterprise revenues, economic activities and the taxes they pay among countries, according to a common template. The result of Action Plan 13 is to obtain previously unavailable information about large multinational enterprises, allowing multinational enterprises to better understand their business structure and improve their risk assessment capacity. Action Plan 13 stems from the international tax system's supportive nature of minimizing tax liability and seeks to ensure increased accountability of multinational enterprises for how profits are allocated to countries through taxation. In addition, making country-based reporting mandatory provides tax administrations with additional information that will allow them to better evaluate the risk of distribution of profits among their fields of activity. Transparency can be achieved by providing information flow between countries through country-based reporting, and in this way, losses and evasions in taxation can be prevented. Therefore, it would be beneficial to expand country-based reporting and information exchange agreements. In this way, countries and businesses will be able to obtain detailed information about the countries they intend to invest in, contributing to the expansion of transparency and preventing losses and evasion in taxation

References

Aktuğ, M., E. Öz (2021). "Küresel Vergi Şeffaflığının Artırılmasında Uluslararası Bilgi Paylaşımının Rolü", *Uluslararası Yönetim İktisat ve İşletme Dergisi*, 17 (1).

Çamurcu Z.N. (2017). "Vergi Cennetleri İle Mücadele Aracı Olarak Şeffaflık: OECD- BEPS 5 Numaralı Eylem Planı (2015 Nihai Raporu) Temelinde Bir Çalışma", *International Journal Public Finance,* Vol./Cilt 2(2), 226 - 244.

Çavdar, F. (2017). "Elektronik Ticaretin Vergi Denetimi Üzerine Etkileri", *Hukuk ve İktisat Araştırmaları Dergisi,* 9 (1), 13-27.

Kudrle, R. (2016). "Tax Havens and the Transparency Wave of International Tax Legalization", *University of Pennsylvania Journal of International Law,* 19 (4), 1153-1182.

OECD (2012). Digital Economy, OECD Publishing.

OECD (2015). *Model Protocol for The Allowing The Automatic and Spontaneous Exchange of Information Under a TIEA,* https://www.oecd.org/ctp/exchange-of-tax-information/ Model-Protocol-TIEA.pdf (01.09.2023).

OECD (2021a). *Statement on a Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy,*

https://www.oecd.org/tax/beps/statement-on-a-two-pillar-solution-to-address-the-tax-challenges-arising-from-thedigitalisation-of-the-economy-october-2021.htm. (01.09.2023).

OECD (2021b). *The Pillar Two Rules in a Nutshell,* https://www.oecd.org/tax/beps/pillar-two-model-rules-in-a-nutshell.pdf. (01.09.2023).

OECD (2022), OECD/G20 *Base Erosion and Profit Shifting Project Country-by-Country Reporting Compilation of 2022 Peer Review Reports*, *Inclusive Framework On BEPS: Action 13*, (01.09.2023).

OECD (2023). *OECD/G20 Base Erosion and Profit Shifting Project Country-by-Country Reporting – Compilation of 2023 Peer Review Reports Inclusive Framework On BEPS: Action 13,* (01.10.2023).

Rouse, M. (2017). Digital Economy, http://searchcio.techtarget.com/definition/digitaleconomy (06.09.2023).

Sharman, J. C. (2009). "Privacy as Hoguery: Personal Financial ınformation in an Age of Transparancy". *Public Administration,* 87(4), 717-731.

Stewart, M. (2018). "Transparency, Tax, and Human Rights", *Melbourne Legal Studies Research Paper Series.* No: 774.

Uygun, E. ve Gerçek, A. (2018). "OECD Ülkelerinde Agresif Vergi Planlamasını Önlemeye Yönelik Tedbirlerin Değerlendirilmesi", *Vergi Sorunları Dergisi,* 360(9), 34-49.

Uygun, E. (2022). "Vergiden Kaçınmayı Önlemeye Yönelik Küresel Asgari Kurumlar Vergisi", *International Journal of Public Finance.* 7(1), 93–112.

Uygun, E. (2023). "Vergiden Kaçınma ile Mücadele için Vergi Şeffaflığının Sağlanması: Küresel Girişim ve Uygulamalar", *Sayıştay Dergisi,* 34(130), 467-493.

Uygun, E. (2023). Şeffaflığın Sağlanması ve Kayıtdışılıkla Mücadelede Vergi Denetiminin Rolü, *Sosyal Bilimler Üzerine Araştırmalar-VIII,* (Ed). Yazıt H. & K. Neşe, Gaziantep: Özgür Yayınları, 55-74.

Yüce M. & N. Akbulut (2018). "BEPS Eylemi Kapsamında Dijital Ekonominin Vergilendirilmesine İlişkin Alınan Önlemler", *Akademik Bakış,* Sayı 68, Temmuz-Ağustos 2018, 105-123.

Additional 1. Countries Fulfilling Reporting Requirements and Improvement Suggestions

	FILING REQUIREMENTS			IMPROVEMENT SUGGESTIONS		
	First Report	Consolidated Income Limit	Local Filing	Local Editing	Information exchange	Proper Use
Andorra	2018	750 million EUR	Yes	None	None	None
Anguilla	2019	850 million USD	No	None	None	Update
Argentina	2017	750 million EUR	Yes	None	None	None
Aruba	2019	1.5 million AWG	Yes	None	None	Update
Australia	2016	1 billion AUD	Yes	None	None	None
Austria	2016	750 million EUR	Yes	None	None	None
Azerbaijan	2020	750 million EUR	Yes	None	None	None
Bahamas	2018	850 million USD	No	None	None	Update
Bahrain	2021	342 million BHD	No	None	None	Update
Barbados	2021	850 million USD	Yes	None	None	None
Belgium	2016	750 million EUR	Yes	None	None	None
Belize	2019	850 million EUR	Suspended	None	None	Update
Benin	2020	492 million CFA	Yes	Yes	Yes	Yes
Bermuda	2016	750 million EUR	No	None	None	Update
Bosnia and Herzegovina	2018	750 million EUR	No	Yes	Yes	Yes
Brazil	2016	2.260 billion BRL	Yes	None	None	None
British Virgin Islands	2018	750 million EUR	No	None	None	Update
Bulgaria	2016	750 million EUR	Yes	None	None	None
Burkina Faso	2023	491 billion CFA	Yes	Yes	Yes	Yes
Cabo Verde	-	750 million EUR	Yes	Yes	Yes	Yes
Canada	2016	750 million EUR	Yes	None	None	None
Cayman Islands	2016	850 million USD	No	None	None	Update
Chile	2016	750 million EUR	No	None	None	None
China (People's Republic of)	2016	5.5 billion RMB	Yes	Yes	None	None
Colombia	2016	81 million UVT	Yes	None	None	None
Costa Rica	2017	750 million EUR	No	None	None	Update
Côte d'Ivoire	2018	49.967 billion XOF	No	None	Yes	Yes
Croatia	2016	750 million euro	Yes	None	None	None
Curaçao	2018	1.5 billion NAFI	No	None	Yes	Update
Czech Republic	2016	750 million EUR	Yes	None	None	None
Denmark	2016	5.6 billion DKK	Yes	None	None	None
Dominican Republic	2022	38.8 billion DOP	Yes	Yes	Yes	None
Egypt	2018	3 billion EGP	Yes	Yes	Yes	Yes
Estonia	2016	750 million EUR	Yes	None	None	None
Faroe Islands	2019	5.6 billion DKK	Yes	Yes	Yes	Yes
Finland	2016	750 million EUR	Yes	None	None	None
France	2016	750 million EUR	Yes	Yes	None	None
Gabon	2017	4,967 billion XOF	Yes	Yes	Yes	Yes
Georgia	-	750 million EUR	No	Yes	Yes	Yes
Germany	2016	750 million EUR	Yes	None	None	None
Gibraltar	2016	750 million EUR	Yes	None	None	None
Greece	2016	750 million EUR	Yes	None	None	None
Greenland	2019	5.6 billion DKK	Yes	Yes	Yes	None
Guernsey	2016	750 million EUR	Yes	None	None	None
Holland	2016	750 million EUR	Yes	None	None	None
Hong Kong	2018	6.8 billion HKD	Yes	None	None	None
Hungary	2016	750 million EUR	Yes	None	None	None
Iceland	2017	100 billion ISK	Yes	None	None	None
India	2016	64 million INR	Yes	Yes	None	None
Indonesia	2016	11 trillion IDR	Yes	None	None	None
Ireland	2016	750 million EUR	Yes	None	None	None
Isle of Man	2017	750 million EUR	Yes	None	None	None
Israel	2022	3.4 billion NIS	Yes	Yes	None	None
Italy	2016	750 million EUR	Yes	None	None	None
Japan	2016	100 billion JPY	Yes	None	None	None
Jersey	2016	750 million EUR	Yes	None	None	None
Jordan	2021	600 million JOD	Yes	Yes	Yes	Yes
Kazakhstan	2016	750 million EUR	Yes	Yes	Yes	None
Kenya	2022	95 billion KES	Yes	Yes	Yes	Yes

Korea	2016	1 trillion KRW	Yes	None	None	None
Latvia	2016	750 million EUR	Yes	None	None	None
Liechtenstein	2017	900 million CHF	Yes	None	None	None
Lithuania	2016	750 million EUR	Yes	None	None	None
Luxembourg	2016	750 million EUR	Yes	None	None	None
Macau (China)	2019	7 billion MOP	No	None	None	Update
Malaysia	2017	3 billion MYR	No	None	None	None
Maldives	2021	750 million EUR	Suspended	None	None	None
Malta	2016	750 million EUR	Yes	None	None	None
Mauritania	-	22 billion MRO	Yes	Yes	Yes	Yes
Mauritius	2018	750 million EUR	No	None	None	None
Mexico	2016	12 billion MXN	Yes	None	None	None
Monaco	2018	750 million EUR	No	None	None	None
Mongolia	2020	1.7 trillion MNT	Yes	Yes	Yes	Yes
Montenegro	2024	750 million EUR	Yes	Yes	Yes	Yes
Montserrat	2024	750 million EUR	No	None	None	Update
Morocco	2021	8.1 thousand MAD	Suspended	None	Yes	Yes
Netherlands	2016	750 million EUR	Yes	None	None	None
New Zeland	2016	750 million EUR	No	None	None	None
Nigeria	2016	160 billion NGN	Suspended	None	Yes	None
Norway	2016	6.5 billion NOK	Yes	None	None	None
Oman	2020	300 million OMR	Suspended	None	None	Update
Pakistan	2016	750 million EUR	Yes	Yes	Yes	None
Panama	2018	750 million EUR	No	None	None	None
Papua New Guinea	2017	2.3 billion PGK	Suspended	Yes	Yes	Update
Peru	2017	2.7 billion PEN	Yes	None	None	None
Poland	2016	750 million EUR	Yes	None	None	None
Portugal	2016	750 million EUR	Yes	None	None	None
Qatar	2018	3 billion QAR	Suspended	None	None	Update
Romania	2016	750 million EUR	Yes	Yes	None	Update
Russian Federation	2017	50 billion RUB	Yes	Yes	None	None
San Marino	2019	750 million EUR	Yes	None	None	None
Saudi Arabia	2018	3.2 billion SAR	Yes	None	None	None
Senegal	2018	49.967 billion WOF	Yes	Yes	Yes	Yes
Serbia	2020	750 million EUR	No	None	Yes	Yes
Seychelles	2018	750 million EUR	No	None	Yes	Yes
Singapore	2017	1.125 billion SGD	No	None	None	None
Slovak Republic	2016	750 million EUR	Yes	None	None	None
Slovenia	2016	750 million EUR	Yes	None	None	None
South Africa	2016	10 billion ZAR	Yes	None	None	None
Spain	2016	750 million EUR	Yes	None	None	None
Sri Lanka	2019	750 million EUR	Yes	Yes	Yes	Yes
Sweden	2016	7 billion SEK	Yes	None	None	None
Switzerland	2018	900 million CHF	Yes	None	None	None
Thailand	2021	28 billion THB	Suspended	None	None	None
Togo	2023	492 billion CFA	Yes	Yes	Yes	Yes
Tunisia	2020	1,636 million TND	Suspended	None	None	Update
Turkey	2019	750 million EUR	Yes	None	None	None
Turks and Caicos Island	2020	850 million USD	No	None	None	Update
Ukraine	2022	750 million EUR	Suspended	None	Yes	None
United Arab Emirates	2019	3.150 million AED	No	None	None	Update
United Kingdom	2016	750 million EUR	Yes	None	None	None
United States	2016	850 million USD	No	Yes	Yes	None
Uruguay	2017	750 million EUR	Yes	Yes	None	None
Viet Nam	2017	18 billion VND	Yes	Yes	Yes	Yes
Zambia	2021	750 million EUR	Yes	Yes	Yes	Yes

Source OECD (2023). Country-by-Country Reporting was created by me using data from the Inclusive Framework on ¬BEPS: Action 13

Earthquake and Elections: Evidence from Türkiye

Yasin Acar[1]

Abstract

Election results can be affected by many socioeconomic factors and natural disasters such as earthquakes. It has been calculated that the impact of the earthquakes on the Turkish economy that affected 11 provinces will be approximately 104 billion dollars. Developing countries, which are less prepared to deal with catastrophes, have reported more considerable economic loss and more significant death tolls. Thus, political leaders from these countries are expected to face greater challenges in future crisis handling. How well a government handles any type of large-scale crisis events will create greater or lesser public confidence in political leaders and government institutions, affecting the political behavior of voters. Empirical literature has found that natural disasters indeed influence political and electoral outcomes (Achen & Bartels, 2004, 2012; Bechtel & Hainmueller, 2011; Gallego, 2015; Quiroz & Smith, 2013; Visconti, 2015). This paper examines the impact of the Kahramanmaraş earthquakes on the electoral outcomes in the 2023 general elections in Türkiye. According to the study's preliminary results, the incumbent party lost votes compared to the previous election, while the main opposition party CHP increased its votes. In terms of alliances, there is no statistically significant difference between the two elections. In the provinces affected by the earthquake, it was found that the incumbent party (Ak Parti) votes did not decrease statistically compared to other provinces. We also found that the vote rate of the Zafer Party, which advocates anti-immigrant policies, is high in provinces where immigrants live heavily. Looking at the effect of economic variables, the votes of CHP increase in provinces with high per capita income. There may be several reasons why Ak Parti's vote did not decrease in the earthquake zone. First, generally more conservative voters live in the region, and these voters vote according to different factors. The second is that the AK Party quickly directed public expenditure to this region by using the public finance resources, enjoying the advantages of being in power. Housing construction initiated through TOKİ seems to affect voter behavior in this sense. The government's response to an earthquake can significantly influence the electoral landscape. If the government is perceived as effectively managing the crisis, providing prompt relief, and demonstrating strong leadership, it may generate goodwill among the public, potentially benefiting the incumbent party. Conversely, a poorly managed response or a perceived lack of competence in handling the aftermath of the earthquake can lead to public dissatisfaction and negatively impact the ruling party's electoral prospects.

Keywords: Elections, Voting Behaviour, Türkiye

[1] Assoc. Prof. Ph.D, Bilecik Şeyh Edebali University, Department of Public Finance, ORCID: 0000-0002-0847-1902, yasin.acar@bilecik.edu.tr

Integrating Gender Perspective into Medium-Term Plans and Budgets at the Local Level: A Comparative Study of Berlin and Istanbul

Reyhan Karababa[1]

Abstract

Fiscal rules prioritize the integration of the medium-term expenditure framework in the budget process to ensure fiscal sustainability. Incorporating medium-term financial planning into a resource-based budgeting system allows for effective administrative actions, achieving desired policy outcomes, and promoting intergenerational equality (Schick, 2007; Burth ve Hilgers, 2014). The medium-term budget approach goes beyond merely including medium-term plans in traditional budgeting. Instead, it strives to establish a structure where budgeting becomes an inherent component of the medium-term spending framework, effectively interconnecting it with other elements within the system (Kim vd., 2005: 38). The challenge of merging medium-term plans with the budget process becomes particularly evident for gender equality policies. Medium-term plans play a crucial role in the effectiveness of gender-responsive budgeting (GRB), much like other budget approaches. Berlin has been implementing gender-responsive budgeting since 2003 through a collaborative process between the district and senate administrations, with a strong focus on procedural aspects. The "Gender Equality Framework Programme" (Gleichstellungspolitisches Rahmenprogramm), developed through the collaborative efforts of the working groups, is a medium-term policy document that concentrates on social concerns and aims to promote gender equality. Similarly, the Istanbul Metropolitan Municipality has formulated a local equality action plan for 2021-2024, motivated by the decision to endorse the European Charter of Equality between Women and Men in Local Life. While encompassing various forms of inequality, the action plan primarily emphasizes addressing gender inequality. The Istanbul Metropolitan Municipality demonstrates a clear commitment to gender-responsive budgeting through its local equality action plan and the integration of gender-focused policies within its strategic plans. The degree to which the targets outlined in these policy documents are effectively incorporated into the budgets remains a topic of discussion and subject to debate. The research delves into the challenges and advancements encountered during the 20-year implementation of GRB in Berlin, employing a medium-term policy framework. With this perspective in mind, a model proposal for the Istanbul Metropolitan Municipality is created based on the findings gained from the study. While acknowledging Turkey and Germany's contrasting political and administrative structures, the study proposes that valuable insights can still be gleaned from examining budgetary practices in the birthplace of the science of public finance. Furthermore, it is worth noting that Berlin employs a program budget system similar to the one being implemented in Turkey, where a performance-based program budget reform is being carried out at the national level and is expected to extend to the local level. Therefore, studying the Berlin example can provide valuable insights for the continuation of this reform at the local level in Turkey.

Keywords: Gender-Responsive Budgeting, Medium-Term Policy Framework, Budget Documents Integration, Gender Equality

[1] Ress. Assist. Ph.D, Hitit University, Department of Business Administration, ORCID: 0000-0001-5212-5153, reyhankarababa@hitit.edu.tr

Unmet Health Demand Under Public Provision in Türkiye: Who Cannot Access Health Service in Türkiye and Why?

Mustafa Kahveci[1]

Abstract

This study aims to analyse the prevalence and determinants of unmet health care demand in Turkey. Unmet health demand is a compelling research area due to Turkey's health system structure. Following of the health transformation program the Turkish health system has been promoted as a universal coverage. At first glance, this claim seems consistent with the national-level representative Health Survey results. According to the latest available survey result, % 92 of respondents have Social Insurance Institution's health coverage. However, the same data indicates one-third of the above 15 population (5757 of 11357) postponed or gave up getting the health service they needed within the last twelve months. Descriptive statistics present very frequently unmet health demand under highly publicly provided health and insurance systems. Data contains three groups of reasons for unmet health demand: 1. Waiting time to get an appointment from a hospital, 2. Affordability of out-of-pocket health care expenses, 3. Physical accessibility (distance to health facilities). Microdata indicates that waiting time to get an appointment is the most dominant reason of unmet health demand. Together with comparison of with previous Health Survey microdata and recent one, the change of unmet health demand level and reasons of it is analysed. In the second step, the determinants of unmet health demand were analysed using logit methodology. Individual characteristics (age, gender, income, health status, education, income, insurance status) were used as independent variables, and both composite measures of unmet health demand and singular necessities were regressed on these variables. Findings of this study is consistent with related literature. The previous research on this topic underlines that socio demographic factors and personal barriers like time, financial constraints were among the determinants of the health avoidance behaviour; usually disadvantaged socio-economic conditions decrease access to necessary healthcare. Overall, lower-income groups, females, individuals with chronic illness are more likely to have problems taking health care services. It is necessary to reorganize the health care system in Turkey to improve the health care access of these vulnerable groups.

Keywords: Health Demand, Social Insurance Coverage, Determinants of Unmet Health Demand, Chronic Illness, Location of Health Service

[1] Assist. Prof. Ph.D, İstanbul University, Faculty of of Political Sciences, ORCID: 0000-0001-5053-2230, mustafa.kahveci@istanbul.edu.tr

Making the Earthquake Tax Work

Arkan Yusufoğlu[1]

Abstract

Extraordinary times such as major natural disasters require extraordinary measures like additional taxation. Tax measures implemented after earthquakes that hit Türkiye in 1999 have caused ongoing debates on “earthquake taxes” for the past two decades. This study discusses the misperceived phenomenon of earthquake taxes in Türkiye and the underlying motivation behind the debate on earthquake taxes. It is argued that an “earthquake tax” as perceived by the public is theoretically possible through earmarked taxation, but the Turkish budget legislation prevents it. As a solution, it is suggested to redesign the revenue structure of the Disaster Reconstruction Fund to include an earmarked "Disaster Solidarity Contribution" in addition to the existing revenues. By implementing such an instrument, public opinion’s expectations can be met without violating budgetary principles and distortions on economic efficiency.

Keywords: Earthquake Tax, Earmarked Taxation, Extrabudgetary Funds
JEL Codes: H20, H50, Q54

1. Introduction

Türkiye is located in a geologically active zone, which makes it an “earthquake country”. MTA[2]’s updated active fault map shows that 45 of the 81 cities are located on active faults (MTA, 2023). According to AFAD[3], faults in Türkiye generate a destructive earthquake that causes life and property losses once every five years on average (AFAD, 2018:43; 2020:84). Between 1900 and 2017, more than 86.000 people lost their lives, and nearly 600.000 houses were damaged or destroyed (AFAD, 2018:46). On 6 February 2023 two major earthquakes hit Türkiye that caused more than 50.000 confirmed deaths, 650.000 damaged and 35.000 destroyed buildings, and a total of 103 billion USD damage and expenditure costs (SBB, 2023: 26,130). Casualties and economic damage of the earthquake and the perception of lack of preparedness caused the debates on earthquake taxes to come to the fore again.

The aim of this study is to propose a solution to the earthquake tax debate that is applicable in terms of budgetary legislation. To this end, the concept of “earthquake taxes” will be explained, and this type of tax design will be discussed in terms of earmarked taxation.

2. Earthquake Taxes in Türkiye

The term “earthquake tax” refers to a set of taxes implemented aftermath of the two devastating earthquakes in 1999. In November 1999, temporary surtax on income, corporate, property, motor vehicle taxes, and two new taxes, namely Special Communication Tax and

[1] Assist. Prof. Ph.D, Ankara Hacı Bayram Veli University, Department of Public Finance, ORCID ID: 0000-0002-5143-7152, arkan.yusufoglu@hbv.edu.tr

[2] General Directorate of Mineral Research and Exploration

[3] Disaster and Emergency Management Presidency

Special Transaction Tax, were introduced with Law no. 4481[4] for budgetary requirements of restoration. These taxes were named "earthquake taxes" by the public.

Additional taxes were implemented for one year, but new ones were first extended twice to the end of 2003 then Special Communication Tax was incorporated into the Expenditure Taxes Law no. 6802 and became permanent. Hayrullahoğlu argues that the Gambling Tax, which was a part of the Special Transaction Tax, first included in the Expenditure Taxes Law and then regulated in a separate law, is an extension of earthquake taxes (Hayrullahoğlu, 2022:112). It's a perfect example for explaining the Peacock-Wiseman Hypothesis (Peacock and Wiseman, 1961).

A similar strategy, which contains additional motor vehicle tax and raising corporate tax rate for the 2023 financial year has been implemented by government in July 2023[5]. Before that, in March 2023, an additional corporate tax was implemented with another omnibus bill[6]. Even, approximately %200 rise in fixed Special Consumption Tax on fuel is justified with the earthquake argument by Ministry[7]. It's yet unknown if these additional and higher taxes will become permanent in the future or not.

3. An 800-Year Late Awakening or A Rhetorical Question: Where are the Earthquake Taxes?

Since Special Communication Tax became an ordinary budget revenue, approximately 90 billion TL[8] has been collected to date (Revenue Administration). Last two decades, after every major earthquake that caused loss of life and property, the same question has been asked: "Where are the earthquake taxes?". Going after the taxes paid is one of the key elements of tax awareness and democracy. Limiting the taxing power and gaining the budget right were milestones of the way to modern parliaments and democracies. Today, citizens use this right via their representatives in parliament. Executive branch of government is responsible to the parliament, and legislative auditing of budget provides control over governments' expenditures and tax collection. (Çağan, 1982: 13-28; Edizdoğan and Çetinkaya, 2014: 21-38).

However, in this case, it's not about democracy but a consequence of misperception. Because the question indicates that this tax is perceived by people as implemented solely for funding earthquake relief and disaster prevention activities such as urban transformation. Special Communication Tax is an ordinary budget revenue just as the others and very few people are tracking collected VAT revenues etc. That makes this question a rhetorical one rather than a democratic demand.

Although politicians already knew or could easily find the answer, this question has been frequently used for political debates too. After Elazığ Earthquake in 2011 Minister of Finance made a true but unfortunate statement while explaining budgetary principles: *"…taxes were used for building divided highways."* (Cumhuriyet, 2011). This statement amplified criticism rather than convincing public opinion.

[4] Law on the Establishment of Certain Tax Liabilities and Amendments to Certain Tax Laws in Order to Eliminate the Economic Losses Caused by the Earthquakes in and around the Marmara Region on 17.8.1999 and 12.11.1999

[5] Law No. 7456, Law on Additional Motor Vehicles Tax for Compensation of Economic Losses Caused by Earthquakes Occurring on 6/2/2023 and on the Amendment of Some Laws and Decree Law No. 375

[6] Law No.7440, Law on the Restructuring of Certain Receivables and Making Amendments on Certain Laws

[7] Ministry of Treasury and Finance. (2023). Press Release – 16 July 2023

[8] 88.851.430.000 TL as of 21.07.2023

4. Possibility of a Real Earthquake Tax

It is theoretically possible to design an earthquake tax just as perceived by public opinion. Such taxes are called earmarked taxes. Earmarking is dedicating the revenue of a specific tax or a proportion of a broad-based tax such as VAT to a specific purpose (Buchanan, 1963:457-458; Wilkinson, 1994:119, Carling, 2007:1). Earmarked taxes and user fees are widely used to raise funds for public services like healthcare, education, highway maintenance, and other infrastructure, protection of nature and wildlife, etc. Social security programs funded by payroll taxes are another significant example of earmarking (Camic, 2006:60-61).

In addition to those mentioned above, earmarked taxes are also used for disaster management and risk mitigation purposes. In India revenues generated by the National Calamity Contingent Duty, which is levied as a surcharge on excise duty, is earmarked to the National Disaster Response Fund (Sharma, 2021:15). If climate change is considered a humanmade disaster threatening the world, Thailand's Energy Conservation Promotion Fund, China's Clean Development Mechanism Fund, and Brazil's National Climate Change Fund are other examples of disaster or risk mitigation funds that are funded by earmarked taxes (World Bank, 2014:204). The Fireworks Public Safety Fee is another example of earmarked taxation that is used for disaster management activities in the states of Indiana, Michigan, and West Virginia (Yahya, Inayati and Sardjono, 2021:3).

Earmarking taxation could be in the forms of pure/strong which the amount of expenditure is determined by the collected tax or soft/weak earmarking which the expenditure program is funded by other sources along with the earmarked tax. In addition, earmarking can be in wide and narrow forms which the earmarked revenue funds the public spending function such as education wholly or a specific expenditure item in a program (Wilkinson, 1994:125-126, Carling, 2007:1). An earmarked disaster tax should be in the form of soft – narrow earmarking. Because it would be impossible for any tax to provide the required funding for devastating disasters such as those Türkiye experienced in 1999 and 2023 alone. It would be more convenient to fund a part of disaster management program such as "reconstruction" by the revenues collected from this tax together with other sources.

As a budgeting practice, earmarking has advantages and disadvantages. Earmarking can guarantee the funding of a specific expenditure program such as disaster preparedness or relief, makes the funding of expenditure programs independent from politics, and creates a link between tax and expenditure that enhances tax compliance. On the other hand, earmarking can create similar effects as a fiscal rule like budget rigidities, low government flexibility, and risk of insufficient funds. (McCleary, 1991:84-87; Gripentrog, 1997: 541-542; Michael, 2015:3-4)

Although it is theoretically possible Turkish budgetary legislation prevents earmarked earthquake or a general disaster tax (Batı, 2020; 2023a; Hayrullahoğlu, 2022:110; Kurt, 2023:209). Not to allocate specific revenues for specific expenditures is essential in Law no 5018. This is accepted as a requirement for the functionality of "universality principle". But there are several exceptions in law such as extrabudgetary funds, revolving funds, conditional donations and grants (Edizdoğan and Çetinkaya, 2014:41-45).

5. Solution: Redesigning the Disaster Reconstruction Fund

After the massive earthquakes hit Türkiye in February 2023, a new "Disaster Reconstruction Fund" was established on 15 March 2023 for the purpose of providing,

managing, and transferring the resources to the relevant institutions for reconstruction, infra, and superstructure works in disaster zones[9].

The fund's revenue stream is uncertain because it depends on cash donations, grants, aids, credits, budgetary appropriations, and resources provided from domestic and foreign money and capital markets[10]. This means the fund may become dysfunctional over time as its predecessors[11].

Redesigning the Fund's revenue structure with earmarked revenue such as a "Disaster Soliditary Contribution" to be replaced with Special Communication Tax[12] can satisfy public opinion while providing constant financing for the Fund. Another alternative could be introducing such an obligation instead of the %2 TRT share on electricity bills, which was repealed in 2021[13] (Hayrullahoğlu, 2022:117). "The Disaster Soliditary Contribution" will work as an other such financial obligation, if not a real tax, and won't be violating the budgetary principles (Uğur and Öztürk, 2017:299-300). This kind of financing won't create significant distortions on economic efficiency. Because replacing the Special Communication Tax with a such obligation will have no effect on prices. On the other hand, since electricity is a necessity good the efficiency loss would be negligible, if not zero. But the equity side of the issue is open to criticism.

Also using such an instrument would be consistent with the literature shows evidence that "tax labeling" has a significant effect on perception of the tax and taxpayer behavior (Hundsdoerfer et al. 2010; Blaufus and Möhlmann, 2014; Baranzini and Carattini, 2017). It can be expected to have a positive effect on voluntary compliance.

6. Conclusion

The earthquake tax debate in Türkiye is a consequence of a misperception. This debate is based on the public opinion's expectation of the revenues collected from the Special Communication Tax which is called as earthquake tax, to be used only for disaster-related matters. This type of taxation is possible and called as earmarked taxation in the literature. Although earmarked taxes are widely used in various areas worldwide, especially in federal systems, it is not possible in Türkiye to dedicate a specific tax to a specific expenditure.

Redesigning the recently established Disaster Reconstruction Fund could provide a solution to the ongoing debate regarding earthquake taxes. By introducing an earmarked revenue such as "Disaster Solidarity Contribution" proposed in this paper in addition to the existing ones, public opinion's expectation can be met without violating budgetary principles. This would also assure the public that the funds collected under the "solidarity contribution" will be solely used for disaster-related areas and will be monitored through independent audit reports.

[9] Law No. 7441, Law on the Establishment of the Disaster Reconstruction Fund, article 1.

[10] Law No. 7441, article 4.

[11] In Türkiye, a "Disasters Fund" was established in 1959. Earmarked proportions of the profits of public economic enterprises and state-owned banks were among the revenues of this fund. Another specific "Earthquake Fund" which had earmarked revenues from the surpluses caused by price hikes on products of state monopoly, was established in 1972. Both of these funds had lost their effectiveness over time and were abolished in the early 2000s. (Batı, 2023b).

[12] 9,8 billion TL Special Communication Tax collected in 2022. It was equal to % 0.22 of the central government revenues.

[13] According to EPDK the electricity consumption of households in July 2023 was 6,11 million MWh and unit cost of electricity was 1,34 TL per KWh. The revenue potential of such contribution would be approximately 163,7 million TL for that month if applied as %2.

References

Afet ve Acil Durum Yönetimi Başkanlığı. (2018). Türkiye'de Afet Yönetimi ve Doğa Kaynaklı Afet İstatistikleri.

Afet ve Acil Durum Yönetimi Başkanlığı. (2020). 2019 Overview of Disaster Management and Natural Disaster Statistics.

Baranzini, A. & Carattini, S. (2017). "Effectiveness, Earmarking And Labeling: Testing The Acceptability Of Carbon Taxes With Survey Data", *Environmental Economics and Policy Studies*, 19 (10), 197-227.

Batı, M. (2020). "Deprem Vergilerinin Başka Yerlerde Kullanılması Nasıl Engellenebilir?", https://www.sozcu.com.tr/2020/ekonomi/deprem-vergilerinin-baska-yerlerde-kullanilmasi-nasil-engellenebilir-6108675/

Batı, M. (2023a). "Deprem Fonu Kurulmalı Hemen…" https://t24.com.tr/yazarlar/murat-bati/deprem-fonu-kurulmali-hemen,38585

Batı, M. (2023b). "Israrla geçemediğimiz sınav; Afet/Deprem Fonları", https://t24.com.tr/yazarlar/murat-bati/israrla-gecemedigimiz-sinav-afet-deprem-fonlari, 38637

Blaufus, K. And Möhlmann A. (2014). "Security Returns and Tax Aversion Bias: Behavioral Responses to Tax Labels", *Journal of Behavioral Finance*, 15, 56-69.

Buchanan, J. M. (1963). "The Economics Of Earmarked Taxes", *Journal of Political Economy*, 71 (5), 457-469.

Camic, S. (2006). "Earmarking: The Potential Benefits", *Pittsburgh Tax Review*, 4 (1), 55-84.

Carlic, R. (2007). "Tax Earmarking Is It Good Practice?", Perspectives on Tax Reform (12), CIS Policy Monograph 75.

Cumhuriyet. (2011). "Deprem Vergileri Duble Yollara Gitti" https://www.cumhuriyet.com.tr/haber/deprem-vergileri-duble-yollara-gitti-293808

Çağan, N. (1982). *Vergilendirme Yetkisi*, İstanbul: Kazancı Hukuk Yayınları.

Edizdoğan, N. & Çetinkaya Ö. (2014). Kamu Bütçesi. 5. Baskı. Bursa: Ekin Basım Yayın Dağıtım

Gelir İdaresi Başkanlığı. (2023) "Bütçe Gelirleri (1923 - 2022)", https://gib.gov.tr/sites/default/files/fileadmin/user_upload/VI/GBG1.htm

Gripentrog, M. I. (1998). "Earmarking Tax Revenues in the District of Columbia: A Description and Evaluation", Taxing Fairly Taxing Simply: District of Columbia Tax Revision Commission Report.

Hayrullahoğlu, B. (2022). "Türkiye'de Deprem Harcamalarının Finansmanı Amacıyla Yürürlüğe Konulan Vergilerin İncelenmesi", *Mehmet Akif Ersoy Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 9 (1), 102-120.

Hundsdoerfer, J. Sielaff, C. Blaufus, K. Kiesewetter, D. Weimann, J. (2010). The Name Game For Contributions: Influence Of Labeling And Earmarking On The Perceived Tax Burden, Diskussionsbeiträge, No. 2010/12.

Kurt, S. (2023). "Bütçenin Adem-i Tahsis İlkesi Gereği Deprem Vergisi Olarak Anılan Özel İletişim Vergisinin Değerlendirilmesi", *Kamu Yönetimi Enstitüsü Sosyal Bilimler Dergisi,* 3 (4), 199-214.

Maden Tetkik ve Arama Genel Müdürlüğü. (2023). Diri Fay Haritaları, https://www.mta.gov.tr/v3.0/hizmetler/diri-fay-haritalari

Michael, J. (2015). "Earmarking State Tax Revenues", POLICY BRIEF Research Department Minnesota House of Representatives.

McCleary, W. (1991). "The Earmarking of Government Revenue: A Review of Some World Bank Experience", *The World Bank Research Observer*, 6 (1), 81-104.

Peacock, A. T. and Wiseman, J. (1961). "The Growth of Public Expenditure in the United Kingdom", National Bureau Of Economic Research Number 72, Princeton University Press.

Sharma, S. (2021). "Exploring Disaster Mitigation in India: A Financial Viewpoint", Emerging Economy Studies7(1), 7–22.

T. C. Cumhurbaşkanlığı, Strateji ve Bütçe Başkanlığı, (2023). 2023 Kahramanmaraş ve Hatay Depremleri Raporu.

T.C. Hazine ve Maliye Bakanlığı. (2023). Basın Açıklaması – 16 Temmuz 2023 https://www.hmb.gov.tr/haberler/basin-aciklamasi-16-temmuz-2023 Erişim: 17.07.2023

Uğur, Y. & Öztürk, İ. (2017). "Maden Arama Ve İşletme Faaliyetlerinden Kaynaklanan Mali Yükümlülükler Ve Bunların Hukuki Niteliğinin Analiz", *Gazi Üniversitesi Hukuk Fakültesi Dergisi*, 21 (3), 277-320.

Wilkinson, M. (1994). "Paying for Public Spending: Is There a Role for Earmarked Taxes?", *Fiscal Studies*, 15 (4), 119-135.

World Bank. (2014). Climate Change Public Expenditure and Institutional Review Sourcebook

Yahya, I. B. Inayati and Sardjono, L. F. (2021). "Proposed Use of Land and Building Tax as a Fiscal Policy Instrument to Support Flood Disaster Management Financing in DKI Jakarta". *IOP Conference Series: Earth and Environmental Science* 940 012070

Resilience Against Disasters: Efficiency in Resource Distribution and Strengthening the Local Fiscal System

Harun Kılıçaslan[1]

Abstract

In 2023, two large and devastating earthquakes centered in Kahramanmaraş affected 11 provinces and approximately 13.5 million people. The destruction caused by the earthquake in city centers had a negative impact on search and rescue activities in the rubble. The extent of the destruction and the disruption of search and rescue activities due to transportation require questioning the scale of local government and the distribution of the population. For this reason, it is necessary to ensure effective geographical distribution of resources, including the use of fiscal policy instruments by the central administration. However, the scale of local government and, accordingly, the financial structure of local governments need to be reconsidered. Pre-disaster policies will increase the chance of success of the measures to be taken during and after disaster situations. The mentioned central and local dimensions of pre-disaster policies can significantly reduce budgetary risks. For this purpose, expanding regional incentive policies to strengthen local administrations may have a positive impact. The study advocates increasing population and resource density in rural areas and reducing the increasing population burden in urban areas. In this framework, it is concluded that it is necessary to develop local economic resources and strengthen local administrations financially.

Keywords: Disaster Risk Reduction, Local Government Finance, Natural Disasters, Climate Change
JEL Codes: F64, H84, Q54, Q57

1. Introduction

Although natural disasters are as old as human history, loss of life and economic losses are increasing due to the increasing global population. The problem has become global with the addition of disasters related to global warming and climate change caused by increasing air pollution after industrialization. In 2023, two large and devastating earthquakes centered in Kahramanmaraş, which affected 11 provinces and approximately 13.5 million people, with a geographical area and population more significant than many countries. The destruction and losses caused by these earthquakes have revealed the importance of the steps needed to increase resilience to disasters at the national and local levels.

In this context, the study aims to investigate the problems and solutions regarding pre-disaster measures that can be taken to increase the resilience of local administrations against disasters and reduce budgetary risks. The existence of financial and budgetary risks increases the importance of efficiency in resource distribution and use. On the other hand, the fact that disasters are generally local makes them related to the duties and financial structure of the local administration within whose borders they occur, as well as the central administration. In the study, disasters were discussed regarding resource distribution and their relationship with public finance and focused on pre-disaster policies.

[1] Assoc. Prof. Ph.D, Bursa Uludağ University, Department of Public Finance, ORCID: 0000-0002-2204-7323, harunk@uludag.edu.tr

2. Disaster Risk and Managing Financial Risks

After the earthquake in 1999, essential regulations were made in Türkiye, especially regarding earthquakes. It is seen that significant progress has been made in terms of institutional and legal regulations regarding disasters and the creation of documents such as strategies and plans. However, practices must be objective and determine objective institutions and rules. The surest way to achieve this is through systems created according to objective rules.

The most crucial element to carry out disaster and risk management activities before, during, and after a disaster is the financial resources needed. A distinction can be made between using these resources before the disaster (damage reduction and preparation) in the first stage and their use during and after the disaster in the second stage. It can be stated that the resources to be used before the disaster are aimed at reducing and preventing the damages that disasters may cause, and they will also increase the efficiency in resource use by reducing future damages (Uzunçıbuk, 2005: 349-350).

It seems possible to eliminate the budgetary risks of post-disaster restoration costs with a disaster fund and, more effectively, a disaster insurance system. However, it is not possible to compensate for the loss of life (loss of human capital) and natural capital. Therefore, pre-disaster policies form the basis of disaster policies.

3. Local Finance System Against Disasters

Developments such as demographic structure, climate change and environment, natural disasters, migrations, and military threats need to be considered in the context of the duties and expenditures of municipalities and, more generally, the dynamic structure of local government policies.

Especially pre-disaster policies will effectively increase the efficiency of the intertemporal distribution of resources. The fact that disasters occur mainly within the borders of local administrations concerns them closely in terms of the measures to be taken following the principle of locality. In this regard, it is necessary to intervene more seriously with some limitations and incentives in regional incentive policies. Some resources need to be allocated to local administrations regarding the measures to be taken regarding pre-disaster policies. Considering that climate change causes disasters such as landslides and floods to increase, local public services need to expand in this direction. It requires expansion of both planning and financial framework.

Zoning plans that will distribute the population density towards the villages around the city should be prepared by horizontal architecture. Imposing upper limits on independent sections per square kilometer can ensure that the population density is kept at reasonable levels within the settlement. Although current urban transformation practices increase the quality of the building stock, they still need to reduce the population density and increase the population density in neighborhoods and the resulting crowding costs. The meaning of urban transformation should be expanded in this sense and removed from the circle of transformation of the building stock.

4. Conclusion

Disaster awareness in Turkey increased after the 1999 earthquake by looking at the regulations and plans made. The devastating effects of disasters and the economic losses they cause, especially felt more with the recent earthquakes, have brought financial risks to the fore

in compensating them. In this context, although establishing a Disaster Fund is a significant development, there is still time to evaluate the implementation process. On the other hand, disaster insurance has come a long way, but it needs to be expanded and developed. In this way, it will be possible to reduce budgetary risks and allocate resources to economic growth and development.

Measures regarding disaster risk reduction are essential for the effective use of resources. Local governments have an important role in disaster risk reduction policies due to the nature of disasters. In terms of investing in disaster prevention in conjunction with green budgeting practices and spatial planning, the financial structures of local governments need to be strengthened by allocating appropriate resources to them from the central administration.

Regional imbalances and the concentration in the Marmara region have created a suitable basis for disasters to turn into a national security threat. In this context, expanding regional incentive policies to strengthen local administrations can support disaster risk reduction.

One of the most critical issues is the implementation of the regulations and plans made in a technical sense and following their spirit. Otherwise, it will be difficult to recover from an economic and social structure that is fragile against disasters.

References

Altuğ, F. (2019). *Kamu Bütçesi*. İstanbul: Beta Basım Yayım Dağıtım A.Ş.

Bhola, V., Hertelendy, A., Hart, A., Adnan, S.B. & Ciottone, G. (2023). "Escalating Costs of Billion-Dollar Disasters in The US: Climate Change Necessitates Disaster Risk Reduction". *Journal of Climate Change and Health*, 10, 0–5.

Çeber, K. & Dulupçu, M.A. (2008). "Afet Yönetiminde Türkiye'nin Mali Yapısı". *Türk İdare Dergisi*, 80(459), 65-80.

Çetin, M. (2005). "Doğal Sermaye (Kritik Doğal Sermaye) ve Sürdürülebilir Kalkınma". *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 10(1), 313-328.

Çetinkaya, Ö. (2020). Mahalli İdareler Maliyesi. 7.Baskı, Bursa: Ekin Yayınevi.

Doğal Afet Sigortaları Kurumu. (2023). Poliçe Üretim. https://dask.gov.tr/tr/police-uretim, (29.09.2023).

Emre, Ö., Duman, T.Y., Özalp, S., Elmacı, H., Olgun, Ş. & Şaroğlu, F. (2013). *Açıklamalı Türkiye Diri Fay Haritası: Ölçek 1:1.250.000*, Ankara: Maden Tetkik ve Arama Genel Müdürlüğü Özel Yayın Serisi-30.

Genç, F.N. (2008). "Doğal Afet Riskleri Açısından Türkiye'de Kentleşme". *Türk İdare Dergisi*, 80 (459), 81-100.

Kılıçaslan, H. (2023). "Deprem Sonrası Köy İdarelerini Yeniden Düşünmek: Mahalli İdarelerin Ölçek ve Hizmet Sorunu". *Kahramanmaraş Merkezli Depremler Sonrası için Akademik Öneriler*. (Ed.) Öztürk, M. & Kırca, M., Gaziantep: Özgür Yayınları, 231-247.

Maden Tetkik ve Arama Genel Müdürlüğü. (2023). Diri Fay Haritaları. https://www.mta.gov.tr, (10.09.2023).

Rudden, J. (2023). "Natural disaster losses cost worldwide 2000-2022", *Statista*, https://www.statista.com/statistics/612561/natural-disaster-losses-cost-worldwide-by-type-of-loss/, (03.09.2023).

Selçuk, L. & Aydın, H. (2012). "Kuvaterner Yaşlı Alüvyal Zeminlerin Kuvvetli Yer Hareketine Etkisi: 2011 Van Depremleri". *Jeoloji Mühendisliği Dergisi*, 36(2), 75-98.

Tolacı, S.Ş., Akyol, G. & Karagöz, E.B. (2022). "Covid-19 Pandemisi ile Ortaya Çıkan Mekânsal İhtiyaçların Geleneksel Türk Evi ile İlişkilendirilmesi". *İDEALKENT (Kent Araştırmaları Dergisi)*, 13(38), 2835-2869.

Uzunçıbuk, L. (2005). *Yerleşim Yerlerinde Afet ve Risk Yönetimi.* Ankara Üniversitesi Sosyal Bilimler Enstitüsü (Yayımlanmamış Doktora Tezi). Ankara.

Yeşildal, A. (2020). "Doğal Afetlerle Mücadelede Yerel Yönetimlerin Rolü ve Kapasite Sorunları: Esnek Şehir Uygulaması". *Fırat Üniversitesi İİBF Uluslararası İktisadi ve İdari Bilimler Dergisi*, 4(1), 87-116.

Zimmermann, H. (1999). *Kommunalfinanzen: Eine Einführung in die finanzwissenschaftliche Analyse der kommunalen Finanzwirtschaft*. Baden-Baden: Nomos Verlagsgesellschaft.

Insurance as a Financing Tool in the Management of Natural Disasters

Tuba Gezer[1]

Abstract

It is known that disasters have occurred in almost every period from past to present. Disasters can be of natural origin such as earthquakes, floods, landslides, or they arise from human-induced causes. Since the form, time and place of its occurrence cannot be determined, it causes economic, psychological, and social destruction, especially physical losses. Especially natural disasters cause economic damage in the country where they occur. The topic of this study is to analyze the development of Compulsory Earthquake Insurance, which is one of the measures taken against natural disasters in Turkey within the scope of disaster insurance. The aim of the study, in which Compulsory Earthquake Insurance (CEI) against natural disasters is evaluated in terms of the number of policies and premium amounts, is to investigate whether the willingness of the society to have insurance decreased in the earthquake and subsequent periods. According to the findings, it has been found that the number of policies is increasing day by day in Turkey and the insurance rate is high, especially in provinces that experienced earthquakes. In addition, it has been observed that the impact of natural disasters on the society in terms of having insurance is maximum for two years and there is a decrease in the rate of having insurance in the following years.

Key Words: Disaster Insurance, Financial Instruments, Management of Natural Disasters
JEL Codes: G22, H44, Q54

1. Introduction

Insurance activity is one of the primary measures that can be taken before the occurrence of a natural disaster in order to protect against the economic loss that may arise as a result of natural disasters. If natural disasters cannot be prevented, utilising different types of insurance, especially in risky areas, will lead to sharing the economic damage that will arise in order to compensate for the economic loss. Even if the idea of utilising insurance is brought to the agenda after the occurrence of natural disasters, it is off the agenda again after a while. Since it cannot be determined where, when and how a natural disaster will occur, it is necessary to continue to increase insurance activities in order to minimise the damage that may occur.

After the Marmara Earthquake in 1999, Compulsory Earthquake Insurance (CEI), one of the measures taken by the public authority to minimise the loss caused by the earthquake, was put into operation. TCIP (Turkish Catastrophe Insurance Pool) is a non-profit organisation established in cooperation with the public and private sectors, which has been offering CEI coverage for dwellings since 2000. It contributes to the prevention of possible additional taxes arising from the financial burden of the state that will be reflected on the citizens, to meet the needs in the most effective and fastest way, and to the development of insurance and social solidarity awareness in the society. In this study, the development of insurance against natural disasters in Turkey is analysed. The aim of the study is to investigate the insurance awareness of citizens against natural disasters and to reveal the change in insurance premium amounts after the earthquakes. In the study, tables and graphs obtained from TCIP are interpreted.

[1] Assist. Prof. Ph.D, Kütahya Dumlupınar University, Department of Public Finance, ORCID: 0000-0002-5417-1986, tuba.yildirim@dpu.edu.tr

2. Natural Disasters

Disaster; "A natural, technological or human-induced event that causes physical, economic and social losses for the whole or certain segments of the society, stops or interrupts normal life and human activities, and the coping capacity of the affected society is not sufficient. Disaster is not the event itself, but the result of it" (AFAD, 2018: 23). Disasters are not limited to the region where they occur in terms of impact, but they can also cause physical and economic problems in national terms (Cavallo ve Noy, 2010:22).

Classification of a Disaster – If any of the following criteria are met after an event, it is classified as a disaster (Guha-Sapir et al., 2014: 7):

- 10 or more people reported killed;
- 100 or more people reported affected;
- Declaration of state of emergency;
- Call for international assistance.

Table 1: Natural disaster subgroup classification

Geophysical	Hydrological	Meteorological	Climatological	Biological
Eartquke	Flood	Storm	Drought	Animal Accident
Mass Movement (dry)	Landslide	Extreme Temperature	Glacial Lake Outburst	Epidemic
Volkanic Activity	Wave Action	Fog	Wildfire	Insect Infestation

Source: EM-DAT, 2017

Table 1 shows the classification of natural disaster subgroups and their main types. Geophysical, Hydrological, Meteorological, Climatological and Biological. Earthquake is a type of sudden natural disaster caused by nature. In this study, disaster risk management will be analysed with a special focus on earthquake.

3. Financing Disaster Risk Management

Disaster risk management strategies include risk reduction by increasing investment in mitigation and prevention. They also allow the use of a series of alternative instruments for loss financing (Miller and Keipi,2005:7). The financing of the damage caused by natural disasters can be classified in two ways as pre-disaster and post-disaster. Insurance, reserve funds, disaster bonds and extraordinary loans are used for pre-disaster financing, while post-disaster financing sources consist of taxes, borrowings and aids, transfers and budget (Miller and Keipi, 2005: 11-12).

The impact of insurance on financial and economic development in modern economies indispensable. Insurance covers unexpected losses arising from risks. Guarantees, offering people independence and confidence (Dalkılıç, 2014:118). A significant portion of the economic losses caused by natural disasters is covered by insurance companies. Natural disasters are less likely to occur although the damages it may cause are serious (Çekici, 2011: 58).

4. Natural Disasters and Insurance in Turkey

In Turkey, the most common natural disaster is landslide with 45%. The type of disaster that causes the highest loss of life and property in Turkey is earthquakes. A significant 60 per cent of the loss of life due to disasters is caused by earthquakes. Due to its geographical location, Turkey is situated on the Mediterranean-Alpine-Himalayan belt, one of the most active earthquake belts. This belt is an active belt where approximately twenty per cent of the world's earthquakes occur and produces at least one earthquake in Turkey every year with a magnitude ranging from 5.0 to 6.0. The devastating earthquakes of February 2023 were among the deadliest in Turkey's history (AFAD,2018).

The legal arrangements for disasters in Turkey have been realised with the laws enacted after the occurrence of the disaster. In this respect, the turning point is considered as the 1999 Marmara earthquake (Budak,2022: 277). Compulsory Earthquake Insurance (CEI) System has been established in order to compensate the damages arising in the existing buildings after natural disasters independently from the budgetary means of the state. In 1999, after the Marmara Earthquake, an arrangement was made for Compulsory Earthquake Insurance in our country. Established by Decree Law No. 587 and offering Compulsory Earthquake Insurance coverage for dwellings since 27 September 2000, TCIP has gained a more robust legal framework with the Catastrophe Insurance Law No. 6305, which entered into force on 18 August 2012. Compulsory Earthquake Insurance is an insurance for dwellings. It is intended for all dwellings in the country, excluding village settlements, commercial buildings and public buildings. The duration of the compulsory earthquake insurance policy is one year, and when the policy expires, it is compulsory to have insurance for one year again. The insurance premium is differentiated to be higher in regions with high earthquake risk and lower in regions with low earthquake risk (DASK, 2022).

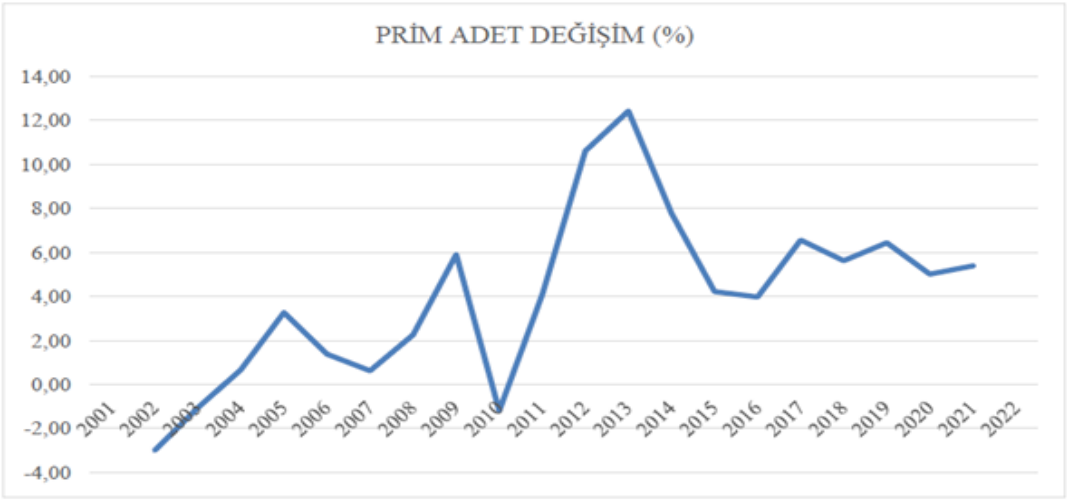
Graph 1: Insurance Rates in Earthquake-Prone Provinces



Source: DASK

When we read the CEI participation rate by regions and the earthquake hazard map of Turkey together, where both natural and man-made disasters are experienced quite frequently, the fact that the compulsory earthquake insurance participation rate remains at a rate of 55 percent indicates that there is not enough awareness about the risks and that people underestimate the reality and danger of earthquakes. Here, ensuring sufficient awareness among the public by AFAD and related public institutions, making new legal arrangements to increase the insurance rate, expanding the scope of the CES and following a disaster management policy in accordance with the earthquake reality can be listed as useful steps.

Graph 2: TCIP Policy Premium Number Change (%)



Source: DASK,2022

According to Graph 2, which shows the rate of change in TCIP premium amount, while the increase continued in 2001 and 2000, it peaked in 2003, the year of the earthquake, and while the increase continued in 2004 and 2005, the trend turned negative in the following years, that is, the rate of increase slowed down. Another earthquake year, 2011, was another year with a high rate of change in premiums, while this increase continued until 2012 and decreased in the following years. When these two periods are analysed, it is observed that the change was positive and rapid for the earthquake and the following 1-2 years, while it declined after the second year. Another striking situation is that there is a significant decrease in the rate of premium increase since 2020, when two earthquakes occurred, which is the opposite of the reactions to previous earthquakes.

5. Conclusion

In this study, disaster insurance, one of the pre-disaster financial instruments, is analysed in terms of Turkey. The concept of earthquake insurance in Turkey changed its shape with the Marmara Earthquake that occurred on 17 August 1999 and decisions were taken to adopt a compulsory application model in order to control the economic loss. As a result of these decisions, the Turkish Catastrophe Insurance Pool (TCIP) was established on 27 September 2000 with the Decree Law No. 587 on Compulsory Earthquake Insurance. CEI, which was created under the supervision and pricing of this institution, was thus started to be implemented. TCIP is the earthquake insurance that has been compulsory since 2001. Before 2001, there was no compulsory insurance against earthquakes. In the pre-2001 period, insurances against natural disasters were completely voluntary insurance.

When the CEI participation rate by region and the earthquake hazard map of Turkey are analysed together, it can be said that for a country like Turkey, where both natural and man-made disasters are experienced quite frequently, the fact that the compulsory earthquake insurance participation rate remains at a rate of 55% -when it is considered that this rate has increased with the introduction of ACS control in electricity and water subscription transactions- indicates that there is not enough awareness about the risks and that people underestimate the reality and danger of earthquakes. According to the results of the study, while there were

significant increases in the number of insurance policies during the earthquakes and the following 1-2 years, significant decreases were observed in the following period. First of all, ensuring adequate awareness among the public by AFAD and related public institutions, making new legal arrangements to increase the insurance rate, expanding the scope of the CDS and following a disaster management policy in accordance with the earthquake reality can be listed as useful steps.

References

AFAD, (2018). *Türkiye'de Afet Yönetimi ve Doğa Kaynaklı Afet İstatistikleri*, 2018

Budak, S. (2022). Doğal Afetler ve Sigortacılık İlişkisinin Ekonomik Bakımdan İncelenmesi. *3. Uluslararası Afet Yönetimi Kongresi*, Tokat, idmc.gop.edu.tr, https://idmc.gop.edu.tr/document/kongre_kitabi.pdf?49

Cavallo, E. ve Noy, I. (2010). *The Economics of Natural Disasters: A Survey (IDB Working Paper 124).* Department of Research and Chief Economist, Inter-American Development Bank: Washington, DC. https://doi.org/10.2139/ssrn.1817217

Çekici, Elif (2011), Doğal Afetler ve Türk Sigorta Sektöründe Risk Transferi*, Öneri Dergisi* 9 (36), s. 53-62.

Dalkılıç, N. (2014). Kamu-Özel Sektör İşbirliği Çerçevesinde Doğal Afet Risk Finansmanı. *Amme İdaresi Dergisi*, *47*(4).

DASK (2022) *Doğal Afet Sigortaları Kurumu Zorunlu Deprem Sigortası Faaliyet Raporu 2022.*

Guha-Sapir, D., Hoyois, P., & Below, R. (2014). Annual Disaster Statistical Review 2011: the numbers and trends. 2012. *Centre for Research on the Epidemiology of Disasters (CRED), Institute of Health and Society (IRSS) and Universite Catholoque de Louvain: Louvain-la-neuve, Belgium*.

Miller, S., & Keipi, K. (2005). Strategies and financial instruments for disaster risk management in Latin America and the Caribbean. *Inter-American Development Bank*. Washington D.C.

Poundrik, Sandeep. (2011). Disaster Risk Financing: Case Studies*. EAP DRM Knowledge Notes; No. 23.* © http://hdl.handle.net/10986/10104 License: CC BY 3.0 IGO.

Geopolitical Risks and Fiscal Policy: An Analysis on Turkish Economy

Süleyman Kasal[1]

Abstract

Geopolitical risk is understood as the threat, escalation or occurrence of undesirable events due to war, terrorism and tensions between states or political actors that affect the peaceful course of international relations. Caldara and Iacoviello (2022) developed a geopolitical risk index within this definition. The index covers not only terrorist attacks, but also other forms of geopolitical tensions such as military threats, war risks, Middle East tensions and global uncertainty. Examples of these events include the Gulf War, the September 11 attacks, the invasion of Iraq, the Paris attacks, the US-China trade war and the Russian invasion of Ukraine. These events have negative impacts such as migration, supply chain disruptions, rising inflation expectations, pressure on financial markets and slowing capital flows.

Geopolitical risks can restrict or disrupt international trade and financial flows. This can affect a country's import and export activities and cause imbalances in that country's economy. Higher import costs can push up prices of goods and services, while lower export revenues can widen a country's current account deficit. Higher prices of goods and services can also lead to higher inflation and higher budget deficits. Rising budget deficits can make it difficult to finance government expenditures and threaten economic stability. On the other hand, deterioration in economic stability might adversely affect investment and consumption and reduce tax revenues. Moreover, an increase in geopolitical risks might also adversely affect capital flows and foreign direct investments. In fact, investors' risk appetite decreases during periods of heightened risks. A decline in investors' risk appetite might increase the demand for safe assets and have a negative impact on financial stability, especially in emerging economies. Therefore, it is crucial for policymakers to take into account how geopolitical risks affect economy. Based on this notion, this study seeks to ascertain the effect of geopolitical risks on inflation, household consumption, investments, budget deficit, government foreign debt, and trade openness in Türkiye during the period of time from 2006:I to 2022:IV. The relationships between the variables are analyzed with the vector autoregressive (VAR) method using the model in Caldara et al. (2023). There is no empirical study in the literature that analyzes the relationship between geopolitical risks and fiscal policy for Türkiye. Therefore, this study is expected to make a new contribution to the fiscal policy literature.

Empirical evidence suggests that geopolitical risks increase inflation and budget deficits. Moreover, the findings from the model suggest that geopolitical risks have a negative impact on private consumption and investment in Türkiye. Findings from the VAR model suggest that an increase in geopolitical risks also decreases Türkiye's trade openness. These results prove that the Turkish economy is economically sensitive to global geopolitical risks. Therefore, in order to increase its resilience to international geopolitical shocks, the Turkish economy should first diversify its international trade structure and diversify its import-oriented production structure. In addition, it should take measures to stabilize budget revenues and develop fiscal policies to ensure fiscal sustainability.

Keywords: Geopolitical risks, fiscal policy, business cycle

[1] Assist. Prof. Ph.D, Anadolu University, Department of Public Finance, ORCID: 0000-0001-8409-1090, skasal@anadolu.edu.tr

Fiscal Buffers Against Fiscal Liabilities Created by Natural Disaster: A Proposal for Turkiye

Şeref Can Serin[1] **Murat Demir**[2]

Abstract

This study proposes building a fiscal buffer to manage the negative economic effects of natural disasters in Turkiye. In this context, it suggests creating a liquid natural disaster risk account, keeping the fiscal buffer in the budget, and offering catastrophe bills and bonds to financial markets. Additionally, the study suggests creating a compulsory natural disaster insurance profile and offering incentives and subsidies to increase penetration at the individual health insurance and comprehensive motor insurance levels. These steps can help absorb the primary economic shocks of natural disasters through fiscal buffers and, while doing so, protect budget rights, ensure transparency and accountability, and build fiscal resilience against natural disasters in Turkiye. Overall, this proposal aims to provide a comprehensive framework for managing fiscal risks associated with natural disasters in Turkiye and ensuring the safety of the lives and property of its citizens.

Keywords: Fiscal Buffer, Natural Disaster, Fiscal Policy
JEL Codes: E62, H61, Q54

1. Introduction

The study suggests that developing and underdeveloped states may sometimes be unable to respond effectively and quickly to natural disasters due to fiscal inadequacy. However, the states are primarily responsible for securing the lives and properties of their citizens under special conditions such as natural disasters. In this paper, we examine the term fiscal buffer to combat the devastation caused by natural disasters in Turkiye. The fiscal buffer could be built more resiliently by analyzing public expenditure-income-debt tools altogether. Fiscal buffer, as defined by the IMF (2016: 25), is the ready-to-use financial area consisting of savings made from budget resources to compensate for unforeseen increases in public expenditures and decreases in public revenues and steps that will reduce public debts in good periods of the economy. Empirical research shows that developing countries suffer more from the economic consequences of natural disasters (Panwar & Sen, 2020; Jerch et al., 2023). After natural disasters, there are significant increases in public expenditures (Nishizawa et al., 2019; Cabezon et al., 2019; Noy et al., 2022), public revenue decreases (Melecky & Raddatz, 2011), and budget deficits arise (Lis & Nickel, 2010). These conditions indicate that fiscal policy has become an undesirable "pro-cyclical" structure in the face of natural disasters, particularly in developing and underdeveloped countries (Noy & Nualsri, 2011). Fiscal buffers operate differently than a fund structure and can be separated into ex-ante and ex-post resources within budget lines to minimize alternative costs. Thus, the problem of keeping idle resources can be minimized. Based on the findings, it is advised that approximately 3% of the total public expenditures be kept as a fiscal buffer depending on the countries' disaster fragility degree (Cebotari et al., 2009; Çevik & Huang, 2018: 3).

[1] Res. Assist., Harran University, Department of Public Finance, ORCID: 0000-0001-8575-9128, scserin@harran.edu.tr
[2] Prof. Ph.D., Harran University, Department of Public Finance, ORCID: 0000-0002-1466-1104, mdemir@harran.edu.tr

2. Fiscal Liabilities Resulting from Natural Disasters

According to Cavallo & Noy (2009: 10) and Noy & Nualsri (2011), natural disasters cause economic losses by damaging infrastructure and reducing human and physical capital accumulation. These losses tend to have a more devastating impact on developing and underdeveloped countries than on developed countries. The negative impacts of natural disasters on social welfare happen differently than economic crises, as they lead to the physical destruction of human and physical capital (Skoufias, 2003: 1088).

The public sector incurs a part of the expenses of natural disasters due to social and state obligations. This is where the concept of fiscal liability comes into the picture. Public expenditures on goods and services can be directly defined as "*explicit*" fiscal liabilities based on a program with a legal basis. However, it is also possible to consider them as "*implicit*" liabilities since there is no legal basis to compensate for the economic effects of disasters and "*conditional*" liabilities since they are not included in a predetermined program (Çelen, 2010: 64). Therefore, losses stemming from natural disasters fall under the umbrella of *conditional implicit fiscal liabilities* (Brixi, 2001; Brixi & Shick, 2002:3). Although state budgets account for conditional *explicit liabilities*, other risks under *conditional implicit liabilities* are not directly considered in traditional budgeting process. However, if the state does not intervene in macroeconomic disruptions caused by uncertainty, risk, or unforeseen factors, the alternative costs may exceed the expenses incurred through conditional implicit fiscal obligations. Hence, since the exact dates of natural disasters, their impact, and the social and economic losses they cause cannot be fully predicted, fiscal buffers are the primary fiscal tool ready for use.

3. Fiscal Buffer: Usage and Size

Fiscal buffers are assets that are available for financial needs during search-rescue, recovery, and reconstruction phases in the aftermath of natural disasters (Nishizawa et al. 2019:6). However, it is important to note that the effectiveness of these buffers depends on the country's economic development level. Developing and underdeveloped countries already have a narrow fiscal space, as found in a study conducted by Noy Nualsri (2011) for 42 countries. As a result, they tend to adopt pro-cyclical fiscal policies when disasters strike. Therefore, it is crucial to allocate resources efficiently by considering the three stages of scarce resources allocation during disasters: *rescue, recovery, and reconstruction*. To this end, it would be wise to prioritize the recovery phase when building the fiscal buffer. In high-risk disaster regions, pre-disaster (Ex-Ante) planning, incentives, and subsidies on insurance and motor insurance within the framework of conditional *explicit* fiscal obligations, along with resource transfers from the central budget, can ensure that a larger share is allocated to the conditional implicit fiscal liabilities covered by the fiscal buffer after the disaster. Moreover, transforming Indemnity-based insurance markets into parametric insurance through regulations and combating market failures (such as, asymmetric information and moral hazard) can reinforce the fiscal buffer. Although ex-post central budget transfers, aid, and donations are the most liquid instruments, the yields of debt, additional budget, and disaster bonds have temporal limitations in terms of liquidity. Indemnity-based insurance is also prone to temporal delays as it requires damage assessment before making payments.

$$\boldsymbol{Fiscal\ Buffers_t} = \boldsymbol{NDC_t} - (\boldsymbol{Donations\ and\ Aids\ for\ Disasters\ from\ Domestic\ and\ Foreign\ Markets} + \boldsymbol{Conditional\ Liability\ Resources} + \boldsymbol{Insurance\ Compensation\ Payments}) \quad (1)$$

*$Natural\ Disasters\ Costs_{t(disaster)} = \Delta Public\ Ex_{t(disaster)} + \Delta Public\ Rev_{t(disaster)}$

According to Nishizawa et al. (2018), Equation 1 can be used to determine the size of the fiscal buffer against a possible disaster. Basic observations can determine the stock costs of disasters, but forecasting methods and projections are required to determine flow costs. Domestic and foreign aid and donations should be deducted from the size of the fiscal buffer, but this is an ex-post process since the level of donations and aid cannot be known in advance. Insurances (as DASK) provide an advantage in risk layering, which reduces the size of the fiscal buffer and increases its durability. However, using parametric-based insurance in Turkiye instead of indemnity-based insurance is an important step towards reducing disaster vulnerability. Çevik and Huang (2018) suggest that around 3% of the annual public expenditures be allocated to the fiscal buffer. Therefore, building a fiscal buffer for the approximately 90-day search-rescue and Emergency Aid phase is essential. After that, resources can be accumulated to fulfill the basic missions in the recovery and reconstruction phases during good periods of the economy.

4. Conclusion

The study proposes a "fiscal buffer" for Turkiye to deal with natural disasters. It also suggests that Turkiye should create a liquid natural disaster risk account that accrues under optimal risk-return conditions. This account should be kept within the budget to ensure transparency and accountability and protect the budget right. The study recommends creating a compulsory all-natural disaster insurance profile instead of compulsory earthquake insurance to increase the DASK penetration level. Additionally, catastrophe bonds and bills should be introduced at local administrations and central government levels to layer disaster risk in the financial markets. Finally, incentives and subsidies are necessary to increase penetration at individual and motor insurance levels.

References

Brixi, H. P. (2001). Government contingent liabilities: A hidden risk to fiscal stability. *Journal of Public Budgeting, Accounting & Financial Management*, *13*(4), 582–623.

Brixi, H. P. & Schick, A. (2002). *Government at Risk: Contingent Liabilities and Fiscal Risk*. World Bank Publications.

Cabezon, E., Hunter, L., Tumbarello, P., Washimi, K. & Wu, Y. (2019). Enhancing macroeconomic resilience to natural disasters and climate change in the small states of the Pacific. *Asian-Pacific Economic Literature*, *33*(1), 113–130.

Cavallo, E. A. & Noy, I. (2009). *The Economics of Natural Disasters: A Survey*. Rochester, NY. https://publications.iadb.org/en/publication/economics-natural-disasters-survey (04.04.2023).

Cebotari, A., Davis, J., Lusinyan, L., Mati, A., Paolo, M., Murray, P. & Ricardo, V. (2009). *Fiscal Risk Sources, Disclosure, and Management*. Washington, DC.

Çevik, S. & Huang, G. (2018). How to Manage the Fiscal Costs of Natural Disasters. *IMF How To Notes*, *2018*-003.

Ghesquiere, F. & Mahul, O. (2010). *Financial Protection of the State Against Natural Disasters: A Primer*. Rochester, NY. https://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-5429 (06.03.2023).

IMF. (2016). Small States' Resilience to Natural Disasters and Climate Change—Role for the IMF. http://www.imf.org/external/pp/ppindex.aspx (06.03.2023).

Jerch, R., Kahn, M. E. & Lin, G. C. (2023). Local public finance dynamics and hurricane shocks. *Journal of Urban Economics*, *134*, 103516.

Lis, E. M. & Nickel, C. (2010). The impact of extreme weather events on budget balances. *International Tax and Public Finance*, *17*(4), 378–399.

Loayza, N. V., Olaberría, E., Rigolini, J. & Christiaensen, L. (2012). Natural Disasters and Growth: Going Beyond the Averages. *World Development*, *40*(7), 1317–1336.

Melecky, M. & Raddatz, C. E. (2011). *How Do Governments Respond after Catastrophes? Natural-Disaster Shocks and the Fiscal Stance*. Rochester, NY. https://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-5564 (09.06.2023).

Nishizawa, H., Roger, S. & Zhang, H. (2019). Fiscal Buffers for Natural Disasters in Pacific Island Countries. *IMF WP,* 19/152.

Noy, I. (2009). The macroeconomic consequences of disasters. *Journal of Development Economics*, *88*(2), 221–231.

Noy, I. & Nualsri, A. (2011). Fiscal storms: Public spending and revenues in the aftermath of natural disasters. *Environment and Development Economics*, *16*(1), 113–128.

Noy, I. Okubo, T., Strobl, E. & Tveit, T. (2022). The fiscal costs of earthquakes in Japan. *International Tax and Public Finance*, 30, 1225-1250.

Panwar, V. & Sen, S. (2020). Fiscal Repercussions of Natural Disasters: Stylized Facts and Panel Data Evidence from India. *Natural Hazards Review*, *21*(2), 1-16.

Skoufias, E. (2003). Economic Crises and Natural Disasters: Coping Strategies and Policy Implications. *World Development*, *31*(7), 1087–1102.

The Assessment of The Effect of Pressure and Interest Groups on Fiscal Legislation in terms of Poverty Relief

Nilay Akbulut[1] **Mehmet Yüce**[2] **Ramazan Gökbunar**[3]

Abstract

Interest groups are groups that come together to achieve a common benefit. An interest group; If it tries to achieve the benefit it wants to achieve by influencing the political authority, it is called a pressure group. The most important method of influence of pressure groups is lobbying. Lobbying pressure groups; In order to change the laws in a way that can achieve their own gains, they either prepare new bills or draft alternative laws to the existing law.

In our study, it is stated with examples from around the world how pressure groups influence financial legislation in order to eliminate poverty through lobbying activities. Our first example is about the lobbying activities of the pressure group called American Association of Retired Persons (AARP), which defends the rights of the elderly poor, and the legalization of social health insurance called Medicare. Medicare; It is a federal health insurance used for people aged 65 and over and for some people under the age of 65 with certain disabilities or illnesses, obtained from two funds whose costs are covered by the US treasury. Our other example is the contribution of the interest group called Children Defense Fund, which has focused on efforts to eliminate child and youth poverty, to the enactment of the Child Tax Credit program. In both examples given, both pressure groups influence financial legislation to alleviate poverty; It can be said that the first example was more successful in eliminating poverty, while the second example group achieved some success.

Keywords: Pressure Groups, Interest Groups, Lobbying, Poverty, Fiscal Legislation.
JEL Codes: D7, I3, K34

1. Introduction

Groups that come together to gain any material or moral interest or to defend any idea are interest groups. If interest groups try to influence political decision-making mechanisms in order to achieve their own gains, they are called pressure groups. In England, these groups that work to achieve their own interests by involving the political authority are called pressure groups, while in America they are called interest groups. Although their names are mentioned differently around the world, our study describes groups that put pressure on political authority in order to achieve their own interests. These groups have methods of influencing the political process in order to get what they want. In our study, lobbying will be explained as one of the methods of influence. Lobbying; It is a form of defending an idea, focusing on the laws. Pressure and interest groups prepare draft laws to organize the legislation in the way they want or prepare alternative draft laws to change the legislation. In our study, we examine how and to

[1] Project Asssistant, Bursa Uludag University, Faculty of Economics and Administrative Sciences, ORCID: 0000-0003-4784-7471, nnilayakbulut@gmail.com.
[2] Prof. Ph.D., Bursa Uludag University, Faculty of Economics and Administrative Sciences, ORCID: 0000-0001-6398-5589, mehmetyuc@gmail.com.
[3] Prof. Ph.D., Manisa Celal Bayar University, Faculty of Economics and Administrative Sciences, ORCID: 0000-0003-2084-7332, ramazan.gokbunar@cbu.edu.tr.

what extent pressure and interest groups influence financial legislation in order to eliminate poverty, by giving examples.

2. Poverty

Poverty is generally felt by people; failure to meet economic, social and other welfare standards. However, the concept of poverty includes different dimensions of deprivation, and the dimesions of poverty are widely accepted. Poverty includes all significant areas in all societies where people of both sexes are perceived as deprived and inadequate. These areas; economic capabilities, human capabilities, political capabilities, socio-cultural capabilities and resilience to vulnerability (OECD, 2001: 37).

3. Concepts of Pressure Group, Interest Group and Lobbying

In literature, an interest group is a group of people who come together for any material or moral interest. Interest does not only Express an economic interest, it also refers to the defense of an ideal or an idea. The distinction between interest groups and pressure groups begins exactly after this point. Some of the interest groups mentioned try to influence political decision-making mechanisms in order to achieve their own goals and try to direct them by putting pressure on the government, parliament or bureaucracy. This is how pressure groups arise (Şener, 2013: 254).

Lobbying; ıt is a way of expressing an idea that focuses on influencing the law (Akatay & Harman, 2017: 16). When groups conduct lobbying activities, they aim to support the legislation in their own way or to change it to suit their own wishes: They prepare draft laws to regulate the legislation in their own way, or they prepare alternative draft laws to change the legislation. They submit the draft laws thay have prepared to politicians and sometimes to the society in order to find support (Watts, 2007: 2).

4. The Assessment of The Effect of Pressure and Interest Groups on Fiscal Legislation in terms of Poverty Relief

4.1 American Association of Retired Person (AARP), Grey Loby

AARP is an interest group that often draws attention to the poverty and losses that accompany retirement and advancing age. Policymakers have made policies that will reduce the losses and elderly poverty that come with old age (Day, 2017: 13). The members of the group, who are trying to make their elderly members live better, drew attention to the poverty and losses that accompany retirement and advancing age more often while doing lobbying activities (Day, 2017: 13).

AARP has two main achievements that she has made towards alleviating elderly poverty. The first is to endure the improvement of pensions, and the other is to become the founder of the Medicare health insurance for citizens over the age of 65, where expenses are covered from treasury funds (Ainsworth, 2019: 1).

Medicare came with the Social Security Act of 1965. With the 1965 Social Security Law Amendments; basic hospital care for the elderly, skilled nursing home care and home health services, and supplemental health insurance that covers doctor services and some other expenses for a small amount are available (Winston, 1965: 10).

Improved pensions and Medicare health insurance; ıt has reduces elderly poverty. When AARP was first founded in 1958, the poverty rate for Americans aged 65 and over was %35, but by the 1970s it had falled to %15 (Day, 2017: 14).

4.2. Children Defense Fund

Children Defense Fund; Founded by Edelman in 1973, it is an interest group that works to eliminate child poverty in order to be a strong and effective voice for America's children who cannot vote, lobby or speak on their own behalf (Babson, 1991).

Since its establishment, Children Defense Fund; She has worked with federal, state, and local lawmakers to pass landmark legislation for children and families, including authorization and expansion of the Children's Health Insurance Program, Head Start and Early Start, Supplemental Nutrition Assistance Program, and Child Tax Credit. Child Tax Credit; It came as part of the Taxpayer Relief Act of 1997 (McCabe, 2018: 147). According to paragraph (a) of Article 101 of Title I of the Taxpayer Relief Act, Child Tax Credit;

"There shall be allowed as a credit aganist the tax imposed by this chapter for the taxable year with respect to each qualifying child of the taxpayer an amount equal to $500 ($400 in the case of taxeble years beginning in 1998)."

This loan is intended to help parents cover the increasing day-to-day costs of raising children, but will only provide limited relief. (Buehler, 1998: 209). As a result, we can say that the Children Defense Fund aims to eliminate poverty and influences financial legislation with successful lobbying activities, but it is only somewhat successful in eliminating poverty.

5. Conclusion

As a result of our research, we encountered the activities of unions trying to influence financial legislation in order to eliminate poverty in Turkey. They worked on the abolition of taxation on the minimum wage. When we look at the world; of all the pressure groups that have ever existed in America, we have seen two pressure groups strive to achieve this goal. Our work; although it was limited to Turkey and the USA, we encountered the effectiveness of very few groups influencing financial legislation to eliminate poverty.

In our study, we focused on social aid, which is a direct way to eliminate poverty. It was evaluated whether pressure groups were successful in lobbying on the social aid provided by the state in order to eliminate poverty. It was evaluated how they influenced the financial legislation in their countries as a result of their lobbying activities. AARP, a powerful pressure group, has led to the enactment of the health insurance called Medicare in order to minimize the losses of old age in people's later ages. Another pressure group, the Children Defense Fund, had activities aimed at eliminating family poverty by enacting the child tax credit.

As seen in the two examples given; If pressure groups aim to eliminate poverty, they can influence financial legislation in their own ways. However, how successful their efforts are in eliminating poverty is a separate question. Our first example reveals that AARP's successful lobbying activities since its founding have reduced elderly poverty compared to previous years. However, the work carried out by our other example, the Children Defense Fund, although not fully effective in eliminating child poverty, has provided some relief to families.

References

Ainsworth, S., H.; Harward, B., M. (2019). Political Groups, Parties and Organizatins That Shaped America, ABC – CLIO, Santa Barbara, California.

Akatay, A.; Harman, S. (2017). Sivil Toplum Kuruluşları Yönetim, Yönetişim ve Gönüllülük, Ekin Press, Bursa.

Babson, A. (1991). The Children's Defense Fund: Speaking Out For The Child, Mothering, İssue: 59, Spring.

Buehler, S., J. (1998). Child Care Tax Credits, The Child Tax Credit, And The Taxpayer Relief Act Of 1997: Congress' Missed Opportunity To Provide Parents Needed Relief From The Astronomical Costs Of Child Care", Hastings Women's Law Journal, 9(2), 189-218.

Day, C., L. (2017). America's Largest Interest Group and Its Impact, ABC – CLIO, LLC, Santa Barbara, California.

McCabe, J., T. (2018). The Fiscalization of Social Policy, United States of America , Oxford Press,.

OECD (2001). The DAC Guidelines Poverty Reduction, France.

Şener, M. (2013). Baskı Grupları, Siyaset Bilimi Kavramlar, İdeolojiler, Disiplinler Arası İlişkiler, (Ed.) Atılgan G., Aytekin, A., Genişletilmiş 3. Basım, İstanbul, Yordam Kitap, 253-266.

Watts, D. (2007). Pressure Groups, Edinburg, Edinburg University Press.

Winston, E. (1965). Implications of the 1965 Amendments to the Social Security Act, Social Work, 10(4), 10-15.

The Link Between Fiscal Transparency and Macroeconomic Dynamics

Burak Pirdal[1] **Haldun Çolak**[2]

Abstract

Fiscal transparency helps to analyze more accurately the general fiscal position of the public sector, including the costs and benefits of policies adopted in economic and financial decision-making processes and their possible risks to public financial management. In general, since the fiscal transparency plays a supporting role in the reliability of a country's fiscal plans and the establishment of general market confidence in the economy, it is expected to interact to a certain extent with macro-economic dynamics. Based on this insight, the aim of this study is to examine the potential relationships between fiscal transparency and basic macro-economic dynamics. For this purpose, the possible relationships between fiscal transparency and foreign direct investments, exports, growth and development in Turkey are analyzed. In this direction, the partial least squares structural equation modeling (PLS-SEM) is conducted as a distinctive technique particularly in the public finance literature. The results indicate that there is a statistically significant and positive relationship between the enhancement of fiscal transparency and both foreign direct investments and development. Additionally, foreign direct investments have a significant impact on exports, and exports in turn contribute to economic development. Furthermore, development is found to have a beneficial impact on economic growth. The overall results suggest that the implementation and enhancement of policies and practices aimed at promoting fiscal transparency in Turkey have a positive impact on macroeconomic performance. Moreover, it is evident that the presence of a robust macroeconomic framework is contingent upon the establishment of a solid foundation of fiscal transparency. This study not only contributes to the existing literature but also provides novel insights for future research and policy makers.

Keywords: Fiscal Transparency, Development, PLS-SEM
JEL Codes: E60, E62, O11

1. Introduction

Fiscal transparency helps analyze the evaluation of the general fiscal situation of the public sector by stakeholders including the costs and benefits of the policies adopted in the processes of economic and financial decision-making and their possible risks to public financial management more accurately. Moreover; it provides the information to legislatures, markets and citizens that they need in order to ensure the governments face the consequences of the fiscal policies they implement and are held accountable for them. Fiscal transparency also plays a supporting role in establishing the credibility of a country's fiscal plans and general market confidence in the economy. When all these mentioned functions are taken into account, fiscal transparency is expected to interact with macro-economic dynamics to a certain extent. The aim of this study is to examine the potential relationships between fiscal transparency and basic macro-economic indicators. Within the framework of the theoretical model, the possible relationship between fiscal transparency and foreign direct investments, exports, growth and development in Turkey is analyzed. Partial Least Squares Structural Equation Modeling (PLS-SEM) is applied for data analysis, as a unique method in the public finance literature. As a matter

[1] Res. Assist., Anadolu University, ORCID: 0000-0002-7856-5701, burakpirdal@anadolu.edu.tr
[2] Res. Assist., Anadolu University, ORCID: 0000-0003-4369-6063, halduncolak@anadolu.edu.tr

of fact, academic studies on similar subjects in the literature - both in Turkish and English literature - have been examined, and as a result, no study using Partial Least Squares Structural Equation Modeling has been found. Within the scope of the study, Turkey was chosen as the sample country and the period examined covers the years 1995-2022 within the availability of data.

2. Theoretical Foundations

Fiscal transparency requires that information on public financial management processes be made available to the public. As a matter of fact, financial transparency refers to the implementation of financial decisions regarding public financial management, the auditing and reporting of financial results, and the fact that all these processes are accessible to stakeholders (households, firms, markets and even the public sector itself) and the public. Establishing and/or increasing transparency in public financial management also increases/establishes trust in state administrators (Sevinç & Demirel, 2019: 671).

Establishing fiscal transparency makes it possible to provide a clear view of governments' historical fiscal performance, current fiscal position and future fiscal policies. As a matter of fact, fiscal transparency refers to the mechanisms and practices that can make this desired situation possible.

Increasing fiscal transparency is seen as a means of encouraging regulations in the economic field that will improve the functioning of the public sector in terms of supporting financial stability and the general economic environment for the private sector (Heald, 2003: 723). As a matter of fact, fiscal transparency enables market actors to better evaluate the policy intentions regarding public financial management. This can also enable market actors to bring positive discipline to government policies. However, the lack of fiscal transparency may also pave the way for possible fiscally wasteful behavior of public administrators and politicians to remain unnoticed for relatively longer than usual. Likewise, a transparent public financial management allows the markets and the stakeholders to understand what actions are taken by bureaucrats and politicians and to make comparisons between predicted and real financial transactions and pre-set targets. In summary, fiscal transparency has a positive impact on the macro-economic position of the country by establishing the trust of stakeholders (markets, public, firms, public sector and international investors) in policy makers. In this context, there are strong justifications for claiming that fiscal transparency supports the macro-economic performance of country economies (Kopits & Craig, 1998: 2).

3. Methodology

The study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) as the chosen methodology. A model was constructed utilizing secondary data in this particular situation, with the model comprising of single-item variables. PLS-SEM is capable of operating well with limited sample sizes (Chin et al., 2020). It enables the examination of complex models (Hair et al., 2020) and may be employed in conjunction with various supplementary analyses, such as artificial neural networks and IPMA (Guenther et al., 2023). Covariance-based SEM is surpassed by it in terms of measuring the variables that occur, offering several advantages. For instance, Cheah et al. (2018) found in their comparison research that single-item variables using PLS-SEM had more effectiveness in evaluating the structure, despite their relatively poor predictive power, compared to multi-item variables. Furthermore, in the field of social sciences, a complex model that examines regression connections may involve dependent and

independent variables expressed as single variables and PLS-SEM is widely recognized as the leading approach for estimating the independent variable (Venturini & Mehmetoglu, 2019). In contrast, PLS-SEM does not necessitate the use of traditional reliability tests for variables that are composed of secondary data. However, the assessment considers the dependability of the source from which the secondary data is obtained (Adam, 2020). Based on the nature of the theoretical model and the aforementioned benefits, it has been concluded that PLS-SEM is the suitable approach for this investigation.

3.1. Theoretical Model and Data

Variables used in the theoretical model created; fiscal transparency (FT), foreign direct investments (FDI), exports (EXP), development (HDI) and growth (GDP). Corruption Perceptions Index (CPI), which is published annually by Transparency International, is used as the fiscal transparency variable. "*The perception of corruption is not the level of corruption; it shows the level of fiscal transparency*" (Bilginoğlu & Maraş, 2011: 66). "*Therefore, since corruption and practices that foster corruption are opaque practices, a high level of corruption perception means a high level of fiscal transparency. For this reason, the corruption perception index (CPI) represents the degree of fiscal transparency of countries*" (Şalçı, 2007: 87; cited in: Bilginoğlu & Maraş, 2011: 66). "*Fiscal transparency and perception of corruption can be used interchangeably, and the countries with high fiscal transparency are also the countries with high perception of corruption*" (Halkos & Tzeremes 2007:4; cited in: Bilginoğlu & Maraş, 2011: 66). FDI, EXP and GDP data were obtained from the World Bank database and the Human Development Index (HDI) data were obtained from the United Nations Development Programme. Data regarding the variables used in the model belong to the period 1995-2022.

In this context, the hypotheses of the study are as follows:

H_1: FT has a statistically significant and positive impact on FDI and HDI.

H_2: FDI has a statistically significant and positive impact on EXP.

H_3: EXP has a statistically significant and positive impact on HDI.

H_4: HDI has a statistically significant and positive impact on GDP.

In the light of all this, the financial transparency model under review was created as shown in Figure 1.

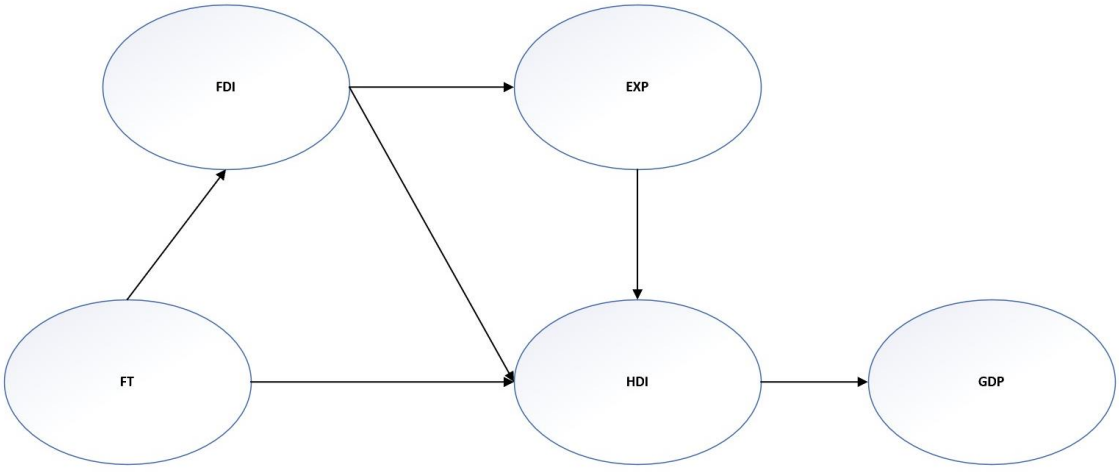


Figure 1. Fiscal Transparency and Macro-economic Dynamics Model

4. Findings

While the PLS-SEM approach does not necessitate total independence among model variables (Adam, 2020), the correlation links between model variables, as per the traditional method phases, are presented in Table 1. Upon examining the correlation linkages between the variables, it is evident that there are no issues that would hinder the use of the variables in the model.

Table 1. Pearson Correlation Coefficients Between Constructs

	FT	FDI	EXP	HDI	GDP
FT	1	.617**	.470*	.523**	.417*
FDI	.617**	1	.610**	.611**	.584**
EXP	.470*	.610**	1	.983**	.989**
HDI	.523**	.611**	.983**	1	.977**
GDP	.417*	.584**	.989**	.977**	1
N	28	28	28	28	28
Sd	5.05	691	6.87	.073	2.42

Note: Correlation significance levels: p<0.01**; p<0.05*.

Upon analyzing Table 2 in the context of hypothesis testing, it becomes evident that the FDI->HDI path lacks statistical evidence (β=-0.027, p=0.563). Nevertheless, as this path falls within the mediation hypothesis in the theoretical model, it will be reevaluated to identify its specific indirect effects, which will be analyzed in the subsequent phase. When examining the other path coefficients, it is found that all established relationships are positive and statistically significant.

Table 2. Path Coefficients of Relationships Between Variables

Paths	Coefficient	Standard D.	p Statistics
FT->FDI	0.617	0.093**	0.000***
FT-> HDI	0.089	0.043	0.037*
FDI-> EXP	0.606	0.113	0.000***
FDI-> HDI	***-0.027***	***0.048***	***0.563***
EXP -> HDI	0.958	0.037	0.000***
HDI -> GDP	0.956	0.023	0.000***

Note: Significance levels: * p < .05, ** p < .01, *** p < .001.

On the other hand, specific indirect effects are employed to examine mediation relationships. The method proposed by Zhao et al. (2010) was utilized for mediation interpretation in this study. When variable c is added to mediate the direct relationship between a and b, it is expected that the direct effect of a on b would lose its significance. However, this effect will regain its significance only when c gets involved in the aforementioned relationship. This phenomenon is referred to as the full mediation effect. The path coefficient for the FDI-> EXP-> HDI was calculated as (β=0.581, p= 0.000). Thus, EXP serves as a complete mediator in the link between FDI and HDI. Simply said, FDI can have a positive effect on the HDI by means of EXP.

4. Conclusion

Establishing/increasing fiscal transparency is expected to have a positive impact on macro-economic dynamics and thus support the economic performance of country economies. In this study, the potential relationships between fiscal transparency and main macro-economic indicators in Turkey are examined. As a result of the study; it has been determined that the

increase in fiscal transparency has a statistically significant and positive effect on foreign direct investments and development. On the other hand, the same impact is valid for the foreign direct investments on exports, exports on development and development on growth. The most striking finding of the research is that the impact of foreign direct investments on development depends on the increase in exports. This explains that foreign direct investments support the development of the country via the increasing impact on exports. The findings indicate that, in general terms, policies and practices that establish and increase fiscal transparency in Turkey are supportive of macroeconomic performance. In this context, it can be said that the existence of a strong macro-economic structure depends on strong fiscal transparency. In addition to contributing to the literature as a result of the original theoretical and methodological approach it adopts, it is expected that this study will provide added value and have a widespread impact in terms of providing researchers with insights for future studies.

References

Adam, I. O. (2020) "Examining E-Government development effects on corruption in Africa: The mediating effects of ICT development and institutional quality", *Technology in Society*, 61, 1-10.

Bilginoğlu, M. A. & Maraş, G. (2011) "Avrupa Birliği ve Türkiye'de Mali Saydamlığın Panel Veri Yöntemi ile Analizi", *Ege Akademik Bakış, Özel Sayı*, 11, 59-73.

Cheah, J. H., Sarstedt, M., Ringle, C. M., Ramayah, T., & Ting, H. (2018) "Convergent validity assessment of formatively measured constructs in PLS-SEM: On using single-item versus multi-item measures in redundancy analyses", *International Journal of Contemporary Hospitality Management*, 30(11), 3192-3210.

Chin, W., Cheah, J. H., Liu, Y., Ting, H., Lim, X. J., & Cham, T. H. (2020) "Demystifying the role of causal-predictive modeling using partial least squares structural equation modeling in information systems research", *Industrial Management & Data Systems*, 120(12), 2161-2209.

World Bank (2023) Waorl Bank Database.

Guenther, P., Guenther, M., Ringle, C. M., Zaefarian, G., & Cartwright, S. (2023) "Improving PLS-SEM use for business marketing research" *Industrial Marketing Management*, 111, 127-142.

Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020) "Assessing measurement model quality in PLS-SEM using confirmatory composite analysis", *Journal of Business Research*, 109, 101-110.

Halkos, G. & Tzeremes, N. (2007). *Corruption and Socioeconomics Determinants: Empirical Evidence of Twenty Nine Countries*. Munich Personal Repec Archive Papers, No:2874.

Heald, D. (2003). "Fiscal transparency: concepts, measurement and UK practice", *Public administration*, 81(4), 723-759.

Kopits, G. & Craig, J. D. (1998). *Transparency in Government Operations.* IMF Occasional Paper No. 158, Washington: International Monetary Fund.

Sevinç İ. & Demirel A. (2019) "Türkiye'de Mali Saydamlık Ve İlişkili Kavramlar", *İKSAD III – Uluslararası Sosyal Bilimler Kongresi*. 8-10 Mart 2019. Adana.

Şalcı, F. (2007) "Türkiye'nin Dünya Mali Saydamlık Sıralamasındaki Yeri ve Mali Saydamlığa Ulaşmış Bir Ülke: Danimarka" *Bütçe Dünyası Dergisi*, 2(26): 85-90.

Transparency International (2023) Corruption Perceptions Index.

UNDP (2023) Human Development Index (HDI), Human Development Reports.

Venturini, S., & Mehmetoglu, M. (2019) "Plssem: a stata package for structural equation modeling with partial least squares", *Journal of Statistical Software*, 88, 1-35.

Zhao, X., Lynch, J. G., & Chen, Q. (2010) "Reconsidering Baron and Kenny: Myths and truths about mediation analysis", *The Journal of Consumer Research,* 37(2), 197–206.

Electoral Economy in Türkiye Examining the in the Framework of the Post-2000 Elections

Songül Akyıldız[1]

Abstract

This study aims to examine the political economy implemented by the current government, which has won all the elections held in the 2000s and maintained the single-party government regime, before and after the elections. Inflation, growth, unemployment, money supply, public debt stock, budget revenues and budget expenditures data and political conjuncture fluctuations were examined. Depending on the conditions in the economy, it has been observed that the government is effective in some elections and some variables to result in the elections in its favor. During the election periods, positive effects were achieved in the form of an increase in the growth rate and a decrease in the public debt stock. In some election periods, the inflation rate also decreased due to improvements in the economy. There was no political impact on the unemployment rate due to election periods. The money supply generally tends to increase before the election year, and this increase continues during the election year, showing that the election economy is effective. Depending on the election periods, there has been an increase in budget expenses and a decreasing trend in budget revenues.

Keywords: Election, Voter Behavior, Electoral Economics.
JEL Codes: E32, G18.

1. Introduction

In societies governed by democracy, voter preferences have a significant impact on the process of determining power. Voters, who play a key role in determining the government, are affected by many factors in the decision-making phase. These factors that have an impact on voter behavior are sociocultural and psychological attitudes and economic approaches. İ Economic approaches are measured by the economic policy implemented. The economic performance implemented by the government is generally considered a priority factor for voters during the election process. For this reason, governments in power can use monetary and fiscal policies to provide a more favorable economic environment by taking into account voter preferences, and thus manipulate the economy with the policies implemented.

The attitude of the ruling political party during the election period, also referred to as election economy, can be seen more on the economy with populist policies. In order to be re-elected, the government in power can implement expenditures and taxes in the state budget components in its favor, especially shortly before the elections. There are efforts to influence voter preferences, especially with civil servant salary increases, pension increases, supports in the field of agriculture and more acceptable tax policies.

In this study, the activities of the state budget managed by the government to influence voter preferences during election periods and the existence of decisions that ensure that the elections are in favor of the government will be examined. With this review, the election policy implemented by the government and the money supply, budget revenues, budget expenditures,

[1] Lecturer, Artvin Çoruh University, Yusufeli Vocational School, ORCID: 0000-0001-6309-8269, songulakyildiz@artvin.edu.tr

borrowing and tax policies will be evaluated in the light of available data. In addition, the expansionary fiscal policies that governments generally implement during election periods and the contractionary fiscal policies they implement after the elections may also cause fluctuations in some macroeconomic indicators such as inflation, unemployment and growth. In this regard, taking into account the post-2000 data of the macroeconomic variables mentioned, the positive/negative effects of the election process on these variables will be interpreted.

2. Examination of Political Cyclical Fluctuations After 2000

There were serious economic crises in the early 2000s. Especially the negative developments in the economy, which continued from previous years, led to the economic crises of November 2000 and February 2001. In order to reduce the impact of these economic crises, the "Transition to a Strong Economy Program", which includes various structural reforms, especially the agreements made with the IMF, was implemented. 7 general elections were held after 2000. The impact of these elections and the election policies of political parties regarding the economy are examined below.

2.1. Literature Review

There are many domestic and foreign studies in the literature dealing with the economics of elections. In this study, which focuses on Turkey's election economy, only domestic literature is examined. Özatay (1999) conducted research covering the period 1985-1995 and as a result of the study, it was concluded that the Nordhausian model is not valid for M0 and non-interest public transfer expenditures, but is valid for the CBRT's net domestic assets and other public transfer expenditures (Özatay, 1999: 25). Telatar (2000) examined the period between 1986 and 1997 in her study and concluded that there is no direct relationship between the inflation rate and election periods (Telatar, 2000: 150-151). In addition, in another study by Telatar in 2001, it was seen that governments in Turkey manipulated the economy by increasing public expenditures and money supply in order to be re-elected (Telatar, 2001: 57-66). Bakırtaş and Koyuncu (2005) discussed the validity of electoral political fluctuations in Turkey. As a result of the study, it was obtained that it is not valid for inflation, M1 and interbank interest rate variables, but it is valid for GDP and public sector final consumption expenditure variables (Bakırtaş & Koyuncu, 2005: 58-61). Özkan and Tarı (2010) tested the impact of the general elections held in Turkey after 1985 on GDP, money supply and public expenditures. Considering the results obtained, it was seen that the election artificial variable regarding GDP, public expenditures and money supply variables was in line with the theory, positive and statistically significant (Özkan & Tarı, 2010: 231-236). In their study, Eryılmaz and Murat (2016) examined the political conjuncture theory for Turkey with GDP, inflation, money in circulation and money supply variables for the period 1987-2012 and concluded that no political conjuncture fluctuations were observed in any series in the relevant (Eryılmaz & Murat, 2016: 248).

2.2. Review of General Elections

It is possible to examine the impact of general elections after 2000 on inflation with Table 1. The fact that the inflation rate tended to decrease in the 2002 general election year compared to the previous year was a positive reflection of the implemented economic policy rather than the effect of the elections. In the 2007, 2011 and 2015 general elections, there was a decrease in the inflation rate with the effect of both the improvements in the economy and

the stability in politics. The ruling party has an influence on the inflation rate in these three election periods.

Many studies have stated that the political conjuncture is effective on the growth rate. When the growth rate in Table 1 is examined, a conclusion confirming this statement can be reached. Depending on the influence of the current government on the economy, the growth rate has always been high in the election year and tended to decline in the following year.

It is not possible to state that the political conjuncture has a direct impact on the unemployment rate. When Table 1 is examined, it is seen that the current government, which came to power with the 2002 general elections and continues to do so including the 2023 elections, cannot carry out policies that could have an impact on the unemployment rate during election periods.

Table 1. Economic Indicators (2000-2023) (%)

Years	Inflation	Growth	Unemployment	M2/GDP	Public Debt Stock/GDP	Budget Expenses /GDP	Budget Revenues /GDP
2000	54,9	6,8	7,0	15,0	59,6	26,9	19,8
2001	54,4	-5,7	8,9	16,4	108,6	28,0	21,2
2002*	45,0	6,2	10,8	15,2	71,0	33,5	21,3
2003	25,3	5,3	11,0	15,3	63,0	33,0	21,7
2004	8,6	9,4	10,8	17,5	57,1	24,4	23,9
2005	8,2	8,4	10,6	19,7	51,5	21,7	24,3
2006	9,6	6,9	10,2	39,2	45,8	22,6	21,4
2007*	8,8	4,7	10,3	40,7	39,9	23,2	21,0
2008	10,4	0,7	11,0	46,0	40,5	22,8	20,4
2009	6,3	-4,8	14,0	51,9	46,1	26,8	20,9
2010	8,6	9,2	11,9	53,5	42,4	25,4	21,2
2011*	6,5	8,8	9,8	50,5	38,8	22,6	20,5
2012	8,9	2,1	9,2	52,3	35,5	23,0	20,4
2013	7,5	4,2	9,7	58,1	34,1	22,6	20,8
2014	8,9	2,9	9,9	57,8	31,5	21,9	20,0
2015*	7,7	6,1	10,3	51,2	30,5	21,6	19,8
2016	7,8	2,9	10,9	54,3	31,0	22,4	20,4
2017	11,1	7,4	10,9	52,3	30,2	21,8	19,5
2018*	16,3	2,6	13,5	52,1	31,1	22,1	19,4
2019	15,2	0,9	13,7	57,4	33,6	23,1	19,7
2020	14,7	1,8	13,2	65,9	35,9	23,8	20,4
2021	36,1	11,4	11,3	70,2	38,1	22,1	19,3
2022	64,2	5,6	10,4	54,7	28,0	19,6	18,7
2023*	61,5[1]	3,8[2]	9,7[3]	106,8[4]	55,3[5]	22,5[6]	17,2[7]

Source: Kalkınma Bakanlığı, 2015. TÜİK. T.C. Cumhurbaşkanlığı Strateji ve Bütçe Başkanlığı. TCMB.
* General Election years are indicated.
[1] As of September
[2] 2. Quarter
[3] As of July
[4] Rate including June
[5] Rate including June
[6] Rate including March
[7] Rate including March

Due to the planned progress that dominated the general elections, it was observed that the money supply had an increasing trend in the 2007 and 2015 elections, starting from the year before the elections. According to the six-month data obtained in the 2023 elections, the money supply-GDP ratio doubled the previous year and reached the highest rate of the 2000s. Therefore, it is possible to state that the electoral economy is applied in terms of money supply.

In Table 1, where the ratio of public debt stock to GDP is examined, a downward trend is seen due to improvements in the economy, and this situation continued until the 2018 elections. However, in the following years, including 2018, an upward trend began in the public debt stock. According to second quarter data in 2023, the public debt stock/GDP ratio increased to 55.3%. It is possible to state that the increase in the public debt stock is due to economic conditions and the Kahramanmaraş-centered earthquake that occurred in February 2023, rather than the elections.

It can be seen in Table 1 that budget expenses tend to increase and budget revenues tend to decrease depending on the election economy. This effect was not intense in the 2011 and 2015 election years. In the 2023 election year, first quarter data was examined. In this period, when the ratio of budget expenditures to GDP increased to 22.5% and the ratio of budget revenues to GDP was limited to 17.2%, there were developments arising from the internal dynamics of the country. Especially with the impact of the major natural disaster, expenditures increased, but revenues decreased.

After 2000, ten laws were enacted regarding the regulation of tax receivables in 2001, 2002, 2003, 2008, 2011, 2013, 2016, 2018, 2021 and 2023 (Özgüven, 2018: 38; Resmî Gazete). As stated above, governments' introduction of new taxes or amnesty and restructuring of tax debts is generally left to the election period rather than to the election period. While tax amnesty can be promised and implemented as an election campaign, it is also possible to apply for tax amnesties to eliminate the problems experienced in financing increasing public expenditures before and during the election period.

3. Conclusion

In the study, selected inflation, growth, unemployment, money supply, public debt stock, budget expenditures and budget revenues and the political impact of the general elections in Turkey after 2000 were examined. As stated in the studies in the literature, it has been observed that the political conjuncture is effective on some variables. The current government carried out policies that could have an impact especially on growth, money supply and budget during election periods. While it was seen that the government had an effect on the inflation rate in some election years, no election-related effect was observed on unemployment rates. Therefore, the possible effects of a developing country like Turkey during election periods are on public expenditures, the amount of money in circulation and the level of growth. The impact of elections held in periods when economic problems are at a high level on the budget has increased more. Thus, the ruling party, which has the authority to use public resources and budget, affects the election results depending on the political conjuncture. As a result of the development of budget right awareness and a transparent, accountable and effective budget system, governments' implementation of election economy will be more limited.

References

Bakırtaş, İ. ve Koyuncu, C. (2005). "Politik Dalgalanmalar Yaklaşımı Çerçevesinde Türkiye'deki Seçimlerin Ekonometrik Analizi", *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 19(1), 55-66.

Eryılmaz, F. ve Murat, D. (2016). "Politik Konjonktür Teorileri: Türkiye'den Kanıtlar", *Yönetim ve Ekonomi Araştırmaları Dergisi*, 14(1), 248-268.

Kalkınma Bakanlığı. (2015). Ekonomik ve Sosyal Göstergeler 1950-2014. Ankara.

Özatay, F. (1999). "Populist Policies and the Role of Economic Institutions in the Performance of the Turkish Economy", *Reprinted from Yapı Kredi Economic Review*, 10(1), 12-26.

Özgüven, V. A. (2018). "Vergi Etiği Açısından Vergi Afları", *Gaziantep University Journal of Social Sciences*, 17(Özel Sayı), 34-46.

Özkan, F. ve Tarı, R. (2010). "Türkiye'de 1980 Sonrası Seçim Dönemlerinin Politik Konjonktürel Dalgalanmaları Teorisi Çerçevesinde Analizi", *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, (36), 223-238.

Resmî Gazete. (2021). Bazı Alacakların Yeniden Yapılandırılması İle Bazı Kanunlarda Değişiklik Yapılmasına İlişkin Kanun. https://www.resmigazete.gov.tr/eskiler/2021/06/20210609-1.htm, (25.09.2023).

Resmî Gazete. (2023). Bazı Alacakların Yeniden Yapılandırılması İle Bazı Kanunlarda Değişiklik Yapılmasına Dair Kanun. https://www.resmigazete.gov.tr/eskiler/2023/03/20230312-14.htm, (25.09.2023).

Telatar, F. (2000). "Parlamenter Sistemlerde Politik Devresel Dalgalanmalar: Teori ve Türkiye İçin Bir Uygulama", *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 2(1), 133-154.

Telatar, F. (2001). "Politik Devresel Dalgalanmalar Teorisi Işığında Demokrasi-Siyaset-Ekonomi İlişkisi Türkiye Örneği", *İktisat İşletme ve Finans Dergisi*, 16(187), 50-66.

TCMB. (2023). Elektronik Veri Dağıtım Sistemi. https://evds2.tcmb.gov.tr/index.php?/evds/serieMarket, (02.03.2023).

T.C. Cumhurbaşkanlığı Strateji ve Bütçe Başkanlığı. (2023). Ekonomik ve Sosyal Göstergeler. https://www.sbb.gov.tr/ekonomik-ve-sosyal-gostergeler/#1540021349004-1497d2c6-7edf, (02.05.2023).

TÜİK. (2023). İstatistik Göstergeler. https://www.tuik.gov.tr/, (02.03.2023).

The Analysis of Public Debt Stock by Using System Dynamics

Hatice Altınok[1]

Abstract

With 2008 global financial crisis, many countries have applied partly to expansionary fiscal policies. These expansionary fiscal policies encompassed tax cuts and increases in government expenditures. As a result of these policy measures taken by governments and the widespread use of borrowing policy caused an increase in public debt stock in economies. Therefore, countries should apply more stable and efficient policies for debt management today.

Public debt stock is an important economic issue in developing economies. Therefore, the sustainability of public debt management is important for ensuring economic stability in countries. As a reflection of the changes in the economic and financial structure, the increase and spread of diversification in financial markets, the increase of investors, and the interconnection of markets in the globalization process necessitated the creation of new policies in public debt management. Hence, it is substantial that the public debt stock, which is an important tool in the hands of the government, can be maintained by debt managers.

Some economic situations have far-reaching consequences. It is accepted in the literature that such economic conditions have affected economic growth, put heavy burdens on future generations and caused financial markets to deteriorate, and even increased the risk of melting of these markets. One of these conditions is the public debt. The purpose of our study is to develop a dynamic macroeconomic model that identifies the structure of public debt which has great importance for the Turkish economy. Also, it is planned to reveal the relations and elements of public debt stock using the system dynamics method. System dynamics models have an important role in the analysis of the structure of public debt because they can incorporate multiple variables into the system and run feedback loops simultaneously. Such models allow us to see the dynamic consequences of different policies with certain variables. Furthermore, these models bring out the policies' outcomes that policymakers plan to implement through simulation. Thus, a powerful tool will be formed for policymakers to manage the financial system in a more balanced and efficient way by showing public debt structure with various variables based on system dynamics.

In this study, the public debt stock structure was established with three models. The first model, in its simplest form, expresses the situation that the government is obliged to pay interest on the debt it has received and that these interest payments increase the public debt stock. The system dynamics model has a single positive feedback loop. The model contains a single positive feedback loop connecting public debt, public debt interest and the total deficit. With this cycle, the government starts with a certain debt rate and pays the debt interest depending on the debt interest rate over the years. In the second model, GDP must be added to the model in order to accurately express the sustainability of the debt. In the last model, when considering the public debt stock, a distinction must be made between domestic and external debt. For this purpose, the interest rates of domestic debt and foreign debt were also

[1] Assist. Prof. Ph.D, Anadolu University, ORCID: 0000-0002-1093-403X, haltinok@anadolu.edu.tr

differentiated. In addition, government expenditures and tax revenues were added to the model as a stock variable, not as an exogenous variable.

The models were run with various scenarios. Relationships, which are of great importance in the analysis of the sustainability of the public debt stock, enable us to see dynamic patterns more clearly. System dynamics models can be powerful tools for policymakers trying to formulate policies that result in sustainable management of public debt stocks in developing countries. These policies help policymakers identify variables to ensure that the public debt stock can be sustained with the least possible sacrifice of people's welfare.

Keywords: public debt, system dynamics, simulation, Türkiye
JEL Codes: H61, H63, C02, O50

Protection of the Whistleblower in Tax-Related Whistleblowing

Doğan Gökbel[1]

Abstract

The tax gap leads to a failure to provide the necessary funds for the desired public services. Although this situation affects developing countries more, it is also seen as a problem that needs to be solved by developed countries. In particular, the ability of governments to close the tax gap by combating tax evasion, tax avoidance and tax fraud depends on the collection of sufficient information on taxable events. The information provided by the taxpayers and those who are obliged to provide information and the information obtained by the administration as a result of its own audits are not sufficient, and the information provided by third parties and expressed as whistleblowing is also an important factor in tax assessment. In addition to its benefits, whistleblowing is also criticized for its negative aspects. Encouraging and rewarding whistleblowing and protecting whistleblowers have become more important issues today. In particular, it is becoming more important in which situations the whistleblower should be protected against the negativities that the whistleblower may face after whistleblowing and what the form of protection should be. On October 23, 2019, the European Union enacted Directive 2019/1937 "On the protection of persons reporting violations of Union law". States have different regulations on whistleblower protection. In the study subject to the Communiqué, after determining the theoretical foundations of whistleblowing for taxation, the EU directive on whistleblower protection, case law on whistleblowing in the context of the European Convention on Human Rights, and the regulations of the countries on whistleblower protection will be evaluated. In addition to the benefits provided by the whistleblowing institution, it should also be considered in terms of its impact on the rights of the taxpayers.

Keywords: Whistleblowing, Whistleblower, Taxpayer rights, Whistleblower protection
JEL Codes: **K3, K34**

1. Introduction

In order to collect the tax amounts stipulated by the tax laws, the tax administration, which will levy the tax, must have sufficient and accurate information. The information provided by "whistleblowers" to government agencies is also important in order to prevent damage to the public interest due to the tax that cannot be collected as a result of violations of the law. Whistleblowing is the reporting and revealing of possible bad and wrong behaviors in organizations (Aktan, 2006: 1). A whistleblower is defined as "a person who reports another person or discloses corruption and misconduct to the public" (West, Skarbnik, Brunetti, 2012:27). Although the concepts of whistleblowing or whistleblowing do not fully cover the concept of whistleblowing, they are used instead (Santoro, Kumar, 2018: 9) (West, Skarbnik, Brunetti, 2012:27). The difficulty of telling the truth is that whistleblowers live in fear of reprisals, at risk to their careers, freedom and lives (Santora, Kumar, 2018:16). For the whistleblower, uncovering the wrongdoing is the first step and the whistleblower also needs to be protected. While providing this protection, a balance must be struck between the protection of the accused and the disobedient act of the whistleblower (Deckert, Sweney, 2016: 127).

[1] Assoc. Prof. Ph.D, Anadolu Üniversity, Law Faculty, Department of Public Law, ORCID: 0000-0002-4406-9240, dgokbel@anadolu.edu.tr

2. Grounds for Whistleblowing and Elements of the Concept of Whistleblowing

The justifications for whistleblowing are; the public interest over personal interest, the assessment of the damage, the whistleblower's desire not to be a partner in violations and criminal acts and to avoid them, the understanding of integrity depending on what kind of person he/she wants to be, the need to take action due to his/her position, and the belief that whistleblowing is a civic duty (Santoro, Kumar, 2018: 26-38). Whether whistleblowing is effective or not depends on whether the disclosure is made externally rather than internally, the use of mass media, the use of which is largely dependent on social and cultural elements, the fact that the disclosures are based on strong evidence, the absence of retaliation, and the breadth of legal protection afforded to the whistleblower (Apaza, Chang, 2020: 3-5). The main constitutive elements of a definition of whistleblowing are the public nature of the disclosure, the role of the perpetrator, the confidential nature of the disclosure, its content, and its importance for the public interest (Sontoro, Kumar. 2018: 38-46). The fact that the whistleblower is not a referee or a traffic police officer, and that the whistleblowing is not an act of infiltration are also qualifications that cannot be deduced from the definition (Sontora, Kumar, 2018: 46-48).

3. Legal Regulations on Whistleblower Protection

Whistleblower laws in the US are much older than in Europe. From an American perspective, whistleblower protection and anonymity are the most important aspects for the success of whistleblowing (Deckert, Sweney, 2016: 127). Whistleblower protection has emerged later in other countries.

The level of protection provided to whistleblowers has increased with the work carried out by the Council of Europe and the European Union. Most recently, the EU adopted the Directive on the Protection of Whistleblowers (Directive (EU) 2019/1937). It sets minimum rules for Member States to ensure the protection of whistleblowers who blow the whistle on infringements of Union rules. Unlike the Recommendations and Principles, the Directive is binding on Member States. Member States must transpose the provisions of the Directive into domestic law. Internationally, Article 33 of the United Nations Convention against Corruption provides for appropriate measures to protect against unfair treatment of any person who, in good faith and on reasonable grounds, reports to the competent authorities the facts relating to offences established under the Convention. The ECtHR's case-law on whistleblowers is based on Article 10 of the ECHR, which regulates freedom of expression. Interference under Article 10 is permissible if it is prescribed by law, pursues a legitimate aim and is necessary in a democratic society. (Yurttagül, 2021: 114) The ECtHR set out six criteria for whistleblowing: the reporting channel used must be primarily internal, and public disclosure may be made only as a last resort, when reporting to a higher authority and a competent body is "clearly impracticable". The second criterion is the public interest in the information disclosed. Third, the authenticity of the information. Fourth is the damage suffered by the employer, Fifth is the motive and good faith of the employee in making the disclosure. Finally, the severity of the penalty imposed on the employee should be evaluated (Yurttagül, 2021: 124-136).

In a whistleblowing arrangement, who will be considered whistleblowers, the types of misconduct that may constitute whistleblowing behavior, whether only acts and possibilities prohibited by law or also reprehensible behavior that is not illegal will be covered by whistleblowing, what are the mechanisms established for receiving whistleblowing, Questions

such as whether there are financial incentives for whistleblowers, whether whistleblowing is a duty established by law, whether information leaks and anonymous tips can be considered as whistleblowing, and how to evaluate the disclosure of confidential information that poses a threat to national security are important (Yurttagül, 2021: 2), (Sadia: 2009: 433).

Whistleblower protection legislation varies considerably between states: Some states have specific protection regulations, while others do not have any protection legislation at all. In some countries, protection is provided through administrative processes, while others rely on protection provided by the courts (Thüsing, Forst, 2015: 7). There are also different arrangements between states regarding the persons to be protected, which types of acts should be protected, which whistleblowing mechanisms are provided, whether there is protection or not, and whether the whistleblower's motive for whistleblowing should be taken into account (Thusing, Forst, 2016: 14-21).

4. European Union Whistleblowing Directive

The EU adopted Directive 2019/1937 of October 23, 2019 on "Protection of Whistleblowers of Breaches of Union Law". The aim of the Directive is to provide comprehensive protection for whistleblowers in order to actively promote the disclosure of irregularities and illegality through internal and external whistleblowing mechanisms. It sets minimum standards for protection. It is emphasized that whistleblowers are exercising their freedom of expression under Article 10 ECHR (recital 31). The purpose of the disclosure is not important in providing safeguards (ground 32). The relatives of the whistleblower should also be protected (ground 41) and there should be safeguards against indirect retaliation as well as direct retaliation (ground 44). In addition to protection, the Directive aims to provide all means to ensure effective disclosure of violations (Alp, 2021:13)

In terms of subject matter, the Directive covers the issues listed in the annex to the Directive, but does not limit Member States in terms of subject matter. Negativities other than breaches of ethical rules and violations of the law are excluded. Matters related to national security, protection of state secrets, patient and client confidentiality and criminal proceedings are excluded from the scope (Article 3).

Article 4 also has a very broad scope in terms of persons. Public sector employees are covered by the Directive as well as private sector employees. The basic rule for the coverage of persons is that they obtain information about the infringement in connection with work or within the scope of activities related to business relations (Alp, 2021:16).

In order to benefit from the protection provided by the Directive, there must be sufficient justification that the unlawfulness disclosed actually exists and falls within the scope of the Directive, and it must be an internal or external disclosure (Article 6). Deliberately false disclosure is excluded from protection. It is sufficient if the discloser has sufficient grounds to show that the information disclosed is necessary to reveal the unlawfulness covered by the Directive (Article 21(1)). Mistakes, such as believing that a non-existent unlawfulness exists, are also protected (Alp, 2021: 25)

The Directive does not mention the employee's duty of loyalty and does not take into account the interests of the employer, but only the overriding public interest. The same safeguards apply to the anonymous whistleblower, provided that the anonymous disclosure is not followed by a false report (Article 6(3)).

Article 19 of the Directive lists examples of retaliation. In order to protect those subjected to retaliation, disclosers should not be held liable in any way and should not be subjected to any sanctions for disclosure. If the whistleblower has committed a criminal offense while collecting the information disclosed, they can only be prosecuted for that offense.

5. Whistleblowing Regarding Taxation

The importance of data for tax administration is indisputable. Whistleblowing by whistleblowers, either directly to the tax authorities or to the public, can lead to tax violations and the imposition of additional taxes. Whistleblower protection in tax matters, as in the general practice of whistleblowing, is an important tool to promote transparency, fairness and democracy. There is no doubt that whistleblowers in tax evasion and tax fraud should be protected. However, whistleblower protection for tax planning and uncovering tax avoidance behavior is controversial. On the other hand, it may not be right to provide whistleblower protection on the condition that an act is tax evasion or tax fraud. It is the administration and the courts that will make the classification (Dourado, 2018: 425). Since whistleblowers are not tax authorities or judicial bodies, they should not classify tax evasion, tax fraud and tax avoidance, and in order to protect the whistleblower, there must be behaviors disclosed by the whistleblower that will be subject to criminal sanctions (Gutmann, 2018: 427). Even when it turns out that there is nothing illegal in the information provided by the whistleblower, it is sufficient for protection to be based on a good faith and reasonable belief that the information provided is evidence of tax evasion (Dourado, 2018: 424).

There are three possible ways to encourage whistleblowers to disclose: imposing legal obligations to disclose; unlawful behavior; rewarding and protecting whistleblowers' actions. Those with legal professional privilege under national law are not obliged to provide information. Rewarding whistleblowing is also controversial. It can lead to excessive and frivolous whistleblowing, as well as damage the reputation of the organization and public trust (Dourado, 2018: 427).

People who act in good faith deserve protection. What constitutes good faith is also important here. Apart from the concealment of income or wealth, it is very difficult to determine whether it constitutes a crime or not, as there is no certainty. Whistleblower protection should be designed to protect both the whistleblower and the addressees by following some basic procedures (Gutmann, 2018: 427). One way to ensure that tax authorities have access to sensitive information is to expand their powers in the field of information requests. Listening to third parties (such as former employees) is not very different from the spirit of whistleblowing (Gutman, 2108 :428).

6. Conclusion

Collecting the amount of tax prescribed by law requires the tax administration to have sufficient information. Apart from the usual sources of information, some individuals may also participate in the information process and help the tax administration to collect the correct amount of tax. The mechanism of being informed about violations of the law through whistleblowers, which exists in many fields, has long been applied in the field of taxation. One of the conditions for its effective implementation is the protection of the informant, i.e. the whistleblower. There have been very important developments in this regard both internationally and nationally. However, it must be said that there is still some way to go.

References

Aktan, Ç. C., Yanlış Uygulamalara Karşı Bir Sivil Erdem, Ahlaki Tepki ve Vicdani Ret Davranışı, *Mercek Dergisi*, Ekim 2000

Alp, M., Avrupa Birliği'nin 2019/1937 Sayılı Birlik Hukukuna Aykırılıkları Bildirenlerin Korunması (Whistleblowıng) Yönergesi Işığında İşçinin Hukuka Aykırılıkları İfşa Etmesi, *Dokuz Eylül Üniversitesi Hukuk Fakültesi Dergisi*, Cilt 23, sayı 1, 2021, 2.1-37

Deckert, K., Sweeney, M., Whistleblowing: National Report For France, Whistleblowing Around The World: A Comparative of Whistleblowing in 23 countries, *Whistleblowing-A Comparative Study*, Spinger, 2015

Dourado, A. P., Whistle-blower in Tax matters: Not Public Enemies, *Intertax*, Volume 46, Issue 5, 2018, Kluwer Law International

Gutmann, D., The Difficulty in Establishing an Appropriate Legal Framework For Whistleblower, *İntertax*, Volume 46, Issue 5, 2015, Kluwer Law International

Sadig, K., Tax and Whistlwblower Protection: Part of A Commitment to Tackling Tax Misconduct in Australia, *Intertax*, Volume 46, Issue 5, Kluwer Law International

Sontora, D., Kumar, M., *What Is Whistleblowing, Speaking Truth to Power- A Theory of Whistleblowing*, Spinger Publishing AG, 2018

Thusing, G., Forst, G., Whistleblowing Around The World: A Comparative of Whistleblowing in 23 Countries, *Whistleblowing-A Comparative Study*, Spinger, 2016

Yurttagül, H. C., Whistleblower Protection By The Council of Europe, the European Court of Human Rights and the European Union, *An Emerging Concencus*, Springer, 2021

West, R., Skarbrink, J.,H., Brunetti, F., L., *A Primer For Tax Whistleblowers*, 2012, 90 Taxes 27

Is it Necessary to Discuss Tax Regulations Related to Capital Reduction?

Ahmet Kavak[1] **Ziyaettin Bildirici**[2]

Abstract

With the 22nd article of Law No. 7420, Article 32/B was added to the Corporate Tax Law and a regulation was made on how taxation should be done in capital reduction, which has been discussed for many years. As I mentioned in the title, this regulation needs to be discussed for the reason I summarize below. Because the first target in the regulation is justice and especially the fact that the capital that creates the capital surplus is not taken into account at all, and the principles of taxation are stated according to whether the capital reduction is made after five years from the date of capital increase or before the five-year period expires. According to this; a) If the capital reduction is made after five years from the date of capital increase, the reduction is determined by the capital reduced by taking into account the ratios of the elements that make up the total capital within the capital, and according to the determination, the reduction made in cash and the same capital is not taxed, emission On the reduction made from the capital consisting of premiums and previous years' profits, only profit distribution withholding and transfer to another account other than addition to the capital, withdrawal from the business or transfer from the capital account to other accounts are subject to corporate tax and tax withholding depending on the profit distribution or the amount transferred to the head office. If the corporate tax is from the amount after the corporate tax, profit distribution withholding tax is applied, b) If the capital reduction is made before the completion of the five-year period from the date of capital increase, the reduction should be transferred to another account other than adding to the capital, withdrawn from the business or transferred from the capital account.

By accepting the reduction made from the capital whose transfer to other accounts is subject to corporate tax and tax withholding depending on the profit distribution or the amount transferred to the head office, first the corporate tax is applied, and then the profit distribution withholding is made from the amount after the corporate tax, and secondly, only the profit distribution or the amount transferred to the head office is applied. c) In case the capital is used for loss offset, the reduced capital will not be taxed in the order explained in section (b) above, it has been stipulated that the tax will be made from capital elements, but there will be no withholding tax based on profit distribution. However, considering the fact that the capital that creates the capital surplus is the capital that was last increased and the elements that constitute this increased capital, it would be appropriate to tax it starting from the last capital increase as a fair practice. If there is a capital decrease that is less than the increased capital amount, there will be no need to proportion the capital increase amounts that are subject to reduction, other than taking into account their ratio within the total increased capital.

On the other hand, it is important to make arrangements to include capital increase dates and increased capital elements within the scope of the "Uniform Chart of Accounts" under the "Capital Account" number 500 or in the footnotes of the balance sheet, indicating the dates

[1] Ph.D, Tax Director at PwC, Chartered accountant, ahmet.kavak@tr.pwc.com

[2] Prof. Ph.D, Chartered accountant, Öncü Certified Public Accountancy & Audit, ORCID: 0009-0005-7107-9291, zbildirici@oncuymm.com

and numbers of the Trade Registry Gazette. In addition, since the total equity of the balance sheet will decrease due to capital reduction, the liabilities that will arise due to the regulations in the Corporate Tax Law and the Turkish Commercial Code stated below must also be taken into account. 1.In terms of the Corporate Tax Law; a) Financial expense restriction included in Article 11/1-i titled "Unacceptable discounts", b) Interest deduction in cash capital increase included in Article 10/1-i titled "Other discounts", c) "Disguised capital title" Interest, exchange rate differences and similar expenses paid or calculated on the disguised capital included in Article 12 and the related article 11/1-b titled "Unaccepted discounts". 2. In terms of the Turkish Commercial Code, the condition that the capital shares that can be acquired in the article titled "Acquisition of the company's own capital shares" should not exceed ten percent of the basic capital.

Keyword: Capital elements, capital reduction and taxation.

Tax Perception of Owners of Immovable Property Income: The Case of Burdur Province

Sadık Aydoğan[1] **Ali Balkı**[2] **Mustafa Alpin GULSEN**[3]

Abstract

This study aims to measure the tax perceptions of real estate capital income owners in Burdur city center and to determine the factors affecting tax perception. For this purpose, we collected data using the face-to-face survey method with 440 real estate capital income owners in Burdur city center. We generally preferred a five-point Likert scale for the statements in the survey. We created the dependent variable by combining three survey statements to represent tax perception from Likert-scale statements. The average of the dependent variable we created regarding tax perception is 3.57. This ratio shows that real estate capital income owners in Burdur city center generally have a positive tax perception. We conducted an OLS regression analysis to determine the factors affecting tax perception. The analysis results are as follows: Among the real estate capital income owners, taxpayers in the lower income group have a positive tax perception compared to other taxpayers, and retirees have a positive tax perception compared to taxpayers in other occupational groups. Taxpayers who are high school graduates have a negative tax perception compared to taxpayers with other education levels. The tax perception of taxpayers who think that the tax system in Türkiye is fair is positive compared to taxpayers who do not think this way. People who think most people in their social circle underreport their rental income have a negative tax perception.

Keywords: Tax compliance, tax perception, real estate capital income.
JEL Codes: H24, H26, H27.

1. Introduction

Tax is the most essential public revenue that enables the state to perform its functions. Taxes constitute approximately 80% of public revenues in Türkiye. Therefore, a decrease in tax revenues will make providing public services difficult. At this point, the concept of tax compliance, which means that taxpayers fulfill their tax obligations fully, accurately, and on time, comes to the fore. Voluntary tax compliance is when a taxpayer fulfills his tax obligations without coercion or imposition. Many developed countries have adopted the declaration method as a tax collection method. Türkiye has also been attaching importance to the declaration procedure in recent years and is trying to increase the share of taxes collected according to the declaration procedure. However, two factors are influential in the success of the declaration procedure. These are an effective tax audit system and taxpayers' voluntary tax compliance. Many factors affect taxpayers' voluntary tax compliance. These factors are generally divided into two: economic and non-economic factors. Tax perception, which is among the non-economic factors and reflects the taxpayers' perspective on taxes, has been frequently the subject of studies conducted in recent years (Sağlam, 2013; Korlu et al., 2016; Alm, 2019; Demir & Balkı, 2023; Çelik & Sağbaş, 2023). Because the taxpayer with a positive tax perception

[1] Revenue Specialist, Burdur Tax Office, ORCID: 0009-0008-2864-3792, sadkaydogan003@gmail.com
[2] Assist. Prof. Ph.D, Afyon Kocatepe University, ORCID: 0000-0002-7130-2001, alibalki42@hotmail.com (Corresponding Author)
[3] Lecturer Ph.D, Alanya Alaaddin Keykubat University, ORCID: 0000-0002-9739-9710, celik.erhan07@gmail.com

will comply with the tax voluntarily, measuring taxpayers' tax perceptions, determining the factors affecting this perception, and developing policies to increase the number of taxpayers with positive tax perceptions will contribute to tax compliance.

There are many studies in the literature aimed at measuring taxpayers' tax perception. However, there are no studies specifically aimed at measuring the tax perceptions of real estate capital income owners. Based on this, the study aims to measure the tax perceptions of real estate capital income owners in Burdur city center and to determine the factors affecting tax perception.

2. Related Literature

Muter et al. (1993), one of the studies in the literature measuring taxpayers' tax perception, surveyed 505 taxpayers subject to income tax in the city center of Manisa. According to the study's findings, as the level of education increases, tax awareness increases. The increase in tax rates negatively affects tax compliance. Vogel (1974) investigated taxpayers' perceptions and attitudes towards taxes in a survey he administered to 1796 people in Sweden. The findings are that the tax compliance of the elderly is higher than that of young people, and as their income increases, tax compliance decreases.

Çelikkaya & Gürbüz (2006) surveyed 1750 people in Eskişehir province to analyze the factors affecting tax compliance. The remarkable finding of the research is that the increase in tax audits increases tax compliance. Tuay & Güvenç (2007) investigated taxpayers' attitudes towards taxes with a survey conducted with 6546 people in 18 provinces of Türkiye. Findings show that the high tax rates and tax burden are effective in not achieving full voluntary tax compliance.

Saraçoğlu (2008) investigated the effects of age, gender, educational status, and marital status on tax compliance behavior through a survey conducted with 494 people. The findings show that tax compliance increases as the level of education increases, public expenditures do not return services to citizens, and the perception that high tax rates and insufficient audits negatively affect tax compliance. Karaca et al. (2020) surveyed 569 income taxpayers in Sivas province. The findings of the study, which investigates the factors that determine tax compliance, show that tax burden and education are factors that determine tax compliance. While there is a positive relationship between education level and tax compliance, there is a negative relationship between tax burden and tax compliance.

3. Methodology and Empirical Findings

We collected the data in this study, which we conducted to measure the tax perceptions of real estate capital income owners, using a face-to-face survey method with 440 real estate capital income owners in Burdur city center. We generally preferred a five-point Likert scale for the statements in the survey. We created the dependent variable by combining three survey statements representing tax perception from Likert scale expressions. The survey statements that make up the dependent variable are as follows:

- “Paying taxes is a civic duty (Mean: 3.82).”
- “Taxes are the payment for public services provided by the state (Mean: 3.38).”
- “Taxes are penalties imposed by the state on citizens (Mean: 3.50).”

The average of the dependent variable created regarding tax perception is 3.57. The results of the OLS (Ordinary Linear Square) regression analysis we conducted to determine the factors affecting tax perception are as follows:

- At a statistical significance level of 10%, increasing the number of children negatively affects tax perception.
- The tax perception of taxpayers in the lower income group among real estate capital income holders is positive compared to other taxpayers (Significance level: 10%).
- At the 5% significance level, the tax perception of retired real estate capital income owners is positive compared to taxpayers in other professional groups.
- The tax perception of taxpayers who are high school graduates is negative at the 1% significance level compared to taxpayers with other education levels.
- Those who see the tax rates applied to rental income as high in current tax laws have negative attitudes towards taxes (Significance level: 10%).
- At the 10% significance level, tax perceptions of taxpayers who find the tax audit on rental income insufficient are positive.
- The attitude of taxpayers towards taxation, who think that progressive taxation on rental income reduces the desire to own real estate, is negative (Significance level: 10%).
- At the 1% significance level, the tax perception of taxpayers who find it fair to divide rental income elements into workplaces, residences, land, etc., is positive.
- The tax perception of taxpayers who think that the more understandable information provided by the tax administration has a positive effect on their ability to fulfill their tax duties is positive at the 1% significance level.
- At the 1% significance level, the tax perception of taxpayers who think that the tax system in Türkiye is fair is positive compared to taxpayers who do not.
- At the 5% significance level, the tax perception of taxpayers who state that they report their rental income to the tax administration in order to avoid damaging their reputation in society is negative compared to other taxpayers.
- The tax perception of people who think that most people in their social circle underreport their rental income is negative compared to taxpayers who do not think so (Significance level: 1%).

4. Conclusion

The average of the dependent variable created regarding tax perception is 3.57. This ratio shows that real estate capital income owners in Burdur city center generally have a positive tax perception. Tax perception of real estate capital income owners varies significantly regarding demographic variables such as number of children, educational status, occupation, and income level. The relationship between income level and tax perception is negative. This result coincides with the results obtained by Vogel (1974), Tuay & Güvenç (2007), and Karaca et al. (2020). The relationship between education level and tax perception is positive. This result coincides with the results obtained by Muter et al. (1993), Saraçoğlu (2008), and Karaca et al. (2020).

The relationship between the tax perception of real estate capital income owners and tax rates is negative. This finding coincides with the findings of Muter et al. (1993), Tuay & Güvenç (2007) and Saraçoğlu (2008). There is also a negative relationship between tax perception and tax audit. This result differs from the findings of Saraçoğlu (2008). Tax perception differs significantly from non-economic factors regarding fairness in rental income, fairness in the tax system, loss of reputation, tax office employees, and tax administration variables.

References

Alm, J. (2019). "What Motivates Tax Compliance?", *Journal of Economic Surveys,* 33(2), 353-388. https://doi.org/10.1111/joes.12272

Çelik, E. & Sağbaş, İ. (2023). "Beklenti Teorisi ve Vergi Uyumunu Etkileyen Faktörler", *Ekonomi Maliye İşletme Dergisi*, 6(1), 1-21. https://doi.org/10.46737/emid.1240981

Çelikkaya, A. & Gürbüz, H. (2006). "Mükelleflerin Vergiye Gönüllü Uyumunu Etkileyen Faktörlerin Analizi: Bir Alan Çalışması", *İktisat İşletme Finans*, 21(247), 122-139.

Demir, İ. C. & Balkı, A. (2023). "Is the Excise Tax Perceived as an Externality Tax? An Empirical Study on Turkey", *Ege Academic Review*, 23(2), 331-340. https://doi.org/10.21121/eab.1165418

Karaca, C., Oktay, S. & Yemez, İ. (2020). "Vergi Uyumunun Ekonomik ve Sosyo-Kültürel Belirleyicileri: Sivas İli Örneği", *Tokat Gaziosmanpaşa Üniversitesi Sosyal Bilimler Araştırmaları Dergisi,* Sonbahar Özel Sayı, 62-73.

Korlu, R. K., Gerçek, A. & Çetinkaya, Ö. (2016). "Mükelleflerin Yerel Vergi Algıları Üzerine Bir Analiz: Bursa Örneği", *Yönetim ve Ekonomi Dergisi,* 23(3), 711-732. https://doi.org/10.18657/yonveek.281955

Muter, N. B., Sakınç, S. & Çelebi, A. K. (1993). *Mükelleflerin Vergi Karşısındaki Tutum ve Davranışları Araştırması.* Celal Bayar Üniversitesi İİBF Maliye Bölümü, Manisa.

Sağlam, M. (2013). "Vergi Algısı ve Vergi Bilinci Üzerine Bir Araştırma: İktisadi ve İdari Bilimler Fakültesi Öğrencilerinde Vergi Algısı ve Vergi Bilinci", *Sosyoekonomi,* 19(19), 315-334. https://doi.org/10.17233/se.64180

Saraçoğlu, F. (2008). "Yaş, Cinsiyet, Medeni Durum ve Eğitim Durumunun Vergiye Karşı Tutum Üzerine Etkilerinin Anket Sonuçları Çerçevesinde Değerlendirilmesi", *Karamanoğlu Mehmetbey Üniversitesi Sosyal Ve Ekonomik Araştırmalar Dergisi*, 15, 16-34.

Tuay, E. & Güvenç, İ. (2007). *Türkiye'de Mükelleflerin Vergiye Bakışı*, Gelir İdaresi Başkanlığı.

Vogel, R. C. (1974). "Taxation and Public Opinion in Sweden: An Interpretation of Recent Survey Data", *National Tax Journal,* 27(4), 499-513. https://doi.org/10.1086/NTJ41861983

Adapting to Change: Taxation of Tiny House

Muharrem Çakır[1]

Abstract

Because of being cheaper than traditional houses, allowing savings due to low maintenance costs, contributing to a sustainable environment, the desire for a simple life, and people wanting to get away from the city the tiny house (TH) trend which started in the USA in the 1990s, has spread the other countries and tiny houses demand has increased. Taxation of THs, which can be described as property, varies depending on whether these houses are mobile or permanent. While permanently built THs are mostly subject to property tax, the taxation of mobile THs is different. In particular, the exclusion of mobile THs from taxation by qualifying them as RVs negatively affects the principle of justice in the taxation of wealth. A building permit must be obtained to build a permanent TH in Türkiye. This naturally requires permanent THs to be subject to property tax. However, the exclusion of mobile THs of the same value from taxation is contrary to the principle of justice in taxation. For this reason, mobile THs should also be included in the tax scope. With a provision to be added to the motor vehicle tax law, taxing THs by taking their weight into account, similar to the German example, would be a step in the right direction in terms of taxing wealth.

Keywords: Tiny House, Taxation of Tiny House, Justice of Taxation, Justice of Taxation on Wealth
Jel Codes: H2, H,20, H27

1. Introduction

Tiny houses (TH) are an important element of wealth. Due to the increasing demand for THs, their value has become higher than many motor vehicles and houses. However, excluding THs from taxation is inconsistent with the principle of fairness in taxation. Therefore, THs should be taxed as an element of wealth.

THs can be built as permanent or mobile. While permanent THs are subject to property tax, the taxation of mobile THs is different. Since the non-taxation of mobile THs, which are described as RVs, causes injustice in taxation, this study focuses on the purpose of taxing THs regardless of their qualifications to ensure taxation fairness.

In the study, THs will first be defined and the reasons for TH preference will be explained. Then, in terms of taxation of THs, suggestions for taxing THs in Turkey will be given by examining the USA, England, and Germany countries. The reasons why prefer these countries are that TH preferences are high and the differences are in taxation.

2. Tiny House Definition and Reasons for Choosing Tiny House

Small houses have existed throughout human history, but the TH concept is relatively new. Although the TH modern movement started in the USA in the 1990s, life in small houses on wheels was seen in many countries in Europe, and portable or truck houses emerged in the

[1] Ph.D, Ankara Hacı Bayram Veli University, Department of Public Finance, ORCID: 0000-0003-0830-0430, muharrem.cakir@hbv.edu.tr

1800s with the establishment of mobile home parks. In the past, however, people who lived in such houses were stigmatized in a derogatory way (Shearer & Paul, 2019: 301). On the other hand, the TH movement, which is seen today as a rebellion against excess consumption, is a social movement initiated by those who choose a simpler lifestyle (Zeiger, 2011: s.y. Aktaran: Wood, 2023: 1).

THs are living spaces that usually have an area of less than 37 m2, require low energy use and less material consumption in their construction, and are therefore considered sustainable compared to normal houses (Wood, 2023: 1). According to another definition, THs are houses of less than 37 m2 that are built permanently or portably and can be lived in as a full-time residence (Shearer & Paul, 2019: 301). In another definition, THs are defined as habitable spaces in the form of portable units, cabins, or detached houses large enough to meet the needs of users (Zainal & Aziz, 2021: 160). THs are divided into two categories according to in which they are built, mobile and permanent THs. This differentiation of THs stems from the property rights to which they are attached. Mobile THs are generally characterized as RVs, while others are characterized as annexes or accessories of traditional dwellings (Trambley, 2021: 929).

Reasons for choosing a TH are listed below:

- THs are cheaper than traditional houses2 (Seaquist vd., 2016: 92).

- Since THs are small, maintenance and repair costs are reduced and energy consumption such as heating, cooling, and lighting is less, providing extra savings to users3 (Wood, 2023: 4).

- THs can be customized to match the preferences of the user and THs offer enough space for everything you need to live a fulfilling and organized life (Wood, 2023: 4).

- People who desire a quieter life away from city life with stress prefer TH (Zainal & Aziz, 2021: 161-163).

- THs are also a tool that can be used in the fight against homelessness (Trambley, 2021: 928).

- Mobile THs can respond positively to the needs of the community in the event of natural disasters (Seaquist vd., 2016: 93).

- One of the reasons for owning a TH in the USA is the realization of the American dream expressed by Adam in 1931 (Vail, 2016: 357-379).

3. Taxation of Tiny House

The fact that THs remain in a gray area between the definitions of mobile home, RV or traditional house brings along an important problem in terms of taxation. Therefore, for THs to be taxed, they need to be defined and included in the legal legislation.

[2] In the study by conducted Mangold and Zschau, it was concluded that the participant's interest in TH started with the complexity of the asset crises and that financial and economic problems were the most important reasons. For more informatin: (Mangold & Zschau, 2019: 5).

[3] In a 2019 study, it was found that the energy consumption of users who switched from traditional homes to THs decreased by approximately 40-50%. It also helps to reduce the carbon footprint with the use of solar energy (Stephans & Parsons, 2021; Aktaran: Wood, 2023: 5). In another study, it was stated that compared to traditional houses, THs reduce greenhouse gas emissions by at least 70% (Crawford & Stephan, 2020: 3).

USA

There is no legal definition of THs in the USA. THs vary from cabins of less than 37 m^2 built on wheels to houses of less than 75 m^2. For this reason, THs are characterized and taxed as RVs or dwellings according to their characteristics (Colorado Department of Local Affairs, 2016: 1). Accordingly, the qualifications of THs are determined according to the regulations in the regional laws and building codes. For example, for a TH to qualify as an RV, its length and width must not exceed certain measures and it must be built on wheels and axles (Colorado Department of Local Affairs, 2016: 1). Once the nature of THs has been determined, their tax status varies across states (Riley, 2021). In some states, THs towed by a car are considered RVs and are subject to taxation, while in others they are excluded because they do not meet the definition of an RV (All About Tiny House, 2020). When THs qualify as RVs, they are subject to property tax and taxed by the county motor vehicle office, while when they qualify as dwellings, they are subject to real estate tax and taxed by the county assessor and treasurer's office. (Colorado Department of Local Affairs, 2016: 2-3). Also, even if THs are not permanently established, if public services (water, etc.) are provided, they are taxed like traditional houses (Riley, 2021).

England

In England, the taxation of THs differs according to their intended use. Accordingly, THs can be used for RV or temporary accommodation purposes as well as for permanent residence purposes. There is no taxation when THs are used for RV or temporary accommodation purposes. An example of the use of THs for temporary accommodation is the use of a craft room or guest room in the backyard of a house. However, when THs are used as permanent residences, THs are subject to council tax (The Qube Eco Tiny House).

When THs are used as permanent residences, they are divided into bands according to their value. The council tax bands are organized as 9 bands corresponding to each letter between the letters A and I. Accordingly, houses worth up to £40,000 are in Band A, while houses worth more than £424,000 are in Band I (Local Government Financial Act 1992). The tax amounts corresponding to the bands vary across municipalities (City of Westminster, 2022). Municipalities provide exemptions or discounts on municipal taxes by taking into situations such as studentship, temporary leaving because of physical condition, health, etc. In addition, no one under the age of 18 is a municipal taxpayer (Rochdale Borough Council, 2023: 8).

Germany

In Germany, the tax status of THs differs depending on whether they are built on a chassis or permanently. Permanently built THs are subject to property tax (Valcheva, 2023). Also, if THs are built on a chassis and used permanently, they are considered buildings (RTS, 2023).

Mobile THs are qualified as RVs. RVs are divided into two towed RVs and motorized RVs, and both types are subject to MVT. However, the calculation of MVT differs according to the type of RV. Motorized RVs are classified according to their weight and carbon emissions and taxed. Carbon emission classes are divided into five different groups S0, S1, S2, S3, and S4. The tax amount for each group differs and tax is paid per 200 kg. The maximum tax for RVs in the S4 class is €800, while the maximum tax for those in the S3 and S2 classes is €1,000. There is no upper limit for S1 and S0 RVs (CIVD, 2023). Towed RVs are subject to tax according to their weight. Accordingly, the annual tax is €7.46 per 200 kg. (UNSINN, 2022).

Türkiye

In Turkey, THs appear in two different forms: mobile and permanent structures. Therefore, to tax these assets, their characteristics should first be determined. While permanent

THs are subject to property tax, mobile THs are not taxed as they are considered towing RVs. At this point, a brief explanation of the tax status of RVs is required. In Türkiye, RVs are divided into two categories: motorized RVs and towed RVs. While motorized RVs are subject to MTV as they are connected to a motorized vehicle, towed RVs are not subject to a tax. This difference in taxation is explained by the fact that motorized RVs are attached to a motorized vehicle, not by the fact that they are RVs. However, when the MVT Act tariff numbered II is examined, it will be seen that panel vans and motor RVs are subject to extra tax. For example; in 2023, the MVT amount paid for a 1-year-old minibus with an engine power of more than 1900 cm^3 is 2,535 TL. When the same vehicle is converted from a minibus to an RV, the tax to be paid is 5,116 TL. As can be understood from the example, the tax amount to be paid by two different vehicles with the same engine power, size, and age is higher in the case of an RV.

4. Conclusion and Suggestions

According to Article 73 of the Constitution, everyone is obliged to pay taxes according to their financial power to meet public expenditure. Income, expenditures, and wealth are accepted as indicators of financial power. Therefore, the main reason for taxing THs is that these structures are an element of wealth. For example, while a vehicle worth TL 300,000 is subject to MVT, the fact that a TH worth TL 1,000,000 is not taxed does not comply with the principle of fairness in taxation.

There is no legal definition of THs in Türkiye. While this does not cause any problem in the taxation of permanently built THs, it causes mobile THs to be excluded from taxation. Mobile THs are characterized as RVs since they are towed by a vehicle. However, THs are more comprehensive vehicles than RVs due to their structure. It would be a correct approach to tax THs, which are different from RVs both in terms of size and living space inside, according to their weight, as in the German example. For this reason, it is necessary to define THs in the motor vehicle tax law and also include mobile THs within the scope of the tax. Even if the TH is mobile, it should be taxed to property tax in case of utilization of the services provided by the municipality. A notification obligation should be imposed on those who will permanently use their mobile THs, and penalties should be imposed for those who fail to make timely notifications. In addition, a maximum limit can be set for mobile THs, and those that exceed these limits can be obliged to become permanent.

References

All About Tiny House. (2020). Tiny Houses and Taxes: Everything You Need to Know. https://allabouttinyhouses.com/1109/tiny-houses-taxes-everything-to-know/ (21.08.2023)

CIVD. (2023). Motor Vehicle Tax for Motor Caravans, https://www.civd.de/ en/Artikel/motor-vehicle-tax-for-motor-caravans/, (05.09.2023)

City of Westminster. (2022). Your Guide to Council Tax, 2022/2023.

Colorado Department of Local Affairs. (2016). Tiny Houses, https://www.law.du.edu/documents/rmlui/conference/handouts/2016/Coburn-Tiny-Houses-DOLA.pdf, (22.08.2023)

Crawford, R. H. & Stephan, A. (2020). "Tiny House, Tiny Footprint? The Potential for Tiny House to Reduce Residental Greenhouse Gas Emission", *IOP Conference Series: Earth and Environmental Science 588.*

Local Government Financial Act 1992, Part I.

Mangold, S. & Zschau, T. (2019).” In Search of the “Good Life”: The Appeal of the Tiny House Lifestyle in the USA”, *Social Sciences*, 8(1), 26, 1-21.

Riley, M. (2021). Do You Pay Taxes on a Tiny Home?, https://idownsized.com/do-you-pay-taxes-on-a-tiny-home/, (17.08.2023)

Rochdale Borough Council. (2023). Council Tax 2023-24, https://www.citizensadvice.org.UK/housing/council-tax/paying-council-tax/ (28.08.2023)

RTS. (2023). Tiny House: Steuerliche Abzugsmöglichkeiten Und Steuerpflichten, https://www.rtskg.de/standorte/standort-news-einzelansicht/steuerliche-fragen-rund-ums-tiny-house.html#:~:text=%C2%A7%207%20Abs%202%20EStG,sind%20die%20hohen%20Abschreibungen%20i. (04.09.2023)

Seabury, C. (2023). How Property Taxes Are Calculated. https://www.investopedia.com/articles/tax/09/calculate-property-tax.asp, (18.08.2023).

Seaquist, G., Bramhandkar, A. & Santana-Frosen, V. (2016). “Tiny Houses: Big Concern, Proceedings Of The New York State Economics Association”, Volume 9, *69th Annual Meeting*, October 8-9 2016.

Sheaer, H. & Burton, P. (2019). “Towards a Typology of Tiny Houses, Housing”, *Theory and Society*, 36 (3), 298-318.

Stephans, A. & Parsons, C. (2021). *The Beginner’s Guide to Tiny Houses: What You Need to Know About 400-Square-Foot Living*, Rockridge Press.

The Qube Eco Tiny House. (2021). Tiny House in The UK: Everything You Need To Know About Planning Permission And Law, https://www.thequbeecotinyhomes.co.uk /tinyhouses-in-the-uk-everything-you-need-to-know-about-planning-permission-and-law/, (23.08.2023).

Trambley, L. (2021). “The Affordable Housing Crisis: Tiny Homes & Single-Family Zoning”, *Hasting Law Journal,* 72, 919-958.

UNSINN. (2022). Kfz-Steuer Für Ihren Anhänger - Infos & Berechnung, https://www.unsinn.de/anhaenger-blog/2022-05/kfz-steuer-fuer-ihren-anhaenger-infos-berechnung#:~:text=Muss%20ich%20f%C3%BCr%20einen%20Anh%C3%A4nger,373%2C%2D%20%E2%82%AC%20pro%20Jahr, (05.09.2023)

Vail, K. M. (2016). “Saving The American Dream: The Legalization of The Tiny Homes Movement”, *University of Louisville Law Review*, Volume 54, 357-379.

Valcheva, K. (2023). Property Tax in Germany – Everything You Need to Know, https://www.ptireturns.com/blog/property-tax-income-germany/#:~:text=All%20types%20of%20real%20estate,market%20value%20of %20the%20property. (04.09.2023)

Wood, J. L. (2023). *The Design of Tiny Homes and Their Significance Within Our Environment and Communities*, Oakland University.

Zainal, M. & Aziz, A. A. (2021). “The Significance of Natural And Serene Environment to Improve The Quality of Living in Tiny House”, *Journal of The Malaysian Institute of Planners*, 19 (2), 160-172.

Zeiger, M. (2011). *Micro Green: Tiny House in Nature*, Rizzoli.

Governing The Commons and Its Contribution to Economy: A Case Study of Aydın Koçarlı

İsa Sağbaş[1] **Erhan Çelik**[2]

Abstract

The limited areas where pine nuts can be grown in the world and the insufficient production amount increase the value of this product and make it rare. Pine nuts are mostly grown in regions where the Mediterranean climate is effective. In Turkey, pine nut forests are mostly found in Bergama, Çine, Koçarlı, Söke, Milas, Kantarcı, Madran, Serik, Manavgat, Önsen, Seydiköy and Artvin Çoruh valley. Among these distribution areas, Aydın Koçarlı, located in the Aegean Region, has an important place. 60% of the total pine nuts produced in Turkey are supplied by the Aydın Koçarlı region and 80% of the pine nuts produced in the region are exported. Thus, the fact that pine nut harvesting is among the most important sources of income for the local people is of great importance for rural development. The pine nut forest in Aydın Koçarlı can be considered as common property. Naturally occurring or human-made resources such as lakes, oceans, irrigation systems, hunting grounds, forests or the atmosphere, where it is difficult to exclude beneficiaries from use and where the consumption of one person reduces the share of another person, are expressed as common goods. The state itself undertakes the management of common goods, based on the assumption that they will be damaged in case of excessive use. Elinor Ostrom; He was awarded the 2009 Nobel Prize in Economics for his research showing that common goods such as pastures, forests, underground resources and fisheries can be managed sustainably and equitably by people without the need for state intervention. Additionally, Elinor Ostrom is the first female scientist to be awarded the Nobel Prize in Economics. Similar to the examples given in Ostrom's works, the pine nut forest in Aydın Koçarlı is successfully managed by the local people without state intervention. According to Ostrom, the state should make minimum regulations and leave the management of common goods to those who benefit from these goods. In this study, the management of pine nut harvest in Aydın Koçarlı and its contribution to the economy will be evaluated in detail. As a method, in-depth interviews with farmers and local administrators who make their living from pine nuts will be conducted within the scope of the field study. Additionally, observation technique will be used to support the interview. The findings obtained through interview and observation methods will contribute to the newly developing field of financial anthropology.

Keywords: Commons, Management of commons, Financial anthropology

[1] Prof. Ph.D., Afyon Kocatepe University, Department of Public Finance, ORCID: 0000-0002-9374-7247, isagbas@aku.edu.tr

[2] Lecturer Ph.D., Alanya Alaaddin Keykubat University, ORCID: 0000-0002-9739-9710, celik.erhan07@gmail.com

Analysis of Flypaper Phenomenon in Türkiye in the Framework of Political Effect

Mete Dibo[1] **Emre Özyerden**[2]

In this study, the change in municipal expenditures is analyzed within the framework of the flypaper effect, by taking into account the effect of election periods and inferring from the political business cycles approach. The foundations of the flypaper effect are based on the research by Henderson and Gramlich in the late 1960s, where they stated that the resources consist of citizen incomes and financial transfers from the central government. From this perspective, Henderson and Gramlich argued that personal income and transfers should affect expenditures in the same way. However, their empirical analysis revealed that an extra dollar of personal income increases local government spending by $0.02 to $0.05, while an extra dollar of transfer increases local government spending by $0.30. Arthur Okun called this larger effect of lump sum transfers on municipal expenditures as the "flypaper effect" and stated that "money sticks where it hits" (Pettersson, 2020: 4; Hines & Thaler, 1995: 218; Inman, 2008: 1). According to the flypaper effect, central government transfers increase municipal expenditures more than tax revenues (personal income). Courant, Gramlich and Rubinfeld (1979) argues that bureaucrats and politicians find it easier to reduce taxes when their shares from the central government increase, rather than to increase taxes when some external events increase the income of the society.

The other approach within the scope of this study is the political business cycles model. According to this model, if voting takes place according to the recent performance of politicians and inflation expectations are formed retrospectively, opportunistic politicians who control monetary policy instruments will implement inflationary policies that reduce unemployment in the period immediately before the election. On the other hand, in the post-election period, they will implement anti-inflationary policies that have the potential to cause a decrease in the level of economic activity.

This paper evaluates the existence of the flypaper effect in Türkiye for local governments, taking into account the effect of election periods. The study was carried out with data from 81 provinces for the period 2007-2021. Estimates were made using fixed and random effects methods for linear panel data. Three different models were used in the analysis to investigate whether the flypaper effect persists when control variables are added, and real per capita expenditure of the province in the relevant year is the dependent variable in all models. In the first model, independent variables are the province's own revenues and transfers from the central government. In the second model, real GDP per capita, population, and the metropolitan city dummy were added to the model as control variables. The third model, in addition to the second model, adds the dummy variable representing the pre-election year, and the voting rate of the ruling party in the provincial council elections to the model. According to the findings, the flypaper effect is confirmed in all three models in Turkiye as the coefficient of transfers is higher than that of revenues. It is also observed that local expenditures in the pre-election periods are significantly higher than post-election expenditures.

Keywords: Flypaper effect, political business cycle, political effects, local government expenditures.

[1] Assoc. Prof. Ph.D., Hitit University, Department of Public Finance, ORCID: 0000-0002-7775-0673, metedibo@hitit.edu.tr

[2] Ress. Assist., Hitit University, Department of Public Finance, ORCID: 0000-0003-3577-4236, emreozyerden@hitit.edu.tr

Examining the Effect of Transfer Expenditures on Income Distribution: The Case of Comparative Country

Ebru Karaş[1]

Abstract

Ensuring justice in income distribution is among the basic functions of today's states. Income distribution, which occurs in the market and is described as primary distribution, is often criticised as unfair. For this reason, the state distributes the income a second time. One of the most effective tools in income redistribution is transfer expenditures. However, the impact of transfer expenditures on income distribution varies depending on the subtypes of these expenditures. While social transfer expenditures have a positive effect on income distribution, interest payments negatively affect income distribution. The study aims to determine the impact of transfer expenditures on income distribution based on country groups based on the Gini coefficient. In this context, it has been observed that transfer expenditures have a higher share of total public expenditures in developed countries than in developing countries. In addition, it has been determined that the share of social benefits in transfer expenditures is higher in developed countries compared to developing countries. It is observed that the transfer expenditures of countries and the shares allocated to their subtypes are reflected in the Gini coefficients of the countries. Income distribution in developed countries has a more egalitarian structure compared to developing countries. In country-based evaluations, the reflection of the share of social expenditures on the Gini coefficients is as expected in theory.

Keywords: Income Distribution, Gini Coefficient, Transfer Expenditures
JEL Codes: D31, H53

1. Introduction

The distribution of the output obtained due to the inclusion of production factors in the production process between factors and individuals is called income distribution. This distribution, which occurs under market conditions, is called primary income distribution. Since the main target under free market conditions is efficiency, it is a matter of debate how fair the income distribution is at every point where efficiency is achieved. In this context, the state redistributes income to improve the income distribution in the market and to ensure justice between income groups. One of the financial instruments used within the scope of secondary income distribution is transfer expenditures. Transfer expenditures, considered within the size of the economic classification of public expenditures, are described as unrequited expenditures. When these expenditures are carried out under certain conditions, they become effective solution instruments in improving income distribution. Mainly, the distribution of transfer expenditures and the share of social transfers are some of the most critical conditions. For this reason, the share of social expenditures in total transfer expenditures must be high. Accordingly, the study was addressed based on the research question, "Is the share of transfer expenditures an indicator that the state attaches importance to improving expenditures in income distribution?". In this context, the study aims to determine the improving effect of transfer expenditures as an income transfer mechanism on income distribution. In the study, the Gini

[1] Assis. Prof. Ph.D., Uşak University Department of Public Finance, ORCID: 0000-0003-0625-3722, ebru.cilli@usak.edu.tr

coefficient and the share of transfer expenditures are discussed by year, and comparisons and evaluations are made based on developed and developing countries, especially Turkey.

2. Income Distribution and Improving Income Distribution

One of the most critical issues that economics focuses on is the creation and continuous increase of national income. At the same time, the distribution, circulation and consumption of this income are among the essential topics of economics (Dayar & Akıncı, 2020: 174). For this reason, the distribution of national income resulting from economic growth in a stable economy is a significant problem (Tokatlıoğlu & Selen, 2019: 28). As a result of the involvement of production factors in the production process, the income paid to these factors constitutes national income (Türk, 2004: 320). The distribution of this income occurring in a certain period in a country among individuals, social groups and production factors is defined as income distribution (Aktan & Vural, 2002: 1).

Justice of income distribution is one of the issues emphasised by both social sciences and policymakers. As it is known, the basis of public finance literature is the exchange relationship between efficiency and justice. It is accepted that especially public interventions negatively affect effectiveness (Aktaş & Dokuzoğlu, 2021: 120). In the first fundamental theorem of welfare economics, which results from a competitive market economy, a relationship is established between the market and Pareto efficiency. It is accepted that in the case of a competitive equilibrium, Pareto efficiency is automatically achieved (Just et al., 2004: 24). The income distribution that occurs when Pareto efficiency is achieved represents the situation that comes closest to justice. This distribution, which occurs in the market without government intervention, is defined as primary income distribution. In this mechanism, economic units receive a share of the income in proportion to the degree of production factor they have (Tokatlıoğlu & Selen, 2019: 29). In other words, the distribution of income among individuals in the market depends on their factor endowments and prices in the market. Most of the time, this income distribution may not be compatible with the distribution that society accepts as fair or justice (Musgrave & Musgrave, 1989: 9). Because some people in society are exposed to situations such as illness, disability, ageing or unemployment, making it difficult for these people to be involved in the production process and therefore get a share of the income distribution. In this case, income inequality exists between individuals or groups in society. Since increasing inequality in income distribution may bring various social problems, the redistribution function of the state comes to the fore at this point, and income is distributed a second time (Çalışkan, 2022: 219). In this way, national income is redistributed by the state and justice is tried to be achieved (Türk, 2004: 324). This distribution, which is described as the income improvement function of the state, is expressed as secondary income distribution (Kirmanoğlu, 2007: 207).

3. Indicators of Income Distribution

There are methods that show the income distribution between periods in a country or allow comparisons to be made regarding the income distribution between countries. One of the most widely used of these methods is the Lorenz curve method (Howard, 2001: 81). The Lorenz curve is related to the cumulative rate of consumer units and the cumulative rate of national income (Kakwani, 1977: 719). This curve, expressed on a diagram, is drawn at a 45-degree angle to the origin and shows absolute equality. As the income distribution curve approaches the Lorenz curve, inequality decreases; on the contrary, inequality increases. The Italian statistician Gini expressed the income distribution imbalances shown on the Lorenz curve with a coefficient,

which is used today as the Gini coefficient (Türk, 2004: 318-319). When the Gini coefficient, which takes a value between 0 and 1, is 0, the Lorenz curve is at the 45-degree line. Therefore, the closer the Gini coefficient is to zero, the more equal the income distribution is (Hyman, 2011: 475).

4. Effect of Transfer Expenditures on Income Distribution

Fiscal policy is considered one of the most effective public interventions in redistributing income (Muinelo-Gallo & Roca-Sagalés, 2013: 820). The state ensures income redistribution by regulating the amount and components of fiscal policy instruments. One of the most effective tools for redistributing income by the state is public expenditures. In this context, the income redistributive effect of fiscal policy becomes effective with public expenditures, especially transfer expenditures (Aktaş & Dokuzoğlu, 2021: 121).

Transfer expenditures are expenditures that transfer purchasing power to certain individuals or groups. These expenditures, which are unrequited and mostly aid, consist of social security programs, unemployment benefits, and social aid provided to those in need (Ay, 2004: 126-127). The first theoretical framework regarding transfer expenditures was put forward by Pigou (1947), who divided public expenditures into transfer and non-transfer expenditures. Pigou states that transfer expenditures, which he defines as an income transfer mechanism, affect the distribution of income generated in the market among households (Aktaş & Dokuzoğlu, 2021: 122).

The impact of transfer expenditures on income distribution varies according to the subtypes of transfer expenditures. These expenditures, accepted as an income transfer mechanism, do not consist only of social expenditures. In this context, transfer expenditures comprised payments to low-income groups, payments to support certain economic activities, payments for social purposes and interest payments. Among these, the effect of interest payments on income distribution is contrary to the desired, while others have a positive effect (Topuz & Doğan, 2020: 550). Therefore, the impact of these expenditures on income distribution varies depending on who benefits from them and for what purpose they are made (Chu et al., 2000: 15; Martinez-Vazquez et al., 2012: 97).

5. Conclusion

In the study, the reflection of transfer expenditures on Gini coefficients was examined on the basis of selected developed and developing countries, and it was observed that both the share of transfer expenditures in total expenditures and the share of social aid in total transfer expenditures were high in developed and developing countries. It is seen that the high share of transfer expenditures in these countries also affects the Gini coefficients. Gini coefficients in developed countries have a more egalitarian ratio than the Gini coefficients of developing countries. Considering the reducing effect of social transfer expenditures on income inequality, it is possible to say that developing countries should also focus more on such expenditures. It is also very important to control whether such expenditures achieve their purpose. The fact that those in need benefit from social expenditures increases the impact of these expenditures on income distribution. In addition, in order for the effect of transfer expenditures on income distribution to be positive, they must be supported by tax system. Subjecting public revenues, especially from high-income earners, to social transfer expenditures is one of the most effective

methods in ensuring justice in income distribution. In addition, reducing interest payments can also strengthen the function of transfer expenditures to ensure justice in income distribution.

Refenrences

Aktan, C. C. & Vural, İ. Y. (2002). "Gelir Dağılımında Adalet(siz)lik ve Gelir Eşit(siz)liği: Terminoloji, Temel Kavramlar ve Ölçüm Yöntemleri". *Yoksullukla Mücadele Stratejileri*. (Ed.) Aktan, C. C., Ankara: Hak-İş Konfederasyonu Yayınları.

Aktaş, E. E. & Dokuzoğlu, S. (2021). "Sosyal Transfer Harcamalari-Gelir Eşitsizliği İlişkisi: Karşilaştirmali Panel Nedensellik Analizi", *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 59, 119-140.

Ay, H. M. (2004). "Adil Gelir Dağılımının Sağlanmasında Özel Tüketim Vergisinin Yeri ve Bunun Türkiye'de Uygulanabilirliği". Yayımlanmamış Doktora Tezi, Bursa: Uludağ Üniversitesi Sosyal Bilimler Enstitüsü.

Çalışkan, A. (2022). "Gelir Dağılımında Adaletin Sağlanmasına Yönelik Yaklaşımlar: Teorik Bir Bakış", *Kırşehir Ahi Evran Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 6 (2), 214-229.

Chu K., Davoodi H. & Gupta S. (2000). "Income Distribution and Tax and Government Social Spending Policies in Developing Countries". *IMF Working Paper, 00/62.*

Dayar, H. & Akıncı, A. (2020). "Kamu Sosyal Transfer Harcamalarının Kişisel Gelir Dağılımına Etkisi", *Maliye Dergisi*, 179, 172-185.

Howard, M. (2001). *Public Sector Economics for Developing Countries*, Jamaica: University of the West Indies Press.

Hyman, D. N. (2011). *Public Finance*, Mason: South-Western Cengage Learning.

Just, R. E., Hueth, D. L. & Schmitz, A. (2004). *The Welfare Economics of Public Policy*, UK: Edward Elgar Publishing.

Kirmanoğlu, H. (2007). *Kamu Ekonomisi Analizi*, İstanbul: Beta Basım.

Martinez-Vazquez, J., Moreno-Dodson, B. & Vulovic, V. (2012). "The Impact of Tax and Expenditure Policies on Income Distribution: Evidence from a Large Panel of Countries", *Review of Public Economics*, 200 (4), 95-130.

Muinelo-Gallo, L., & Roca-Sagalés, O. (2013). "Joint Determinants of Fiscal Policy, Income Inequality and Economic Growth", *Economic Modelling*, 30 (1), 814-824.

Musgrave, R. A. & Musgrave, P. B. (1989). *Public Finance in Theory and Practice*, Singapore: McGraw-Hill Book Company.

Kakwani, N. C. (1977). "Applications of Lorenz Curves in Economic Analysis", *Econometrica*, 45 (3) 719-728.

Topuz S.G. & Doğan E. (2020). "Transfer Harcamaları ve Gelir Eşitsizliği İlişkisi: Panel Nedensellik Analizi ile Karşılaştırmalı Bir Değerlendirme", *İzmir İktisat Dergisi*, 35 (1), 549-562.

Türk, İ. (2004). Maliye Politikası, Ankara: Turhan Kitabevi.

Tokatlıoğlu, M. & Selen, U. (2009). Maliye Politikası, Bursa: Ekin Basım Yayın.

Yüce, M. (2002). "Türkiye'de Gelir Dağılımı Bozukluğunun İzlenen Kamu Gelir ve Harcama Politikaları ile Bağlantısı", *Bilig Dergisi*, 23, 1-38.

The Effect of Public Sector Size on Economic Growth in the Scope of Public Employment

Cevat Tosun[1] **Mete Dibo**[2]

Abstract

Due to the scarcity of resources or with the goal of sustainability, the public and private sectors that make up the national economy have to use resources optimally. Under this obligation, the efficient use of resources is discussed theoretically and empirically, even though the value attributed to the public sector and the market is different according to economic systems. These discussions are generally about the size of the public sector in the economy and what the role of the public should be in the economy. Therefore, the participation of the state or the public in a broad sense in economic activities is a subject that has been extensively studied in the literature. An indisputable element about the relationship between the public sector and the economy is that the participation of the public sector in the economy is gradually increasing. In particular, the existence of market failures is the reason for the existence of the public sector in every economic system, albeit at a minimum level. Within the scope of the effects of this existence, there are debates about what the share of the public economy should be in the total economy. According to those who argue that the public's share in the economy should be reduced, as the public's share in the economy increases, effective resource distribution is disrupted by excluding the private sector from the markets in various ways, and inefficiencies arise due to the public's politically oriented preferences in resource distribution. Those who argue that increasing the public share may not be inefficient emphasize that infrastructure and human capital investments made by the public will support the private sector. Ultimately, studies addressing the effects of the public sector take into account the relationship between the size of the public sector and economic growth. Although there are many studies examining this relationship, most of the studies focus on the relationship between economic growth and public expenditures and tax revenues. The aim of this study is to test the effect of the relevant variable on economic growth by taking the public size into consideration within the scope of public employment/total employment ratio, and in this way to contribute to the relevant literature, where there are few applied studies. In this context, the Westerlund panel cointegration test was applied using total savings, public investment expenditures and public employment data for the period 2007-2019 of 25 OECD countries whose data are accessible, and the Common Correlated Effects Mean Group (CCEMG) method was used to estimate the long-term coefficients. According to the research results, increases in total savings, public investment expenditures and public employment increase the growth rate.

Keywords: Public size, Public employment, Economic growth, Panel cointegration

[1] Assist. Prof. Ph.D., Hitit University, Department of Public Finance, ORCID: 0000-0003-0179-9582, cevattosun@hitit.edu.tr

[2] Assoc. Prof. Ph.D., Hitit University, Department of Public Finance, ORCID: 0000-0002-7775-0673, metedibo@hitit.edu.tr

Evaluation of The Earthquake Tax Introduced by The Law No. 7440 In Terms of Constitutional Taxation Principles

Hakan Bay[1] **Zeynep ARIKAN**[2]

Abstract

Disasters are events that cause physical, economic and social losses and damages for people, stop, disrupt or hinder people's normal lives and activities, and where opportunities are inadequate. These events can occur naturally or artificially and negatively affect the country and sometimes the world economy. Disaster is not the event itself, but its consequences and the harmful effects it causes. Being exposed to disasters or living with the risk of disasters negatively affects human life and harms the environment. Loss of life, property loss, injuries and mutilations caused by disasters bring with them many problems that are difficult to overcome and increase the need for national and international assistance and the urgent use of financial resources. It is important to financially compensate for the damages caused by disasters. Turkey is a country that frequently encounters natural disasters that can cause great damage due to its geological, topographic and meteorological conditions. The fact that a large part of Turkey's geography is in an active earthquake zone reveals the need to combat the damages caused. Because disasters create great burdens on the state budget. In order to alleviate this burden, earthquake taxes are put into effect in case of disasters that occur from time to time. Following the 1999 Marmara earthquake, an earthquake tax under the name of special communication tax, which was first temporary and then became permanent, was introduced and resources were provided. Due to the earthquake that affected Gaziantep, Hatay and other provinces, a one-time additional tax was imposed on corporate taxpayers who benefit from exemptions and discounts on corporate earnings with Law No. 7440. With the Law No. 7440, a one-time additional tax of 10% was collected on the exemption and discount amount on the corporate tax return, and a one-time additional tax of 5% was collected from the earnings subject to the participation income exemption and the exemption earnings obtained from abroad. It is aimed to use this additional tax liability to meet the needs of citizens damaged in the earthquake zone and the urgent resource needs in the region. It is important that this additional tax is compliant with the principle of legal security and equality. Since "everyone is obliged to pay taxes according to their financial power" in accordance with Article 73 of the 1982 Constitution and "balanced and equitable distribution of the tax burden is the aim of fiscal policy", the principles of financial power, generality and justice must be realized. In this study, after mentioning the earthquake tax, the tax will be discussed in terms of legal security and equality principles and the aspects of non-retroactivity, solvency and justice will be evaluated.

Keywords: Earthquake Tax, Non-Retroactivity Principle, Equality Principle

[1] Assoc. Prof. Ph.D, Dokuz Eylül University, Department of Public Finance, ORCID: 0000-0001-9159-3259, hakan.bay@deu.edu.tr

[2] Prof. Ph.D, Dokuz Eylül University, Department of Public Finance, ORCID: 0000-0001-6710-171X, zeynep.arikan@deu.edu.tr

Tax Reliefs After Natural Disasters and Tax Management

Meltem İrteş Gülşen[1]

Abstract

Natural disasters are costly for governments and victims. The state needs taxes, which are the financing source necessary to heal the wounds of the disaster. However, it is also obvious that citizens exposed to natural disasters will experience financial losses and will probably even have difficulty paying due to losing all their assets. The aim of the study is to analyze the tax facilities applied after the disaster to citizens who are affected by natural disasters and suffer material and moral losses. In this context, the theoretical structure of the tax facilities granted to disaster-affected citizens so that they can fulfill their tax duties has been examined. The practices of Japan, the People's Republic of China, and Turkey regarding force majeure, tax reduction, donations and aid applied after natural disasters are compared.

Keywords: Natural Disasters, Tax Reliefs, Tax Management

JEL Codes: H20, H84.

1. Introduction

People are faced with natural events in many different ways. It is obvious that governments will need financing due to natural disasters that have occurred and may occur. In the same period, people who experience natural disasters will also need support to erase the traces of the disaster they experienced. Governments provide some tax benefits to their citizens in order to support them in their situation.

In the study, first of all, the definition of natural disaster and what it is, then the effects and losses of natural disasters are mentioned. Then, the tax benefits offered by selected countries were examined and a comparison was made between countries. The countries selected for comparison: Japan and the People's Republic of China, which are most exposed to natural disasters since 45% of the natural disasters in the world are in Asia, were selected and examined, and a comparison was made with Turkey in terms of the tax benefits applied.

2. Definition and Effects of Natural Disasters

Natural disasters are defined as a set of events that occur in different ways and at different times, often causing death and injuries as well as great damage, and negatively affecting community life and management (Hewitt, 1997). In the classification made by the World Health Organization, natural disasters are discussed in six main groups (CRED, 2022).

Thousands of natural disasters have occurred in the world in the last 30 years. The biggest example is, according to the data of the World Health Organization regarding the Covid disease experienced globally, as of September 6, 2023, the number of cases reached 770, 437, 327 in total and 6,956,900 people died due to this epidemic (THSSGN, 2023).

[1] Assoc.Prof.Dr., Anadolu University, ORCID ID: 0000-0002-5068-053X, mirtes@anadolu.edu.tr

Almost 49% of these natural disasters occurred in the Asian continent. Due to these disasters, natural disasters caused a loss of 252.1 billion dollars worldwide in 2021 (CRED, 2022). Considering the above taxes, the two countries in the Asian continent that are most exposed to natural disasters, the People's Republic of China and Japan, were selected and compared with Turkey.

3. Examination of Tax Instruments Applied During Natural Disasters in Selected Countries

In the study, three different countries that are frequently exposed to similar natural disasters and evaluated in terms of their economic differences are discussed. These three countries were chosen because they are most exposed to earthquakes in terms of natural disasters. The selected countries are Japan, People's Republic of China and Türkiye, respectively. Japan is one of the countries that is cautious about natural disasters and does not experience much economic losses, and the People's Republic of China is among the countries that suffer the most economic losses due to natural disasters. There are some provisions in the tax legislation of these countries to be applied in cases of natural disasters. These regulations were examined under the headings of force majeure, tax deduction, donations and aid, and abatement.

3.1. Force Majeure

The practice of force majeure in the People's Republic of China is basically regulated in the Chinese Civil Code, which came into force in 2021. There is no provision regarding the application of force majeure in Chinese Tax Law. Additional periods are not given or suspended for tax purposes due to force majeure. Natural disasters are not counted as force majeure (Civil Code of China, 2020: 33–104).

Force majeure application is not included in Japanese tax law. It appears that force majeure is regulated in the Civil Code (Japan Civil Code, 1896). Within the scope of the contract, the parties are allowed to include a clause regarding force majeure. Natural disasters are not considered force majeure.

In Turkey, force majeure practice is regulated in both public law and private law. Force majeure provisions are included in the Tax Procedure Law and the Law on Public Receivables Collection Procedure. Natural disasters are considered force majeure (VUK, 13/2).

3.2. Tax Deduction

In the People's Republic of China, tax law includes provisions regarding tax deduction due to natural disasters (Civil Code of China, 2020: 33–107).

Japanese tax law includes tax deductions in cases of natural disasters. In Japan, incentives are provided to support earthquake insurance by providing income tax deductions (Kamachi, 2023).

Although the legal basis for tax deductions in Turkey is Article 73/4 of the Constitution, the President is shown to be the authorized authority for tax deductions in the same article. In cases of natural disasters, tax reductions are available.

3.3. Donation and Aid

In the People's Republic of China, tax law includes provisions regarding donations made due to natural disasters. Aid provided can be deducted as an expense from the person providing aid (Civil Code of China, 2020: 33–107).

In Japan, information about donations made in cases of natural disasters is included in the tax law. It can be deducted as an expense from the person providing aid (NTA, 2020: 18). In Turkish Tax Law, in cases of natural disasters, in case of support for aid campaigns initiated by the Presidency, taxpayers can deduct their in-kind and cash donations from their tax base, provided that they are made entirely in the form of receipts.

3.4. Abatement

Abatement is one of the practices that ends tax debt in Turkish Tax Law. Abatement is applied when natural disasters occur. The practice of abatement in the sense applied in Turkey has not been achieved in Japan and the People's Republic of China.

4. Conclusion

It has been determined that taxes are used as an important economic tool in case of natural disasters in all three countries. Although the tax benefits granted to disaster victims are included in different laws, they appear to be similar. From the analysis, it is understood that Japan is relatively more prepared for natural disasters that may occur. The fact that the country takes precautions by collecting funds in advance to compensate for the losses incurred through taxes (such as creating funds by encouraging insurance payments by applying more taxes to risky areas and old buildings) constitutes an important example for efforts to heal the wounds after natural disasters.

References

Civil Code of China. (2020). https://www.trans-lex.org/601705/_/civil-code-of-the-peoples-republic-of-china-/, (25.08.2023).

CRED. (2022). 2021 Disasters In Numbers. https://doi.org/10.1787/eee82e6e-en., (1.09.2023).

Japan Civil Code, Act No.89 of 1896. https://efaidnbmnnnibpcajpcglclefindmkaj/https://www.cas.go.jp/jp/seisaku/hourei/data/CC1.pdf, (12.08.2023).

Kamachi, S. (2023). Japan Individual - Deductions. PWC. https://taxsummaries.pwc.com/japan/individual/deductions. (25.08.2023)

Hewitt, K. (1997). Regions of Risk: A Geographical Introduction to Disasters. Harlow, Essex: Longman. Civil Code of China. (2020).

213 Sayılı Vergi Usul Kanunu.

6183 Sayılı Amme Alacaklarının Tahsili Usulü Hakkındaki Kanun.

National Tax Agency Report (NTA), (2020). Japan Issued in June 2020. https://www.nta.go.jp/english/index.htm, (25.08.2023).

TC. Sağlık Bakanlığı, Türkiye Hudutlar ve Sahiller Sağlık Genel Müdürlüğü (THSSGN), 10.08.2023, 'Dünya Sağlık Örgütü'nün 10.08.2023 Tarihli Yeni Koronavirüs (COVİD-19) Durum Raporu', https://www.seyahatsagligi.gov.tr/Site/HaberDetayi/3840, (15.08.2023).

Watanabe, S. (2015). Natural Disasters and Taxation in Japan, PRI Discussion Paper Series (No.15A-04). https://www.fiscooggi.it/sites/default/files/u13/articoli/paper.pdf, (08.10.2023).

The Situation of Relatives of the Missing People in Kahramanmaras-Centered Earthquakes in Terms of Tax Legislation

Erdinç Alp[1]

Abstract

According to official statements, more than fifty thousand of our people lost their lives in the Kahramanmaraş-based earthquakes that occurred on February 6, 2023, and although the number cannot be determined, thousands of people who can be estimated through media / social media have disappeared and have not been found by their relatives. Although many of those who have not been able to reach their relatives want to act on the assumption that these people are living, there are also those who have to accept that they are dead, especially those who have lost hope. As a result of these losses, the legal status of the mentioned persons should be determined. Determining the legal status of missing persons is important for determining what the people who are their heirs will do as well. The decision of absence or presumption of death regarding these persons may cause different consequences for the heirs. In the study, the relatives of those who disappeared as a result of the earthquakes will be mentioned by looking at the tax legislation from different angles according to the situation of making decisions on the presumption of absence and death.

Keywords: Eartquake, Absence, Presumption of Death, Inheritance and Transfer Tax
Jel Codes: H20, K30, K34

1. Introduction

The two earthquakes centered in Kahramanmaraş on February 6, 2023, which have been referred to as the disaster of the century according to official statements, resulted in the loss of more than fifty thousand lives. Although it is not included in official statements, according to the information obtained especially through social media, many people have still not been reached.

Even though those who lost their loved ones have the belief that these people are alive, they are losing this belief day by day and they are starting to discuss what to do about the missing in legal terms. According to the Turkish Civil Code, a decision of presumption of death or a decision of absence must be made regarding those who are missing. Although both applications are based on similar reasons, they cause differences in terms of results.

In the study, first of all, the concepts of absence and presumption of death will be touched upon, and then, what actions should be taken in terms of tax legislation for the relatives of people who have not been heard from.

2. Legal Situation Of Those Missing As A Result Of The Earthquake

According to the Turkish Civil Code, personality emerges at birth and ends with death. The deceased person is recorded in the registry and the death record is recorded. In this case, birth and death can be proven with records in the population registry (Camkurt, 2011, p. 236).

[1] Lecturer, Ordu University, ORCID: 0000-0002-9287-6223, e.alp@odu.edu.tr

However, for those who cannot be registered for death because their bodies cannot be reached as a result of natural disasters such as earthquakes or floods, or those who have not been heard from for a long time, this record can be reduced from the civil registry within the framework of special provisions in the Turkish Civil Code. The Turkish Civil Code stated that, except for death, it would end with the presumption of death and absence regulations.

2.1. Absence

Although it is not known whether the person is alive or not, if the person is in a situation where death is almost certain, there are suspicions that the person is not alive. If this situation lasts for a long time, it may cause problems, especially in terms of property rights (Sarı Fidan, 2023, s. 221). In Article 32 of the Turkish Civil Code; "If there is a strong possibility of the death of a person who is lost in danger of death or has not been heard from for a long time, the court may decide on the absence of this person upon the application of those whose rights depend on this death." It contains the provision. In order for a decision of absence to be made about the person, there must be a very strong probability that it may suggest death about the person (Şahin, 2019, s. 252). For example, an application for a missing person's decision may be made as a result of reasons that first bring to mind death, such as the disappearance of a person as a result of an earthquake or flood, or not being able to reach the bodies of others on the crashed plane, but not the bodies of the missing person. Since the decision of absence is an uncontested judicial matter, those whose rights depend on this death (heirs, those who inherit together with the absent person, those who cannot participate in the inheritance due to absence, life insurance beneficiaries, the prosecutor's office, the state as the last legal heir, etc. (Şahin, 2019, s. 255)) can appeal to the Civil Court of Peace after the periods specified in the law have expired.

It is stated in Article 35 of the Turkish Civil Code that the personality of the absent person will come to an end with the decision of absence. However, since this decision does not give a legally binding date of death, in a sense, the person whose absence is determined is neither dead nor alive (Sarı Fidan, 2023, s. 223). As a result of this, while the assets of the missing person pass to the heirs due to the decision of absence, a periodical guarantee is also required from the heirs due to the possibility of the missing person appearing one day[2].

2.2. Presumption Of Death

If it is certain that the person is dead and there is no doubt about his death, a presumption of death is issued for the person and a death record is recorded in the person's civil registry upon the request of the relevant parties, in accordance with Article 31 of the Turkish Civil Code. The point to be considered here is that there is no doubt about the person's death. For example, it is impossible to identify the funerals on the plane that exploded in the air and fell into the sea, and it is also impossible for those on the plane to live (Camkurt, 2011, s. 236). The person for whom the presumption of death is issued is considered dead from the date of the event, and all consequences of death become apparent with the issuance of the presumption.

[2] According to Article 584 of the Turkish Civil Code, guarantee is given for five years in case of disappearance in danger of death, fifteen years in case of not being heard from for a long time, and probably for the period until the missing person reaches the age of one hundred.

3. What Relatives Of Those Lost In The Earthquake Should Do

Although the presumption of death and absence are similar in terms of their reasons, they also have differences. In the presumption of death, there is no doubt about the death, but when the body cannot be reached, the doubt prevails in the decision of absence. For this reason, it is necessary to wait for a while before a decision of absence can be made, and due to the possibility of the disappearance, the assets are transferred to the heirs in return for providing collateral. It may be possible to grant a presumption of death to those who are missing due to the earthquake if their death is considered certain. However, since we know that although all the people living in the building died, there were earthquake victims who were taken alive from the same building days later, it would not be right to give a presumption of death as a result of the earthquake, even though the destruction was very heavy. If there are situations such as fire or flood in that building along with the earthquake and each event is evaluated individually, the presumption of death may be applied, but in terms of general evaluation, a decision of absence will be more appropriate.

In this case, what the relatives of those who disappeared in the February 6, 2023 earthquakes should do is to obtain a decision of absence as of February 6, 2024, one year following the earthquake. However, heirs can also request presumption of death because they will have access to rights such as inheritance more quickly as a result of the presumption of death. In this case, civil authorities should be expected to act to protect the rights of the missing person rather than the heir and not to issue a presumption of death.

4. Things To Be Done In Terms Of Inheritance And Transfer Tax Legislation

What the relatives of those who are missing as a result of the earthquake can do legally is stated above. When we consider the issue in terms of tax legislation, the tax law we encounter is the Inheritance and Transfer Tax Law. According to Article 1 of the Law; “The transfer of goods belonging to persons who are citizens of the Republic of Turkey and goods located in Turkey, through inheritance or in any way, without any consideration, from one person to another is subject to Inheritance and Transfer Tax”. In this case, the heirs of those who died in the earthquake or those for whom a presumption of death was issued or those for whom a decision of absence was issued will be liable for inheritance and transfer tax.

The issue will be examined first in terms of those whose bodies were found, and then separately in terms of those for whom a presumption of death was issued and those for whom a decision of absence was issued.

4.1. What To Do For Those Whose Bodies Were Found

If the body of the deceased person is found as a result of the earthquake, the death decision about the deceased person will be recorded in the civil registry and the heirs will be able to take over the deceased person's assets. In this case, each heir will be liable for inheritance and transfer tax. As stated in Article 4 of the Law, each of them is obliged to pay inheritance and transfer tax on the remaining inheritance after deducting the exemption amount, as a result of the application of the 2023 tariff. However, according to Article 10/21-Ç of the Law No. 7440 on the Restructuring of Certain Receivables and Amendments to Certain Laws, published in the Official Gazette on March 12, 2023, these people are granted inheritance and transfer tax exemption (Bazı Alacakların Yeniden Yapılandırılması ile Bazı Kanunlarda

Değişiklik Yapılmasına Dair Kanun, 2023). For this reason, the relevant parties are required to submit declarations within the periods given in Article 9 of the relevant law, starting from the date the force majeure situation ends, but they are not required to pay taxes pursuant to the above-mentioned article.

4.2. What To Do For Those Who Are Absent Or Presumed Of Death

Since the result in case of a presumption of death will be the same as death, the heirs are obliged to submit the inheritance and transfer tax return within 4 months at the latest from the date of removal of the force majeure (Maç & Jamali, 2000, s. 7-8). Again, since they are within the scope of the exemption introduced by Law No. 7440, they are not required to pay inheritance and transfer taxes. In case of a decision of absence, since the decision of absence will be applied due to suspicion of death, they must first wait one year following the date of suspicion of death. In this case, if a decision of absence is made as a result of applying to the court for absence on or after February 6, 2024, the declaration must be submitted within one month following the date of this decision, according to Article 9 of the Inheritance and Transfer Tax Law. Again, according to Law No. 7440, these people do not need to pay taxes since they have inheritance and transfer tax exemption.

5. Conclusion & Evaluation

The earthquakes that occurred in Kahramanmaraş on February 6, 2023, can be considered as the most significant disaster for our country in recent years. As a result, all our citizens have been directly or indirectly affected. Apart from those whose bodies have been recovered, the number of individuals whose status remains unknown, whether they are alive or not, is estimated to be significant. This situation has brought the concepts of "disappearance" and "presumption of death" to the forefront in the media and on social media.

While there is a debate regarding which concept should be applied for individuals who cannot be reached after the earthquake, the presumption of death should be considered for those with a high probability of death, and if there is doubt about whether they are alive, a presumption of disappearance should be made. In cases where the earthquake is accompanied by incidents such as gas leaks, flooding, or fire in a collapsed building, it is expected that the presumption of death will be established through the local authorities, as the likelihood of survival for those individuals is low. If the mentioned circumstances do not apply, then a court decision for the presumption of disappearance is expected.

In conclusion; making the decision on the presumption of absence or death should be made based on the concrete event. It should not be based solely on the geographical location, such as the province, district, neighborhood, or even street, but rather on the manner in which the buildings collapsed and the presence of other destructive events within the building.

References

Bazı Alacakların Yeniden Yapılandırılması ile Bazı Kanunlarda Değişiklik Yapılmasına Dair Kanun. (2023, Mart 12). *Resmi Gazete(Sayı:32130)*. https://www.resmigazete.gov.tr/eskiler/2023/03/20230312-14.htm adresinden alındı

Camkurt, M. Z. (2011, Mart-Nisan). Ölüm Karinesi ve Gaiplik Durumunda Sosyal Güvenlik Mevzuatı Kapsamında Hak Sahiplerine Gelir ve Aylık Bağlanması. *Mali Çözüm Dergisi*, s. 235-248.

Maç, M., & Jamali, T. (2000, Şubat). Depremde Kaybolanların Yakınlarının Durumu. *Vergici ve Muhasebeciyle Diyalog*(142), s. 5-9.

Sarı Fidan, Ö. (2023, Temmuz). Depremde Kaybolanların Hukuki Durumlarının Gaiplik ve ölüm Karinesi Yönünden Ele Alınması. *Sakarya Üniversitesi Hukuk Fakültesi Dergisi, 11*(1), s. 219-236.

Şahin, E. (2019). Gaipliğin Miras Hukuku Bakımından Hüküm ve Sonuçları. *Türkiye Barolar Birliği Dergisi*(144), s. 249-275.

Behaviourally Informed Policies: An Evaluation on Fiscal Policies in Türkiye

Emre Özyerden[1]

Abstract

Instead of rough assumptions such as homo economicus regarding the economic behavior of people, the real characteristics of homo sapiens are revealed and theories based on these are produced as a result of behavioral economics studies,. These studies subsequently assist private institutions as well as public policy-making units in the policy-making phase. In addition to traditional policies such as taxation, subsidization, and prohibition, behaviorally informed policies also take their place in the toolbox of policy makers.

In this study, the process of creating and implementing behaviorally informed policies is evaluated on the basis of sample practices and studies. In the first section of this paper, basic behavioral concepts that choice architects frequently consider in policy making are listed. In this section, the areas and ways in which these features can be applied are summarized within the scope of theoretical and applied studies and policy experiences.

In the second section, behavioral policy units (nudge units) are evaluated in creating behaviorally informed policies. Behavioral policy units, pioneered by the Behavioral Insights Team in the UK, are units that provide assistance to public and private institutions in creating behavioral policies. In this section, country experiences of the nudge units and their behavioral policy examples, especially in fiscal policy, are listed.

In the third section, Türkiye's experience in micro-level behavioral fiscal policies and potential areas in terms of behavioral policy are presented. Davranışsal Aksiyon Takımı, established within the Ministry of Economy in 2017, is the first nudge unit of Türkiye, and it is followed by other nudge units within ministries. In this section, Türkiye's experience on behavioral and mixed policies will be quantitatively evaluated.

The main emphases of this study are as follows: First, it is presented that different behavioral approaches should be taken into consideration in different policy areas, and that it may not yield desired results to apply behavioral intervention in every field. In this regard, it is stated that the policy mix in appropriate areas should be evaluated along with a selective behavioral policy choice. Secondly, the need for a dynamic behavioral policy making that takes into account cultural differences, characteristics of the target audience and periodic changes in order to create the appropriate behavioral policy set is mentioned. This dynamic evaluation includes the collection and analysis of administrative data as well as the generation of behavioral inferences through field and laboratory experiments. Finally, the importance of a comprehensive public opinion survey and discussion for behaviorally informed policies is emphasized.

Key Words: Behaviorally Informed Policies, Nudge, Behavioral Public Finance
JEL Codes: D9, E7, H3

[1] Ress. Assist., Hitit University, Department of Public Finance, ORCID: 0000-0003-3577-4236, emreozyerden@hitit.edu.tr

Public Acceptability of Congestion Charge at the Centre of Istanbul

Yusuf Cengiz[1] **Naci Tolga Saruç**[2]

Abstract

Congestion pricing refers to the practice of internalizing the external costs that people impose on others via the implementation of Pigouvian taxes. In theoretical parlance, the concept of real congestion pricing pertains to the implementation of charges that escalate in proportion to the level of congestion, hence resulting in higher fees for vehicles as traffic intensifies. The objective of this research is to ascertain the level of acceptance of congestion pricing in the city of Istanbul. The data acquired from a survey including 422 participants who reside in Istanbul and commute from work to home using either private vehicles or public transit offers significant insights into the study inquiries. Based on the research results, it has been found that there is a lack of widespread popular support for congestion pricing. There is a prevailing belief that those belonging to high-income brackets would have favorable outcomes as a result of this, whilst those in low-income brackets will encounter negative consequences and suffer unfavorable effects. Individuals without access to a personal mode of transportation exhibit a diminished level of confidence in the efficacy of the aforementioned application, in comparison to those who possess such means of transportation. The majority of participants expressed the belief that residents are unlikely to alter their driving behaviors, leading to a lack of success for the program. In the event of the implementation of congestion pricing, most participants anticipate that the generated revenue will be allocated towards enhancing public transport infrastructure.

Keywords: Congestion pricing, public acceptability, survey
Jel Codes: R48, R41, H23.

1. Introduction

The extensive use of motor cars facilitates individuals in attaining convenience and affluence; nonetheless, it sometimes results in the accumulation and overcrowding of urban traffic and roadways. Indeed, it is evident that losses might be incurred in relation to both temporal and fuel efficiency. Simultaneously, the increased vehicular density contributes to a heightened level of pollution per square meter, specifically in relation to environmental contamination, hence posing a threat to the well-being of local inhabitants.

The road transport industry often fails to adequately incorporate the costs associated with transportation externalities into market pricing. That is, it is impossible to internalize the externalities associated with road transportation (Santos et al., 2010).

Istanbul has 4.3 million registered automobiles for transportation as of 2020. Approximately 3 million automobiles are autos in this population. Compared to 2005 statistics, the values are 2.4 million and 1.5 million. The number of registered cars has increased

[1] Res. Assist., Kırklareli University, Department of Public Finance, ORCID: 0000 0002 0287 9587, yusufcengiz@klu.edu.tr
[2] Prof. Ph.D., İstanbul University, Department of Public Finance, ORCID: 0000-0003-0716-3040, naci.saruc@istanbul.edu.tr

significantly. According to 2019 figures, 28% of greenhouse gas emissions come from transportation. Most of these emissions—99%—are from motor vehicles. For road safety, this city has higher death and injury accident rates than comparable metropolitan regions. In 2020, 322 people died in road accidents. Traffic-related noise pollution affects 24% of the population at 55–69 dB (IBB, 2022).

Thus, congestion pricing is discussed in the context of Istanbul's traffic congestion and the search for solutions. This study examines Istanbul's congestion pricing acceptance.

2. Explanations on Congestion Charging and the Importance of Public Support

In general, there are two approaches to resolving traffic congestion. The primary solutions consist of expanding road construction or optimizing the utilization of current infrastructure (Selmoune et al., 2020:1).

The congestion pricing mechanism is an application of the economic demand law. Use of vehicles may be minimal when costs are high, or substantial when they are low. Congestion pricing, operating under the ceteris paribus assumption, will endeavor to offset the exogenous impacts that manifest during periods of heavy traffic volume (Aasness & Odeck, 2023:2). Two methods are possible for implementing congestion pricing. Cordon pricing encompasses the entrance fees for the areas encircling the city center, resembling an external chain. Charging based on varying entry and exit times is an optional feature of the application (Sorensen et al., 2008:391). A second approach is congestion pricing based on area. The charges imposed on individuals entering and exiting a specific area are encompassed within this (Saruc, N. T., 2008:53). Furthermore, the practice can be categorized as facility-based, encompassing specific roads, tunnels, and bridges, and distinguished by distance and time; alternatively, it can vary based on attributes including vehicle type, axle length, and weight (De Palma & Lindsey, 2011:1381-1382).

Political and social acceptance stands as a paramount obstacle to the successful implementation of congestion charging (Saruc, N. T., 2008:57-59). An instance of this can be seen in the canceled congestion charging referendum held in Edinburgh in 2005, which was attended by 74.4% of the population and was therefore unsuccessful (Gaunt et al., 2007:89). In a similar vein, the execution was met with a referendum-driven rejection in Manchester, England (Ministry of Transport, 2020:53).

"Privacy concerns, equity and fairness concerns, complexity, and uncertainty" (Gu et al., 2018:96) are the four key categories that comprise the literature on the social acceptability of congestion pricing.

3. Cities that Implement Congestion Charging

In 1975, Singapore became the inaugural municipality to implement congestion pricing. Singapore holds a significant position in the annals of literature due to its pioneering implementation of congestion pricing, which resulted in prosperous outcomes. In truth, after 1975, the number of individuals entering the tolled zone decreased by 44% (Bhatt et al., 2008:20-22).

Congestion charging was implemented in London in 2003, imposing a 5 pounds toll for both entering and navigating within the charged area (Givoni, 2012:1089). Driving within the

designated area from 07:00 to 18:00 Monday through Friday incur a fee. Residents residing within the assessed region are eligible for a 90% discount. Furthermore, special cases are eligible for a 100% discount (Transport for London, 2023).

Following a six-month pilot period, it was implemented in Stockholm in 2006 with the primary objectives of mitigating traffic congestion and utilizing the generated revenues to enhance the environment and transportation infrastructure. Following the implementation of the trial, a 51% majority voted in favor of the scheme's permanence in a referendum; consequently, the scheme was declared permanent the following year (U.S. Department of Transportation, 2021). Pricing is subject to change based on the periods of highest daily traffic (Transport Styrelsen, 2022).

The implementation of congestion pricing in the city center of "The Area C" in Milan was initiated as a measure to mitigate the environmental impact of motor vehicles and decrease pollution. This policy was proposed via a referendum in 2011, which established an 18-month trial period. Following the successful trial, congestion pricing has been permanently implemented since 2013. In the context of congestion pricing, which prioritizes environmental conservation, entry fee of 5 euros is levied during weekdays from 7.30 am to 7.30 pm in the designated area (Comune di Milano, 2023).

Gothenburg implemented a congestion pricing scheme based on cordons in 2013. 57% of citizens, one year after the implementation of congestion charging, cast a negative vote when asked if it should continue following the elections the following year. Nevertheless, the practice persisted due to the absence of a viable substitute for the acquired resource (West & Borjesson, 2020:149).

Authorities in New York State have declared that congestion pricing will be enforced in the Manhattan region beginning in the spring of 2023. Indeed, the initial proposition regarding this matter was put forth by the mayor in 2007, yet it has been persistently delayed throughout the years (Meyersohn, 2023).

4. Methodology and Results of Analysis

This study examines public acceptance of congestion pricing in central Istanbul. Istanbul residents aged 18 and older are the study's main participants. Istanbul has an estimated 15.4 million people, of whom 11.5 million are 18 or older, according to TUIK (2023) address-based population data for 2022. This study's sample size was determined by the table. According to Yazıcıoğlu and Erdoğan (2004: 50), a sample size of 384 is considered representative for a population of one million or more, with a 5% sampling error. The number of individuals included in the research sample is 422.

According to 29.5% of respondents, transportation is the most significant issue in Istanbul. 59.3% of respondents recommended that the revenues generated from congestion pricing be allocated to public transportation services. Congestion pricing would fail, according to 47.5% of respondents, because individuals would not alter their transportation practices.

The outcomes of the Chi-Square Test are provided to ascertain whether demographic characteristics influence the validity of the statements concerning the effectiveness of congestion pricing. Based on the findings of the Chi-Square Test, the H0 hypothesis, which posits that there is no distinction between the independent variables and the dependent variable, is rejected when the p value is below 0.005. This results in the determination, with a 95%

confidence interval, that a statistical difference exists between the groups (Gürbüz & Şahin, 2018: 251).

Statistically significant differences were observed among the respondents who expressed the belief that congestion pricing would be effective in relation to various factors. These factors include education (p=0.003<0.005), income (p=0.000<0.005), distance in kilometers between home and work (p=00.1<0.005), time in minutes between home and work (p=007<0.005), car ownership status (p=0, 000<0.005), means of transportation between home and work (p=0.003<0.005), and allocation area of the collected revenues (p=0.002<0.005).

Regarding the duration of travel time incurred throughout the whole journey from one's residence to the workplace and back, those whose travel time exceeds one hour have a higher inclination towards seeing congestion pricing as a potentially successful measure compared to those whose travel time falls within the range of 16 to 60 minutes.

In relation to the distance covered in kilometers between their residence and workplace, those who commute 10 km or less each day are inclined to hold the belief that congestion pricing would not yield desirable outcomes. Conversely, individuals who travel 31 km or more are more prone to see congestion pricing as an effective measure.

There exists a disparity in income groups regarding their perceptions of the effectiveness of the cost. Individuals with an income ranging from 25,001 to 50,000 liras tend to hold the belief that the fee will have limited efficacy. Conversely, those with an income between 50,001 to 75,000 liras, as well as those earning over 75,001 liras, are inclined to see the fee as more impactful.

Those who own a privately-owned car exhibit a favorable inclination towards the efficacy of congestion pricing, while those without vehicle ownership express a pessimistic stance on the effectiveness of congestion pricing.

Regarding the modes of transportation used for commuting between one's home and workplace, those who rely on private cars exhibit a favorable inclination towards the effectiveness of congestion pricing. Conversely, individuals who utilize public transportation or shuttle services express a positive inclination towards the ineffectiveness of congestion pricing.

5. Conclusion

Congestion pricing, a policy measure that has been used in several urban centers like London, Singapore, and Milan, has had several positive outcomes. These include a decrease in traffic congestion, an improvement in air quality, a reduction in traffic accidents, and a decrease in travel times for public transportation. The primary impediment to the implementation of congestion charge measures is in the realm of social and political approval. Historically, the execution of the initiative has been postponed because of limited public approval in urban areas such as Edinburgh and Manchester.

This study examines the perspectives of Istanbul residents regarding congestion pricing, a potential solution to the city's traffic woes, which are prevalent in most major metropolitan areas. The information gathered from a survey of 422 Istanbul residents who commute by private vehicle or public transit to and from work offers significant insights into the study questions. Social acceptability is low, tolls are not regarded as equitable, and their ability to reduce traffic is questioned, according to the findings. The prevailing viewpoint among those who hold the view that tolling lacks effectiveness is that it will not induce a transformation in the way individuals navigate through traffic. Consensus regarding the efficacy of congestion

pricing is held by those who, in general, spend more time in traffic and make more trips, have higher incomes, own a car or commute to work or home by private vehicle, and are active drivers in traffic, according to the remaining findings.

References

Aasness, M. A., & Odeck, J. (2023). Road users' attitudes towards transforming a flat rate cordon toll to a congestion charging system: The case of Oslo, Norway. *Research in Transportation Business & Management*, 100971.

Bhatt, K., Higgins, T., Berg, J. T., & K.T. Analytics, Inc. (2008). *Lessons learned from international experience in congestion pricing.* https://rosap.ntl.bts.gov/view/dot/16555

Comune di Milano. (2023). *Area C: ticket purchase, activation, top-up.* https://www.comune.milano.it/servizi/area-c-acquisto-ticket-attivazione-ricarica, (03.08.2023).

De Palma, A., & Lindsey, R. (2011). Traffic congestion pricing methodologies and technologies. *Transportation Research Part C: Emerging Technologies*, *19*(6), 1377-1399.

Gaunt, M., Rye, T., & Allen, S. (2007). Public Acceptability of Road User Charging: The Case of Edinburgh and the 2005 Referendum. *Transport Reviews*, *27*(1), 85-102.

U.S. Department of Transportation. (2021). *Lessons Learned From International Experience in Congestion Pricing.* https://ops.fhwa.dot.gov/publications/fhwahop08047/02summ.htm (09.08.2023).

Givoni, M. (2012). Re-assessing the Results of the London Congestion Charging Scheme. *Urban Studies*, *49*(5), 1089-1105.

Gu, Z., Liu, Z., Cheng, Q., & Saberi, M. (2018). Congestion pricing practices and public acceptance: A review of evidence. *Case Studies on Transport Policy*, *6*(1), 94-101.

Gürbüz, S. & Şahin, F. (2018). *Sosyal Bilimlerde Araştırma Yöntemleri,* Ankara: Seçkin Yayıncılık.

İstanbul Büyükşehir Belediyesi. (2022). *İstanbul Sürdürülebilir Kentsel Hareketlilik Planı.* İstanbul, https://www.ibb.istanbul/BBImages/Slider/Image/istanbul-surdurulebilir-kentsel-hareketlilik-plani.pdf (10.06.2023).

New York City, officials announce | CNN Business. *CNN*. https://www.cnn.com/2023/06/26/business/new-york-city-congestion-pricing/index.html (08.07.2023).

Ministry of Transport. (2020). *The congestion question. Technical report—Knowledge Auckland*. https://knowledgeauckland.org.nz/publications/the-congestion-question-technical-report/

Santos, G., Behrendt, H., Maconi, L., Shirvani, T., & Teytelboym, A. (2010). Part I: Externalities and economic policies in road transport. *Research in Transportation Economics*, *28*(1), 2-45.

Saruç, N. T. (2008). *Trafik Sıkışıklığı Ücretlendirmesi: Ekonomik Teori ve Uygulama*. Gazi Kitabevi.

Selmoune, A., Cheng, Q., Wang, L., & Liu, Z. (2020). Influencing Factors in Congestion Pricing Acceptability: A Literature Review. *Journal of Advanced Transportation*, *2020*, e4242964.

Sorensen, P., Wachs, M., Min, E. Y., Kofner, A., Ecola, L., Hanson, M., Yoh, A., Light, T., & Griffin, J. (2008). APPENDIX B19: Cordon Congestion Tolls. İçinde *Moving Los Angeles* (1. bs, ss. 391-400). RAND Corporation.

Transport for London. (2023). *Congestion Charge.* https://tfl.gov.uk/modes/driving/congestion-charge, (14.08.2023).

Transport Styrelsen. (2022). *Congestion taxes in Stockholm and Gothenburg.* https://www.transportstyrelsen.se/en/road/road-tolls/congestion-taxes-in-stockholm-and-goteborg/congestion-tax-in-stockholm/hours-and-amounts-in-stockholm/, (07.08.2023).

TUIK. (2023). *Adrese Dayalı Nüfus Kayıt Sistemi Sonuçları, 2022. https://data.tuik.gov.tr/Bulten/Index?p=49685, (14.05.2023).*

West, J., & Börjesson, M. (2020). The Gothenburg congestion charges: Cost–benefit analysis and distribution effects. *Transportation*, *47*(1), 145-174.

Yazıcıoğlu, Y. & Erdoğan, S. (2004). SPSS uygulamalı bilimsel yöntemleri. Ankara: Detay Yayıncılık.

Descriptive Literature Review On The Laffer Curve

Hasan Hüseyin Aleçakır[1] **Zeynep Karal Önder**[2]

Abstract

The aim of this study is to examine postgraduate theses on the Laffer curve in terms of methods in the local and foreign literature to create a new perspective, idea, and space for further studies to be carried out in Turkey. The curve, which shows the correlation between tax rates and tax revenue in a concave shape, is called the Laffer curve in the economics literature. The Laffer curve argues that each increase in the tax rate due to the positive correlation between the tax rate and tax revenue, up to the optimal tax rate, will increase tax revenue. It states that the increase in the tax rate in the area called the deterrent zone after the optimal tax rate will cause a decrease in tax revenues due to the negative impact it will have on the welfare level, unemployment, and economic growth. The difficulty of calculating the optimal tax rate has always made the shape and existence of the Laffer curve controversial. Along with these discussions, the Laffer curve explains the effects of tax policies on welfare, employment, and economic growth; it continues to be used as an important tool in the literature through various models, tests, and analyses. In this study, the objective is to obtain insight from the existing literature in order to perform an intertemporal or simultaneous analysis of the relationship between macro variables and tax policies in Laffer curve studies on tax policy in Turkey. In this context, document analysis, one of the qualitative data collection methods, will be used to achieve the aims of the study. Descriptive analysis will be performed with the collected data. In this direction, a total of 51 postgraduate theses were examined, including seventeen theses accessed from the National Thesis Centre by searching for the phrase "Laffer Curve" and 34 theses accessed from the ProQuest database with the restriction of having full-text access in English and the phrase "Laffer Curve" in the abstract section, and a descriptive analysis was carried out. As a result, studies of the Laffer curve in Turkey and abroad show similarities in terms of subject and purpose. The least squares method is mostly used for Laffer-curve calculations in the studies conducted in Turkey, whereas the Dynamic Stochastic General Equilibrium Model (DGSE) and the Overlapping Generational Model (OLG) were used in the foreign literature. In this context, it is possible to gain new perspectives on tax policy by using different methods in the Laffer curve calculations for Turkey.

Keywords: Laffer Curve, Tax Policy, Literature Review

[1] Postgraduate Student, Anadolu University, h.huseyinalecakir@gmail.com

[2] Assist. Prof. Ph.D, Anadolu University, Department of Public Finance, ORCID: 0000-002-7032-9448, zkaral@anadolu.edu.tr

Comparison of Income Groups in Türkiye in Terms of Human Capital Expenditure Ratios

İbrahim Kesici[1]

Abstract

Inequality in income distribution is an important socio-economic problem faced by many countries today. Although it is accepted that a more equal income distribution will contribute to social peace, there are also opinions that an unequal income distribution is inevitable and necessary to ensure economic growth. In this context, the concept of human capital, which is one of the factors used to explain inequalities in income distribution, is of great importance. Individuals can become more educated, healthier and more capable as a result of certain expenses. These expenditures have a direct impact on income distribution by increasing individuals' incomes. The aim of this study is to compare the human capital expenditures of households in terms of income groups. Method In this study, 2019 data of "TUIK Household Budget Statistics Micro Data Set" was used. Income is based on household annual disposable income and these households are divided into 5% income groups. Human capital expenditures were determined as the sum of education, health and culture expenditures by using the literature. One-way ANOVA method was used to see whether the share of human capital expenditures in total household expenditures differs significantly between income groups. Findings According to the preliminary findings, the average human capital expenditure rate of the 1st income group was only 2.65%, while the human capital expenditure average of the 20th income group was 12.73%. While the averages vary between these figures, there is a serious break after the 16th income group. According to the one-way ANOVA results, it was observed that the human capital expenditure averages of the lowest income groups began to differ statistically significantly at the $p < 0.001$ level, starting from the averages of the 12th income group and above. Results Preliminary findings indicate that not only the level of human capital expenditures of low-income groups is lower than that of higher-income groups, but also the human capital expenditure rates are lower. Human capital expenditures increase the employment opportunities of individuals and enable them to be employed in higher-income jobs. According to the results of the research, the inability of low-income households to spend sufficient human capital will not reduce the existing income inequality, but will increase these inequalities in favor of high-income households.

Keywords: Income distribution, Human capital, Inequality

[1] Assist. Prof. Ph.D, Hitit University Faculty of Economics and Administrative Sciences, Public Finance Department, ufukgergerlioglu@hitit.edu.tr

The Impact of Natural Disasters on Debt Sustainability: How Can Costs Be Managed?

Şebnem Tosunoğlu[1]

Abstract

Natural disasters are natural events that generally threaten people's lives and can cause serious loss of life and injuries, but can also have many devastating effects through different channels such as infrastructure losses, environmental effects, psychological effects and economic effects. Natural disasters can have major impacts in terms of economic costs. These costs may vary depending on the type of disaster, the economic structure of the affected region and the level of disaster preparedness. It can be said that economic costs will create a significant pressure on public finances and affect the sustainability of public expenditures, public revenues and public debt. Elimination, repair and reconstruction of the negative effects of natural disasters can be costly in terms of public finances. Large amounts of financing may be required, especially for the reconstruction of damaged areas. In addition, increased search and rescue costs, emergency aid supplies and financing of temporary shelter facilities will also be important cost sources. In combating disasters, governments' disaster-related contingent liabilities are also potential expenditure items that increase public expenditures. Because when a disaster occurs, contingent liabilities turn into actual expenses. Natural disasters also negatively affect the local economy with factors such as business closures, agricultural losses, and decline in tourism, causing losses in public revenues.

With the increase in public expenditures and the decrease in public revenues, the additional financing needed for post-disaster reconstruction and repair can be provided through internal or external borrowing. Meeting additional financing needs through borrowing may lead to an increase in the government debt burden and additional difficulties in the debt repayment process for many developing countries. Financial difficulties caused by natural disasters will also affect the credit rating of the state, creating an additional difficulty in public borrowing. If governments have not made preliminary preparations to cover possible costs arising from natural disasters, this will pose great risks to public finances. For this reason, it is important to carefully consider the financing mechanisms of natural disasters.

In this study, the financial burdens created by post-disaster aid, reconstruction and rehabilitation for developing countries will be discussed and, among the alternative financing sources that can be used in financing these, the issues of debt and sustainability will be emphasized. In the study, both short and long-term financial effects of borrowing in financing the negativities caused by natural disasters will be evaluated for developing countries, and the importance of debt sustainability will be emphasized so that governments can reduce the effects of natural disasters and adjust their fiscal areas efficiently. For this purpose, natural disaster financing strategies in selected developed countries with a large impact of natural disaster damages on total GDP will be compared. Thus, the benefits and risks of borrowing will be evaluated by revealing how different countries use borrowing in combating disasters. At the same time, the sustainability of debt strategies and their impact on financial stability will also

[1] Prof. Ph.D, Anadolu University, Department of Public Finance, ORCID: 0000-0002-5591-4403, ssel@anadolu.edu.tr

be evaluated. Descriptive analysis method will be used in the study. This method involves describing data related to the financing of natural disasters and analyzing them using basic statistics, graphs and tables. The analysis will help explain the distribution of key financing sources, damage costs, public expenditures and other relevant data. In addition, descriptive analyzes will be discussed comparatively for selected developing countries. Countries to be included in the evaluation; These are countries where the incidence of natural disasters and economic losses are high. Post-disaster recovery and financing strategies will be analyzed by evaluating the countries' financing difficulties, international aid opportunities, debt restructuring processes and borrowing strategies through the examples discussed.

Keywords: Natural Disasters, Debt Sustainability, Budget Balance

Analysis of the Relationship Between Budget Deficit and Balance of Payments in Türkiye (1975-2020)

Göksel Karaş[1]

Abstract

Today, budget and current account deficits are among the most critical problems of most developed and developing countries. This situation, defined as a twin deficit in the literature, is analysed within the framework of different views. These views are the Traditional Keynesian view that causality is from the budget deficit to the current account deficit, the current account targeting view where the causality is reversed from the current account deficit to the budget deficit, the Feldstein-Horioka Hypothesis that there is bidirectional causality between the budget deficit and the current account deficit, and the Ricardian Equivalence Hypothesis that there is no relationship between the budget deficit and the current account deficit. The study aims to analyse the relationship between the budget deficit and the current account deficit in Turkey from 1975 to 2020 within the scope of structural breaks. For this purpose, unit root tests with structural breaks, cointegration tests with structural breaks and causality tests were applied. The findings determined a long-term relationship between the budget deficit, current account deficit and interest in Turkey. Additionally, it was concluded that there is a one-way causality relationship between the current account deficit and the budget deficit and interest and a bidirectional causality relationship between the budget deficit and interest. Therefore, it can be stated that the view of current account targeting was supported in Turkey in the relevant period.

Keywords: Budget deficit, Current account deficit, Co-integration, Causality, Türkiye
JEL Codes: C32, E62, H62

1. Introduction

Due to the increasing functions of states over time, there are increases in public expenditures. Expenditures are basically financed through tax revenues. In addition to tax revenues, states also finance public expenditures through borrowing. If the expenditures are higher than the revenues obtained, budget deficits occur. When external borrowing is used mainly to finance the resulting budget deficits, this situation causes problems in terms of balance of payments and the budget deficit problem. Because the high amount of foreign debt necessitates sufficient foreign exchange inflow to the country for debt service, governments are expected to have a foreign trade surplus in this case. Policies must be followed to reduce imports and increase exports to achieve a foreign trade surplus. However, reducing the import level is expected to lead to economic stagnation, which means blocking the entry of raw materials and capital goods. At the same time, reducing imports may be impossible due to multilateral trade agreements. On the other hand, increasing exports in the short term is not easy in practice because it requires a specific production infrastructure and competitiveness. At this point, countries can intervene in the market through the exchange rate to create a trade surplus. Because the depreciation of the national currency and the increase in the value of the exchange rate will make imports expensive, thus reducing imports and making exports attractive.

[1] Assist. Prof. Ph.D, Kütahya Dumlupınar University, ORCID: 0000-0003-4091-1258, goksel.karas@dpu.edu.tr

However, since the rise in the exchange rate causes an increase in interest payments due to high external borrowing, it can pressure the budget. Based on this, the study aims to analyse the relationship between budget deficits and the balance of payments in Turkey from 1975 to 2020 with the help of structural break cointegration and causality tests.

2. Budget Deficit and Balance of Payments

Budget deficits, among the most critical problems of countries today, are mainly financed by taxes. In cases where tax revenues are insufficient, borrowing is resorted to. Fiscal expansion through budget deficits causes a current deficit as domestic total demand increases imports of foreign goods and services. The increased demand for loanable funds to finance the budget deficit causes domestic interest rates to rise. International capital movements, capital inflows with flexible exchange rates, and the subsequent domestic currency appreciation may reduce net exports and cause a current account deficit (Afonso et al., 2022). The necessary amount of foreign currency must be provided to reduce the current account deficit. For this, the foreign trade account, which has a dominant share in the balance of payments, must have a surplus. To achieve a foreign trade surplus, imports must either be reduced or exports encouraged. Both of these situations are challenging in practice. Apart from this, foreign exchange rates that directly impact foreign trade can be intervened to create a foreign trade surplus. However, this will cause an increase in interest payments due to the already large amount of foreign debt, which will cause a budget deficit (Ataç, 2013: 234).

In theory, experiencing the budget and current deficits simultaneously is referred to as a twin deficit by Feldstein (1986) (Helmy, 2018: 328). The literature examines the relationship between the budget deficit and the current account deficit through four different views (Afonso & Opoku, 2023: 1391-1392). The first of the views is the Traditional Keynesian view explained within the framework of the Mundell-Fleming Model. This view states that an increase in the budget deficit will have a negative impact on the current account deficit. In the Mundell-Fleming Model, a flexible exchange rate regime is valid. Therefore, in a flexible exchange rate regime, an increase in the budget deficit increases aggregate demand and also causes an increase in domestic real interest rates. The rise in interest rates attracts foreign capital, causing the domestic currency to appreciate and causing the current account balance to deteriorate due to the deterioration of the import-export balance (Salvatore, 2006: 706-707). The second view is the current account targeting view by Summers (1998). Accordingly, the direction of causality is from the current account deficit to the budget deficit. A deterioration in the current account balance leads to economic growth, which subsequently causes a decline in the budget balance (Xie & Chen, 2014: 96). The third view suggests that the causal link between the budget deficit and the current account deficit is somehow related to the degree of international capital mobility and the Feldstein and Horioka (1980) puzzle (Marinheiro, 2008: 1042). This view states that there is a bidirectional causality between the budget deficit and the current account deficit. The last view is the Ricardian Equivalence Hypothesis developed by Barro (1989). Accordingly, budget deficits do not affect the economy. To provide debt financing, economic units believe that the tax burden will increase in the future and increase their savings in line with the amount of debt (Tokatlıoğlu & Selen, 2019:187). Therefore, units perceive the increase in the budget deficit as the postponement of high taxes to the future. As a result, the Ricardian Equivalence Hypothesis assumes no causal relationship between the budget deficit and the current account deficit.

Turkey has faced budget and current account deficit problems since the 1980s, when the open growth model was adopted. The budget deficits and current account deficit

experienced in the 1994 crisis and the 2001 crisis were seen as the causes of the crisis. Although fiscal discipline was tried to be achieved in the budget after the 2001 crisis, it is seen that the current account deficit is on an increasing trend. The global financial crisis in 2008, the trade wars in 2018 and the COVID-19 process effective in 2020 were the reasons for the decrease in the current account deficit (Bolat et al., 2011: 348; Erer, 2022: 1297).

2.1. Literature Review

Many studies in the literature examine the relationship between budget deficit and current account deficit. These studies mostly used analyses such as cointegration analysis, least squares method and causality analysis. Some of the studies support the Keynesian theory (Roubini (1988), Ay et al. (2004), Lau & Tang (2009), Bolat et al. (2011), Sahoo & Das (2012), Trachanas & Katrakilidis (2013); Xie & Chen (2014); Erer (2022), Afonso et al. (2022)), some studies present the current account targeting view (Anoruo & Ramchander (1998), Kim & Kim (2006), Baharumshah et al. (2006), Yay & Taştan (2007), Magazzino (2012), Helmy (2018), Afonso & Coelho (2021), Afonso & Opoku (2023)), some studies include the Feldstein-Horioka view (Utkulu (2001), Bose & Jha (2011), Shastri (2019), Banday & Aneja (2021).)) and some studies support the Ricardian Equivalence Hypothesis (Ahmed (1987), Feldstein (1992), Roy & Gupta (2013), Atılgan et al. (2022)). Some studies have obtained different results even though they studied the same countries and country groups. This is because of the difference in the method used, the variables taken as a sample, and the time interval. The study differs from other studies in that it uses the cointegration test that considers structural breaks in Turkey and considers a broader period.

2.2. Analysis and Findings

Within the scope of the study, it aims to analyse the relationship between the budget deficit and the current account deficit in Turkey, considering structural breaks. For this purpose, firstly, the stationarity of the series was tested with the ADF unit root test and then with the Zivot-Andrews (1992) unit root test, which is a unit root test with structural breaks. According to the findings, according to the ADF unit root test, the budget deficit, current account deficit and interest rate are first-order stationary. In the unit root test with structural breaks, the hypothesis that it contains a unit root in the presence of structural breaks is not rejected, and it is concluded that there is a unit root.

Then, cointegration analysis with structural breaks, which takes structural breaks into account and was developed by Gregory and Hansen (1996), was applied. According to the findings, it was concluded that there is a long-term cointegrated relationship between the variables.

After determining the long-term relationship between the variables, causality analysis was applied to determine the direction of the relationship. The Granger causality analysis determined a one-way causality relationship between the current account deficit and the budget deficit. The findings show that the view of current account targeting was supported in Turkey from 1975 to 2020.

In addition, according to the applied variance decomposition analysis, while the current account deficit is mainly affected by the budget deficit, the budget deficit is affected more by the current account deficit. The interest rate is affected by both the current account deficit and the budget deficit. These results support the findings obtained in the causality analysis.

3. Conclusion

The study aimed to analyse the relationship between the budget deficit and the current account deficit in Turkey in the 1975-2020 period in the presence of structural breaks. According to the findings obtained within the scope of the study, the hypothesis that the variables used in the model contain unit roots in the presence of structural breaks was rejected, and it was concluded that they were stationary at their level values. Then, according to the Gregory-Hansen structural break cointegration test, it was concluded that the variables moved together in the long run. According to the findings of the causality analysis applied to determine the direction of the relationship, there was a unidirectional causality from the current account deficit to the budget deficit and the interest rate. In contrast, a bidirectional causality relationship was found between the interest rate and the budget deficit. Finally, according to the findings of variance decomposition analysis, it was concluded that the budget deficit was mainly affected by the current account deficit and the interest rate was affected by both the budget and the current account deficit. These findings also support the conclusions of causality analysis.

As a result, it can be stated that the view of current account targeting was supported in Turkey in the relevant period. Policies aimed at reducing the current account deficit and achieving a high growth rate have been followed in Turkey, especially in recent years. However, when we look at Turkey's foreign trade structure, it is seen that the main reason for the current account deficit is the foreign trade deficit. For this reason, imports in Turkey need to be reduced. However, considering that the dominant share in import items is the import of intermediate goods and raw materials, it is necessary to reduce foreign dependency by realising domestic production. Channelling expenditures within the scope of the budget to these areas is essential in the long term in combating both the budget deficit and the current account deficit.

References

Afonso, A. & Coelho, J. (2021). *Current Account Targeting Hypothesis versus Twin Deficit Hypothesis: The EMU Experience of Portugal*. REM Working Paper, 182-2021.

Afonso, A. & Opoku, P. K. (2023). "The nexus between fiscal and current account imbalances in OECD economies". *Applied Economics*, 55 (13), 1389-1406.

Afonso, A., Huart, F., Jalles, J. T. & Stanek, P. (2022). "Twin deficits revisited: A role for fiscal institutions?". *Journal of International Money and Finance*, 121 (2022), 1-22.

Ahmed, S. (1987). "Government spending, the balance of trade and the terms of trade in British history". *Journal of Monetary Economics*, 20 (2), 195–220.

Anoruo, E. & Ramchander, S. (1998). "Current Account and Fiscal Deficits: Evidence from Five Developing Economies of Asia". *Journal of Asian Economics*, 9 (3), 487–501.

Ataç, B. (2013). *Maliye Politikası,* 10. Baskı. Ankara: Turhan Kitabevi.

Atılgan, D., İspir, T. & Uğur, B. (2022). "G8 Ülkelerinde İkiz Açık Hipotezinin Geçerliliği: Panel Nedensellik Analizi". *Finans Ekonomi ve Sosyal Araştırmalar Dergisi*, 7 (4), 661-668.

Ay, A., Karaçor, Z., Mucuk, M. & Erdoğan, S. (2004), "Bütçe Açığı-Cari İşlemler Açığı Arasındaki İlişki: Türkiye Örneği (1992-2003)". *Selçuk Üniversitesi SBE Dergisi*, 12, 75-82.

Baharumshah, A., Lau, E. & Khalid, A. (2006). "Testing twin deficit hypothesis using VARs and variance decomposition". *Journal of Asia Pacific Economy*, 11 (August (3)), 331–354.

Banday, U. J. & Aneja, R. (2021). "Budget deficit and current account deficit in case of South Africa". *J Public Affairs*, 22, 1-11.

Bolat, S., Belke, M. & Aras, O. (2011). "Türkiye'de İkiz Açık Hipotezinin Geçerliliği: Sınır Testi Yaklaşımı". *Maliye Dergisi*, 161, 347-364.

Bose, S. & Jha, S. (2011). "India's Twin Deficits: Some Fresh Empirical Evidence". *ICRA Bulletin, Money and Finance*, 1, 83–104.

Erer, E. (2022). "İkiz Açık Hipotezi Türkiye'de Geçerliliği: Zamanla Değişen Nedensellik Analizi". *Ankara Hacı Bayram Veli Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 24 (3), 1291-1326.

Feldstein, M. (1992), *The Budget and Trade Deficits Aren't Really Twins*, NBER Working Paper, No. 3966, 1-11.

Helmy, H. E. (2018). "The twin deficit hypothesis in Egypt". *Journal of Policy Modeling*, 40 (2018), 328–349.

Kim, C. & Kim, D. (2006). "Does Korea have twin deficits?". *Applied Economic Letters*, 13, 675–680.

Lau, E., & Tang, T. C. (2009). *Twin deficits in Cambodia: Are there reasons for concern? An empirical study. (Disscussion Papers)*, Monash University, Department of Economics, 11(09), 1–9.

Magazzino, C. (2012). "The Twin Deficits Phenomenon: Evidence from Italy". *Journal of Economic Cooperation and Development,* 33 (3), 65–80.

Marinheiro, C. F. (2008). "Ricardian equivalence, twin deficits, and the Feldstein–Horioka puzzle in Egypt". *Journal of Policy Modeling*, 30 (2008), 1041–1056.

Roubini, N. (1988), *Current Account and Budget Deficits in an Intertemporal Model of Consumption and Taxation Smoothing. A Solution to the "Feldstein-Horioka Puzzle"?,* No. 2773, NBER Working Papers, National Bureau of Economic Research, Inc.

Roy, A. & Gupta, S. D. (2013). "An Empirical Investigation of Budget and Trade Deficits: The Case of Bangladesh". *International Journal of Economics and Financial Issues,* 3 (3), 570–579.

Sahoo, D. & Das, A. B. (2012). "*ARDL Co-Integration Approach to the External and Internal Sector Equilibrium of India*". Procedia-Social and Behavioral Sciences.

Salvatore, D. (2006). "Twin deficits in the G-7 countries and global structural imbalances". *Journal of Policy Modeling*, 28 (2006), 701–712.

Shastri, S. (2019). "Re-Examining the Twin Deficit Hypothesis for Major South Asian Economies: Some Insights into the Transmission Mechanism". *Indian Growth and Development Review*, 12 (3), 265–287.

Tokatlıoğlu, M. & Selen, U. (2019). *Maliye Politikası,* 2. Baskı. Bursa: Ekin Basım Yayın.

Trachanas, E. & Katrakilidis, C. (2013). "The Dynamic Linkages of Fiscal and Current Account Deficits: New Evidence from Five Highly Indebted European Countries Accounting for Regime Shifts and Asymmetries". *Economic Modelling*, 31, 502–510.

Utkulu, U. (2001). "Türkiye'de Dış Açıkların Belirleyicileri: Ekonometrik Bir İnceleme". *DEÜ İİBF Dergisi*, 16 (2), 113-132.

Xie, Z. & Chen, S. W. (2014). "Untangling the Causal Relationship Between Government Budget and Current Account Deficits in OECD Countries: Evidence from Bootstrap Panel Granger Causality". *International Review of Economics & Finance*, 31, 95–104.

Yay, G. G. & Taştan, H. (2007). "İkiz Açıklar Olgusu: Frekans Alanında Nedensellik Yaklaşımı". *İÜ Siyasal Bilgiler Fakültesi Dergisi*, 37, 87-111.

Effect of Indirect Taxes on Poverty[1]

İhsan Cemil Demir[2] **Merve Malak**[3]

Abstract

The study's primary purpose is to explore the impact of Value Added Tax and Excise Tax on poverty. Panel data analysis, which allows the use of both unit and time data, was used as a method in the study. In this context, panel data analysis was carried out based on 24 OECD countries and the time between 2004-2017. Before analyzing the established model, various tests were carried out to decide which model was suitable. In this context, analysis was carried out with the random effects model due to the F test, Breusch Pagan LM test, and Hausman test. According to the analysis results as the share of Excise Tax in GDP increases by one unit, the poverty level decreases by 1.28%. On the other hand, there is no statistically significant difference between VAT and poverty rate.

Key Words: Excise Tax, Value Added Tax, Poverty
Jel Codes: H20, I32, I38, P43

1. Introduction

Poverty can define as low income and deprivation of various elements such as employment, housing, health, education, and social life. Tax policy is one of the main tools states can use to against poverty and income inequality. There is a very close connection between the subject of tax and tax justice. While some argue that it would be fairer to levy taxes on income and wealth, the leading solvency indicators, some say that expenditures are more effective than income.

Taxes levied on expenditures can adversely affect income and wealth distribution through progressive and reflective mechanisms. Consumption taxes are not a viable means of income generation to improve the poverty situation. Therefore, taking measures to minimize the distorting effects of redistribution policies would be a more appropriate policy for expenditure taxes. In this context, policies such as low taxes on compulsory goods, applying different tax rates to various goods and services, and using high tax rates on luxury consumption goods with low demand elasticity, may limit the adverse effects of expenditure taxes.

This study was conducted to examine the effect of indirect taxes on poverty. The scope of the study consists of OECD countries. When the studies on OECD countries in the literature are examined, it is seen that public expenditure items are generally taken into account in terms of poverty. Therefore, in this study, it is aimed to examine the effect of indirect taxes on poverty.

[1] This study was produced from the doctoral thesis titled “Public Instruments for Poverty Reduction: The Example of OECD Countries”.

[2] Prof. Ph.D, Afyon Kocatepe University, Department of Public Finance, ORCID: 0000-0002-4756-0617, icdemir@aku.edu.tr

[3] Lecturer Ph.D, Afyon Kocatepe University, Dinar Vocational School, Accounting and Tax Practices, ORCID: 0000-0002-0477-3719, mmalak@aku.edu.tr

2. Concept of Poverty

Poverty has not always been expressed or perceived as the opposite of rich. Different conditions, such as a person's declining position in life, being unprotected, being excluded from society, or being sick, were also perceived as poverty. They define poverty as monetary deprivation that began with the spread of the commercial economy (Başkaya & Ördek, 2008: 1368-1369). Rowntree defines the concept of poverty as the food, clothing and shelter required for a person's physical survival, etc. defined as not having enough income to meet their needs (Rowntree, 1901: 86). Sen defined poverty as the inability to reach a certain skill level and emphasized that public policy is essential in preventing talent inequality (Sen, 1983: 168). The report published by the World Bank in 1990 dealt with poverty mostly in monetary terms and defined people below a certain income level as poor (World Bank, 1990: 26). The United Nations Development Program (UNDP) has removed poverty from being a monetary phenomenon and identified mandatory elements for human development. These elements consist of lifelong health, a creative life, an average standard of living, self-confidence, and dignity. UNDP defined deprivation of these elements as poverty (UNDP, 1990: 9-10).

3. Effect of Indirect Taxes on Poverty

When we look at the taxes collected on expenditures in general terms, we mostly encounter Value Added Tax (VAT) and Excise Tax (ET). The primary purpose of adopting and widely using VAT is that it is low-cost, provides high revenue, and has a strong auto-control mechanism. Since the ability to reflect this tax, which provides essential economic activities for states, is very strong, it generally remains on the consumer, thus negatively impacting lower-income groups (Akdoğan, 2017: 292). Special consumption taxes aim to reduce inequalities in tax distribution by making indirect taxes progressive. These taxes, concentrated on luxury consumer goods, especially in underdeveloped countries, can reduce income distribution imbalances. However, on the other hand, high tax rates on goods not included in the expenses of high-income segments will not significantly reduce the income of these segments, so its impact on income distribution and poverty may remain limited. In this case, the tax will reduce the demand for luxury goods, mostly among people in the middle-income group. (Taylar, 2010: 446-447).

Taxes on expenditures, especially VAT, are powerful revenue-generating mechanisms for states. For this reason, although there is an increasing trend in countries towards taxes collected on expenditures, the negative impact of these taxes on redistribution and poverty can be relatively alleviated if the income obtained from these taxes is transferred to the segments in need through social transfer expenditure or social security mechanisms (Alavuotunki et al. 2019:491)

States are turning to indirect taxes to reduce the tax burden on income and capital and increase economic growth. In this context, it is thought that taxation of individual earnings negatively affects productivity and, thus, economic growth. However, although this understanding is acceptable in terms of growth, it does not eliminate the fact that in economies where income imbalances and poverty are high, low-income households will be the financiers of growth (Durkaya, 2015: 9). Therefore, expenditure taxes have a positive effect on economic efficiency and a negative effect on tax justice efficiency. Therefore, to ensure tax justice and economic efficiency together, income and expenditure taxes should be applied according to the countries' economic conditions (Sağbaş and Saruç, 2010: 214).

4. Methodology of Studies

In this study, it is aimed to examine the effect of indirect taxes on poverty in OECD countries. The sample of the study consisted of 24 OECD countries with data suitable for analysis. The time 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: ET has an impact on the poverty rate.

H_2: VAT has an impact on the poverty rate.

The variables in the model used in the study were inspired by the studies on poverty and the share of indirect taxes in gross domestic product was added to the factors affecting poverty. In this context, the models and variables used to examine the effect of indirect taxes on poverty as follows:

$$PHR_{it} = \beta_{0it} + \beta_1 GDP_{it} + \beta_2 Inf_{it} + \beta_3 Gini_{it} + \beta_4 \ Ln(IPC)_{it} + \beta_5 UR_{it} + \beta_6 (ET)_{it} + \beta_7 (VAT)_{it}$$

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*
ET: *Excise Tax (% GDP)*
VAT: *Value Added Tax (% GDP)*

Before analyzing the impact of taxes on expenditures on poverty, F, LM, and Hausman tests were conducted to decide on model selection. As a result of these tests, it concluded that the fixed effects model (FE) is consistent with the random model (RE).

After the model determination tests, heteroscedasticity, autocorrelation, and cross-section dependence tests were performed. As a result of the Wald test for heteroskedasticity testing, it concluded that there was a heteroscedasticity problem in the model. Durbin-Watson and Baltagi-Wu tests were applied to test whether there was autocorrelation in the model. As a result of the tests, it was determined that there was also an autocorrelation problem in the model. Finally, Pesaran-CD, Friedman, and Frees tests were performed to test cross-sectional dependency in the model. As a result of these tests, it was concluded that there was cross-sectional dependence in the model. In this context, in addition to the fixed model estimator (FE), the model was also estimated with the Drisccoll-Kraay (DK) method, which is one of the effective prediction methods against deviations since it includes cross-section, heteroscedasticity, and autocorrelation problems.

5. Results and Conclusion

The estimation results of the effects of indirect taxes on the poverty rate are given in Table 1.

Table 1. Effects of Indirect 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	130,146	130,146
GDP	0.0216*** (0,70)	-0,053** (-2,09)	-0,053** (-2,14)	0,015 (0,64)	0,019 (0,82)	0,011 (0,48)	0,011 (0,38)
Inf		-9,720*** (-13,21)	-9,233*** (-12,66)	-4,178*** (-4,84)	-5,456*** (-5,28)	-5,253*** (-5,23)	-5,253*** (-6,15)
Gini			0,0279*** (3,94)	0,022*** (3,55)	0,019*** (3,08)	0,204*** (3,30)	0,204*** (3,48)
Ln (IPC)				-11,322*** (-8,93)	-8,899*** (-5,33)	-10,214*** (-6,29)	-10,214*** (-3,66)
UR					0,091** (2,22)	0,076** (1,88)	0,076 (1,58)
ET						-1,286*** (-4,84)	-1,286** (-2,64)
VAT						-0,191 (-1,25)	-0,191 (-0,78)
R^2	0,212	0,361	0,391	0,516	0,524	0,566	0,566

Statistical Significance Levels: **0.05<p<0.10 **0.01<p<0.05 ***<0.01. The values in parentheses show the t statistic.*

Analyzes made to estimate the impact of VAT and ET on poverty are included in Table 1. According to the results of two different estimation methods, there is no statistical significance between growth and poverty rate. Poverty rate: It is statistically significant at the 5% level with the Gini coefficient and at the 1% level with the Ln(IPC) coefficient, and the coefficient signs of these significances are in line with expectations. Accordingly, a one-unit increase in the Gini coefficient increases the poverty level by 0.20%, while a 1-unit increase in Ln (IPC) reduces the poverty rate by 10.21. While there is no significance between the unemployment and poverty rates in the DK method, there is a significance level of 5% in the FE method. The coefficient sign between inflation and poverty rate is negative, and is statistically significant at the 1% level.

ET, generally collected on goods and services demanded by high-income people, is expected to affect poverty positively. According to the analysis results, the coefficient sign between ET and the poverty rate is negative, as expected, and statistically significant at the 1% level. Accordingly, as the share of ET in GDP increases by one unit, the poverty level decreases by 1.28%. VAT is expected to have a distorting effect on the poverty rate. According to the analysis results, there is no statistical significance between VAT and the poverty rate. Therefore, while the hypothesis "H_1: ET has an impact on the poverty rate" was accepted, the hypothesis "H_2: VAT has an impact on the poverty rate" was rejected.

References

Akdoğan, A. (2017). *Kamu Maliyesi*, Ankara: Gazi Kitapevi.

Aktan, C. (2002). Gelir Dağılımında Adaletin Sağlanması ve Yoksulluk Sorunun Ortadan Kaldırılması İçin Vergi Sistemi Nasıl Dizayn Edilmeli?. *Yoksullukla Mücadele Stratejileri.* (Ed). Aktan, C.C., Ankara: Hak-İş Konfederasyonu Yayınları, 585-606.

Alavuotinki, K., Haapen, M. & Pirtilla, J. (2019). The Effects of the Value-Added Tax on Revenue and Inequality. *The Journal of Development Studies*, 1-20.

Başkaya, F. ve Ördek, A. (2008). *Ekonomik Kurumlar ve Kavramlar Sözlüğü Eleştirel Bir Bakış,* İstanbul: Maki Basım

Durkaya, M. (2015). Türkiye'de Vergi ile Yoksulluk Arasındaki İlişkilere Kuramsal Yaklaşım, *Karadeniz Sosyal Bilimler Dergisi, 7*(12), 1-23.

Lipton, M. (1997). Editorial: Poverty Are There Holes in The Consensus. *World Development, 25*(7), 1003-1007.

Rowntree, S. (1901). *Poverty A Study of Town Life.* New York: The Macmillan Company.

Sağbaş, S. ve Saruç, N.T. (2010). *Vergi Teorisi.* İstanbul Üniversitesi: Açık ve Uzaktan Fakültesi.

Sen, A. (1983). Poor, Relatively Speaking. *Oxford Economic Papers, 35*(2), 153-169.

Taylar, Y. (2010). Vergi Teorisi Açısından Özel Tüketim Vergileri ve Türk Özel Tüketim Vergisi Uygulaması. *Dokuz Eylül Üniversitesi Hukuk Fakültesi Dergisi,* 12, 435-467.

UNDP, (1990). *Human Development Report.* United Nations Development Programme New York: Oxford University Press.

World Bank, (1990). Poverty. World Development Report. https: //openknowledge.worldbank.org/bitstream/handle/10986/5973/WDR%201990%20-%20English.pdf?sequence=5&isAllowed=y.

Developing Tax Performance Index Methodology: The Case of Türkiye

Metin Allahverdi[1]

Abstract

In this study, an index methodology has been developed to compare the tax performance of a country over a certain period with other macroeconomic, demographic, sociocultural, financial, and technological indicators. The stages of the developed index methodology are based on mathematical modeling. The methodology developed in the study was applied to the provincial level of Türkiye. The findings show that the index score provides appropriate results for evaluating a country's tax performance in static and dynamic terms and can be used as an indicator in future empirical studies.

Keywords: Tax Performance, Tax Performance Index, Türkiye
Jel Codes: H71, C43, C38

1. Introduction

Measurement of tax performance is a continuous process to determine the extent to which the goals and objectives of tax policy are achieved. Establishing an appropriate methodology for ensuring the continuity of this process, collecting, analyzing, and interpreting sufficient data will play an important role in shaping fiscal policies and developing strategies and programs. A review of the literature reveals that different approaches are used to measure tax performance (Frank, 1959; Bird, 1964; Tait et al., 1979; Tanzi, 1981). Most of the studies in the literature are not based on the calculation of an index but on the acceptance and evaluation of some tax indicators as indices (Leuthold, 1991; Stotsky & WoldeMariam, 1997; Teera & Hudson, 2004; Gupta, 2007). Therefore, the motivation of this study is to develop a methodology that can reveal the tax performance of a country or a region over a certain period of time in the form of an index score.

2. Methodology

Index methodology includes a set of rules or criteria that govern the construction, calculation, and maintenance of an index. With these characteristics, index measurement is a continuous process. Ensuring this continuity leads to the need to establish an index methodology. The aim of this study is to develop a methodology that can reveal a country's tax performance over a given period of time in the form of an index score. Some studies in the literature suggest that tax performance can be measured as an index (Bunescu, 2015: 45; Allahverdi & Alagöz, 2023: 75).

[1] Lecturer Ph.D, Selçuk University, ORCID: 0000-0002-8247-4167, allahverdi@selcuk.edu.tr

In index studies in the literature, sub-indexes are generally determined and measured for the target index (Al, 2018: 60; Machova & Kotlan, 2013: 169; Macek & Murin, 2020: 230; Bunn & Asen, 2021: 52). Creating sub-indexes is used as a technique to integrate large amounts of heterogeneous data in a compact way (Söylemez & Varol, 2020: 124). The tax performance indicators to be determined in the study will constitute the sub-indexes of the tax performance index (TPI), which is the target index.

2.1. Methodology Steps

In this study five step methodology based on a mathematical model was applied, consisting of a selection of variables, data organization, normalization of data, data combining and creation of sub-indexes, and finally revealing the main index.

1. *Step: Selection of variables*

This study uses the tax performance indicators shown in Table 1.

Table 1: Variables Used in Tax Performance Index Calculation

Index	Sub-Indexes	Variables
Tax Performance Index (TPI)	Tax Revenue Share Index (TRSI)	Tax Collection/Total Tax Collection
	Tax Collection Rate Index (TCRI)	Tax Collection/Tax Base
	Tax Burden Index (TBI)	Tax Collection/GDP
	Tax Gap Index (TGI)	(Tax Base – Tax Collection)/GDP

Data for all variables are formulated at the province level for Türkiye. All data are used for the period 2008-2021.

2. *Step: Data organization*

Data received from official institutions were formulated at the province level according to the variables. All of the data were used for the years 2008-2021. The total number of data used is 4536.

3. *Step: Normalization of data*

In this study, the data of the variables were normalized according to the min-max method. This method converted the values to positive and 0-1 range in the presence of heterogeneous structures and outliers. Accordingly, the data of the variables were normalized with the following equations:

a) If the effect of the values on the index is positive;

$$S_{ic}^{t} = \frac{X_{ic}^{t} - min_{c}X_{i}^{t}}{max_{c}X_{i}^{t} - min_{c}X_{i}^{t}} \quad (1)$$

b) If the effect of the values on the index is negative;

$$S_{ic}^{t} = \frac{max_{c}X_{i}^{t} - X_{ic}^{t}}{max_{c}X_{i}^{t} - min_{c}X_{i}^{t}} \quad (2)$$

where X_{ic}^{t} signifies the value of the *i*-th indicator for the *c*-th city at time *t*. Accordingly, the data of all variables took normalized values in the range of 0-1. Here, if the normalized value of a data is 0, it will represent the worst performance and if it is 1, it will represent the best performance. In the analysis, tax revenue share, tax collection rate and tax burden variables are

normalized according to Equation (1) and tax gap variable is normalized according to Equation (2).

4. Step: Data combining and creation of sub-indexes

The inverse Euclidean method was be applied to combine the normalized data. This step aims to create two different sub-indices, one variable-based and one period-based (annual).

$$V_c^t = 1 - \frac{\sqrt{(1-S_{ic_1}^t)^2 + (1-S_{ic_2}^t)^2 + \cdots + (1-S_{ic_n}^t)^2)}}{\sqrt{n}} \quad (3)$$

where S_{ic}^t signifies the normalized value of the *i*-th indicator for the *c*-th city at time *t*.

5. Step: Creating of Tax Performance Index

In the last stage, the tax performance index is calculated by averaging the annual-based sub-indexes calculated by Equation (3).

$$TPI_c = \frac{V_c^t{}_1 + V_c^t{}_2 + ,\ldots, + V_c^t{}_n}{n} \quad (4)$$

where V_c^t signifies the annual-based sub-indexes value of the *c*-th city at time *t*.

3. Findings

According to the analysis, Türkiye's average province-level tax performance index for 2008-2021 is as follows.

Table 2: Turkey's Provincial Tax Performance Index Score (2008-2021, average)

Rank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Provinces	İstanbul	Kocaeli	İzmir	Mersin	Ankara	Hatay	Bursa	Tekirdağ	Rize	Zonguldak	Samsun	Edirne	Trabzon	Kahramanmaraş	Kayseri	Tunceli	Eskişehir	
TPI	0,624	0,519	0,468	0,375	0,373	0,367	0,341	0,335	0,326	0,311	0,310	0,309	0,308	0,308	0,304	0,298	0,298	
Rank	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	Above mean
Provinces	Elazığ	Karabük	Balıkesir	Aksaray	Ağrı	Çanakkale	Bingöl	Bayburt	Denizli	Isparta	Manisa	Çankırı	Çorum	Konya	Bitlis	Gümüşhane	Kastamonu	
TPI	0,296	0,295	0,294	0,291	0,290	0,289	0,287	0,287	0,286	0,285	0,285	0,285	0,284	0,284	0,283	0,283	0,282	
Rank	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	
Provinces	Malatya	Artvin	Ardahan	Kırıkkale	Karaman	Giresun	Burdur	Muş	Siirt	Bartın	Gaziantep	Erzincan	Kütahya	Erzurum	Ordu	Antalya	Sinop	
TPI	0,279	0,279	0,279	0,278	0,278	0,277	0,276	0,276	0,275	0,273	0,272	0,270	0,270	0,270	0,267	0,267	0,265	
Rank	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	
Provinces	Tokat	Afyonkarahisar	Kırşehir	Uşak	Adıyaman	Muğla	Batman	Niğde	Diyarbakır	Bolu	Amasya	Kars	Sakarya	Osmaniye	Nevşehir	Şanlıurfa	Adana	Below mean
TPI	0,261	0,260	0,260	0,259	0,255	0,254	0,253	0,253	0,253	0,252	0,252	0,249	0,246	0,246	0,246	0,242	0,240	
Rank	69	70	71	72	73	74	75	76	77	78	79	80	81					
Provinces	Aydın	Yalova	Kırklareli	Bilecik	Şırnak	Yozgat	Sivas	Iğdır	Mardin	Hakkari	Kilis	Düzce	Van					
TPI	0,237	0,233	0,231	0,229	0,221	0,216	0,213	0,211	0,207	0,189	0,186	0,183	0,160					

Table 2 shows that the province with the highest tax performance index score is Istanbul with 0.624, followed by Kocaeli, Izmir, Mersin and Ankara. The province with the lowest tax performance index score is Van with 0.16. The mean score of all provinces is 0.28. Türkiye's 34 provinces are above and 47 provinces are below the calculated mean score.

Table 3: Descriptive Statistics of Tax Performance Index

Years	Mean	Standard Deviation	Minimum	Maximum	The Number of Provinces Above Mean
2008	0,268	0,06248	0,077	0,588	42
2009	0,265	0,06499	0,103	0,595	39
2010	0,261	0,06673	0,114	0,586	41
2011	0,248	0,06696	0,111	0,523	43
2012	0,258	0,06707	0,116	0,579	42
2013	0,255	0,06504	0,011	0,509	44
2014	0,269	0,06570	0,011	0,563	45
2015	0,280	0,06816	0,007	0,601	37
2016	0,276	0,07003	0,007	0,587	37
2017	0,284	0,07775	0,027	0,623	34
2018	0,306	0,08297	0,023	0,708	22
2019	0,316	0,08366	0,016	0,744	24
2020	0,312	0,08355	0,018	0,745	23
2021	0,325	0,09295	0,014	0,787	31

The developed index provides both dynamic and static results. To demonstrate the dynamism, the index score is calculated for the years 2008-2021. Accordingly, while the lowest average index score of the provinces in Turkey was in 2011, it was found that the performance increased towards the last years, but the performance gap between provinces widened.

4. Results

This paper develops a feasible methodology based on a mathematical model to measure a country's tax performance as an index score. This index provides both dynamic and static results. According to the findings of the study, when the tax performance index is constructed with the right indicators, it allows for positive analyses that include objective evaluations. According to these results, revealing the current performance will lead to determining the extent of existing deviations to improve performance, understanding the causes of these deviations, and making future decisions to evaluate and modify them to achieve better results.

The results contribute to the literature by providing a generalized performance assessment from the specific to the general in an inductive approach. On the other hand, the resulting index score can be used to derive normative results that can be used in statistical analyses.

References

Al, İ. (2018). Türkiye'nin Mali Performansının Ölçülmesi: Endeks Yaklaşımı. Maliye Dergisi, (175), 55-69.

Allahverdi, M., & Alagöz, A. (2023). The Analysis of Components Affecting Tax Performance in Turkey and the Establishment of Provincial Level Tax Performance Index. *Uluslararası Muhasebe ve Finans Araştırmaları Dergisi*, *5*(1), 74-106.

Bird, R. (1964). A Note on "Tax Sacrifice" Comparısons. National Tax Journal, 17(3), 303-308.

Bunescu, L. (2015). Tax Performance Assessment in Scandinavian Countries. Studies in Business and Economics, 10(1), 47-65.

Bunn, D., & Asen, E. (2021). International Tax Competitiveness Index 2021. Tax Foundation, Washingtion, D.C.

Frank, H. J. (1959). Measuring State Tax Burdens. National Tax Journal, 12(2), 179-185.

Gelirler İdaresi Başkanlığı (2023). Bütçe Gelirleri. Erişim Adresi: https://www.gib.gov.tr/sites/default/files/fileadmin/user_upload/VI/GBG1.htm

Gupta, A. S. (2007). Determinants of Tax Revenue Efforts in Developing Countries. International Monetary Fund Working Papers No. 07/184, 1-39.

Leuthold, J. H. (1991). Tax Shares in Developing Economies a Panel Study. Journal of Development Economics, 35(1), 173-185.

Macek, R., & Murín, M. (2020). World Tax Index: Methodology Changes and Revision of Data for OECD Countries from 2000 to 2018. In *Proceedings of the International Scientific Conference ECONOMIC AND SOCIAL POLICY. Ostrava: Vysoká škola PRIGO* (pp. 227-239).

Machová, Z., & Kotlán, I. (2013). World Tax Index: New Methodology for OECD Countries, 2000–2012. *DANUBE*, *4*(2), 165-179.

Özdamar, K. (2018). Paket Programlar ile İstatistiksel Veri Analizi, Cilt 2, Ankara: Nisan Kitabevi, 10. Baskı.

Söylemez, E., & Varol, Ç. (2020). Developing a socio-spatial index methodology for measuring cross-border mobility. Geographica Pannonica, 24(2), 124-135.

Stotsky, J. G., & WoldeMariam, A. (1997). Tax Effort in Sub-Saharan Africa, IMF Working Papers, 1997(107), A001.

Tait, A. A., Gratz, W. L., ve Eichengreen, B. J. (1979). International Comparisons of Taxation for Selected Developing Countries. 1972–76, Staff Papers - International Monetary Fund, 1979(001), 123-156.

Tanzi, V. (1981). A Statistical Evaluation of Taxation in Sub-Saharan Africa. V. Tanzi, M. Z. Yücelik, P. S. Griffith & C. A. Aguirre (Eds.), Taxation in Sub-Saharan Africa içinde (ss. 45-50). Washington: International Monetary Fund.

Teera, J. M., & Hudson, J. (2004). Tax Performance: A Comparative Study. Journal of International Development, 16(6), 785-802.

Universal Basic Income Approach and Its Applicability in Türkiye: An Evaluation from Fiscal Policy Perspective

Mehmet Güneş[1] **Emine Kızıltaş Uzunali**[2]

Abstract

The aim of this study is to make determinations and develop suggestions to increase certainty in taxpayer rights during the application for conciliation and to ensure that the tax and penalty revenues accrued as a result of conciliation are transferred to the treasury as soon as possible. In the justification for the establishment of the post-assessment reconciliation institution, which was included in Turkish tax law with Law No. 205 in 1963; The aim is to reduce the workload of the judiciary by ensuring legal security and transferring tax and penalty revenues to the treasury as soon as possible. This study investigates whether the provisions regarding application and payment periods in conciliation are sufficient to achieve the said objectives in the Tax Procedure Law No. 213, in the light of the principles of non-contradiction of provisions and administrative consistency in terms of law-making technique. In this research, a survey was conducted in Antalya province as the primary source and the results were analyzed.

In addition to the general literature review on the subject, reconciliation practices in England, the United States, France and Germany were examined and compared with the practice in Turkey. As a result of the findings; In order to ensure the collection of taxes and penalties accrued as a result of the reconciliation, it is thought that if the payment period requirement is not complied with, it will be considered as a "violation of the agreement", which will affect the deterrence of tax penalties and the behavior of taxpayers and will contribute positively to the collection. If the agreed tax and/or penalty amounts are not paid on time, resetting the tax and penalty amounts will create payment pressure as it will increase the risk factor for the taxpayer. Simultaneously within thirty days from the notification of the tax and penalty notice; Applying for conciliation by the taxpayer or the penalty addressees, provided that the right to request a reduction in penalties, conciliation and filing a lawsuit is reserved, will be mandatory and the first way, not optional, and this will eliminate the "optional chaos".

As a result, the revenues of the tax administration will increase, complexity will be prevented, certainty in the use of taxpayer rights will increase, and the workload of the judiciary will decrease. In addition, by ensuring that finalized receivables are relieved of the burden of follow-up, the abuse of the right granted to taxpayers or penal recipients will be prevented, and the reconciliation institution will be given a collection-based structure. Regarding the application period requirement included in the Annex 1 provision of the Tax Procedure Law and the relevant reconciliation regulation; In our legislation where tax complexity is high, the tax and/or penalty notice is notified to the taxpayer or penalty addressee simultaneously, apart from the normal payment; There are three rights: reconciliation, reduction of penalties and the right to appeal

[1] Revenue Specialist, Ministry of Treasury and Finance, ORCID: 0000-0002-4501-5594, mehmetgunes33@hotmail.com.tr

[2] Prof. Ph.D, Siirt University, Department of Public Finance, ORCID: 0000-0002-7610-1567, emine.uzunali@siirt.edu.tr

to the judiciary. In the rights process that we define as "optional chaos", it is thought that it would be appropriate to first regulate the way of conciliation with the administration as a mandatory and first way, otherwise it will be considered as an administrative authority violation, and if an agreement is not reached, legal action should be taken, taking into account the freedom to seek rights. Therefore, disputes that go to court, which is a difficult, expensive and troublesome method in terms of tax costs, will be reduced further and will be resolved in most administrative stages. The cases referred to the judiciary will be resolved within a reasonable time, which is the basis of the right to a fair trial. Additionally, the judicial body will examine other case files closely and make a fair decision within a reasonable time, taking into account the time value of money in tax revenues, and this will further strengthen the situation.

Regarding the payment period requirement included in Annex 8 of the Tax Procedure Law and the relevant pre- and post-assessment reconciliation regulations; Considering the reason for the enactment of the relevant law, it is thought that there should be a disruptive time requirement for payment of agreed tax and penalty amounts, as in other administrative solutions in line with the principles of "inconsistency of provisions" and "administrative consistency" to ensure consistency in similar works and transactions of the administration. Since the relevant provision of the said law is far from the reason for its introduction and negatively affects the subsequent stages of the administrative process, a disruptive time requirement should be imposed in the payment of the agreed tax and penalty amounts, not just accrual and delay interest. In this context, failure to pay the tax and penalty amounts accrued as a result of the reconciliation on time should be considered as a "violation of agreement" and the tax and penalty amounts should be converted to their original state. Thus, at the point of achieving the desired financial goals without compromise; By preventing the abuse of taxpayer rights and ensuring payment pressure, the reconciliation institution will cease to be an accrual-based institution and will have a collection-based structure. Based on the principles of justice and legality in taxation, it is thought that the collection-based structure will directly increase public resources and have positive effects on the state budget, which is our common wallet.

Keywords: Optional Chaos, Consensus Violation, Inconsistency of Provisions, Administrative Consistency, Taxpayer Rights.

Corporate Social Responsibility in Global Reporting Initiative Standards and Taxation

Gülşen Gedik[1]

Abstract

Corporate Social Responsibility (CSR) is a strategy for corporate business which beneficial and ethic value for community. The aim of the CSR is enable to economic, social and environmental sustainability and has become an important factor in corporate decision- making after years of shareholder-centric thinking. According to European Commission "CSR is the responsibility of enterprises for their impact on society". But CSR is not a range of additional activities that a company adopt. Rather, it is a way of carrying out its core activity which recognize the company's responsibility to society as forming part of the business environment. CSR must be distinguished from corporate philantrophy such as donations to charitable or community causes, which relates to the distribution of profits rather than to the manner in which they are earned. CSR considered four categories as a environmental responsibility, human rights responsibility, help responsibility and economic responsibility.

The application of CSR to tax issues has not received so much attention but this beginning to change. Whereas commercial transactions can be varied in a large number of ways to support CSR objectives by far the most significant variable for tax relates its amount. As a result the major issues that arise in attempting to apply CSR principles to taxation concern those actions that can reduce the liability: Tax avoidance and tax planning. Another issue about relation between CSR and taxation is GRI Tax Standards. Most companies comply with the Standards and we have to follow developments in this context.

Key Words: Corporate Social Responsibility, Tax, GRI
Jel Code: K34, K00, M4

1. Introduction

In recent years considerations of corporate social responsibility (CSR) have come to play a significant part in decision making process within companies (Williams, 2007:10).Corporate social responsibility (CSR) is defined as a strategy that the company will implement for activities that add ethical value and benefit society. Its aim is to ensure economic, social and environmental sustainability, and it has begun to become an important factor in the decision-making bodies of companies years after the shareholder-oriented approach. CSR is not an additional activity carried out by a company, but it is the company's continuing activities within the scope of a responsibility that is beneficial to society. However, this responsibility should be treated differently than donations to charities or charitable groups. Corporate social responsibility (CSR) has become an important factor in corporate decision- making after years

[1] Assoc. Prof. Ph.D., Assist., Marmara University, Faculty of Law, ORCID: 0000-0002-3267-7409, gulsen.gedik@marmara.edu.tr

of shareholder-centric thinking. For example, in August 2019 the Business Roundtable, an organization of CEOs of leading American companies, updated its statement on the purpose of a corporation to shift from a shareholder focus to a stakeholder focus.

2. CSR and Taxation

According to the KPMG Survey of Sustainability Reporting 2020, 80 percent of the largest 5,200 companies analyzed in 52 countries report on their CSR. Many companies and stakeholders recognize the shift toward incorporating traditional CSR topics, such as the environment, employee initiatives, product safety, and community partnerships, in decision-making. It is less clear how, or even whether, tax fits into CSR. (DeMatte vd. 2021: 63). The argument seems to be that paying taxes is a cost that reduces corporate profits and this negatively impacts the value of the shares. (Avi Yonah, 2014:28). Should Corporations Pay Tax? The usual understanding of this question relates to the debate on whether there should be a corporate tax. Many observers have recently criticized the corporate tax and some have defended it. CSR activities are costly and that firms will counteract the resulting decline in profits by other adjustments in behaviour. Such responses may relate to input choices, pricing strategies or the extent to which reported and actual activities diverge. They may also involve illegal behaviour like the non-observance of labour regulations, environmental restrictions, liability rules or tax laws. We consider a widespread behavioural adjustment, namely tax avoidance. There is ample evidence that firms try to (legally) avoid taxes by appropriate transfer pricing policies, making suitable location choices or exploiting loopholes in tax law. (Goerke, 2018: 2).That is an issue which has been debated intensively in the mostly empirical literature on tax avoidance behaviour of firms which undertake CSR activities. Specifically, we enquire whether socially responsible firm behaviour and tax avoidance activities are complements or substitutes. In the former case, more socially responsible firms will avoid taxes to a greater degree, resulting in a positive correlation between CSR activities and tax avoidance. In the latter case, the correlation is negative and CSR firms will avoid lower amounts of taxes than firms pursuing no CSR objectives. The policy relevance of knowledge about this relationship is obvious. If CSR is welfare-enhancing and CSR and tax avoidance are substitutes, fostering socially responsible behaviour by firms will yield a kind of double dividend because tax avoidance declines simultaneously. (Goerke, 2018:2).

3. GRI Standards

The GRI Standards represent global best practice for reporting publicly on a range of economic, environmental and social impacts. Sustainability reporting based on the Standards provides information about an organization's positive or negative contributions to sustainable development. The GRI Standards is a modular system of interconnected standards. Three series of Standards support the reporting process: the GRI Universal Standards, which apply to all organizations; the GRI Sector Standards, applicable to specific sectors; and the GRI Topic Standards, each listing disclosures relevant to a particular topic. Using these Standards to determine what topics are material (relevant) helps organizations to achieve sustainable development (https://www.globalreporting.org). Discussions of taxes in corporate sustainability reports also provide mixed evidence on the importance of tax payments in a CSR context. International organizations like the GRI seek to influence CSR activities by issuing guidelines for sustainability reporting. The GRI gıuidelines recommend that firms provide detailed information on tax payments because what is "frequently desired by users of sustainability reports is the

organization's contribution to the sustainability of a larger economic system., How firms jointly choose the extent to which they engage in CSR and tax avoidance likely reflects how engaging in one activity affects the costs and benefits of the other. If firms view paying taxes in the same way they view CSR activities, then the two activities act as complements. While CSR includes a multitude of aspects, the payment of taxes is usually not associated with it. This is exemplified by the documents from which the definitions quoted above stem: They do not deal with taxation. However, in recent years this neglect has been criticized and suggestions have been formulated to incorporate the payment of taxes according to the spirit and not only the letter of the law into the definition of CSR. This is also reflected in the addition of information requirements relating to tax payments and tax strategies in the Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines and the DOW Jones Sustainability Index. These developments suggest that the incentives to pay taxes differ for firms which pursue a CSR objective, in comparison to their purely profit-maximising counterparts.(Goerke, 2018:1).

4. Tax at Sustainability Reports in GRI Standards

Sustainability reporting is voluntary in the United States and in many other countries, and companies that elect to report on their CSR activities choose whether to adopt a set of standards such as the GRI disclosure standards. Compliance with a reputable framework, such as the GRI standards, can lend credibility to a company's sustainability report. Although this tax standard, then, is not mandatory for any company, those choosing to report under the GRI framework will need to follow its stipulations. The development of this particular tax standard and its content reveal the current thinking of GRI leadership and stakeholders regarding how taxes fit into the world of sustainability reporting (DeMatte vd, 2021: 69). GRI guidance on sustainability recommends that companies that carry out more socially responsible activities pay more taxes (Nunez, Nunez, 2019:45).

5. Conclusion

From an immediate pandemic response to long-term challenges, citizens rely on governments to react to threats to society at large while maintaining other spending programs. Regardless of whether tax is viewed as an integral part of CSR, governments will continue to need tax revenue to fulfill their obligations to citizens. The trend toward including CSR in corporate decision-making could point to a more widespread adoption of the view that paying tax is socially responsible. If the traditional view of a disconnect between tax and CSR continues to lose relevance, companies will need to react to this challenge, for instance, in terms of tax risk management and reporting. We look forward to future developments in this area(DeMatte, Hardeck, Inger, Moore, 2021: 71).

References

Avi-Yonah Reuven S., " Corporate Taxation and Corporate Social Responsibility", NYU Journal of Law & Business, Volume:11, Number: 1, 2014, p.11- 29.

Nunez E., Nunez R, "Comparison of CSR Reporting Using the GRI Framework for Small and Large Companies", Stevens Institute of Technology , 2019.

Davis A., Guenther D., Krull L., "Do Socially Responsible Firms Pay More Taxes?", American Accounting Association, The Accounting Review, Vol.91, No.1, January 2016, p.47-68.

DeMatte Kelsey, Hardeck Inga, Inger Keery K., Moore Rebekah D.," Do Corporations Have a Social Responsibility Regarding Taxes?", Tax Analysts, 2021, p. 63-71.

Goerke, L. Corporate Social Responsibility and Tax Avoidance, CESifo Working Paper, No. 7297, Center for Economic Studies and ifo Institute (CESifo), 2018, Munich

William D., "Tax & Corporate Social Responsibility", The Tax Journal, 2007, p.10-12.

International Cooperation in the Taxation of the Sharing and Gig Economy

Birol Ubay[1]

Abstract

"Sharing" and "GIG" economies are among the most used terms in the business world today. Broadly speaking, it describes a market in which workers are paid by an online company based on informal short-term contracts for the performance of a specific task or project. Over the past decade, the GIG economy has revolutionized the way people do business and brought about a fundamental shift in the functioning of the national and international economic system. The advantages of working in the gig economy are related to flexibility. More specifically, barriers to market entry are low, regardless of personal skill set, anyone can easily find a career in the GIG economy. Another advantage is that it allows individuals to adjust their work-life balance. This is possible due to flexible working hours, where the worker has the opportunity to work at any time he wants. Interestingly, if working hours are flexible enough, it will allow the employee to reach a better standard of living by giving the opportunity to work from anywhere in the world. The growth of GIG economy platforms leads to the transfer of activities, transactions and related payments previously carried out in the informal cash economy to digital platforms where they are recorded electronically, and this presents significant opportunities for tax administrations. In this context, tax administrations aim to develop compliance strategies to include the taxable income obtained by an increasing number of taxpayers through such platforms into their own tax revenues. On the other hand, some activities carried out through these platforms may not always be detected by tax administrations or may not be reported by taxpayers themselves. This is because, with the development of the GIG economy, there is a transition to individual service delivery that will not be subject to third-party reporting, unlike traditional service contracts. These developments carry risks of disrupting competition with traditional businesses and reducing declared taxable income. However, given the facilitating effect of internet platforms on a global scale in "sharing" and GIG economy transactions, reporting rules imposed by countries locally will have a limited impact. For this reason, international cooperation between tax administrations becomes important in terms of taxing platforms operating simultaneously in more than one jurisdiction. The study will examine the current status of international information exchange activities carried out under the leadership of the OECD in the taxation of GIG economies operating in more than one jurisdiction and aiming to facilitate the taxation of these activities. The study will generally benefit from OECD and European Union reports and academic sources published in this field.

Keywords: International taxation, Information Exchange, Gig Economy

[1] Ph.D., Revenue Administtration of Türkiye, ORCID: 0000-0001-8855-3897, bir.ubay@gmail.com

The Comparison of the Valuable Housing Tax with the Greece and France Practices and the Proposal of a Model

Hülya Kabakçı Karadeniz[1]

Abstract

Valuable Housing Tax in Turkey is a wealth tax that became law in 2019 and started to be implemented in 2021. The purpose of the valuable property tax is to tax wealth in accordance with the principle of taxation according to financial power.

In 2022, the share of Valuable Housing Tax in total tax revenues is very low, at 16 per hundred thousand. The tax in question constitutes 0.2% of the Property Tax. The low share of Valuable Housing Tax in tax revenues may indicate that the tax is not implemented effectively. The main reason for this may be that the subject and liability of the Valuable Housing Tax cannot be determined well.

The low share of Valuable House Tax in total tax revenues can be explained by the fact that the subject of the tax is limited, house values do not reflect the real value, and houses above the threshold value are considered for taxation instead of total houses.

In France, a tax like the valuable property tax applied when the total of people's properties exceeds a certain limit is applied. The property tax calculated from this tax is deducted. Thus, double taxation is eliminated by the offset method. In Greece, A base formed by summing the value of all properties is used and all real estate is subject to progressive tax.

The aim of the study is to introduce a new wealth tax, the Valuable Housing Tax; The aim is to examine the tax in terms of its subject and taxpayer and to investigate why the income obtained from the tax in question remains low in total tax revenues. In the study, a new Valuable Housing Tax proposal for Turkey is presented based on the examples of Greece and France.

Keywords: Wealth Tax, Property Tax, Valuable Housing Tax

JEL Code: K11, K34, H21

[1] Prof. Ph.D., Pamukkale University, Faculty of Law, ORCID: 0000-0003-3321-4905, hulyak@pau.edu.tr

Evaluation of Public-Private Partnerships (PPPs) Practices for Enhancing Disaster Preparedness

Abdurrahman Taraktaş[1]

Abstract

The state bears the responsibility of ensuring the security of society and maintaining public order. Disasters that threaten the lives and properties of the public, disrupting societal order, prompt the state's responsibility to manage these disasters. Moreover, the state should provide necessary resources for disaster preparedness and to tackle the destructive consequences of disasters. This includes conducting risk assessments, formulating essential strategic plans, and establishing collaboration and coordination among stakeholders. The state must ensure effective communication and coordination among stakeholders such as foreign states willing to provide aid, public institutions, local governments, civil society organizations, volunteer groups, and the private sector. Disaster management supported by accurate planning and coordination involves taking effective measures in disaster preparedness, responding swiftly to emergencies, and managing the recovery process following a disaster. This study primarily investigates the rationale behind the establishment of Public-Private Partnerships (PPPs) for disaster preparedness. Subsequently, it analyzes successful PPPs examples in disaster management and attempts to identify key factors contributing to their effectiveness. The study also evaluates the main challenges and limitations that PPPs practices created for disaster preparedness might encounter. Additionally, the paper provides recommendations for decision-makers and stakeholders to establish and sustain successful PPPs.

Keywords: Disaster Management, Public-Private Partnerships, Disaster Preparedness, Strategic Planning
JEL Codes: L32, Q54, H12

1. Introduction

Disasters encompass a broad spectrum, ranging from earthquakes and floods to epidemic diseases and climate-related events. When preparing for and combating the consequences of disasters, states may encounter a range of challenges and limitations, such as limited financial resources and expertise, bureaucratic complexities, coordination difficulties, a focus on short-term political goals, and the integration of new technologies. This underscores the importance of collaborative approaches. Public-Private Partnerships (PPPs), leveraging the strengths of both the public and private sectors, hold significant potential to substantially enhance efforts in disaster preparedness.

Public-Private Partnerships (PPPs) offer numerous advantages in disaster management. Firstly, they enable a more comprehensive and integrated approach by bringing together different expertise, resources, and networks from both sectors. Secondly, they facilitate interaction between the private sector's innovation and efficiency and the regulatory frameworks and institutional capacities of the public sector. Thirdly, PPPs allow for the sharing

[1] Assoc. Prof Ph.D., Anadolu University, Department of Public Finance, ORCID: 0000-0003-0649-3291, ataraktas@anadolu.edu.tr

of risks and costs, thereby reducing the financial burden on governments. Lastly, inter-sector collaboration promotes knowledge sharing, capacity building, and mutual learning.

2. Role of Public-Private Partnerships (PPPs) for Enhancing Disaster Preparedness

The inevitability of an increase in the frequency and impact of natural disasters emerges when factors such as climate change, ecosystem degradation, and a growing population combined with unplanned urbanization. Traditional approaches relying solely on government resources have proven insufficient to address the complex challenges arising from these events. Public-Private Partnerships (PPPs) have emerged as a promising solution that combines the strengths of both sectors to enhance disaster resilience. The increased intensity of natural disasters is anticipated as a consequence of climate change. Numerous scientific articles related to the Katrina Hurricane and other catastrophes have emphasized the need for governments to develop a collaborative framework that mobilizes private and public resources through a networked management system to address large-scale disasters.

In the international arena, the primary United Nations document aimed at reducing disaster risk, the Hyogo Framework for Action (UNISDR, 2005), recommended the establishment of Public-Private Partnerships (PPPs) to enhance the engagement of the private sector in reducing key risk factors contributing to disasters. Countries worldwide are increasingly embracing policy frameworks highlighting the importance of partnerships for resilience against disasters. Following the Hyogo Framework for Action, the Sendai Framework for Disaster Risk Reduction (UNDRR, 2015), released during the Third UN World Conference on Disaster Risk Reduction in 2015, designated National Platforms as critical stakeholders. These Platforms aim to understand and prevent country-level hazards related to disasters and emergencies, enhance community awareness and resilience, ensure the continuity of risk reduction efforts, and integrate risk reduction into plans, policies, and programs at every level.

Recognizing the crucial connection between public and private sector resilience, there emerges an opportunity to explore their interactions before, during, and after a disaster. In many cases, the services and products required by local communities' post-disaster are the same as those routinely distributed within these areas. Understanding that local distribution networks might suffer post-disaster, the infrastructural support and supply chains underpinning local operations become vital components in bolstering national resilience.

Given the contractual nature of these interactions, it is clear that public agencies are seeking to protect the public's interest by obtaining a certain level of risk sharing, accountability and transparency (Bloomfield, 2006). While these agreements are effective in spelling out the expectations for a certain project, contracts do not guarantee performance, much less effective performance during disasters. For example, the execution of contracts for services like evacuation often calls upon contractors to quickly mobilize large numbers of vehicles. During the 2008 hurricane season, contracts were reported to have failed due to inability of contracted partner to deliver the vehicles needed by the client. Since the 2005 hurricane season, there has also been a tremendous amount of research on the topic of resilience (Stewart et al., 2009).

The UNISDR's publication titled "Living with Risk: A Global Review of Disaster Reduction Initiatives" (2004) delineates key domains for the Disaster Risk Reduction (DRR) framework, comprising the following areas:

i. Risk awareness and assessment, encompassing hazard analysis, vulnerability/ capacity analysis.

ii. Knowledge development involving education, training, research, and information.

iii. Public commitment and institutional frameworks, inclusive of organizational structures, policy development, legislative measures, and community engagement.

iv. Application of measures such as environmental management, land-use and urban planning, safeguarding critical facilities, application of science and technology, partnership and networking, and financial instruments.

v. Early warning systems integrating forecasting, dissemination of warnings, preparedness measures, and responsive capacities.

This comprehensive framework offers a structured approach to disaster risk reduction by addressing multiple dimensions including risk evaluation, education, community involvement, application of specific measures, and establishing effective early warning systems. These fields of action provide a roadmap for stakeholders, policymakers, and communities to enhance preparedness, response, and mitigation strategies in the face of disasters.

The United States, as illustrated on a dedicated FEMA website, frequently establishes county and city-based public-private partnerships primarily focused on pre-disaster planning. Their core objectives revolve around fortifying business and service continuity in disaster response and recovery. These partnerships strive to foster systematic engagement and strategic information exchange among public and private stakeholders. While often instigated by government-affiliated entities such as local authority emergency management offices, these collaborations typically entail the appointment of multi-sector administrative bodies and specialized personnel to oversee and facilitate their operations (Bajracharya et al., 2012).

3. Conclusion

Disaster management programs encompass an intricate web of institutional interconnections, involving national and local government bodies, businesses, private sector associations, non-governmental organizations, volunteer groups, academic institutions, media outlets, and foreign funding agencies. Consequently, the coordination among these diverse organizations poses a significant challenge for stakeholders involved in disaster response and preparedness efforts. Collaborative efforts between public and private entities have demonstrated effectiveness in mitigating the loss of life and property during disasters. These partnerships are instrumental in implementing measures for disaster risk reduction, fostering public awareness, and formulating strategic response plans.

The Turkey Disaster Risk Reduction Platform was formed in alignment with the United Nations International Disaster Risk Reduction guidelines, encompassing the 2005-2015 Hyogo Framework Action Plan and later the 2015-2030 Sendai Disaster Risk Reduction Framework. To effectively function, the platform should adopt a multi-stakeholder approach, engage sub-working groups, and extend financial and technical support to innovative practices centered on public-private collaborations.

References

Bajracharya, B., Hastings, P., Childs, I. & McNamee, P. (2012). "Public-private partnership in disaster management: A case study of the Gold Coast", *The Australian Journal of Emergency Management*, 27(3), 27-33.

Bloomfield, P. (2006). "The challenging business of long-term public-private partnerships: reflections on local experience", *Public Administration Review*, 66(3), 400.

Stewart, G. T., Kolluru, R., & Smith, M. (2009). "Leveraging public-private partnerships to improve community resilience in times of disaster". *International Journal Of Physical Distribution & Logistics Management*, 39(5), 343-364.

UNISDR. (2004). *Living with risk: A global review of disaster reduction initiatives*. United Nations Publications.

UNISDR. (2005). *Hyogo framework for action 2005–2015: Building the resilience of nations and communities to disasters*. The United Nations International Strategy for Disaster Reduction: Geneva, Switzerland.

UNDRR. (2015). *Sendai framework for disaster risk reduction 2015–203*0. United Nations Office for Disaster Risk Reduction: Geneva, Switzerland.

Local Government Finance in Disaster Danagement: A Bibliometric Analysis and Future Research Directions

Erdal Eroğlu[1] **Mine Aydemir Dev**[2]

Abstract

This study analyzes the trends of disaster policies by examining scientific studies on disaster management in local governments through bibliometric analysis. Scientific studies on disaster management in local governments in the last thirty years were obtained from the Web of Science database and examined with the help of VOSviewer and Biblioshiny software. Within the framework of the findings obtained in the study, disaster management, governance, vulnerability, climate change, and resilience appear to be the main themes underlying the studies included in the sample. To carry out disaster management studies effectively, local governments should determine a road map covering pre- and post-disaster periods by including all local stakeholders in disaster management processes in a more coordinated manner. In addition, more empirical research is needed on effective planning and budget management issues in disaster management in local governments, aimed at eliminating possible disaster risks and solving problems that arise in case of disaster.

Keywords: Local Governments, Municipalities, Urban Management, Disaster Management, Risk Management, Bibliometric Analysis

Jel Codes: C02, H7, Q54

1. Introduction

Most of the world's population (around 60%) lives in large cities, and the number of migrants deciding to settle in urban centers is increasing every day. In addition, cities are increasingly confronted with the risks posed by climate change, water-air and soil pollution, natural disasters, epidemics, unregulated migration, urban poverty, etc. These increasing problems and possible disaster risks in cities have obliged governments and local administrations to produce new policies for the solution of problems and disaster risk management. In this context, concepts such as eco-city, green city, resilient city, and sustainable city have started to be discussed both in academic literature and local public policies.

The aim of this study is to reveal the conceptual development and trends of disaster management by examining scientific studies on disaster management in local governments through the bibliometric analysis. In the study, bibliometric analysis method was used to achieve this objective. In this context, scientific studies on disaster management in local governments in the last thirty years were obtained from the Web of Science database and analyzed with the help of VOSviewer and Biblioshiny software. In this study using the bibliometric analysis method,

[1] Assoc. Prof. Ph.D., Çanakkale Onsekiz Mart University, Department of Public Finance, ORCID: 0000-0002-5359-2420, erdaleroglu@comu.edu.tr

[2] Ph.D., Bursa Uludağ University, Department of Econometrics, ORCID: 0000-0003-3276-8148, mineaydemir@uludag.edu.tr

descriptive findings were first obtained from the bibliometric data obtained and then visual maps were created with the scientific mapping method.

2. Methodology

In line with the aim of the study, relevant keywords related to disaster management in local governments were identified and searched in the Web of Science database and the studies obtained were examined with the help of bibliometric analysis. As a result of the search in the Web of Science (WOS) database for the determined keywords (local government, local governance, municipal government, municipality, municipalities, city government, country government, regional government, provincial government, local administration, state government; municipal budget, financial management, public finance, public budget; disaster, earthquake, disaster management, risk management, disaster policies, disaster planning, disaster risk management, disaster risk reduction, disaster assessment), a total of 807 studies published in English between 1991-2023 were reached. The title, keywords and abstracts of these studies were first analyzed and those outside the context of the study were eliminated. Then, descriptive findings were obtained for the remaining 420 studies. Then, the studies in the database were visualized with the scientific mapping method used in bibliometric analysis.

3. Findings

Studies in this field have increased over the years in the period covering the years 1991-2023. The studies reached the highest point, especially in 2021. The annual growth rate of the studies carried out was obtained as 11.21%. *Sustainability, Disaster Prevention and Management, Jamba-Journal of Disaster Risk Studies, Disasters, and Environment and Urbanization* are the journals that produce the most publications in this field. 1035 authors produced publications in this field and *Shaw R.* was identified as the author who produced the most publications*. Van Niekerk D. and Takeuchi Y.* were the next authors. *Kyoto University, College London University, and Northwest University* are the universities that produce the most publications in this field. The countries where the most publications were produced were *USA, Japan*, and *England*. The common point of these countries is that they frequently face natural disasters. It was observed that the number of publications produced from Türkiye is quite low. Although it is seen that the most used words in the studies have increased over the years, it is seen that the word "*management"* has the highest increase. The word that followed it was "*vulnerability"*. When management-oriented studies are analyzed, it is seen that local governments have successful experiences in combating natural disasters among the important reasons for the increasing importance of the issue (Zamisa and Mutereko, 2019; Budima and Kusumasari, 2021). The increase in the concept of vulnerability is thought to be due to the growing academic interest in making cities more resilient against all kinds of internal and external threats. It is possible to evaluate the emphasis on resilient cities in many studies in this respect (Stevens et al., 2010; Malagoda et al., 2016). As a result of the keywords searched under the main headings of local governments, finance, and disaster management, the studies conducted in the field and the relationships between them were obtained using the mapping method as shown in Figure 1. When the word analysis map shown in Figure 1 is examined, it is seen that there are 7 clusters, 69 nodes, and 431 links in total. Each color represents a cluster.

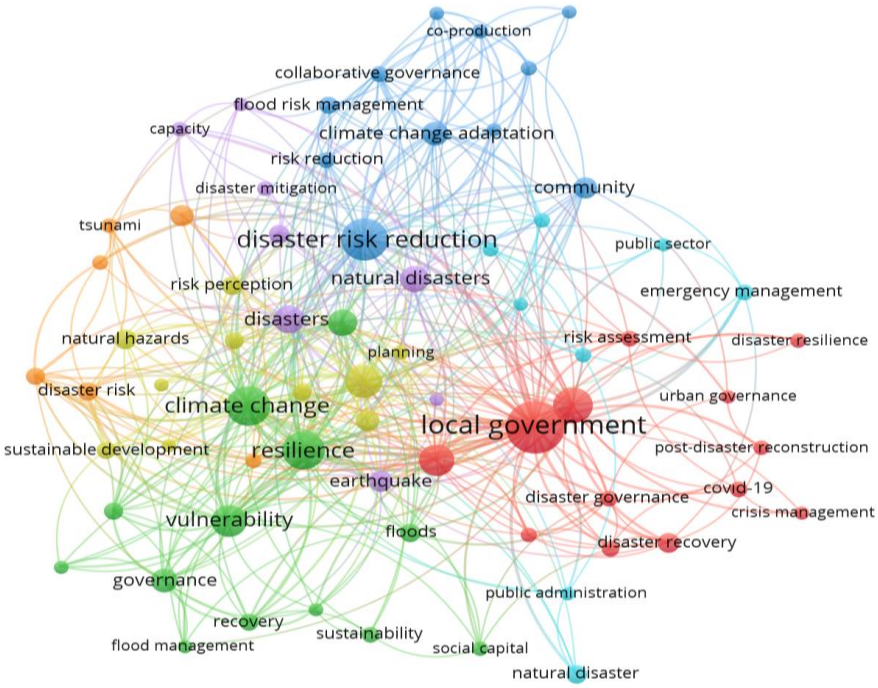


Figure 1. Co-word Network Visualization

The concepts that are evident in the clusters that emerged in the common word analysis are *local governments, resilience, disaster management, disaster, vulnerability, climate change, disaster risk reduction,* and *governance*. The lines between two nodes are called a link that shows the strength of the co-occurrence relations between different keywords. In the study, the keywords grouped in different colors in 7 clusters were categorized into 4 sub-categories in the context of the topics covered in the related articles. These are Cluster 1 (risk and disaster management), Cluster 2 (climate change, natural disasters, and sustainable development), Cluster 3 (participation and governance), and Cluster 4 (public finance).

Another result is related to the areas in which the issues addressed in Türkiye are in the related studies. Within 420 studies, the number of studies by academicians in Türkiye is 5. In some of these articles, risk analysis of local disaster management units against urban floods and the measures to be taken (Koç and Işık, 2021), operational measures for possible earthquake risk in Istanbul, scenarios for facility (aid, shelter, etc.) capacity situations related to post-disaster interventions (Görmez et al., 2011), and the effects of earthquake risk in Istanbul with the slum problem (Gökmen et al., 2006).

4. Conclusion

The results suggest that some aspects of the issues at hand have not yet been fully explored and provide recommendations for future research. *Disaster management, governance, vulnerability, climate change,* and *resilience* appear to be the main themes underlying the studies included in the sample. In the study, keywords were categorized into 4 clusters. These are (1) risk and disaster management, (2) climate change, natural disaster, and sustainable development, (3) participation and governance, and (4) public finance. The findings reveal that

local governments should act in a more coordinated (with central and local institutions) and comprehensive (plan-budget-supervision) manner, by including all local stakeholders in the management processes, and in a way to cover before and after disaster management to effectively carry out studies on disaster management. In addition, more empirical research should be conducted on disaster management in local governments, including effective planning and budget management for eliminating potential disaster risks and solving problems that arise in case of disaster. In this context, disaster management should be evaluated together with a sustainable, ecological planning and budget management approach.

References

Budiman, K., & Kusumasari, B. (2021). Mapping the new elements of local government disaster management capability: a systematic analysis of research trends 2003-2018. *International Journal of Emergency Management,* 17(1), 65-89.

Gökmen, G. P., Yüksel, Y. D., Erkök, F., Alkiser, Y., & Keskin, B. (2006). "Evaluating and reducing earthquake risks of squatter settlements in Istanbul". *Open House International*, 31(1), 116-124.

Görmez, N., Köksalan, M., & Salman, F. S. (2011). "Locating disaster response facilities in Istanbul". *Journal of the operational research society*, 62(7), 1239-1252.

Koc, K., & Işık, Z. (2021). "Assessment of urban flood risk factors using Monte Carlo analytical hierarchy process". *Natural Hazards Review*, 2(4), 04021048.

Malalgoda, C., Amaratunga, D., & Haigh, R. (2016). "Overcoming challenges faced by local governments in creating a resilient built environment in cities". *Disaster Prevention and Management: An International Journal*, 25(5), 628-648.

Stevens, M. R., Berke, P. R., & Song, Y. (2010). "Creating disaster-resilient communities: Evaluating the promise and performance of new urbanism". L*andscape and Urban Planning,* 94(2), 105-115.

Zamisa, N. A., & Mutereko, S. (2019). "The role of traditional leadership in disaster management and disaster risk governance: A case of Ugu District Municipality by-laws". àmbá: Journal of Disaster Risk Studies, 11(1), 1-9.

Do Natural Disasters Provide Opportunities for Learning? A Study on Türkiye's Earthquake Reality

Halil Serbes[1]

Abstract

The organizational learning or policy learning literature examines whether organizations learn from their experiences and use these lessons to improve their performance. However, it is essential to note that learning alone is not enough, and it is also important to determine whether the necessary lessons are learned to prepare the ground for superficial (temporary) or in-depth (permanent) policy changes. Drawing on the literature, this study aims to determine whether the fiscal adjustments made after the earthquakes in Türkiye are permanent, as expected from the organizational learning process. Due to their unpredictable timing, earthquakes are an extraordinary development for Türkiye's public sector and can impose a significant burden on public finances regarding the costs they create. Although this burden is difficult to predict in advance, it is possible to alleviate it through fiscal arrangements. Therefore, it is critical to take lessons from past experiences regarding earthquakes in Türkiye and examine whether necessary fiscal policy changes have been made. Accordingly, development plans, government programs and other regulations concerning the fiscal structure have been examined, with a particular focus on the aftermath of the 1999 earthquake in Gölcük. It has been concluded that the fiscal arrangements made in Türkiye after the earthquake were superficial measures instead of producing permanent solutions.

Keywords: Organizational Learning, Policy Learning, Natural Disasters, Earthquake in Türkiye
JEL Codes: H12, H84, Q54

1. Introduction

Whether natural disasters have instructive consequences for decision-makers in the public sector is examined within the framework of organizational learning or policy learning literature. Accordingly, individuals and organizations can learn lessons from the events they experience and use them to improve their performance. In addition, it is also evaluated whether the arrangements made in line with the results are temporary or permanent. In this study, we focus on Türkiye's earthquake reality and aim to assess whether the disasters experienced in Türkiye have had instructive consequences for decision-makers in the public sector. The scope of the study will be limited to the fiscal aspect. The fact that two-thirds of Türkiye is located in first and second-degree earthquake zones and that earthquakes increase the burden of public finances makes it essential to make this assessment.

The paper will consist of four titles. In the second title following the introduction, the scope of the concept of organizational learning and its relationship with natural disasters will be explained. In the third section, the fiscal burden caused by earthquakes in Türkiye after the Gölcük earthquake is presented, and it is evaluated whether the regulations made to reduce this burden are permanent or not. Finally, the findings and recommendations will be presented.

[1] Assist. Prof. Ph.D., Bursa Uludağ University, Department of Public Finance, ORCID: 0000-0002-6145-2102, hserbes@uludag.edu.tr

2. Organizational Learning: An Antidote for Natural Disasters

Learning can take place at the individual level as well as at the institutional or organizational level (Crow et al., 2018: 567). The issue of learning in the public sector was first addressed by Karl Deutsch in 1963. Deutsch argued that the state operates through feedback and guidance processes that continuously improve learning capacity (Moyson et al., 2017: 162). Subsequently, Bennett & Howlett (1992), Birkland (2004), Dunlop & Radaeli (2013), Crow et al. (2018) and Radaelli (2022) have examined learning in the public sector in more detail. These studies have focused on who the learner is, what they learn, how they learn and what the impact of learning is (Bennett & Howlett, 1992: 288–289). The answers to these questions have contributed to the diversification of the literature on learning and the identification of the stages of learning.

Learning will occur at different intensities depending on the scope of this accumulation. In this direction, two different classifications explaining the stages of learning can be mentioned in the literature. According to the first of these classifications, it is argued that learning takes place in two stages: surface (single-loop) and in-depth (double-loop) (Crow et al., 2018: 569). According to the other classification, learning is a three-stage process: instrumental, institutional and social. Public sector decision-makers are expected to generate solutions to the problems they face that fall within the scope of double-loop, institutional or social learning. This is because these three types of learning, unlike others, focus on reviewing and restructuring the institutional (organizational) structure (institutional learning), identifying the causes of problems, renewing institutional goals and making long-term plans (social learning). In contrast, single-loop, instrumental, or lesson learning involves more superficial adjustments. They involve only changing the policy instruments used or adapting the instruments used in different countries without focusing on the causes of problems and long-term solutions (Albright & Crow, 2021: 94–95).

Disasters such as earthquakes, floods, landslides or avalanches are natural disasters because they are formed based on natural events. These disasters cause significant loss of life and property and interrupt the development process of countries and damage fiscal discipline. However, natural disasters offer opportunities for measures to be taken against possible risks or vulnerabilities and the destruction they cause (Arapis & Chatterjee, 2022: 4). Therefore, it is necessary to learn lessons from past disasters in order to prevent recurring natural disasters from causing new devastation.

In contrast to increased expenditures for search and rescue, shelter and other basic needs due to natural disasters, budget revenues decrease due to foregone or postponed public revenues. Thus, the increasing budget deficit and the need for borrowing deteriorate the budget discipline and the discipline of public finance in general. Therefore, the negative consequences of a disaster in a particular region may affect the whole society. Thus, organizational learning is essential in preventing instabilities that may occur or deepen in public finance. In this respect, it is expected that a resilient fiscal structure that will meet the urgent needs arising from natural disasters and prevent the deepening of problems will be established.

3. Looking at Türkiye's Earthquake Reality from the Window of Organizational Learning: Staging and Evaluation of Fiscal Measures Taken After Gölcük and Düzce Earthquakes

In Türkiye, 269 earthquakes caused loss of life and property between 1900 and 2023. Erzincan (1939), Gölcük and Düzce (1999), and Kahramanmaraş (2023) earthquakes are among the top three in terms of the destruction they caused. For example, the report published by the Strategy and Budget Directorate (2023: 17, 130) estimated that the total cost to the Turkish economy of the Kahramanmaraş and Hatay earthquakes in 2023 would reach approximately 2 trillion Turkish Liras (USD 103 billion). This is approximately 9% of the gross domestic product (GDP). Such a large amount is expected to burden public finances in Türkiye, distort resource allocation in the budget, and exacerbate problems such as inflation and income inequality that emerged before the pandemic and deepened afterwards.

Gölcük and Düzce Earthquakes changed the approach to natural disasters in Türkiye. Following these earthquakes, several regulations were introduced to strengthen disaster management. One dimension of the regulations covering many areas is the fiscal regulations.

The introduction of additional taxes, paid military service, savings in expenditures and the provision of foreign loans (Erkan, 2010: 124-127) are arrangements related to instrumental learning as they continue known practices and do not include a comprehensive regulation. The establishment of the Turkish Catastrophe Insurance Pool (TCIP) to cover the material damages caused by earthquakes in the buildings where citizens live (https://dask.gov.tr/tr/dask-hakkinda), the establishment of the Disaster and Emergency Management Presidency (DASK) by closing different administrations responsible for disaster management (Ministry of Development, 2014: 9), and the allocation of funds for combating natural disasters are considered within the scope of institutional learning. After the 1999 earthquakes in Türkiye, the establishment of separate chapters and specialized commissions on disaster management in development plans (Erkan, 2010: 115), the enactment of Compulsory Earthquake Insurance (CEI) (Yavuz, 2015: 317), the preparation of the National Earthquake Strategy and Action Plan and proposals to increase fiscal resilience (Disaster and Emergency Management Presidency, 2013: 60), and finally, the regulations focusing on strengthening public fiscal discipline until the global crisis are examples of social learning where a long-term approach is adopted to be prepared for problems, and comprehensive solutions are produced.

4. Conclusion

In the scope of the study, it was concluded that decision-makers in Türkiye made arrangements related to all three stages of organizational learning (instrumental, institutional, and social). Additional taxes, paid military service, expenditure savings and access to external loans fall under the instrumental learning type since they do not include comprehensive regulations. The establishment of TCIP and DASK can be listed as examples of institutional learning. Finally, the inclusion of disaster management in development plans, the enactment of the CEI, the preparation of the National Earthquake Strategy and Action Plan, and regulations to strengthen public fiscal discipline are examples of social learning. However, the existence of these regulations is not enough. It is also essential to fulfil the objectives attributed to these regulations. Therefore, it is also necessary to periodically evaluate whether these regulations are successful or not.

References

Albright, E. A., & Crow, D. A. (2021). Capacity Building toward Resilience: How Communities Recover, Learn, and Change in the Aftermath of Extreme Events. *Policy Studies Journal*, 49 (1), 89–122.

Arapis, T., & Chatterjee, V. (2022). Saving for Natural Disasters: Evidence From Pennsylvania Local Governments. *State and Local Government Review*, 55 (2), 1-19.

Bennett, C. J., & Howlett, M. (1992). The Lessons of Learning: Reconciling Theories of Policy Learning and Policy Change. *Policy Sciences*, 25 (3), 275–294.

Birkland, T. (2004). Learning and Policy Improvement After Disaster the Case of Aviation Security. *American Behavioral Scientist*, 48 (3), 341–364.

Crow, D. A., Albright, E. A., Ely, T., Koebele, E., & Lawhon, L. (2018). Do Disasters Lead to Learning? Financial Policy Change in Local Government. *Review of Policy Research*, 35 (4), 564–589.

Disaster and Emergency Management Presidency. (2013). *Ulusal Deprem Stratejisi ve Eylem Planı 2012-2023.* Ankara.

Dunlop, C. A., & Radaelli, C. M. (2013). Systematising Policy Learning: From Monolith to Dimensions. *Political Studies*, 61 (3), 599–619.

Erkan, E. A. (2010). *Afet Yönetiminde Risk Azaltma ve Türkiye'de Yaşanan Sorunlar*. Devlet Planlama Teşkilatı (Uzmanlık Tezi), Ankara.

Ministry of Development. (2014). *Onuncu Kalkınma Planı 2014-2018: Afet Yönetiminde Etkinlik Özel İhtisas Komisyonu Raporu.* Ankara.

Moyson, S., Scholten, P., & Weible, C. M. (2017). Policy Learning and Policy Change: Theorizing Their Relations from Different Perspectives. *Policy and Society*, 36 (2), 161–177.

Radaelli, C. M. (2022). Policy Learning and European Integration. *JCMS: Journal of Common Market Studies*, 60 (S1), 12–25.

Strategy and Budget Directorate. (2023). *2023 Kahramanmaraş ve Hatay Depremleri Raporu*. Ankara.

Yavuz, A. (2015). Doğal Afetlerin Zararlarının Finansmanında Kullanılan Afet Öncesi Finansal Araçlar. *Siyasal Bilimler Dergisi*, 3 (2), 303–322.

Turkish Catastrophe Insurance Pool, https://dask.gov.tr/tr/dask-hakkinda, (09.10.2023)

Public White Elephant Syndrome: The Evaluation of Some Country Examples

Bediha Sultan Zıvalı[1] **Hüseyin Dirican**[2]

Abstract

The concept of the white elephant, which is called "public white elephant" in the public economy, is defined as investments with high status and grandiose, but not productive, maintenance and repair require high costs, and it is not possible to give up. Considering that the resources are limited in the world, and the requirements are unlimited, starting from the classical definition of economics, it is an important issue that the public sector is effective in the use of resources. Although it is so important, it is open to debate why the public sector still carries out projects and investments that can be described as white elephants and does not give up on them. Although it is evaluated in detail in the study, it can be said that the most important reason for the existence of public white elephants is political. In other words, the fact that the political authority does not compromise on its high status and magnificence is the most important reason for the existence of public white elephants. In this context, firstly, the conceptual framework of white elephant and public white elephant terms will be discussed. Afterwards, it will be examined why public white elephants exist. In the last part, which adds originality to the study, some projects and investments realized in selected countries and Turkey within the framework of the document analysis method, one of the qualitative research methods, were evaluated within the scope of the public white elephant syndrome.

Keywords: Public White Elephant, White Elephant, Public Investments
JEL Codes: H43, H54.

1. Introduction

The concept of the white elephant, which has its origins in a story, is referred to as the public white elephant in the public economy and is used for investments that are considered unproductive, costly, difficult to maintain, and a sign of high status. Such investments are usually realized for reasons such as vote anxiety, personal superiority and prestige enhancement rather than public needs. It is a matter that needs to be discussed why countries are still implementing public white elephant projects despite the change in climate conditions and the depletion of natural resources, especially with globalization. While many negative events such as disease, famine and war continue to occur in the world, it is a great mistake both economically and morally to direct the available resources to such areas. In this study, the concepts of white elephant and public white elephant are first mentioned. Afterwards, it will be examined why public white elephants exist. In the last part of the study, some projects and investments realized in selected countries and Turkey are evaluated within the scope of public white elephant syndrome within the framework of document analysis method, one of the qualitative research methods.

[1] Ress. Assist., Kırşehir Ahi Evran University, ORCID: 0000-0002-0464-4992, bediha.zivali@ahievran.edu.tr
[2] Ress. Assist., Aksaray University, ORCID: 0000-0002-6970-5821, huseyindirican@aksaray.edu.tr

2. Conceptual Framework Of The Public White Elephant Syndrome

The concept of the public white elephant has its origins in a story from the Ancient Siamese Empire. Albino elephants were considered sacred in the Ancient Siamese Empire due to their rarity and majestic appearance, and were considered a sign of the Empire's power and demi-godlike qualities. One day, the Emperor devised an ingenious plan to punish a courtier who had angered him by gifting him one of the sacred elephants. At the time, the gift was not to be refused or given to another person. The emperor knew that taking care of the sacred elephant - properly - was a task that even the rich and noble could not afford. Based on this story, white elephants are characterized as "public white elephants" in the public economy. High status and majestic, public white elephants represent investments that are not productive, require high costs to maintain and protect, and cannot be given up (Evans, 2008: 51). The public white elephant has been defined by various authors: Robinson and Torvik define public white elephants as negative value projects (Robinson & Torvik, 2005: 198). Engel, Fischer and Galetovic defined them as projects whose social costs exceed their social benefits (Engel et al., 1997: 12) and Bradburne - using the example of science centers - defined them as projects and investments that burden governments with irrecoverable debts (Bradburne, 1998: 237).

White elephant projects have various characteristics with original designs (Andre, 2008: 14). It is very difficult to characterize a project/investment as a public white elephant. This is because white elephant projects are quite comprehensive and have different characteristics and are not easy to identify. On the other hand, it is often problematic to classify and characterize these projects and investments, which have become a matter of prestige and are highly valued by some groups, as inefficient (Berksoy et al., 2012: 113). From this point of view, it is possible to evaluate public white elephant projects as projects that are not in use, without adequate cost-benefit analysis, built for prestige purposes or for the sake of votes, and bring more burden than benefit to the society (Hayrullahoğlu, 2016: 231).

3. Public White Elephants: Why Do They Exist?

Inefficiency and ineffectiveness are the most important characteristics of public white elephant investments. Despite these characteristics, it is important to first understand the basic logic of public investment projects in order to understand why these projects emerge (Jevcák & Keereman, 2008: 37-38). Decisions in the public investment process are often unplanned and piecemeal, with little standardization. This is because the focus in the public sector is more on how to secure financing. The public sector is not very concerned with the quality of projects and therefore projects are often inefficient. Reputational projects - the white elephant - that require significant resource use and have limited social benefits may be preferred to high-benefit projects (Tandberg, 2008: 61).

According to the theory developed by Robinson and Torvik, white elephants are a redistributive mechanism aimed at influencing the outcome of elections. Essentially all politicians tend to create efficient public investments. However, when politicians start to derive welfare from white elephants, they prioritize and support these projects. Politicians, especially with the desire to stay in power, may turn to inefficient projects - for fear of votes (Robinson & Torvik, 2005: 197). Bohn, on the other hand, focused on the problem of government decision-making on efficient public investment and redistribution in the absence of political stability. According to him, the possibility of another government coming to power in the future and making undesirable decisions creates a negative externality on the current government. The main reason for this situation is myopic - short-sighted - government behavior. If myopia is

caused by political instability, the most appropriate behavior of the current government is not to make public investment expenditures (Bohn, 2004: 12-13).

Another factor contributing to the formation of white elephants is weak strategic planning. Especially in developing countries, strategic planning of infrastructure investments is very weak or even non-existent. In these countries, social projects are produced in the short term in line with political objectives. Moreover, when it is decided to identify inefficient projects in the public sector, costs are underestimated and demand is overestimated (Engel et al., 1997: 11). Another factor that plays a role in the creation of white elephants is the ambitions of managers. Especially in countries where accountability and transparency are not developed, administrators prioritize projects that promote their own prestige rather than the demands and requirements of the public (Berksoy et al., 2012: 115).

4. Public White Elephants on Country Examples

The weak institutional structure of countries is important in terms of inefficient use of existing resources and wastefulness. In addition, factors such as the psychological state of government administrators, the weakness of the culture of democracy, the failure to establish transparency and accountability in governance, political behavior instead of cost-benefit analysis, and the weakness of public memory play a role in the formation of public white elephants (Berksoy et al., 2012: 88).

Table 1. Public White Elephants In Various Countries

Year	Country	Project	Cost	Status
1982	Tanzania	Morogoro Shoe Factory	$40 Million	Not in use
1984	Fhilippines	Bataan NPP Nuclear Power Plant	$2 Billion	Never opened
1984	Romania	Bucharest Parliament Palace	€4 Billion	Some parts are in use
1987	North Korea	Ryugyong Hotel	$748 Million	Not in use
2004	Greece	Athens Summer Olympics	€15 Billion	Many facilities are not in use
2005	China	South China Shopping Center	$~ 1,5 Billion	Not in use
2008	China	Beijing Summer Olympics	$40 Billion	Not in use
2011	Indonesia	Hambalang Sport Complex	$256 Million	Never opened
2012	Russia	Russky Köprüsü	$1 Billion	In use
2013	Sri Lanka	Mattala Rajapaksa Airport	$1,5 Billion	Used as a parking lot
2019	Türkiye	Ankapark Entertainment Center	$801 Million	Not in use

Source: Compiled by the authors.

5. Conclusion

The white elephant is a concept integrated into the public economy as the public white elephant. The public white elephant is a concept that refers to grandiose, unproductive and costly to maintain and protect investments that are indicative of high status. Despite these negative aspects of these investments, they continue to be approved and realized especially by managers as a sign of vote anxiety, personal superiority and prestige. In this study, public white elephants are analyzed through the examples of various countries. In this context, investments that can be characterized as public white elephants are shown in many countries such as

Tanzania, Philippines, Romania, North Korea, China, Russia, Indonesia and Turkey. The first point to be inferred from the study is that public white elephants are still being produced. If evaluations are made over the examples in the study, it is seen that various investments were realized in the period 1984-2019. Another result obtained within the scope of the study is that such investments are realized in almost every region of the world. In other words, public white elephants do not belong to a specific region, nation and understanding of governance. They are projects that can be seen in almost every region and country in the world. This supports that the existence of white elephants is political and that managers act in line with their personal interests. Another result obtained from the study is that such projects usually occur in large-scale investment areas such as the Olympics, airports and sports complexes.

References

Andre, K. (2008). Extreme Makeover: White Elephants Edition, *The Minnesota Reservationist,* 11(5), 14-15.,

Berksoy, T., Şahin, M. ve Uysal Ö. (2012). Kamusal Beyaz Filler ve Kamu Özel Sektör Ortaklıkları. *27. Türkiye Maliye Sempozyumu*, 20-24 Mayıs 2012, Antalya.

Bohn, F. (2004), White Elephants and the Limits to Efficient Investment, *Centre For Economic Research Workıng Paper Series,* WP 04/13, 1-14.

Bradburne, J. M. (1998). Dinosaurs and White Elephants: The Science Center in The Twenty-First Century. *SAGE Journals,* 3(7), 237-253.

Engel, E., Fischer R. and Galetovic, A. (1997). Public-Private Partnerships: When and How. https://econ.uchile.cl/uploads/publicacion/c9b9ea69d84d4c93714c2d3b2d5982a5ca0a67d7.pdf, (07.07.2023).

Evans, R. (2008). A Passion for White Elephants: Some Lessons from Australia's Experience from Nation Building. *Australia Under Construction Nation- Building-Past, Present and Future,* (Ed.) J. Butcher, Australia: The Australian National University ANU E-Press, 49-56.

Hayrullahoğlu, B. (2016). Kamusal Beyaz Fil Sendromu ve Türkiye'de Kamusal Beyaz Fil Tartışmaları. *2. Uluslararası Çin'den Adriyatik'e Sosyal Bilimler Kongresi*, 5-7 Mayıs 2016, Hatay.

Jevcák, A. ve Keereman, F. (2008). "Challenges for Public Investment in New EU Member States", *Public Investment and Public-Private Partnerships Addressing Infrastructure Challenges and Managing Fiscal Risks,* (Eds.) Gerd Schwartz, Ana Corbacho, and Katja Funke, Washington, D.C: Palgrave Macmillan and International Monetary Fund, 36-60.

Robinson, J., and Torvik, R. A. (2005). White Elephants. *Journal of Public Economics,* 89, 197-210.

Tandberg, E. (2008). Budgeting of Public Investments", *Public Investment and Public-Private Partnerships - Addressing Infrastructure Challenges and Managing Fiscal Risks*, (Eds.), Gerd Schwartz, Ana Corbacho ve Katja Funke, Washington, D.C: Palgrave Macmillan and International Monetary Fund, 61-76.

Effects of Fiscal Policy on Preventive Health Services Effect: An Evaluation on Türkiye-European Union Countries

Rabia Selinay Değirmenci[1] **Eda Yeşil**[2]

Abstract

The health system is a system that constantly renews and improves itself from past to present. Controlling the diseases in the world and enabling people to live a longer life with a better quality depend on treatments. Thanks to preventive health services, individuals' health is protected and, in case of a diagnosed disease, risks such as disability or death are eliminated through treatments. These processes also reduce the health costs of individuals. The impact of fiscal policies implemented by countries on preventive health services will be examined. As a result of the analysis to be made, the impact of the countries' costs will also be examined.

The importance of intervening in the economy with fiscal policy tools is examined on health services. Public goods are also mentioned in detail in order to better understand health services. Findings and conclusions to be obtained: The situation of preventive health care in Turkey and the practices of preventive health care in European Union countries will be examined. Analyzes will be made together with the numerical data obtained from the examinations. Purpose of the study: To evaluate the preventive health services implemented in many countries in terms of health policies and other fiscal policies. The provision and service of health, which is a semi-public good, is important not only for our country but also worldwide. As the world population increases, diseases have become an important problem of our age. It has an important place in the early diagnosis and treatment of many diseases affecting humanity through preventive health services.

Our study is to investigate the impact of fiscal policies implemented by Turkey and European Union countries on preventive health services. Approximately 930 million people around the world allocate approximately 10% of their budget for health expenditure. This increases the risk of poverty. Preventive health services enable individuals to be examined for low or free of charge. Preventive health services include the opportunity to directly relieve the health system. There are three types of health services in total. What is important for our work is the type we will talk about in general; preventive health services. Curative and rehabilitative health service types would also be mentioned. Method and Data to be Used: European Union Eurostat and IMF World Economic Outlook data constitute an important source for this study. Internet research is also an important data source for our study in order to collect current health data of countries.

[1] Ph.D student, Kırıkkale University, ORCID: 0000-0001-7640-7278, selinaygurbuz0@hotmail.com
[2] Prof. Ph.D., Kırıkkale University, Department of Public Finance, ORCID: 0000-0002-2525-6745, edabalikcioglu@kku.edu.tr

As a result of the results, it is seen that preventive health services are effective in our country and fiscal policies are also effective. It is seen that preventive health services have a large share in health expenditures in European Union countries. Supervisory and regulatory practices regarding health expenditures can be seen in the fiscal policies of countries. A definitive conclusion will be drawn by interpreting the results of the research subject according to the results of the dynamic panel data analysis, which is an econometric analysis method, of the research to be conducted and the data to be obtained.

Keywords: Preventive Health Services, Fiscal Policy, Health Services

Universal Basic Income Approach and Its Applicability in Türkiye: An Evaluation from Fiscal Policy Perspective

Dilara Çakmakoğlu[1] **Nazmiye Tekdemir**[2] **Pelin Varol İyidoğan**[3]

Abstract

Universal Basic Income (UBI) is a policy proposal that calls for regular payments to all members of society, at regular intervals, at a level sufficient for individuals to maintain a minimum level of living without any conditions. The proposal of an unconditional payment to each individual has sparked intense debates. Some authors have argued that UBI is the only solution to the unemployment problem that may arise from technological developments, mechanization, and artificial intelligence systems. Covid-19 pandemic-induced economic depression and uncertainty about the future compounded existing concerns about unemployment, leading to a thorough debate on the adequacy of existing social welfare programs. Some saw UBI as utopian, disconnected from reality, and an unfeasible fantasy. In this context, we conducted a survey in Türkiye involving 504 respondents to evaluate people's perspectives on Universal Basic Income (UBI) within the framework of their socio-demographic attributes, employing Pearson's test for bicausality and the chi-square test. The results derived from both tests reveal that, in Türkiye, women tend to hold a more favorable opinion about UBI in comparison to men. Additionally, the evaluations concur that UBI will be particularly favorable in terms of correcting income inequality and fostering economic growth.

Keywords: Universal basic income; fiscal policy; social welfare programs
JEL Codes: H53, E62

1. Introduction

While the idea of Universal Basic Income (UBI) has gained increasing prominence in recent years due to technological advancements, artificial intelligence, and automation systems, the concept of providing everyone with an income to support their basic needs can be traced back to historical roots. Throughout history, UBI was a concept that didn't receive substantial attention, both in academic and societal contexts. However, its resurgence in recent times can be attributed to mounting concerns related to mass unemployment, income inequality, and economic instability. This modern interest primarily revolves around the idea of providing every member of society with a guaranteed and unconditional income at regular intervals to fulfill their basic needs. It is proposed that this payment can be funded through taxes and could potentially replace various social assistance programs. Notably, individuals' income levels and employment status would not hinder their eligibility for UBI, distinguishing it from social support programs like negative income tax and unemployment pensions, where eligibility is determined by income status. In essence, the primary goal of UBI is to promote widespread welfare across society. Such a radical proposal has received a wide range of reactions from various quarters.

[1] Res. Assist., Recep Tayyip Erdoğan University, Department of Public Finance, ORCID: 0000-0003-2002-7529, dilara.teber@erdogan.edu.tr
[2] Postdoc Researcher, Kırıkkale University, Department of Public Finance. ORCID: 0000-0002-7292-569X, nazmiyekirik@gmail.com
[3] Prof. Ph.D., Hacettepe University, Department of Public Finance. ORCID: 0000-0002-4632-9130, pelinv@hacettepe.edu.tr

This study aims to empirically assess attitudes toward UBI within a sample group in Türkiye and subsequently provide policy recommendations regarding the revenue and expenditure components of fiscal policy based on the research findings.

2. Universal Basic Income from A Fiscal Policy Perspective

UBI is a radical policy proposal that advocates providing all members of society with regular, unconditional cash payments at a level sufficient to sustain a minimum standard of living. According to Van Parjis (2000: 2), UBI is defined as "an income paid by a government, at a uniform level and at regular intervals, to each adult member of society. The grant is paid, and its level is fixed, irrespective of whether the person is rich or poor, lives alone or with others, is willing to work or not. In most versions - certainly in mine - it is granted not only to citizens but to all permanent residents." With the influence of recent technological advancements, UBI has evolved from a utopian concept into a policy of increasing importance. UBI can be summarized as follows:

- UBI is provided in the form of cash.
- UBI is distributed directly to individuals.
- UBI is given unconditionally.
- UBI is available to everyone.
- UBI is provided at regular intervals.

Examining UBI, characterized by these fundamental features, from the perspective of fiscal policy is valuable. Modern fiscal policy typically pursues three objectives: ensuring equity in income distribution, fostering economic growth, and maintaining economic stability (including price stability and full employment) (Ataç, 2016: 33). Various interpretations exist regarding the impact of UBI on achieving these fiscal policy objectives.

In terms of fairness in income distribution, an UBI paid above the poverty line can reduce income inequality by enabling individuals in the lowest income group of society to participate more fairly in economic opportunities. This can contribute to creating a more just and balanced society (Angelov, 2023). IMF research in 2018 suggests that a UBI set at 25% of median income can reduce income inequality by about 5%, while in developing economies, UBI can reduce poverty by more (Francese & Prady, 2018).

In terms of economic growth, proponents of UBI argue that providing this payment to every individual in society can result in sustained economic growth (Ortiz et al., 2018). For instance, a study conducted by the Levy Institute found that a UBI offering $1,000 per month could potentially grow the US economy by 12.56% over eight years (Nikiforos et al., 2017). However, the outcomes may vary depending on the method of financing. While a UBI funded through taxes may not significantly affect the economy, it could yield positive effects if financed through borrowing. The IMF contends that UBI has a limited impact on GDP (IMF, 2017).

In terms of economic stability, there is concern that UBI may lead to inflation. However, there are differing views on whether UBI causes inflation. While there have been some instances of increased inflation, it is noted that this is exceptional and that cash transfers generally have a positive impact on local economies (ILO, 2018). There is also concern that UBI can discourage people from seeking paid work, although it has been argued that UBI can prevent workers from being forced to work under poor conditions and increase their incomes (Wright, 2002; Bastagli, 2019).

Overall, the effects of UBI on income distribution, economic growth and stability are controversial and may vary depending on factors such as the method of financing and local conditions.

In the context of this study, in the subsequent section of the research, we statistically analyzed whether attitude to UBI differed significantly according to main socio-demographic characteristics.

3. An Empırıcal Applıcatıon of the UBI Attıtude in Türkiye

3.1. Data and Methods

This study[4] is designed to encompass a diverse range of stakeholders representing various dynamics and characteristics within the population. In line with this objective, we aimed to survey participants from 12 NUTS regions corresponding to level-1, as defined by Türkiye's Classification of Territorial Units for Statistics. Our study includes a total of 504 participants. The distribution of participants across regions is as follows: Istanbul region-TR1 (52 - 10.3%), West Marmara region-TR2 (8 - 1.6%), Aegean region-TR3 (34 - 6.7%), East Marmara region-TR4 (9 - 1.8%), West Anatolia region-TR5 (105 - 20.8%), Mediterranean region-TR6 (76 - 15.1%), Central Anatolia region-TR7 (59 - 11.7%), Western Black Sea Region-TR8 (11 - 2.2%), Eastern Black Sea Region-TR9 (111 - 22%), Northeastern Anatolia Region-TRA (12 - 2.4%), Central Eastern Anatolia Region-TRB (13 - 2.6%), and Southeastern Anatolia Region-TRB (13 - 2.6%), Anatolia Region-TRC (14 - 2.8%).

The questionnaire comprises three sections. The first section is dedicated to confirming voluntary participation in the survey. The second section focuses on gathering socio-demographic information about the participants. In the third section, participants' attitudes towards UBI were explored.

The data obtained in the study were evaluated using the Statistical Package for Social Sciences (IBM SPSS Statistics 25) software package. Data analysis included normality tests, Pearson correlation coefficient calculations, pairwise correlations, followed by chi-square tests and cross-tabulations. Additionally, a 95% confidence interval was applied to all data, with a statistical significance level set at $p<0.05$.

To measure attitudes towards UBI in Türkiye, respondents were asked the question: “Do you find the idea of a fixed, unconditional payment by the state, provided at regular intervals (monthly), to every individual over the age of 18 in society reasonable or not?” In this context, a statistical analysis was conducted to examine whether attitudes towards UBI varied based on fundamental socio-demographic characteristics, including age, gender, city of residence, marital status, education level, employment status, the number of people working in the household, and monthly household income.

3.2. Findings

In our study, we placed a particular emphasis on the influence of socio-demographic factors on participants' attitudes toward UBI to begin with, we conducted an examination of whether the data followed a normal distribution. This was necessary because the statistical tests to be employed in our study, including the Pearson test, pairwise causality, and chi-square tests,

[4] Ethical approval of the study was taken from the Ethics Committee of Hacettepe University on 11 July 2023 with the document number E-35853172-200-00002955612.

are parametric analyses that assume normal distribution of variables (Mertler & Vannatta, 2005). Deviations from normality can diminish the statistical power of the analysis and compromise the validity of the results (Wells & Hintze, 2007).

Upon conducting the normality distribution analysis, we found that the data met the requirements for parametric analysis. Subsequently, we investigated the simple binary causality between perceptions of UBI and the socio-demographic variables of the participants. Pearson coefficients were employed for this analysis, and the results are presented in Table 1.

Table 1: Binary Causality Analysis between UBI Perception and Socio-Demographic Factors

	Pearson Correlation	Sig. (2-tailed)
Age	0.035	0.436
Gender	0.108*	0.015
Region of Residence	-0.007	0.868
Marital Status	-0.053	0.273
Level of Education (Completed Degree)	0.080	0.074
Employment Status	0.050	0.259
Number of people working in the household (including yourself)	0.008	0.861
Monthly household income	0.085	0.057

Note: * correlation is significant at the 0.05 level.

In Table 1, we analyzed whether there is a significant relationship between perceptions of UBI assessed by the question “Do you find the idea of a fixed, unconditional payment by the state, provided at regular intervals (monthly), to every individual over the age of 18 in society reasonable” and socio-demographic characteristics. Upon reviewing the results, it became evident that among the socio-demographic factors, only the relationship between gender and the perception of UBI was statistically significant.

Consequently, in the subsequent step of the application, we utilized chi-square analysis to investigate whether the perception of UBI varies solely based on gender, essentially determining if there is a significant difference between men and women regarding UBI perceptions. In other words, we posed the question, '”Is there a statistically significant difference in participants' perceptions of UBI based on gender?” This inquiry was assessed using the chi-square test, which facilitates the analysis of categorical variables at the level of classificatory measurement. The chi-square test is employed to ascertain whether the difference between observed frequencies and expected frequencies is statistically significant (Güngör, 2008).

The results of this analysis are initially presented in Table 2 in the form of a cross-tabulation, and Table 3 displays the outcomes of the chi-square test.

Table 2 provides an overview of responses to the question: “*Do you find the idea of a fixed (monthly) payment of a fixed amount to each person over the age of 18 by the state at regular intervals reasonable?*” Participants could respond with 'yes,' 'no,' or 'undecided.' Upon examining the table and considering the actual response counts, it is evident that out of 278 female participants, 304 find the UBI application reasonable, while 141 find it negative, and 59 remain undecided. Among the male participants, 226 find it reasonable, 120 find it negative, and 77 are undecided. Specifically, 184 women and 120 men answered 'yes,' 64 women and 77 men answered 'no,' and 30 women and 29 men were undecided.

Table 2. Crosstabulation for Perception of UBI by Gender

			Women	Men	Total
Do you find the idea of a fixed (monthly) payment of a fixed amount to each person over the age of 18 by the state at regular intervals reasonable?	yes	Count	184	120	304
		Expected Count	167,7	136,3	304,0
		% In Gender	66,2%	53,1%	60,3%
	no	Count	64	77	141
		Expected Count	77,8	63,2	141,0
		% With Gender	23,0%	34,1%	28,0%
	undecided	Count	30	29	59
		Expected Count	32,5	26,5	59,0
		% With Gender	10,8%	12,8%	11,7%
Total		Count	278	226	504
		Expected Count	278,0	226,0	504,0
		% With Gender	100,0%	100,0%	100,0%

Note: Count indicates observed values and expected count indicates expected values.

Table 3. Chi-square Test

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9,424[a]	2	,009
Likelihood Ratio	9,418	2	,009
Linear-by-Linear Association	5,885	1	,015
N of Valid Cases	504		

Note: 0 cells (0.0%) have an expected count of less than 5. The minimum expected value (expected count) is 26.46.

Notably, the observed discrepancies in actual values, coupled with differences between expected values, indicate that perceptions of UBI vary by gender. The results of the chi-square test, as presented in Table 3, confirm this differentiation in UBI perceptions based on gender. In fact, the probability value being less than 5% underscores that there is indeed a significant difference in perceptions based on gender.

4. Conclusion

In this study, we initially assess UBI as a policy proposal in alignment with fiscal policy objectives, focusing on income distribution fairness, economic growth, and economic stability, which includes full employment and price stability. Our evaluation reveals that the outcomes of UBI can vary depending on the extent of coverage, the financing approach, and the current economic conditions of the country. To ensure successful UBI implementations, especially in addressing structural issues like income inequality and inflation, policymakers should adopt a multidimensional approach that considers both financing and expenditure structures, supported by appropriate policies.

The second part of the study empirically examines the social attitudes toward UBI in a sample group in Türkiye. To measure these attitudes, we asked 504 respondents in Türkiye the question: 'Do you find the idea of a fixed (monthly) payment of a fixed amount to each person over the age of 18 by the state at regular intervals reasonable?' We conducted simple binary causality analysis using Pearson's coefficient and chi-square tests to determine which socio-demographic variables, such as age, gender, region of residence, marital status, education level,

employment status, number of people working in the household, and monthly household income, influence responses to this question.

The findings of both tests indicate that gender is the primary factor affecting attitudes toward UBI in our sample. Specifically, women in Türkiye have a more favorable view of UBI than men. The main challenge to implementing a basic income guarantee in Türkiye is the issue of financing. To enhance the feasibility and sustainability of such a social program, it may be beneficial to prioritize specific groups within society. Given that women in Türkiye have a more favorable view of UBI compared to men, these policies are of critical importance, particularly for socially disadvantaged groups. Therefore, more effective policies should be developed based on gender and social disadvantage considerations in the design and implementation of social assistance policies.

References

Angelov, I. (2023). Income Inequality in Relation To Universal Basic Income. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4558320 (20.09.2023).

Ataç, B. (2016). *Maliye Politikası.* 11. Baskı. Ankara: Turhan Kitabevi.

Bastagli, Francesca. (2019). *Universal Basic Income and Work.* https://elibrary.worldbank.org/doi/10.1596/978-1-4648-1458-7_ch3 (29.09.2023)

Francese, M., & Prady, D. (2018). *Universal Basic Income: Debate And Impact Assessment.* International Monetary Fund. https://www.imf.org/en/Publications/WP/Issues/2018/12/10/Universal-Basic-Income-Debate-and-Impact-Assessment-46441 (29.09.2023)

Güngör, M. (2008). Ki-kare testi üzerine. *Fırat Üniversitesi Doğu Araştırmaları Dergisi*, *7*(1), 84-89.

IMF. 2017. *Tackling Inequality, Fiscal Monitor.* International Monetary Fund, Washington D.C. https://www.imf.org/en/Publications/FM/Issues/2017/10/05/fiscal-monitor-october-2017 (29.09.2023)

M. Nikiforos, M. Steinbaum and G. Zezza, *Modeling the Macroeconomic Effects of a Universal Basic Income*, The Roosevelt Institute, August 29th, 2017. https://rooseveltinstitute.org/wp-content/uploads/2020/07/RI-Macroeconomic-Effects-of-UBI-201708.pdf (29.09.2023)

Mertler, C. A., & Vannatta, R. A. (2005). *Advanced and multivariate statistical methods: Practical application and interpretation (third edition).* United States: Pyrczak Publishing.

Ortiz, I., Behrendt, C., Acuña-Ulate, A., & Anh, N. Q. (2018). Universal Basic Income Proposals In Light Of ILO Standards: Key Issues And Global Costing. https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---soc_sec/documents/publication/wcms_648602.pdf (29.09.2023).

UNCTAD, 2017. *Trade and Development Report 2017: Beyond Austerity - Towards A Global New Deal.* United Nations Conference on Trade and Development, Geneva. https://unctad.org/system/files/official-document/tdr2017_en.pdf (29.09.2023).

Van Parijs P. (2000). A Basic Income For All. https://www.bostonreview.net/forum/ubi-van-parijs/ (01.09.2023).

Wells, C. S., & Hintze, J. M. (2007). Dealing with assumptions underlying statistical tests. *Psychology in the schools*, *44*(5), 495-502.

Wright, E. 2002. "Basic Income, Stakeholder Grants, and Class Analysis". Real Utopias Project conference on "Rethinking Redistribution," University of Wisconsin. https://library.fes.de/libalt/journals/swetsfulltext/19081615.pdf (29.09.2023)

A Discussion on Dispute Resolution in the Context of the Court of Accounts and the Council of State

Murat İnce[1]

Abstract

The status and position of Turkish Court of Accounts' (TCA) trial of account in the Turkish judicial system is an extremely important issue that has not been sufficiently discussed in the administrative and financial law literature. Thoughts put forward regarding the nature of TCA generally only emphasize the sui generis nature of the trial of account of TCA, and the discussions in this area seem far from clarifying the specific position of TCA's judicial function in the context of administrative and financial law. Through its decisions in 2013 and 2014, the Constitutional Court emphasized that TCA is a court, thus confirming that TCA's decisions are final in judicial terms, that is, they have a judicial identity. In this study, it is specifically pointed out that the disputes of judgment that may arise between TCA's decisions and the Council of State's decisions should be resolved before the Court of Jurisdictional Disputes, specifically only for matters "other than taxes, similar financial obligations and duties", that is roughly to the matters related to the institution of public loss and in this context it has been also emphasized that there is no legal obstacle to the resolution of the said disputes by the Court of Jurisdictional Disputes without the need for any legal amendments. In our opinion, the Court of Jurisdictional Disputes can resolve the disputes of judgment between the decisions of the Council of State and TCA, by considering TCA as a judicial authority operating within the administrative judicial regime in a broad sense. As a matter of fact, the provision in Article 160 of the Constitution that no applications for judicial review of the finalized decisions of TCA shall be filed in administrative courts is a clear indication that the Constitution-maker broadly understands TCA as a part of the administrative judicial regime.

Keywords: Judicial Power of Turkish Court of Accounts, Court of Jurisdictional Disputes, Council of State, Public Loss.
JEL Codes: H 83, K 30, M 42.

1. Introduction

The status and position of Turkish Court of Accounts' (TCA) trial of account in the Turkish judicial system is an extremely important issue that has not been sufficiently discussed in the administrative and financial law literature. Thoughts put forward regarding the nature of TCA generally only emphasize the *sui generis* nature of the trial of account of TCA, and the discussions in this area seem far from clarifying the specific position of TCA's judicial function in the context of administrative and financial law.

Judicial reports prepared as a result of the audits carried out by TCA basically aim to determine the financial responsibilities of public officials who are responsible for carrying out financial affairs and transactions and to provide indemnification for public loss inflicted by wilful acts, misconduct or negligence of those responsible. Public loss claims put forward in the reports based on the trial are decided by TCA chambers as a court, and these decisions are finalized within TCA as the first and last instance judicial authority. On the other hand, in the decisions

[1] Assoc. Prof. Dr., Principal Auditor, Turkish Court of Accounts, ORCID: https://orcid.org/ 0000-0003-1519-0321, muratince@sayistay.gov.tr

given in 2013 and 2014, the Constitutional Court emphasized that TCA is a court, thus confirming that the decisions of TCA are final in the judicial sense, that is, they have a judicial identity.

The purpose of this study is to bring to discussion the possibility of resolving possible disputes of judgment that may arise between the decisions of the Council of State and TCA, before the Court of Jurisdictional Disputes, exclusively on "*matters other than taxes, similar financial obligations and duties*", that is, roughly, issues related to the public loss institution. The topic will be subjected to a comprehensive evaluation by following an argumentative method in the context of administrative law and financial law.

2. Constitutional Status of TCA

TCA is a constitutional institution responsible for auditing all revenues, expenditures, and assets of the public administrations financed by central government budget and social security institutions on behalf of the Grand National Assembly, taking final decisions on the accounts and acts of the responsible officials, and exercising the functions prescribed in laws in matters of inquiry, auditing and judgment. In accordance with the provision of Article 160 of the Constitution, no applications for judicial review of such decisions shall be filed in administrative courts.

In the decision of the Constitutional Court dated 27.12.2012 and numbered E. 2012/102, K. 2012/207, it has been stated that *"The Court of Accounts carries out a judicial activity in terms of its duty to finalize the accounts and transactions of those responsible, and the decisions given within this framework are in the nature of a judicial decision that constitutes a final judgment in material terms, so it is concluded that due to its final judgment, it cannot be filed with any administrative or judicial authorities in a manner that would render it inconclusive or ineffective."*

Again, after the same evaluations are included in the decision of the Constitutional Court dated 28.02.2013 and numbered E. 2011/21, K. 2013/36, TCA is defined as *"a court of accounts that makes decisions with judicial consequences"*. The same issue is mentioned in the decision of the Constitutional Court dated 10.01.2015 and numbered E. 2014/172, K. 2014/170, and it is emphasized that TCA's judicial chambers should be considered within the scope of *"the court hearing a case"* in the context of concrete control of norms.

3. Practices of TCA for Determination of Public Loss

"Public loss institution" is a very comprehensive mechanism that covers the processes of collecting and/or indemnifying public losses from the relevant parties, determined both by the control, audit and examination activities of public administrations and by court decisions (including TCA's judicial decisions) (Aksoy et al., 2018: 97-118; Taytak, 2022:46-53). The primary regulations regarding the mechanism in question are regulated in the Public Financial Management and Control Law No. 5018 and its secondary legislation.

The determination of public loss in TCA trial involves a judicial process that begins with the inquiries by the auditors and ends with the final judgment made by TCA's judicial courts (chambers and Board of Appeals). Judicial reports prepared as a result of the audits carried out by TCA basically aim to determine the financial responsibilities of public officials who are responsible for carrying out financial affairs and transactions and to provide indemnification for public loss inflicted by wilful acts, misconduct or negligence of those responsible. In other words, in order for indemnification to be decided against a person as responsible in TCA's trial, the

person in question must have a duty and responsibility in the realization of the financial process and transaction, or his/her signature must be on the official document (payment order, accounting transaction voucher, etc.) that causes public loss, or the transaction that involves public loss must be associated with him/her within the framework of his/her public service status. As a rule, a decision is not made to indemnify public loss as "responsible" for a person who is not a public official or who does not have the duty and authority to make an expenditure (Aksoy et al. 2018:107-108; Geçgel, 2015:33-36). In some cases, responsible public officials may, based on their own discretion and by using public power, collect the public loss that have been inquired by the auditors but have not yet been judged, from the persons concerned (persons to whom unlawful payments have been made). One of the most important reasons why they resort to this method, even though they do not have such an obligation, is their concern or fear that the ultimate responsibility for the indemnification of public loss remains on them.

Essentially, in the context of TCA's trial, those responsible for whom a judgment has been passed must personally pay the market price for the public loss incurred. As a matter of fact, in the article 13 of the Civil Servants Law it is stated that, *"If the administration has suffered public loss as a result of the civil servant's wilful acts, misconduct, negligence or imprudence, it is essential that this damage be paid by the relevant civil servant at market value."* Accordingly, the responsible public official who made the payment must normally have recourse to the receivers later (by applying to the general courts and based on the provisions of unjust enrichment). However, in practice, the process does not work this way; public officials resort to using public power and ex officio collecting from the payers in matters that have not yet been adjudicated (for example, matters that have been inquired by the auditor). Another issue that causes confusion on this matter is that collections made upon inquiries are thought to be a mandatory provision of the legislation. As a matter of fact, the Regulation on Procedures and Principles for the Collection of Public Losses stipulates that inquiries issued by TCA should be accepted as notification by the relevant public administration. However, it is clearly stated in the said regulation that the final decision regarding the occurrence of public loss is a process that ultimately depends on the evaluation of the relevant public administration. Therefore, the notification nature of the inquiries issued by TCA is not a matter that eliminates the discretion and assessment powers of public officials regarding public loss. Nonetheless, it should also be acknowledged that collections made by public officials upon inquiries are a practice that demonstrates the effectiveness of TCA proceedings in most cases.

4. Disputes of Judgment Between the Decisions of the Council of State and TCA

The long-standing debates on the constitutional status of TCA and whether it is a judicial body have reached a final solution in line with the latest jurisprudence changes made by the Constitutional Court, so it has been demonstrated without any hesitation that TCA is "*a court of account that makes decisions with judicial consequences*" and that TCA's judicial chambers *"hear a case"* in the context of concrete control of norms. As a matter of fact, it is emphasized in the Constitution that the judicial decisions of TCA are final judgments, and in Article 78 of TCA Law No. 6085, it is clearly regulated that the judgments given by civil, administrative and military courts shall not preclude the audit and decision of TCA[2].

The emergence of various disputes of judgment between TCA and other judicial authorities is an extremely unfavorable situation that threatens the principles of legal certainty

[2] For further discussion on the topic, see Avci, 2022a:312-319; Avci, 2022b:9-23; Gedik, 2022:72-92; Kılıç, 2022:23-47.

and legal security (Koçberber, 2015:74). In our opinion, there is no need to make changes in the Constitution and the Law No. 2247 on the Establishment and Functioning of the Court of Jurisdictional Disputes in order to resolve decision disputes between TCA and other judicial authorities before the Court of Jurisdictional Disputes. Accordingly, in the face of the latest jurisprudence changes made by the Constitutional Court regarding TCA jurisdiction, there is no legal obstacle for the Court of Jurisdictional Disputes to resolve such disputes of judgment on the merits.

Pursuant to Article 24 of the Law on the Establishment and Functioning of the Court of Jurisdictional Disputes, the existence of a dispute of judgment is accepted where a case with the same subject, cause and at least one of the parties is filed in both civil or administrative jurisdictions and they give contradictory decisions on the merits of the same case and these decisions are also finalized (Tercan, 2015, 789-790). It is obvious that TCA is not listed by name among the judicial authorities that will be a party to the dispute of judgment in the Constitution and the said law. However, in our opinion, considering that TCA judiciary is an element of the administrative judicial regime in a broad sense in terms of legal systematics, it should be taken into consideration that a dispute of judgment may arise between TCA judiciary and administrative or judicial authorities.

An important point that should be noted in the dispute processes regarding public loss detection and indemnification is the situation of the beneficiaries who were made undue payments before TCA trial. If the persons who are the receivers before TCA judiciary are also “responsible persons” or the receivers are also public officials, annulment cases may be filed by the receivers in the administrative courts, and as a result of such cases, disputes of judgment may arise between the decisions of TCA and the Council of State (Aksoy et al. 2018:213). On the other hand, if the receivers are private law persons who are not public officials or who do not have the title of responsibility, some other disputes may arise in the indemnification of public losses. In such cases, those responsible can use their public power and authority to collect public losses from private law persons who have been paid inappropriately or excessively, or from whom less has been collected than required. Under normal circumstances, after the public loss is collected, public officials are required to file a recourse lawsuit against the persons in the position of receiver, based on the provisions of unjust enrichment, and the recourse process is finalized in the judicial courts. Thus, a litigation process based on a private law relationship takes place between the receivers and the public officials who have to indemnify the public loss, and as a result, various disputes of judgment may arise between TCA and the judicial courts. Such disputes of judgment are also encountered in unjust enrichment cases filed by the legal departments of public administrations against the receivers in the judicial courts. However, this study specifically focuses only on the resolution of disputes of judgment that may arise between the decisions of TCA and the Council of State before the Court of Jurisdictional Disputes.

In Article 160 of the Constitution it is stated that *“In case of conflict between the decisions of the Council of State and the Court of Accounts, regarding taxes, similar financial obligations and duties, the decision of Council of State shall prevail.”* As can be understood from this provision, the fact that the Constitution-maker felt the need to make a comparison between the decisions of TCA and the Council of State is a result of considering both of them as judicial bodies. Again, following *argumentum a contrario* of the provision it is clear that in case of a dispute between the decisions of two judicial authorities regarding matters *"other than taxes, similar financial obligations and duties"*, the decisions of TCA shall prevail. In our opinion, many issues decided in TCA proceedings regarding public loss are within the scope of *"matters other than taxes, similar financial obligations and duties”*, and the Court of Jurisdictional Disputes should be considered incumbent and authorized in resolving possible "disputes of judgment"

between the decisions of TCA and the Council of State on such matters. As it is known, the Court of Jurisdictional Disputes is essentially an independent high court authorized to finally resolve jurisdictional and judgment disputes between civil and administrative judicial authorities (Anıl, 1992: 45). However, TCA, which is clearly accepted as a judicial authority in Article 160 of the Constitution, should also be considered as a judicial authority as a part of the administrative justice regime in disputes of judgment resolved by the Court of Jurisdictional Disputes. To date, no dispute cases have been heard before the Court of Jurisdictional Disputes regarding the decision of TCA.[3] In accordance with the definitions and explanations in the Law on the Establishment and Functioning of the Court of Jurisdictional Disputes, there is no possibility of a positive or negative jurisdictional dispute between the decisions of the Council of State and TCA. In order for a positive or negative jurisdictional dsipute to occur, there must be a dispute whose parties, subject and cause are the same. In the likely jurisdictional disputes between the decisions of the Council of State and TCA, it is not possible for the parties, subjects and causes of the cases to be the same, due to the nature of the matter, because TCA judiciary essentially makes judgments about *"responsible public officials"*. On the other hand, it is possible for disputes of judgment to arise between the decisions of the Council of State and TCA, because in accordance with the relevant law and legislation, the existence of a dispute of judgment is accepted in cases where the subject, cause and at least one of the parties are the same.

5. Conclusion

As the court of first and last instance in the judicial process regarding the determination and indemnification of public losses, TCA undertakes an extremely important and central function. However, due to the nature of our legal system, various disputes of judgment may arise between the decisions of TCA and other judicial authorities on matters related to public losses. In our country, the authorized body for final resolution of various jurisdictional and judgment disputes between civil and administrative courts is the Court of Jurisdictional Disputes. In the Constitution and the Law on the Establishment and Functioning of the Court of Jurisdictional Disputes, TCA is not listed among the judicial authorities that will be a party to the disputes of judgment. However, considering that TCA judiciary is an element of the administrative judicial regime in a broad sense in terms of legal systematics, it should be taken into consideration that a dispute of judgment may arise between TCA judiciary and civil or administrative courts.

In this study, it is specifically pointed out that the disputes that may arise between the decisions of TCA and the Council of State should be resolved before the Court of Jurisdictional Disputes, exclusively on matters *"other than taxes, similar financial obligations and duties"*, that is, roughly, on matters related to the public loss institution and in this context, it is emphasized that there is no legal obstacle to the resolution of the disputes of judgment in question by the Court of Jurisdictional Disputes, without the need for any amendments to the Constitution and relevant legislation. In our opinion, the Court of Jurisdictional Disputes can resolve the disputes of judgment between the decisions of the Council of State and TCA, by considering TCA as a judicial authority operating within the administrative judicial regime in a broad sense. As a matter of fact, the provision in Article 160 of the Constitution that no applications for judicial

[3] The Court of Jurisdictional Disputes considers that it has no authority to resolve disputes of judgment between TCA and other judicial bodies. As a matter of fact, in the decision dated 15.11.1993 and numbered E:1993/46, K:43 given by the Court of Jurisdictional Disputes, it has been stated that the examination of the disputes of judgment between the decisions of TCA and judicial courts is outside the jurisdiction of the Court of Jurisdictional Disputes (Koçberber, 2015:73) on the grounds that TCA is not included in the scope of the jurisdictions listed in Article 158 of the Constitution and Article 1 of Law No. 2247.

review of the finalized decisions of TCA shall be filed in administrative courts is a clear indication that the Constitution-maker broadly understands TCA as a part of the administrative judicial regime.

References

Aksoy, M., Geçgel, B. & Öz, Y. (2018). Sayıştay Hesap Yargısı, Ankara: Sayıştay Yayınları.

Anıl, A. (1992). "Uyuşmazlık Mahkemesinin Kuruluşu Ve İşleyişi", Ankara Üniversitesi SBF Dergisi, 47 (01), 45-50, DOI: 10.1501/SBFder_0000001558

Avci, M. A. (2022a). "Türk Sayıştayının Yargı İşlevi Ve Mali Sorumluluk". Kamu Yönetiminde Denetim ve Hesap Verebilirlik: Kavram, Teori Ve Uygulamalar. (Ed.) İnce M., Taner A., Ankara: Adalet Yayınevi, 301-334.

Avci, M. A. (2022b). "Kanun Yolları Ve Sayıştay Yargısında Dereceli Sistem", Sayıştay Hesap Yargısı Ve Kamu Zararı Paneli. (Ed.) Avci M. A, Ankara: Sayıştay Yayınları, 5-22.

Geçgel, B. (2015). "Sayıştayın Yargı Yetkisi, Yargısal Görevinin Niteliği Ve Yargı Kolları Arasındaki Yeri", Sayıştay Dergisi, Sayı: 93, 31-42.

Gedik, Ö. (2022). "Bir Hesap Yargısı Olarak Sayıştayın Klasik Yorum Yöntemlerinden Hareketle Anayasal Görünümü". Sayıştay Hesap Yargısı Ve Kamu Zararı Paneli. (Ed.) Avci M. A., Ankara: Sayıştay Yayınları, 69-98.

Kılıç, A. (2022). "Sayıştay Ve Anayasa Mahkemesinin Norm Denetimi". Anayasa Yargısı Bağlamında Sayıştay Ve Sayıştay Kararları Paneli. (Ed.) Akyel R., Ankara: Sayıştay Yayınları, 21-52.

Koçberber, S. (2015). "Kamu Zararı Kavramı Üzerine Yargı Kurumları Arasındaki Hüküm Uyuşmazlıklarında Uyuşmazlık Mahkemesinin Rolü Ve Önemi", Sayıştay Dergisi, Sayı: 97, 55-75.

Taytak, M. (2022). "Kamu Zararı Kapsamında Mali Sorumluluk Müessesesi", Sayıştay Hesap Yargısı Ve Kamu Zararı Paneli. (Ed.) Avci, M. A., Ankara: Sayıştay Yayınları, 45-68.

Tercan, P. D. E. (2015). "Hüküm Uyuşmazlığında Uyuşmazlık Mahkemesince Esas Hakkında Yeni Bir Karar Verilmesi", Uyuşmazlık Mahkemesi Dergisi, 0 (5), 783-825.

Law No. 7440: Compliance of the Additional Tax with Equality Analysis Test Standards

Nuray Aşcı Akıncı[1]

Abstract

The application of additional taxes to compensate for the damages caused by earthquakes is a frequently used method as a law practice in our country. In order to minimize the economic, sociological, and psychological damages which occur after earthquakes, the state may impose additional taxes based upon its taxation power. In 1999, additional and new taxes were brought by Law No. 4481. Similarly, after the earthquakes on February 6, 2023, additional tax was brought for some corporate tax payers by Article 10 (27) of Law No. 7440.

In this study, the additional corporate tax brought by Article 10(27) of Law No. 7440, was evaluated in terms of the principle of equality in taxation. In this context, it is discussed whether the additional tax meets the requirements of the comparability test, justification test and proportionality test. The mentioned test standards are applied by the European Court of Justice in case-law on discriminatory tax regulations. As a result, it has been concluded that the additional corporate tax does not meet the requirements of the mentioned test standards. Compensation for the economic losses caused by earthquakes can be achieved through funds created for extraordinary periods as part of the state's responsibility, rather than through taxes imposed on taxpayers unproportionality to the ability to pay of the taxpayers.

Keywords: Additional tax, principle of equality, right of property.

JEL Codes: K10, K34.

1. Introduction

The state, based on its taxation power, can impose various obligations in order to meet public expenditures. The continuity of some taxes imposed under extraordinary circumstances requires the state's taxation authority to be re-questioned. In our country, at certain times, additional and new taxes have been introduced. In order to eliminate the economic losses arising from the earthquakes that occurred on February 6, 2023 and to provide the necessary source of income, additional corporate tax by Law No. 7440 and additional motor vehicles tax was introduced by Law No. 7456.

In this study, additional and new tax regulations applied in extraordinary periods such as economic crisis or natural disasters in Turkiye are briefly mentioned and then it is examined whether the additional corporate tax meets the equality analysis test standards. The purpose of the study is to determine the compliance of the additional tax with the principle of equality.

[1] Assoc. Prof., Kocaeli University, Faculty of Law, ORCID: 0000-0001-8844-7146, nuray.akinci@kocaeli.edu.tr

2. Brief Inventory of Additional Tax Regulations

The revenues used to fulfil the public services undertaken by the state are primarily consist of taxes, rather than revenues based on the state's ownership relationship (Karakoç, 2019: 62). In addition to the taxes collected in ordinary periods to financing public expenditures, budget deficits arising from economic crises or natural disasters are tried to be covered with additional liabilities.

In past practices, various additional and new taxes were introduced for similar reasons. In 1994, in order to ensure economic stability, economic balance tax, net wealth tax, additional real estate and additional motor vehicle taxes were introduced by Law No. 3986. The Law No. 4481, known as the earthquake taxes, introduced some additional and new obligations. In 2003, in order to ensure economic stability, additional real estate tax and additional motor vehicle tax were introduced by Law No. 4837. The regulations containing additional and new taxes in the aforementioned laws were taken to the Constitutional Court with the claim of unconstitutionality and request for annulment, and the annulment requests were accepted as well as rejected (Ateş, 2023: 14). The Constitutional Court did not find most of these regulations unconstitutional, based on the multifunctional concept of "public interest" (Akıllıoğlu, 1988:11) and also on law's preambles.

Following the earthquakes of February 6, 2023, which were described as the disaster of the era, an additional tax was introduced for some corporate taxpayers with Article 10 (27) of Law No. 7440. Additional motor vehicle tax was introduced by Law No. 7456. In the application to the Constitutional Court for the annulment of the additional motor vehicle tax, the Court rejected the request for annulment. There was no annulment application for the additional corporate income tax, but in lawsuits brought against taxes paid with reservations by a significant portion of the additional taxpayers, allegations of unconstitutionality were raised.

3. Measurement of the Equality Analysis of the Additional Corporate Tax: Test Standards

One of the constitutional principles of taxation is the principle of equality, which dictates that individuals with the same financial capacity should be taxed the same unless there is a justified reason, and those with different financial capacities should be taxed proportionally to their differences (Yaltı & Özgenç, 2006: 64). Article 73/1 of the Constitution states that everyone is obligated to pay taxes according to their financial capacity to meet public expenses. This provision does not provide a specific explanation regarding equality in taxation, but sets the rule for paying taxes according to ability to pay (Saban, 2021:47). The criterion for equality or differentiation in taxation is ability to pay. Classifying those in similar situations differently violates the principle of equality unless there is a justified reason. A three-stage test is applied to check whether a tax regulation complies with the principle of tax equality. These tests are the standards used by the European Court of Justice in analyzing whether a national regulation has a discriminatory nature. These tests are the comparability test, justification test and proportionality test. In the following sections, the compliance of the additional corporate tax with these test standards has been discussed.

3.1. Comparability Test

In the comparability test, it is examined whether the taxpayers subject to the relevant regulation are in the same situation. In the "comparability test", which is the first stage of the audit, it should be revealed whether the taxpayers are in similar or different situations. Undoubtedly, criterion for comparison in taxation is "ability to pay". Financial capacity

represents the ability to pay (Kaneti, 1989: 33) and is a principle related to tax justice in a welfare state (Öncel et al., 2020: 58). The ability to pay is measured according to various facts such as wealth and expenditures (Kaneti et al., 2019: 51).

The subject of additional corporate tax is corporate taxpayers who have benefited from some deductions and exemptions. According to the 2022 annual report of the Revenue Administration, as of the end of 2022, there are approximately 1,070,000 active corporate taxpayers. However, the additional tax liability is only envisaged for approximately 17 thousand corporate taxpayers who benefit from certain deductions and exemptions. (Yılmaz&Başdelioğlu, 2023: 93). The fact that the additional tax is limited to corporate taxpayers who have specifically enjoyed tax privileges and does not encompass taxpayers with similar or the same financial capacity, causes the relevant regulation to fail this test. Because the criterion of sameness or difference in the field of taxation is ability to pay. Moreover, the fact that the additional corporate tax targets some taxpayers who benefit from exemptions and deductions also contradicts the purpose of social and economic tax incentives.

3.2. Justification Test

In the equality analysis, the next stage after the comparability test is the justification test. Treating individuals in a different manner who are in a similar situation, or in a similar manner those who are in a different situation, is only possible if there is a justified reason. Therefore, if the first test is not passed, the additional tax needs to be examined in terms of the "justification test" in the next stage (Aşçı Akıncı, 2013: 410). In this test, the existence of a legitimate reason that necessitates the imposition of the additional tax on only a portion of taxpayers in a similar situation is considered. Interference with property rights through taxation must have a legitimate basis (Yaltı, 2006: 51). Is regulation of the additional tax for financing increased public expenditures due to earthquakes a justified reason? As mentioned in one of the decisions of the Constitutional Court, additional tax regulation is not a justified reason necessitated by extraordinary circumstances. Even if this argument were considered a justified reason for a moment from the perspective of the public interest, the regulation should also be subjected to the proportionality test.

3.3. Proportionality Test

The third determinant criterion in deciding whether a regulation complies with the principle of tax equality is the proportionality test. Proportionality, which is a requirement of the rule of law; It includes three sub-principles: "suitability" "necessity" and "proportionality". In tax law, the principle of proportionality determines the limit of the restriction on property rights through taxation (Yaltı & Özgenç, 2006: 83). With Article 10/(27) of Law No. 7440, the imposition of an additional tax of 10% and 5% on some corporate taxpayers retroactively limits the property rights of the taxpayer and increases the tax burden (Özgenç, 2023: 54). Because the maximum tax burden that a taxpayer can bear has already been determined by the legislator with the corporate tax rate applied for the previous year (Yaltı & Özgenç, 2006:85). In this case, the additional tax at the specified rates results in exceeding the "ability to pay". Taking the additional tax only once also eliminates the necessity element in terms of closing public finance deficits (Yaltı & Özgenç, 2006: 85). As a result, the additional corporate tax does not meet the three sub-requirements of the proportionality test.

4. Conclusion

Law No. 7440 is a restructuring law that covers many public receivables. With this law, opportunities such as the restructuring and ease of payment of taxes, penalties, and other debts,

privileges for taxpayers who increase their declared income and taxes, bringing business records into line with the actual situation, and restructuring and resolution of disputed receivables through reconciliation have been introduced. Taking all these into consideration, the state is not only aiming for the quicker collection of public receivables, but also forgiving many of them. On the other hand, Law No. 7440 introduces an additional tax liability. In this respect, the legislator contradicts itself. The additional corporate tax is a regulation that does not pass the comparability, justification, and proportionality tests. Compensating for the economic losses caused by the earthquake should be achieved through funds created for extraordinary periods as part of the state's responsibility and as a requirement of being a social welfare state, rather than through additional taxes that do not meet the specified test standards. As a result, the additional corporate tax is contrary to the principle of equality and is also a discriminatory tax.

References

Akıllıoğlu, T. (1988). Kamu Yararı Üzerine Düşünceler. İHİD, S.1-3, Özel Sayı, 11-22.

Aşcı Akıncı, N. (2013). Türk ve Avrupa Birliği Hukukunda Dolaysız Vergilerde Ayrımcılık Yasağı. İstanbul: Beta Yayınları.

Ateş, L. (2023). Kriz Dönemi Ek Vergi Düzenlemelerine İlişkin Niteliksel Parametrelerin Tespiti. Vergi Sorunları Dergisi, Sayı: 418, 13-26.

Kaneti, S. (1989). Vergi Hukuku. 2. Bası. İstanbul: Filiz Kitabevi.

Kaneti, S., Ekmekci, E., Güneş, G. & Kaşıkcı, M. (2019). Vergi Hukuku. 1. Baskı. İstanbul: Filiz Kitabevi.

Karakoç, Y. (2019). Genel Vergi Hukuku. 2. Baskı, Ankara: Yetkin Yayınları.

Öncel, M., Kumrulu, A., Çağan, N. & Göker, C. (2020). Vergi Hukuku. 29. Baskı. Ankara: Turhan Kitabevi.

Özgenç, A.S. (2023). Geriye Yürümezlik Esasında Test Standardı Uygulaması: 7440 Sayılı Kanuna İlişkin Çıkarımlar. Vergi Sorunları Dergisi. Sayı: 415, 46-55.

Saban, N. (2021). Vergi Hukuku. 11. Baskı. İstanbul: Beta Yayınları.

Yaltı, B. & Özgenç, S. (2005). Vergi Hukuku Pratik Çalışma El Kitabı. İstanbul: Beta Yayınları.

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

Yılmaz, S. & Başdelioğlu, O. (2023). Ek Vergi Uygulamasının Anayasa ve Hukuka Uygunluk Açısından Değerlendirilmesi. Vergi Sorunları Dergisi, Sayı: 417, 90-97.

Evaluation of Turkish Court of Accounts' Judgment In Terms of Reasonable Time

İsmail Cengiz Erek[1]

Abstract

Although the right to a fair trial and one of its elements, the trial within a reasonable time, are concepts discussed in civil law and criminal law, this discussion has not been included sufficiently in the Turkish Court of Accounts (TCA) proceedings. In the trials of TCA, the uncertainty of the start and end times of the trial period may undermine the principle of fair trial and prevent those responsible from exercising their freedom to seek justice. The purpose of this paper is to reveal possible problems that may be encountered in terms of reasonable time in the TCA proceedings and to discuss possible solution methods to these problems. In this context, it has been emphasized that in order to conduct a trial within a reasonable time, it is necessary to make regulations that will ensure that the judicial reports are tried as a single item within the fiscal year, rather than at the end of the fiscal year. Apart from this, it is mentioned that it would be beneficial to provide a period for legal remedies such as request for appeal and correction of decision in terms of reasonable time.

Key Words: Reasonable Time, Trial of Turkish Court of Accounts, Right to a Fair Trial

JEL Codes: K 40, K42, M42

1. Introduction

In the sixth article of the European Convention on Human Rights (ECHR), which defines the Right to a Fair Trial, it is stated that everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law. As can be understood from this definition, trials that do not comply with these rules may be considered as a violation of the right to a fair trial. In case of non-compliance with these rules, those responsible can apply to both the Constitutional Court and the European Court of Human Rights (ECtHR). Although there are generally regulatory deadlines for cases to be heard in TCA, which is a court established by law, sometimes these deadlines cannot be complied with by the auditors who prepare the judicial reports, and sometimes the trial exceeds the estimated time due to the disruptions experienced by the chambers of TCA. In such a situation, it may be possible for those on trial to object to the process because a reasonable period of time has been exceeded, and subsequently it may be determined that there has been a violation of rights. This study aims to guide those who are judging and judged by revealing the possible scenarios and solutions that may be encountered in terms of reasonable time in the trial of TCA.

[1] Ph.D., Turkish Court of Accounts, ORCID: 0009-0009-9347-8524, cengizerek@yahoo.com.

2. Right to a Fair Trial and Reasonable Time in the Trials of TCA

The right to a fair trial, one of the fundamental principles of the ECHR, became a part of our domestic law with the constitutional amendment made in 2001 (Yurtcan, 2019: 101). Article 36 of the 1982 Constitution, titled "Freedom to Claim Rights", includes the provision that everyone has the right of litigation either as plaintiff or defendant and the right to a fair trial before the courts through legitimate means and procedures (1982 Constitution, Article 36). The purpose of a fair trial is to conduct the criminal trial within the framework of the principles previously stipulated by law, in accordance with the principle of the rule of law, without hindering the freedom of will and without restricting the right of defense. What a fair trial means in the rule of law is basically expressed in Article 6 of the ECHR (Öztürk et al., 2015:119).

In this article, sufficiently clear explanations have been made regarding the Right to a Fair Trial. These issues are summarized as follows;

1. Everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law,
2. Judgment shall be pronounced publicly however, in exceptional cases, the press and public may be excluded from all or part of the trial in the interests of morals, public order or national security,
3. Everyone charged with a criminal offence shall be presumed innocent until proved guilty according to law,
4. Every defendant shall be informed promptly, in a language which he understands and in detail, of the nature and cause of the accusation against him,
5. Every defendant shall have adequate time and facilities for the preparation of his defence,
6. Every defendant shall have the right to defend himself in person or through legal assistance of his own choosing or, if he has not sufficient means to pay for legal assistance, to be given it free when the interests of justice so require,
7. Every defendant shall have the right to examine or have examined witnesses against him and to obtain the attendance and examination of witnesses on his behalf under the same conditions as witnesses against him, and
8. Every defendant shall have the free assistance of an interpreter if he cannot understand or speak the language used in court (ECHR, Article 6).

When the above mentioned issues are evaluated, it can be said that there are six elements of a fair trial. These are;

1.Independence and impartiality,

2. Court established by law,

3. Trial within a reasonable time,

4.Publicity,

5.Audit, and

6. The equality of arms (Öztürk et al, 2021: 124-125).

3. Reasonable Time in the Trial of TCA

It can be seen that there are two different views regarding the beginning of the judicial process in the trial of TCA. The first is the view that the judicial process begins with the TCA auditor writing an inquiry, and the second is the view that the judicial process starts with the TCA auditor sending of the judicial report to the presidency. When the second view is accepted, a more advantageous situation arises in terms of trial within a reasonable time. However, even if it is evaluated that the accounts and transactions are in compliance with the legal regulations after the inquiry is written, considering that the judicial report shall be written in any case, it seems that the first view, which states that in practice the beginning of the trial is the writing of the inquiry and that this date should be taken as basis at the beginning of the judicial process, stands out as a more accurate approach.

Where a matter resulting in public loss is detected by auditors in the course of audits of the accounts and transactions of public administrations within the scope of the general government, defence statements of those responsible shall be taken, and judicial reports shall be prepared as of the end of the fiscal year in accordance with Article 48 of TCA Law (Article 48 of TCA Law No. 6085). The only exception to this is the judicial reports to be prepared based on the public losses detected in the audits carried out irrespective of activity period or on the basis of sector, program, project and topic, in accordance with the authority given in the sixth article of TCA Law. As can be understood from this definition, the inquiry regarding the public loss detected by the auditors, for example, in January 2020, should be written on the date of occurrence2 and the defence statements of those responsible should be taken, but the judicial report should be prepared in 2021. In this case, except for subsequent processes, those responsible will have to wait an additional year just because of the framework drawn by the law. This issue alone has the potential to be a justification for violation of the right to trial within a reasonable time as stated in the ECHR.

Although it is not included in TCA Law, in accordance with Article 42 of TCA Audit Regulation, the judicial reports shall be submitted to the presidency of TCA by the end of November of the year following the relevant fiscal year at the latest. If we continue with the same example, the judicial report regarding the public loss detected in January 2020 shall be submitted to presidency of TCA at the latest at the end of November 2021, that is, approximately two years after the initial determination.3

After the judicial report is submitted to the presidency, the presidency is required to send this report to the chamber where the trial of account shall be held within fifteen days at the latest (TCA Law No. 6085, Article 48). After the report reaches the chamber, the duty of the chairman of chamber is to ensure that the relevant report is decided on and that the minutes and writs thereof are prepared within at latest six months not including the recess period (Working Procedures and Principles of TCA Chambers, Article 5). A period of twenty days reserved for each of the office of the chief prosecutor and the member to comment on the report is also included within this duration. The part of the six-month period other than the periods (40 days) determined for the notification of the opinions of the prosecutors and the members is considered as the period for the rapporteurs to examine the reports and prepare

[2] In practice, inquiries are written after the fiscal year ends. However, according to Law No. 6085, an inquiry shall be written when public loss is detected. Writing the inquiry as soon as it is detected may also reveal new problems. For example, will an inquiry be written for the following months in the ongoing tender, or will the relevant inquiry item be included in the report when collection is made based on the inquiry? In fact, legislative arrangements should be made to answer these questions.

[3] Generally, auditors submit judicial reports in November. While there are those who submitted the report before this date, there may also be those who cannot even write the inquiries until this date due to workload.

them for trial, to have them tried, to write the minutes and writs after the trial, and to sign and transfer. If we carry our example above here, those responsible for the public loss detected in January 2020 will be tried by the end of May 2022 at the latest, and the writ regarding this trial will probably be notified in June 2022.

However, according to TCA Law, in the course of an account trial, in cases where information and documents are found insufficient based on the facts that transactions under trial lack their supporting documents for the reason that they had been submitted to a court or a relevant administrative authority for an ongoing investigation, and it is deemed necessary to wait until the end of the investigation or the prosecution; the trial of these accounts and transactions may be suspended and excluded from judgment. After remedying the shortcomings concerning the matters excluded from the judgment, the trial of these accounts and transactions shall proceed (Article 50 of TCA Law No. 6085). As can be understood from this provision, in some cases, TCA chambers may suspend the proceedings and leave the matter out of judgment until the decision of the court or administrative authority is received. Such a practice may lead to the problem of the trial being extended to an indefinite date for the person on trial, and therefore may be considered a violation of the right to a fair trial.

Another problem regarding reasonable time is the preparation of a single judicial report regarding the account of the same institution. Therefore, in the event that the parties take legal action against the issues regarding indemnification or the issues where the accounts and transactions are judged to be in compliance with legal regulations, the finalization of all items in the report is prevented. For example, a public official who is responsible for only one item of the report will not be able to be sure whether he/she is fully acquitted until other items that are unrelated to him/her are finalized, or he/she will not be able to process the plan to have recourse to the receivers without exercising his right to object against the indemnification decision. This issue is a factor that prevents the expected benefit from the trial of TCA. Another issue that will harm the right to trial within a reasonable time in TCA jurisdiction is the uncertainty of the trial period for request for appeal and correction of decision. Neither in Law No. 6085 nor in the procedures and principles is there a time limit for the completion of legal remedies against the decisions made by the chambers.

It is known that in today's administrative structure, there are frequent dismissals of personnel or there are public officials who retire or resign when the management changes. The documents that will serve as a basis for the signature signed while on duty cannot be easily accessed after leaving office. It is also a fact that after a certain period of time, a person may have difficulty in remembering past issues. Therefore, preparing and prosecuting the judicial report written based on the public loss detected by TCA auditors as soon as possible will both reduce the concerns of those responsible for the future and contribute to the establishment of a fair trial. In this context, making arrangements to ensure that a judicial report is written for each public loss without waiting for the end of the year, will ensure that the issue is tried as soon as possible, and since the report includes a single item, those responsible will not have to wait for the other items in the report to be finalized. However, in order to achieve this, there is a need to make changes to TCA Law. By removing the phrase "the end of the fiscal year" in the relevant law article from the text of the law, it will be possible to write an inquiry when public loss is detected, and a judicial report will be prepared immediately after taking the defence statements of those responsible. Of course, in order to carry out this process, it is necessary to make an arrangement to ensure that each inquiry item is a single judicial report.

Like every application, this application may have advantages as well as disadvantages. The most common ones are the issue of creating uncertainty as to whether the same kind of payments will continue in the months after the public loss is detected, since the trial has not yet

been held (within the period of preparation of the judicial report by receiving the defence statements of those responsible), or if collections have been made based on the inquiries before the end of the year, whether this issue will be included in the writs. If excessive payments of the same type continue, the need to write inquiries for all of them at once may create an additional workload for auditors. However, it is clear that the advantages of this proposal outweigh the disadvantages. As a matter of fact, in the current situation, there is no obstacle to writing an inquiry when a public loss is detected, but since “November of the following year” is defined as the date of preparation of the judicial report, auditors write their inquiries all at once after the end of the fiscal year. This time, both the auditors and those responsible will have difficulty in remembering the relevant issue, and since the year has passed and perhaps the contractor's tender has ended, those responsible will face problems in collecting the public losses which have been subjected to inquiries. Writing inquiries within the year and thus finalizing public loss claims as soon as possible will have an extremely positive effect on public officials in terms of providing correct guidance to public financial management. Undoubtedly, the most favourable effect will be to ensure the right to trial within a reasonable time by concluding the trial in a short time.

4. Conclusion

In order to ensure compliance with the reasonable time period in the trial of TCA, the expression "the end of the fiscal year" in Article 48 of TCA Law No. 6085 must be changed. This change will be the most important achievement in solving the problems that have been experienced and will probably occur regarding the reasonable time in the trial of TCA.

Another proposal for change in the law regarding trial within a reasonable time is to stipulate a period of time in the law regarding the legal remedies such as request for appeal and correction of decision. As a matter of fact, TCA Law only assigns the duty to the chairmen of chambers in chamber negotiations to ensure that judicial reports passed to their chambers are decided on and that the minutes and writs thereof are prepared within at latest six months, not including the recess period. No such time limit is imposed on the chairman of the Board of Appeals. Providing such a period in the law for both of the legal remedies such as request for appeal and correction of decision will guarantee a trial within a reasonable time.

By allowing the judicial report to be prepared as a single item, it will also pave the way for attorney fees to be paid for each report item. As a matter of fact, even if we accept that attorney fees can be paid according to the current legislation, this fee can only be accrued once for each judicial report. If each inquiry is tried as a single report item, separate attorney fees may be awarded.

Again, by preparing a single judicial report for each inquiry, the situation of preventing the finalization of the verdict regarding the persons responsible for the items for which legal action is not taken will be eliminated.

References

Öztürk, B., Tezcan, D., Erdem, M. R., Sırma, Ö., Kırıt, Y. F. S., Özaydın, Ö., Akcan, E. A., Erden, E. (2015). Ceza Muhakemesi Hukuku. Ankara: Seçkin Yayınları.

Öztürk, B., Tezcan, D., Erdem, M. R., Sırma Gezer, Ö., Kırıt, Y. F. S., Özaydın, Ö., Akcan, E. A., Erden Tütüncü, E., Villemin, D. A., Tok, M. C. (2021). Ceza Muhakemesi Hukuku. Ankara: Seçkin Yayınları.

Yurtcan, E. (2019). Ceza Yargılaması Hukuku. (16.Bası). Ankara: Seçkin Yayınları.

1982 Constitution

TCA Law No. 6085

European Convention on Human Rights

TCA Audit Regulation

Working Procedures and Principles of TCA Chambers

Evaluation of the Plan Regarding Making Lease Agreement over the E-Government Gateway in terms of Tax Law

Ömer Faruk Bayrakcı[1]

Abstract

The Ministry of Treasury and Finance announced 44 actions that it plans to implement between 2023 and 2025 in order to combat the informal economy. Among these, Action 36 is related to the execution of rental agreements through the e-government portal. The published guidance contains little detail about this action. However, the planned implementation may be a measure that limits the freedom of contract. At this point, it is of legal importance to review the plan's compliance with constitutional principles and rules.

The aim of this study is to evaluate the action plan in question in terms of tax law. In this study, the constitutional rules regarding the plan in question will be explained. In this context, the constitutional areas that are the main subject of discussion in terms of tax law are; the content of the freedom of contract and the conditions for limiting this freedom.

Keywords: Freedom of contract, E-goverment portal, Public order, Regulatory impact assessment.

JEL Codes: K1, K34.

1. Introduction

In the guide published by the Ministry of Treasury and Finance, the actions planned to be implemented between 2023 and 2025 to reduce informality in the economy are explained. (HMB, 2022: 4-19). In this context, 5 different objectives such as "measuring the informal economy" and "taking legal, administrative and technical measures" have been determined as sub-components of the aim of preventing the informal economy. In addition, a schedule for the implementation of 44 actions planned to achieve these goals, in cooperation with other public institutions, is included.

“The 36th action, which is included under the target of "taking legal, administrative and technical measures", is the issuance of rental agreements through the e-government portal. (HMB, 2022: 17). The coordinator institution for this action was determined as the General Directorate of Land Registry and Cadastre, and the relevant institutions were the Ministry of Treasury and Finance, Revenue Administration and ministries. In this context, it is planned to make rental agreements through the e-government portal, with the regulation to be made until the end of 2024.

In this study, this plan is evaluated in terms of tax law.

[1] Assist. Prof. Ph.D., Pamukkale University, ORCID: 0000-0002-3135-3146, obayrakci@pau.edu.tr

2. Purpose of the Plan: Protection of Public Order

In the guide, it is explained that the plan to issue rental agreements via the e-government portal was designed for the purposes of "supporting decision-making processes" and "carrying out risk analysis studies" (HMB, 2022: 17). It can be seen that in this plan prioritizes the purpose of collecting data for auditing.

It is not a new situation for taxpayers to abuse their freedom of contract against the fiscal order. Illegal transactions carried out by taxpayers using private law forms in order to pay less tax or no tax at all cause tax loss for the state treasury. Similarly, it is possible for rental agreements to be misused in a way that erodes the tax base.

According to Turkish Constitutional Court decision, preventing tax loss and accurately determining the tax base coincide with the aim of preserving fiscal order. In this decision, fiscal order is defined as an element of public order (AYM, E. 2016/124, K. 2016/155, para. 19). In this respect, not only this plan, but other measures to prevent the informal economy can be justified "legally" in order to protect the fiscal order.

Public order is generally defined as an environment that will enable society to develop and survive in peace and security (Orer, 2015: 366). Additionally, public order is also used as a general justification behind state intervention in the economy. The term "economic public order" is also preferred in the doctrine to explain this situation.

It is an obligation for everyone who is a taxpayer to pay taxes that constitute income for the state treasury (AY, art. 73/1). From this perspective, measures taken to collect taxes fully and completely are closely related to public order, as they concern the state treasury. In this context, the application that makes it possible to make a rental agreement via e-government can be based on protect public order, as it will contribute to risk analysis systems and therefore have a positive impact on the state treasury.

3. The Relationship Between Freedom of Contract and Tax Law

3.1. Freedom of Contract

Freedom of will, a philosophical view, is a doctrine that advocates the liberation of people in all areas (Erçoşkun Şenol, 2016: 710). The way freedom of will is reflected in private law relations is freedom of contract (Erçoşkun Şenol, 2016: 711).

Constitutional rules stating that everyone has the right to protect and develop their material and spiritual existence (AY, Art 17) and personal freedom and security (AY, Art 19) can be considered as an indication that freedom of contract is accepted.

According to the Turkish Constitutional Court, freedom of contract means that the state enables people to achieve the legal results they want, and in this context, recognizes people's wills leading to certain legal results as valid, and embraces and protects the legal consequences that their will directs…Freedom of contract, includes the freedom to make contracts as well as the prohibition of external intervention in the contracts made. (AYM, E.2017/154, K.2019/18, para. 11)

In terms of Turkish Law, it is a rule that contracts are determined by the parties to the contract. However, exceptionally, there are cases where the freedom of contract is limited in terms of contract elements such as content, type or form.

3.2. The Condition of Compliance with the Constitution in Limiting the Freedom of Contract

When evaluating a regulation to be made in the field of tax law from a legal perspective, it should first be discussed whether this change is in compliance with the constitution. Because the constitution is the primary source of tax law.

Freedom of contract is protected at the constitutional level in Turkish Law. Interferences with this freedom must comply with AY, Art 13. According to this article; Any change that limits freedom of contract must first be based on a law. In addition, the amendment to be made must not violate the prohibition of touching the essence, must be in accordance with the essence and spirit of the Constitution, must not be contrary to the principle of proportionality.

4. Legal Assessment

4.1. Option 1

If the regulation to be made is voluntary, then there will be no intervention restricting the freedom of contract. Because, in this case, the parties to the contract have the opportunity to determine an optional contract form and location. However, it is doubtful how much contribution making contracts through the e-government portal will contribute to risk analysis studies. Because contracts made optionally through the e-government portal will not act as a deterrent for property owners who want to set the rental price below the actual amount. In this case, individuals will be able to freely determine the content of the contract or continue to abuse this freedom. For this reason, the "reality" of the data collected by the tax administration with this option is questionable. While there are still doubts about whether the contract price is the "real" price or not, the tax administration's decision to reach a conclusion by processing this data will be a practice contrary to the principle of economic approach (VUK, Art 3).

4.2. Option 2

If the regulation to be made imposes a form requirement on rental agreements in terms of validity or proof, In this case, the regulation must be evaluated in terms of AY, Art 13. As there are currently audit tools regulated in the Tax Procedure Law, I think that such a measure far from producing factual data would not be necessary and proportionate.

On the other hand, we explained that the justification for interference with the freedom of contract by making it mandatory for rental contracts to be made via e-government can be based on the concept of public order. But, public order is a more comprehensive concept than fiscal order. In this context, another issue that should be emphasized in the connection between public order and limiting the freedom of contract is the protection of the contract parties. As it is known, in terms of residential and workplace rents, the weak party of the contract is the tenant. If the form requirement is not complied with and the contract becomes invalid or unprovable, tenants may have to evacuate the place they rent. This will cause the already weak side to be dragged into an even weaker position. However, it is argued that the link between public order and the formal requirement will be established primarily in the context of the principle of protection of the weak side (Atasoy, 2020: 167-168). This situation will be create a contradiction regarding the explanation of just cause as public order.

5. Conclusion

In this study, it was discussed whether a tax rule is legal or not while it is still at the draft. Even if the aim is to protect public order, some regulations may not comply with constitutional rules. To prevent this, regulatory impact assessment studies can be conducted as done in this study.

References

Atasoy, K. (2020). Sözleşme Özgürlüğü İlkesinin Kamu Düzeni Gerekçesiyle Sınırlandırılması. Anadolu Üniversitesi Sosyal Bilimler Enstitüsü (PHD Thesis), Eskişehir.

Erçoşkun Şenol, H. K. (2016). Sözleşmenin İçeriğini Belirleme Özgürlüğü ve Bunun Genel Sınırı: TBK m. 27, İstanbul Üniversitesi Hukuk Fakültesi Mecmuası. 74 (2), 709-737.

Hazine ve Maliye Bakanlığı. (2022). Kayıt Dışı Ekonomiyle Mücadele Eylem Planı. https://ms.hmb.gov.tr/uploads/2022/12/Kayit-Disi-Ekonomiyle-Mucadele-Eylem-Plani-2023_2025-1.pdf, (02.10.2023).

Orer, G. (2015). Ekonomik Kamu Düzeni ve Devletin Ekonomiye Müdahalesi. Uyuşmazlık Mahkemesi Dergisi, 6, 363-393.

AYM, E. 2016/124, K. 2016/155, d. 07.09.2016.

AYM, E. 2017/154, K. 2019/18, d. 10.04.2019.

Testing the Olivera-Tanzi Effect for the Turkish Economy: ARDL Method

Osman Cenk Kanca[1] **Rahmi Yamak**[2]

Abstract

In recent years, the Olivera-Tanzi effect has gained popularity, especially in developing country economies where there are high inflationary pressures. The Olivera-Tanzi hypothesis suggests that there is a negative relationship between real tax revenues and the inflation rate. The aim of this study is to test whether the Olivera-Tanzi hypothesis is valid in Turkiye by using quarterly data sets for the period 2003:1-2019:4. In the study, predictions were made with 8 different models using the ARDL method. According to the results obtained, the Olivera-Tanzi effect is not valid in Turkiye for the period in question. According to the study, inflation affects taxes positively in Turkiye.

Keywords: Olivera-Tanzi Effect, Inflation, Bound Test.

JEL Codes: C22, E31, E62.

1. Introduction

Inflation, which is one of the economic parameters, is generally known as the increase in the general level of prices. Taxes, one of the components of public revenues, are an important resource in terms of meeting public (social) needs. From a macro point of view, it is considered that inflation disrupts financial stability (erosion of tax revenues, etc.) and interacts with taxes and macroeconomic parameters.

In the study, the Olivera-Tanzi effect was examined in terms of the Turkish economy for the period 2003-2019. Various empirical analyzes were used to examine the relationships between the variables discussed in the study. In this context, first of all, theoretical information and related literature about the Olivera-Tanzi effect are presented in the study. Then, the data set used in the study was introduced, the method used was explained and the findings were summarized. In the conclusion part, the findings were interpreted and policy recommendations were made.

2. Data Set, Econometric Method and Findings

In this study, quarterly data for the period 2003-2019 are used, including CPI (LP), total tax revenues (TV), indirect tax revenues (DLV), income tax (GV), corporate tax (KV); T.R. It was obtained from the Central Bank, TUIK data distribution system and the official website of the Ministry of Treasury and Finance.

Pesaran et al. (2001) although it is a more effective method compared to other traditional cointegration (Engle-Granger and Johansen cointegration) analyzes, this approach

[1] Assoc. Prof. Ph.D., Atatürk University, ORCID ID: 0000-0003- 3381-381X, osmancenkkanca@hotmail.com
[2] Prof. Ph.D., Karadeniz Teknik University, ORCID ID: 0000-0002-2604-1797, yamak@ktu.edu.tr

allows very strong empirical results in terms of examining the long- and short-term relationship. In the bounds test method, it is possible to test the cointegration relationship between the variables regardless of whether the variables are I(0), I(1) or mutually cointegrated. In other words, “with the bounds test approach, it can be investigated whether there is a cointegrated relationship between two variables, regardless of what level the series is stationary”. The boundary test consists of two stages, first of all, it is checked whether there is a cointegration relationship between the variables. Then, if there is a cointegration relationship between the variables, short and long-term relationships are estimated using ARDL (Autoregressive Distributed Lag) model.

According to ADF and PP unit root test results; Among the related variables, the CPI (LP) variable was stationary at the first difference, and all other variables were found to be stationary at the I(0) level. Then, it was observed that the limit test result calculated at the 1% significance level exceeded the upper limit critical value, and it was found that there was a long-term relationship between the variables. The short-term coefficients were found to be statistically significant at the 1% significance level in all 8 models. According to the estimation results; It has been observed that inflation has a positive effect on all tax types in question.

3. Conclusion

Inflation is an economic issue that frequently occupies the agenda in Turkiye, as in other developing countries. On the other hand, taxes, which are one of the policy tools of the state, can be affected from time to time by the mentioned economic problem. In this context, the study focuses on inflation, tax types and their relations with each other in the post-2003 period in Turkiye. For this purpose, models has been created and econometric estimation has been made by means of the boundary test.

In this study, it has been tried to determine the mutual influence level of "inflation", "total tax revenues", "indirect tax revenues", "income tax, and "corporate tax" in Turkiye in the period of 2003-2019. In the study, ARDL bounds test methodology was used and evidence was obtained that inflation had an increasing effect on “tax revenues” in the Turkish economy in the said period. This finding is evaluated as the Olivera-Tanzi effect is not valid when considering the Turkish economy in particular.

References

Agbeyegbe, T. Stotsky J. G . & Wolde Mariam A. (2006). “Trade Liberalization, Exchange Rate Changes, and Tax Revenue in Sub-Saharan Africa”, IMF Working Paper, No. 04-178.

Alavirad, A. (2003). “The Effect of Inflation on Government Revenue and Expenditure: The Case of the Islamic Republic of Iran”, OPEC Review, 27 (4), 331-341.

Anušić, Z. & Švaljek, S. (1996). “Olivera-Tanzi Effect: Theory and Its Manifestation in The Croatian Stabilization Programme”, Croatian Economic Survey, 3, 73-102.

Choudhry, N. N. (1990). “Fiscal Revenue and Inflationary Finance”, IMF Working Paper, WP/90/48.

Çavuşoğlu, A. T. (2005). “Vergi Gelirleri ve Kamu Harcamaları Açısından Enflasyon: Tanzi ve Ters Tanzi Etkileri”, Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 7(3), 35-52.

Gobachew, N. Debela, K. L, & Shibiru, W. (2018). "Determinants of Tax Revenue in Ethiopia", Economics, 6 (6), 58.

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

Narayan, P. K. Narayan, S. & Prasad, A. D. (2006). "Modeling the Relationship between Budget Deficits, Money Supply and Inflation in Fiji", Pacific Economic Bulletin, 21 (2), 103-116.

Olivera, J. H. G. (1967). "Money, Prices and Fiscal Lags: A Note on the Dynamics of Inflation", Banca Nazionale del Lavaro, 20, September.

Pesaran, M. H., Shin, Y. & Smith, R. J. (2001). "Bounds Testing Approaches to the Analysis of Level Relationships", Journal of Applied Econometrics, 16 (3), 289-326.

Tokatlıoğlu, M. & Selen, U. (2019). Maliye Politikası. Bursa: Ekin Yayınevi.

Yamak, R. & Köseoğlu, M. (2006). Uygulamalı İstatistik ve Ekonometri (3. Baskı). Trabzon: Celepler Matbaacılık.

Economic and Political Determinants of External Debt: A Comparative Analysis for Countries with Different Income Level[1]

Yusuf Yakşi[2] **Şebnem Tosunoğlu[3]**

Abstract

Determining the determinants of external debt is critical for both external debt sustainability and external debt management policies. In this context, it is clear that the majority of studies on the determinants of external debt concentrate on economic factors. The effects of political and economic factors on external debt were examined in this study. Current account deficit, inflation, money supply, exchange rate, defense expenditures, domestic savings, and foreign direct investments are all explanatory variables in the macroeconomic factors model of external debt. The political factors model incorporates the political regime, political stability, government systems, corruption control, economic growth, foreign trade openness, and budget deficits. According to the findings of the analysis, lower-middle income countries external debt is increased by money supply, exchange rate, budget deficits, and political stability, while corruption control decreases external debt. In upper-middle-income countries, on the other hand, it has been determined that the current account deficit increases external debt, whereas the presidential system, which is one of the economic growth and government systems, decreases external debt. According to the findings, the impact aspects and degrees of economic and political factors differ across country groups. These distinctions have significant policy implications for decision makers concerned with the sustainability of external debt and the effective application of external debt management policies.

Keywords: External debt, Upper middle income countries, Lower middle income countries, Panel data analysis.
JEL Codes: H63, C10

1. Introduction

Most of the studies on the determinants of external debt have focused on economic factors. Although the implications of empirical studies on external debt and economic factors have always attracted attention, it can be stated that there have not been many studies that directly address the issue of external debt and political factors to date. This study analyzes the effects of political factors as well as economic factors on external debt.

The study consists of three sections. The first section is the introduction. The second section presents the conceptual and theoretical framework of the economic and political determinants of external debt. The third section explains the data set, model and methodology of the study. In the conclusion and suggestions section of the study, the findings obtained from the study are evaluated and in the light of the findings, suggestions are made regarding the policies and institutional arrangements to be implemented in order to sustain and manage external debt in lower-middle and upper-middle income countries.

[1] This study was prepared using Yusuf Yakşi's Ph.D thesis titled "Economic and political determinants of external debt: A comparative analysis for countries with different income level" under the supervision of Prof. Dr. Şebnem Tosunoğlu.

[2] Prof.Dr. Anadolu University, ORCID: 0000-0002-5591-4403, ssel@anadolu.edu.tr

[3] Ph.D. Dicle University, ORCID: 0000-0001-6247-0268, yusuf.yaksi@dicle.edu.tr

2. External Debt

Government debt is a two-way exchange transaction in which individuals or institutions transfer their funds to the state and the state takes over the rights over the main sources of income in the post-borrowing period (Buchanan, 1987: 1044). In other words, it is a financial instrument used to provide public services that does not reduce the real incomes of individuals or institutions after states collect funds from individuals or institutions (Batırel, 1990: 183).

Government debt is a combination of domestic and external debt. In this context, different criteria are used in evaluating debt as domestic or external debt. Among these, "the currency" in which the borrowing is made, "the residence of the creditor" and "the place of issuance and the legislation governing the debt contract" are most commonly taken into account (Panizza, 2008: 4). External debt is the amount of interest-bearing/non-interest-bearing principal repayments or principal/non-interest-bearing interest payments contractually obligated by residents of a country to non-residents (Klein, 1994: 56). External debt sustainability is generally defined as the ability of the debtor country to fulfill its current and future obligations (Krugman, 1988: 253).

This section of the study lays the groundwork for the research with conceptual and theoretical evaluations on the factors affecting external debt. In this framework, economic and political factors affecting external debt are discussed under separate headings. This distinction is important for analyzing the determinants of external debt in the following section of the study.

2.1. Economic Determinants

In many studies on the economic determinants of external debt, variables include economic growth, trade openness, inflation, money supply, budget deficit, current account deficit, exchange rate, domestic savings, defense spending and capital flight.

2.2. Political Determinants

The political-economy literature's justifications for a specific area such as external debt have been developed mainly in the context of political regime, political ideology, political stability and government systems. In this section of the paper, the main political characteristics mentioned above will be analyzed one by one and their interactions with external debt will be analyzed.

3. Research Methodology

In this study, which deals with the determinants of external debt in the context of economic and political factors, the main objective of the study is to reveal the political determinants of external debt and their importance levels. The secondary objective of the study is to make a comparative analysis of the determinants of external debt in lower middle and upper middle income countries and to identify the similarities or differences between them. In line with these objectives, firstly, empirical studies in the literature on the political and economic determinants of external debt are reviewed, then the data set, model and methodology of the study are explained and finally the empirical findings are presented.

In this study, the economic and political determinants of external debt are investigated on country clusters classified according to income groups. While making this classification, the

World Bank Atlas method is taken into account. The World Bank classifies high-income, upper-middle-income, lower-middle-income and low-income countries according to their gross national income per capita expressed in US dollars.

In this study, the economic and political determinants of external debt are investigated separately for lower-middle-income countries and upper-middle-income countries. In this framework, the economic factors model is based on Wahed (2017) and Akduğan (2017), while the political factors model is based on the specifications of Chiminya et al. (2018) and Nguedie (2018).

In the application part of the study, four different panel data models, including economic and political factors, were estimated for lower middle and upper middle income countries using annual data for the period 2000-2020. In this context, panel regression methods were utilized. Thus, the determinants of external debt of countries with different income levels were tried to be determined.

4. Conclusion

In this study, the economic and political determinants of external debt are investigated on country clusters classified according to income groups. While making this classification, the World Bank Atlas method was taken into account. According to the World Bank's income classification, it is aimed to include countries in all income groups within the scope of the analysis. However, since debt in developed countries is based on periodic and temporary problems rather than structural problems, countries in the high-income group were not included in the analysis. Low-income countries were excluded from the analysis due to the lack of reliable data. This situation necessitated the sampling of countries as lower-middle and upper-middle income countries. In this sense, the study provides empirical results based on lower-middle- and upper-middle-income countries, which is a perfect laboratory due to countries with different income and development levels.

When the results of the panel data analysis are analyzed at the level of income groups, it is determined that money supply and exchange rate are the determinants of external debt in the economic factors model of lower-middle-income countries, while political stability, corruption control and budget deficit are the determinants of external debt in the political factors model. For upper middle-income countries, current account deficit in the economic factors model and presidential system and economic growth in the political factors model are the determinants of external debt. When the models' findings are evaluated as a whole, it is found that the macroeconomic determinants of external debt are growth rate, real exchange rate, money supply, current account deficit and budget deficit. The political determinants of external debt are political stability, government systems and corruption control. Among these, budget deficit, current account deficit, real exchange rate, money supply and political stability are found to affect external debt stock in a way to increase it. On the other hand, it is concluded that increasing growth rate, presidential system and corruption control affect external debt stock in a way to decrease it. As a result of the analysis, political factors have a significant effect on external debt stock and it is proven that there is a relationship between political factors and external debt.

References

Batırel, Ö. F. (1990). "Kamu Maliyesi Teorisine Giriş". İstanbul: Marmara Üniversitesi Yayınları, No:492.

Buchanan, J. M. (1987). "Public Debt". New Palgrave Dictionary of Economics. Vol. 5, 1044-1047.

Klein, T. M. (1994). "External Debt Management". World Bank Technical, ISSN 0253-7494; No. 245.

Krugman, P. (1988). "Financing vs. Forgiving a Debt Overhang". Journal of Development Economics, 29 (3), 253-268.

Panizza, U. (2008). "Domestic and External Public Debt In Developing Countries". United Nations Conference on Tradeand Development, No:188, 1-17.

The Socio-Economic Factors and Legal Regulations Effecting Private School Preferences in Provinces: An Investigation From the Perspective of Public Economics

Sevim Yaman GÜÇLÜ[1] **Sacit Hadi AKDEDE**[2]

Abstract

Education is a very important universal reality in terms of providing both individual and social benefit. It has an important place in economic growth, development and the formation of human capital. Although education first started in public schools, social and economic changes have led to the existence of private schools. Private schools; These are educational institutions opened by local and foreign real and legal entities whose expenses are not covered by the state (Law No. 5580).

Purpose of the study; It is an examination of the effects of socio-economic factors and legal regulations on the increasing demand in private schools over the years. Private schools, which have an important place in the world with globalization, have increased over the years in Turkey. In the study; The independent variables are per capita income in the provinces, female schooling rate, female labor force participation, household size, agricultural size, metropolitan municipalities, Education-Training Support provided by the Ministry of National Education and the closure of private teaching institutions with the article added to Law No. 5580 within the scope of Law No. 6528; In order to measure the effect of the dependent variable on the private school student ratio, panel data analysis was analyzed with fixed effects model and Driscoll-Kraay standard error regression models between 2010 and 2020. According to the findings; The effects of income, female schooling rate and household size on private school preference are statistically significant and the coefficient is positive. Agriculture and women's participation in the workforce; It is not statistically significant.

Used as dummy variable in the analysis; Educational support, closure of private teaching institutions and metropolitan cities are statistically significant and the coefficient is positive. For this study conducted at the provincial level, students and schools (general and vocational high schools) studying in secondary education were taken into account. In this study, the analysis made at the provincial level showed that private school preference was higher in metropolitan cities. The reason for this may be that metropolitan cities are more convenient both in terms of the number of schools and opportunities. In the study, in order to determine the impact of legal regulations on private school choice, the years in which education support and the decision to close private teaching institutions were included in the analysis as dummy variables.

According to the results of the analysis, it was concluded that the closure of private teaching institutions and education support increased the choice of private schools. The increase in income has a positive effect on families' choice of private schools because the increase in income

[1] Ph.D., Aydın Adnan Menderes University, ORCID: 0000-0003-4473-4594, sevim.yaman@adu.edu.tr
[2] Prof. Ph.D., İzmir Bakırçay University, ORCID: 0000-0002-7220-9220, sacithadi.akdede@bakircay.edu.tr

can make a positive contribution to the amount that families allocate from their income for education expenses for the education of their children. Increase in private schools; By ensuring competition both among private schools and between public schools and private schools; It may increase efficiency and productivity in education, but the fact that families with better socio-economic status have a higher advantage in entering education in private schools may cause inequality of opportunity in education. In order to ensure equality in education, the opportunities provided to students in the process of achieving success must be the same.

Keywords: Education, Private School, Legal Regulations, Income

The Relationship Between Human Development and Public Expenditures: New Evidence From Developed and Developing Countries

Seher Gökpınar[1] **Burak Sertkaya**[2] **Mehmet Songur**[3]

Abstract

This study aims to investigate the effects of public expenditures in developed and developing countries on the human development index. For this purpose, 15 developed and 14 developing countries were included in the analysis. Annual data set was used in the study, and the data set covers the period 1990-2021. The analyses are investigated with Fourier time series techniques. Accordingly, the unit roots of the series are analyzed with the Fourier ADF unit root test developed by Enders and Lee (2012). The cointegration relationship between the series is analyzed with the Fourier Shin cointegration test developed by Tsong et al. (2016). FMOLS estimator with Fourier functions was used to estimate the coefficients in countries with long-run cointegration relationship. According to the findings, there is a long-run cointegration relationship between the two variables in Japan, Italy, USA, Sweden and Denmark in developed countries and in India, China, Mexico, Turkiye, Colombia, Chile, Pakistan and Peru in developing countries. According to FMOLS estimation results in developing countries, public expenditures positively affect the human development index in all countries. In developed countries, the coefficients are positive in Japan, negative in Italy and Denmark, and statistically insignificant in the USA and Sweden.

Keywords: Human Development Index, Public Expenditures, Time Series Analysis

JEL Codes: C22, H50, O15

1. Introduction

Public expenditures, which have an important place among fiscal policy instruments, are actively used by the state to meet economic, social, cultural and other public needs. Public expenditures in many areas such as investment expenditures, education and health expenditures, consumption expenditures and social transfer expenditures are directly related to social welfare. The positive externalities that will emerge in the field of education and health through public expenditures are expected to affect human development in the long run. In this respect, when human development is accepted as a measure of welfare, the impact of public expenditures on human development gains importance. As the weight of the state in the economy increases, the economic and social phenomena that emerge bring the welfare-enhancing role of the state in the economy back to the agenda.

[1] Res. Assist. Dr., Hitit University, Faculty of Economics and Administrative Sciences, Department of Public Finance, ORCID: 0000-0003-0974- 6151. sehergokpinar@hitit.edu.tr

[2] Assoc. Prof., Hitit University, Faculty of Economics and Administrative Sciences, Department of Economics, ORCID: 0000-0001-9551-3439. buraksertkaya@hitit.edu.tr

[3] Assoc. Prof., Dicle University, Faculty of Economics and Administrative Sciences, Department of Economics, ORCID: 0000-0003-4763-9314. mehmet.songur@dicle.edu.tr

This study aims to investigate the effects of public expenditures in developed and developing countries on the human development index. Data on the human development index were compiled from the United Nations Development Program database, and data on public expenditures were compiled from the IMF database. The most important advantage of Fourier-based studies is that the structural break is independent of the break number and break dates. Thus, in addition to significant structural changes, soft transitional structural changes are also taken into account throughout the period under consideration. The fact that each country is analyzed separately in the study is ensuring the consideration of country-specific situations. An important contribution is made to the literature by using Fourier-based time series analysis techniques in examining the effect of public expenditures on the human development index.

2. Theoretical Framework

As development and growth increase over time, public investments shift more towards human capital investments such as education, health and welfare services. This model is the model in which Wagner and Musgrave use the growth in public expenditures (Durmuş, 2006: 259). Wagner stated that the social development that emerges in the structures of societies, in other words, the demand for better quality public services will necessitate an increase in public expenditures and the state will have to make more public expenditures to meet this demand (Işık and Alagöz, 2005: 66). According to Musgrave, the needs arising from urbanization, population and economic development are effective in the increase in public expenditures (Yayla and Şaşmaz, 2020: 182). However, according to Musgrave, excluding public expenditures in extraordinary periods such as war, the ratio of public expenditures to national income is stable. This suggests that over time, as countries complete their development process, the composition of public expenditures will be in favor of education, health and social expenditures. Unlike Wagner and Musgrave, Keynes argued that economic growth depends on the increase in public expenditure. Therefore, he argued that public expenditures should increase. Unlike classical thought, Keynes emphasized that the demand side of the economy is more important. Likewise, he stated that economic growth would be realized by increasing demand through public expenditures (Gül and Yavuz, 2011: 75).

3. Findings

This study aims to investigate the effects of public expenditures in developed and developing countries on the human development index. For the purpose, 15 developed and 14 developing countries were included in the analysis. An annual data set was used in the study and the data set covers the period 1990-2021. Data on the human development index was compiled from the United Nations Development Program database, and data on public expenditures was compiled from the IMF database. Empirical analyzes were carried out using Fourier-based time series analysis techniques. The most important advantage of Fourier-based studies is that structural breaks are independent of the number of breaks and break dates. Thus, in addition to obvious structural changes, smooth transitional structural changes are also taken into account throughout the period under consideration. Analyzing each country separately in the study also ensures that country-specific situations are taken into account. A significant contribution to the literature is made by using Fourier-based time series analysis techniques in examining the impact of public expenditures on the human development index. The analyses are investigated with Fourier time series techniques. Accordingly, the unit roots of the series are analyzed with the Fourier ADF unit root test developed by Enders and Lee (2012). The

cointegration relationship between the series is analyzed with the Fourier Shin cointegration test developed by Tsong et al. (2016). FMOLS estimator, which includes Fourier functions, was used to estimate the coefficients in countries where long-term cointegration relationships were detected. According to the findings, in developed countries such as Japan, Italy, USA, Sweden and Denmark; In developing countries, there is a long-term cointegration relationship between the two variables in India, China, Mexico, Turkiye, Colombia, Chile, Pakistan and Peru. Looking at the FMOLS estimation results in developing countries where the relationship is detected, public expenditures positively affect the human development index in all countries. In developed countries where the relationship was detected, it had a positive effect in Japan and a negative effect in Italy and Denmark, while the coefficients were statistically insignificant in the USA and Sweden.

4. Conclusion

The findings reveal a different picture in developed and developing countries. While there is a relationship between the two variables in developing countries, this relationship is more limited in developed countries. This can be explained by the fact that developed countries provide social welfare to a greater extent than developing countries. In other words, since the welfare of the developing country group considered in this study is relatively low, public expenditure policy is considered to be more important.

Since developing economies often lack the necessary infrastructure and public services, they benefit more from increases in government spending than developed countries (Davies, 2009). However, we can state that it is not valid to make a common interpretation for all countries. Each of the selected countries certainly has different economic structures and problems. Therefore, it should be taken into account that there may be different preferences and objectives for policymakers in each country.

References

Davies, A. (2009). Human development and the optimal size of government. The Journal of Socio-Economics, 38(2), 326-330.

Durmuş, M. (2006). “Kamu Harcamalarının Artışını Açıklayan Makro ve Mikro Modellere İlişkin Bir Değerlendirme”. Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 8(3), 251-299.

Enders, W., & Lee, J. (2012). “The flexible Fourier form and Dickey–Fuller type unit root tests”. Economics Letters, 117(1), 196-199.

Gül, E. & Yavuz, H. (2011). “Türkiye’de kamu harcamaları ile ekonomik büyüme arasındaki nedensellik ilişkisi: 1963-2008 dönemi”. Maliye Dergisi, 160, 72-85.

Işık, N. & Alagöz, M. (2005). “Kamu Harcamaları ve Büyüme Arasındaki İlişki”. Erciyes Üniversitesi IIBF Dergisi, (24), 63-75.

Tsong, C. C., Lee, C. F., Tsai, L. J., & Hu, T. C. (2016). “The Fourier approximation and testing for the null of cointegration”. Empirical Economics, 51, 1085-1113.

Yayla, Y. E. & Şaşmaz, M. Ü. (2020). “OECD ülkelerinde kamu harcamalarının insani gelişme üzerindeki etkisi: Panel veri analizi”. Maliye Dergisi, 178, 180-198.

The Importance of Financial Incentives for Blue Bonds in Fighting Against Disasters

Ayşe Yiğit Şakar[1]

Abstract

Food security, drought, disasters related to climate change, energy needs, and the protection of natural resources are among the main challenges that the world will face in the next 30 years. Rising sea levels due to climate change, acidification and eutrophication in the oceans, marine pollution, and the beginning of biodiversity decline pose a major threat to the earth. As a result of the transfer of these developments on a global scale to the inland seas, policies, and practices aimed to combat these problems are also important at the national level for the countries that are on the seashore. Blue bonds are one of the blue financing instruments issued to support investments and projects to ensure healthier seas and oceans. The purpose of this statement is to raise awareness about the importance of blue bonds for financing the sustainability of the seas and oceans, to examine applications for blue bonds, and to draw conclusions from the point of view of Türkiye. For the future and sustainable prosperity of Türkiye, which is surrounded by the sea on three sides, it is necessary to reduce the environmental footprint in marine tourism activities, protect the seas in port activities, accelerate the transition to low carbon, and regulate the fishing sector. From the point of view of Türkiye, blue bonds are an important financing tool for the protection of its seas and the riches of aquatic life. The incentives provided to the issuers and investors of green bonds in the world have contributed to the spread and success of green bonds. It is expected that the incentives for blue bonds will also be successful. It would be beneficial for Türkiye to use this tool widely and provide tax incentives for both the bond issuers and its investors.

Keywords: Blue Bond, Blue Economy, Climate Change, Disasters, Tax Incentive, Sustainable Development Goals.

JEL Codes: E62, Q54, Q01

1. Introduction

Oceans are the critical resource that keeps the global economy in terms of food supply and employment. Oceans, which absorb more than a quarter of the greenhouse gases released into the atmosphere, are faced with the problem of acidification due to increased carbon dioxide consumption. Additionally, eutrophication, rising water levels as a result of climate change, pollution, overfishing, and the disappearance of aquatic habitats pose a great threat to the Earth. The policies aiming to combat these issues are of national importance for coastal countries since these issues are experienced on a global scale and also have a negative impact on inland seas.

The recent awareness of the sustainability of the oceans has attracted attention to the "ocean-based economy" or in other words "blue economy". Today, "blue economy" refers to

[1] Prof. Ph.D., Istanbul Rumeli University, ORCID: 0000-0002-1432-9398, ayseyigitsakar@gmail.com, ayse.yigitsakar@rumeli.edu.tr.

international interest in growing ocean-based economic development in a way that is both environmentally sustainable and socially equitable.

The subject of this study is financial incentives for blue bonds, which are one of the financing options for the preservation of aquatic life, one of the sustainable development goals in the fight against disasters caused by climate change.

The aim of this study is to raise awareness about the importance of blue bonds for financing the sustainability of seas and oceans, to examine the financial incentive practices of for blue bonds, and to draw conclusions for Türkiye. In the study, the concept of blue economy and blue bonds, their development, and the relationship between blue bonds and green bonds will be explained. The results of academic studies on the tax incentives provided for blue bonds will be mentioned and their importance will be emphasized.

2. Blue Bond

The 14th article of the United Nations' sustainable development goals, titled Life Below Water; is expressed as "conserve oceans, seas and marine resources and use them sustainably for sustainable development". Blue economy, which was first brought to the agenda at the United Nations Sustainable Development Conference (Rio+20) in 2012, seems to be a fairly new concept. At the United Nations Rio +20 Conference, the blue economy was designed which reflects the conditions and needs of countries whose future livelihood depends on maritime in a developing world context (United Nations, 2012:3). The concept of “blue economy” aims to promote economic growth, social inclusion and the protection or improvement of livelihoods, while also ensuring environmental sustainability (World Bank & United Nations, 2017:1).

Several methods such as taxes, subsidies, fees, standards, and pollution permits can be applied in the public economy to combat activities that cause pollution in the oceans and seas and spread negative externalities that harm the environment (Brears, 2021: 288).

Blue bond is a debt instrument issued to facilitate the transition to the blue economy and provide financing for projects that provide positive environmental, economic, and climate benefits in aquatic habitats such as seas and oceans (Sermaye Piyasası Kurulu, 2022:7). Blue bond is one of the sustainable financing instruments, just like a green bond. Green bond standards and principles also apply to this bond. In international markets, ICMA (International Capital Market Association) accepts blue bonds as green bonds as long as they comply with the four elements of the Green Bond Principles (International Capital Market Association, 2021:8).

Blue bonds are securities that are a new form of sustainability-themed bonds, issued to support investments and projects aiming to make oceans and seas healthier, protect biodiversity, and support sustainable fishing. Blue bond revenues are allocated only to the areas mentioned above in a narrower scope than green bonds.

Investors lend money to a bond issuer, who agrees to pay interest and make principal payments at a specified period each year until the due date of the bond. The bond issuer aims to borrow money from investors for their projects, and the investor aims to earn interest income. The maturity of the bond can generally be five, ten, or fifteen years and it will earn a certain rate of interest (coupon) throughout the period. Issuing blue bonds also helps investors fulfill their corporate social responsibilities (Brears: 2021:301).

Blue bonds can be issued by governments, municipalities, multilateral development banks and development finance institutions, banks and other financial institutions, and large

and medium scaled enterprises (Asian Development Bank & International Finance Corporation, 2023:4).

3. Development and Taxation of Blue Bonds in Türkiye

Seychelles, Asian Development Bank, Nordic Investment Bank, World Bank, and Bank of China are some of the countries and institutions that issue blue bonds. Even though there is no blue bond in Türkiye, Akbank offers loans under the name of the "Blue Financing Product Package".

The quarterly public finance report published by the Ministry of Treasury and Finance in May 2021, which is among the goals of the Green Deal Action Plan in Türkiye, aims to carry out a borrowing transaction through bond issuance in the international Environmental, Social, and Governance (ESG) bond market regarding the issuance of sustainable bonds. Within this scope, it is stated that a bond framework document has been prepared. The Green Deal Action Plan includes promoting sustainable loans and creating a suitable environment for banks to have easy access to international funds for sustainability purposes. Capital Markets Board (SPK) published the "Green Debt Instrument, Sustainable Debt Instrument, Green Lease Certificate Guide" in 2022 in order to encourage the financing of investments that will have a positive contribution to environmental sustainability. The Guide states that the issuance of blue debt instruments in the domestic market, the same as blue debt instruments issued within the framework of ICMA's Green Bond Principles in international markets, should be carried out in accordance with the four basic elements specified in this Guide (Sermaye Piyasası Kurulu, 2022:2).

Lease certificates issued for blue projects can be evaluated within the scope of green lease certificates in line with ICMA and CMB's acceptance of blue debt instruments within the scope of green debt instruments. In this case, in order to facilitate the originators in Türkiye to obtain financing through the issuance of lease certificates, significant tax incentives are provided for asset leasing companies and originators' lease certificate applications in Article 17-4 (g) and 17-4(u) of Value Added Tax Law, in paragraph 14 of Table (2) annexed to Article 9 of the Stamp Tax Law and in Article 123 of Act of Fees. However, there are no incentives in Türkiye regarding the taxation of periodic returns and trading profits that investors obtain from their lease certificate investments (Ulusan, 2015:46-47).

In Türkiye, there is no special provision or tax incentive in our tax legislation regarding the revenue obtained from blue bonds. Revenue obtained from government bonds and private bonds is subject to withholding tax in accordance with provisional article 67 of the Income Tax Law. The revenue obtained from blue bonds is also subject to tax.

4. The Importance of Financial Incentives For Blue Bonds

Financial incentives are provided to both the issuer and the investor in green bond issuances around the world. As with green bonds, it is important for sustainable development to provide financial incentives to both investors and issuers to promote the spread of blue bonds issued to finance blue projects.

Many countries have implemented different policies to promote green bonds. Although there are not enough empirical studies on the effectiveness of these policies, the first empirical study on this subject is the study of Azhgaliyeva and Kapsalyamova (2021). The study shows that some green bond policies, such as green bond grants and tax incentives, as well as cooperation

and political signals, are effective in promoting green bond issuance (Azhgaliyeva and Kapsalyamova, 2021).

Lin & Hong (2022) stated in their study that the Chinese Government should direct more financial concessions and subsidies to green projects undertaken by private enterprises, and also provide exemptions to attract investors to make investments in green bonds and serve as a channel to resolve disputes that may arise between issuers and investors.

The Plan Bleu Report (2020) suggests expanding the use of prices, taxes, and subsidies to develop the blue economy in the Mediterranean (Plan Bleu, 2020: 5).

5. Conclusion

It is necessary to reduce the environmental footprint in marine tourism activities, protect the seas in port activities, accelerate the transition to low carbon, and regulate the fishing sector for the food security and sustainable prosperity of Türkiye, which is surrounded by the sea on three sides. Blue bonds are an important financing tool for Türkiye in protecting the richness of its seas and aquatic life. Incentives for green bond issuers and investors around the world have contributed to the spread and success of green bonds. It is predicted that incentives for blue bonds will also be successful. It would be beneficial for Türkiye to use this tool widely and provide tax incentives for both bond issuers and investors.

References

Asian Development Bank & International Finance Corporation. (2023). Bonds To Finance The Sustainable Blue Economy A Practitioner's Guide. September. https://www.adb.org/sites/default/files/publication/907071/bonds-finance-sustainable-blue-economy-guide.pdf (01/10/2023).

Azhgaliyeva, D. & Z. Kapsalyamova. (2021). Policy Support in Promoting Green Bonds in Asia. ADBI Working Paper 1275. Tokyo: Asian Development Bank Institute. https://www.adb.org/publications/policy-support-promoting-green-bonds-asia (30.05.2023).

Brears, R.C. (2021). Blue Financing. In: Developing the Blue Economy. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-84216-1_10 (01.06.2023)

International Capital Market Association. (2021). Green Bond Principles, Voluntary Process Guidelines for Issuing Green Bonds, June, (with June 2022 Appendix 1). https://www.icmagroup.org/assets/documents/Sustainable-finance/2022-updates/Green-Bond-Principles_June-2022-280622.pdf (01.06.2023).

Lin L.& Hong Y. (2022). Developing a Green Bonds Market: Lessons from China. Eur Bus Org Law Rev. 2022;23(1):143–85. doi: 10.1007/s40804-021-00231-1. Epub 2022 Feb 21. PMCID: PMC8860139.

Plan Bleu (2020). Blue economy in the Mediterranean: case studies, lessons and perspectives. Plan Bleu Paper no. 19.

Sermaye Piyasası Kurulu. (2022). Yeşil Borçlanma Aracı, Sürdürülebilir Borçlanma Aracı, Yeşil Kira Sertifikası, Sürdürülebilir Kira Sertifikası Rehberi, i-SPK 128.18 (24/02/2022 tarih ve

10/296 S.K.) https://spk.gov.tr/data/6231ce881b41c 612 808a3a1c/b2d06c64099c9e 7e8877743afc7d2484.pdf (02/10/2023)

Ulusan, H. (2015). Kira Sertifikası Uygulamalarının Vergisel Boyutu Ve Muhasebeleştirilmesi, Muhasebe ve Denetime Bakış, 31-50. https://dergipark.org.tr/tr/download/article-file/1869747 (2/10/2023)

United Nations. (2012). Blue Economy Concept Paper. https://sustainabledevelopment. un.org/content/documents/2978BEconcept.pdf (01.06.2023).

World Bank & United Nations Department of Economic and Social Affairs. (2017). The Potential of the Blue Economy: Increasing Long-term Benefits of the Sustainable Use of Marine Resources for Small Island Developing States and Coastal Least Developed Countries. World Bank, Washington DC.

Evaluation on the Use of Discounted Corporate Tax as a Financial Tool During Disaster Periods

Iraz Haspolat Kaya[1] **Emre Engür**[2]

Abstract

Reduced corporate tax is an incentive given to taxpayers through corporate tax. This practice is essentially embodied in data such as the Decision of the Council of Ministers, the Corporate Tax Law, the Corporate Tax General Communiqué No. 1, Rulings, and Judicial Decisions. The lack of sufficient data in the legislative provisions has led to disputes between taxpayers and the tax administration in practice. In this study, evaluations will be made focused on some issues that may be characteristic of the reduced corporate tax application, and will focus on suggestions on how the reduced corporate tax can be used as an effective tax incentive during disaster periods, such as extraordinary periods.

Keywords: investment incentive, incentive certificate, reduced corporate tax
JEL Codes: H25, K34

1. Introduction

With globalization, foreign direct investments in the mobility of production factors have become the most important target variable in the tax competition environment. Income and corporate tax reductions aimed at tax competition create taxation injustices(Çiçek & Uğur, 2019).

Reduced corporate tax application is a concept that emerged after the concept of 'investment discount' in tax legislation and has taken its place among the diversity of concepts in investment incentives.

Article 19 of the Income Tax Law titled 'Investment Deduction Exemption for Commercial and Agricultural Earnings' has been abolished, effective as of 1/1/2006. Article 32/A, added to the Corporate Tax Law (CTL) No. 5520, has started to make sense for investment incentives given since 2009.

2. Reduced Corporate Tax as an Investment Incentive Practice

2.1. Concept of Incentive Certificate

An incentive certificate is a document that allows you to benefit from the support elements registered on it, if it is carried out in accordance with the conditions determined by the value containing the characteristics of the investment(Türk & Fatihoğlu, 2015).

Investment incentive certificates falling within the scope of CTL Article 32/A are a source of tax deduction for income taxpayers as well as corporate taxpayers.

[1] Prof. Ph.D., Ankara Hacı Bayram Veli University, ORCID: 0000-0003-2380-416X, iraz.haspolat@hbv.edu.tr
[2] Ph.D student/ Tax Inspector, ORCID: 0009-0003-0119-1099, emrengur@gmail.com

2.2. Decisions of the Council of Ministers

The infrastructure of the reduced corporate tax, other than CTL, is the provisions of the Decision of the Council of Ministers (DCM) No. 2009/15199. After DCM No. 2009/15199, the provisions of DCM No. 2012/3305 enabled the development of the practice.

Within the framework of the provision added as "Provisional Article 8" to the Decision No. 2012/3305 by DCM No. 2017/9917, limited to the investment expenditures made between 2017-2022; In addition to adding 15% to the investment contribution rate, a 100% tax deduction was also provided for investment income and other operating earnings.

Within the framework of the provisions of the temporary article added to DCM numbered 2012/3305 after the earthquake disaster dated 06/02/2023; In accordance with the provision of temporary article 16, investment periods were extended for three years without request, and some flexibility was provided in loan repayments in accordance with the provision of temporary article 17.

2.3. Investment Incentive Certificate Statistics

The table below includes the number of investment incentive certificates issued between 2018 and 2022.

Table 1. Investment Incentive Certificates Issued Between 2018-2022

	2018	2019	2020	2021	2022
Region 1	2.197	2.323	4.363	5.442	5.451
Region 2	905	898	1.885	1.960	2.575
Region 3	750	687	1.345	1.615	1.855
Region 4	552	520	816	782	1.177
Region 5	356	324	658	622	969
Region 6	742	659	1.103	2.088	1.516
Miscellaneous Region	15	8	11	5	27
Grand total	**5.517**	**5.419**	**10.181**	**12.514**	**13.570**

Source: Ministry of Industry and Technology, 2018-2022.(Created using data.)

2.4. Tax-Specific Applications

The main goal of applying reduced corporate tax to taxpayers' earnings from other activities during the investment period; The aim is to increase the attractiveness of investing domestically by charging less tax at the investment stage(Oruç, 2016).

The investment period is not defined in the law, but in the draft circular it is defined as the period until the completion of the investment, even if it is partially operational(Türk & Fatihoğlu, 2015).

Investment types are stated in Article 9 of the Communiqué on the Implementation of the Decision on State Aids in Investments No. 2012/1; Although it is divided into 5 types: complete new investment, expansion, modernization, product diversification and integration, complete new investments and expansion investments are listed in CTL article 32/A. It is thought that expansion investments include other investments written in the Communiqué other than complete investments(Dökmen, 2013).

Article 32/A of CTL entered into force on 28/02/2009; The definition of integration, modernization, product diversification investments, complete new investments and expansion investments was determined in the Communiqué dated 28/07/2009. It is understood that the new definitions of income, which are not included in the CTL after approximately 5 months, are due to the fact that other investment types were not defined in the incentive legislation at the time the Law was published in the official gazette(Kurdoğlu,2012).

3. Procedures to be Followed in Reduced Tax Application

If you want to list special issues regarding tax deduction; Issues such as determining investment and operation periods, monitoring and controlling actual expenditures within the scope of investments, complying with the calculation rules in investment earnings and determining their accuracy, having more than one incentive certificate used in the same period, determining and calculating the base to which a discount will be applied, come to the fore.

If the actual expenditure amount is higher than the expenditure amount envisaged in the incentive certificate, the requirement for revision of the incentive certificate is met by replacing the phrase "can" with the phrase "have to". If it is not fulfilled, the amount before the revision will be taken as basis(Coşgun,2018 Şubat).

The practice in case expansion investments cannot be tracked in separate accounts in the reduced corporate tax application has been clarified. However, no separate regulation has been made on this issue for completely new investments.

In the ruling of Izmir Tax Office dated 09/12/2011; It has been reported that the total fixed assets registered in assets refers to the gross amounts of all depreciable assets, whether used in production or not, before deducting their accumulated depreciation.

Expansion investments are only possible for investments within the scope of regional incentive practices. In the calculations regarding expansion investments in the Uniform Chart of Accounts; Accounts numbered 251, 252, 253, 254, 255, 256, 258 and 260 will be taken into consideration(Akyol,2013).

Economic assets purchased through financial leasing within the scope of the investment incentive certificate must be monitored in the "260 Rights Account" within the framework of the provisions of Article 290 Bis of the Tax Procedure Law(İndirimli Kurumlar Vergisi Rehberi,2021).

In the decision of the Ninth Chamber of the Council of State dated 09.12.2021; Since the financial leasing agreements on which the investment incentive certificate was issued were terminated, it was undisputed that the integrity of the investment and the terms and conditions specified in the investment certificate could not be protected, it was decided that there was no unlawfulness in the assessment.

While the profit amount before applying taxpayers' deductions, exemptions, previous year losses and legally unacceptable expenses to their earnings amounts is commercial profit, the profit after the application of these elements can be called financial profit.

Investments within the scope of the investment incentive certificate, in which the entire investment contribution amount is consumed, are converted into income from other activities, not into investment income, according to the incentive legislation. In evaluating whether commercial profit or financial profit will be taken as basis for reduced corporate tax; If we look

at the rule of calculating the ratio of each profit to the total tax base in the Corporate Tax General Communiqué No. 10, it can be thought that financial profit is emphasized.

Once the investment is put into operation, discount can only be applied to investment earnings. There is no explanation in the Communiqué explaining the application in case institutions have previous year loss amounts, and the issue is not clarified in the draft circular(Türk & Fatihoğlu, 2015).

In the letter of Ankara Tax Office dated 20/02/2012; It has been stated that a reduced corporate tax may be applied if legally unacceptable expenses are added to the commercial balance sheet profit related to the expansion investment and a profit is obtained after deducting all discounts, exceptions and previous year losses. In addition, it is stated that it is not possible to transfer the unused discount right to subsequent periods.

4. Conclusion

Insufficient understanding of the legislation and different views of the administration and the judiciary create problems in the application of reduced corporate tax. Due to the need for faster structuring and development in disaster areas, it may be desirable for the state to accelerate the process with supportive practices. DCMs in the incentive legislation aim to "eliminate regional development differences". These statements can be seen as the justification for special regulations for disaster areas. As a matter of fact, provisional articles 16 and provisional 17 added to DCM numbered 2012/3305 are compatible with this.

Providing sub-regional incentive supports for investments in disaster areas, combining investment gains and gains from other activities during the investment period in disaster areas and using the total amount in temporary tax bases, provision of temporary article 8 being inclusive in disaster areas even though it does not cover the expenditures made in 2023 and after, providing taxpayers who invest in disaster areas Measures can be developed that can be increased in number, such as providing tax exemptions to taxpayers who sell services within the scope of these sales.

References

Akyol, M. Emin. (2013,Ekim). “İlk ve Tevsi Yatırımın KVK’nın 32/A Maddesi Kapsamında Yapılması Halinde İndirimli Vergi Uygulaması”, Vergi Dünyası Dergisi, 386, 4-7, https://www.vergidunyasi.com.tr/, (24.02.2022).

Coşgun, Okan. (2018,Ocak). “Birden Fazla Yatırım Teşvik Belgesi Olması Durumunda 2017 Yılı İndirimli Kurumlar Vergisi Uygulaması”, Vergi Dünyası Dergisi, Yıl 37/437, 106-115, https://www.vergidunyasi.com.tr/, (24.02.2022).

Coşgun, Okan. (2018,Şubat). “Fiili Harcama Tutarı ile Yatırım Teşvik Belgesindeki Harcama Tutarının Farklı Olması Durumunda İndirimli Kurumlar Vergisi Uygulaması”, Vergi Dünyası Dergisi, Yıl 37/438, 95-99, https://www.vergidunyasi.com.tr/, (24.02.2022).

Çiçek, Uğur. & Kübra Uğur. (2019). “Vergi Rekabeti ve Oecd Ülkeleri Karşılaştırması”, Turkuaz Uluslararası Sosyo-Ekonomik Stratejik Araştırmalar Dergisi, 1/1, https://dergipark.org.tr/tr/download/article-file/2810536, (15.08.2023).

Dökmen, Selahattin. (2013,Nisan) "Örneklerle İndirimli Kurumlar Vergisi", Vergi Sorunları Dergisi, 295, 30-44, http://www.vergisorunlari.com.tr/, (24.02.2022).

Ernst&Young. (2021). İndirimli Kurumlar Vergisi Rehberi. https://www.ey.com/tr_tr/ey-turkiye-yayinlar-raporlar/2021-indirimli-kurumlar-vergisi-rehberi, (02.03.2022).

Gelir İdaresi Başkanlığı. Ankara Vergi Dairesi Başkanlığı'nın 20/02/2012 tarih ve B.07.1.GİB.4.06.16.01-125-[32/A-11/2]-240 sayılı özelgesi. https://gib.gov.tr/gibmevzuat, (02.08.2023).

Gelir İdaresi Başkanlığı. İzmir Vergi Dairesi Başkanlığı'nın 09/12/2011 tarih ve 4.35.16.01-176300-713 sayılı özelgesi. https://gib.gov.tr/gibmevzuat, (02.08.2023).

Kurdoğlu, Ferrah Sefer. (2012, Nisan). "Tevsi Yatırımlarda İndirimli Kurumlar Vergisi Uygulaması ve Karşılaşılan Sorunlar", Vergi Sorunları Dergisi, 283, 22-28, http://www.vergisorunlari.com.tr/, (24.02.2022).

Oruç, Yunus. (2016, Eylül). "İndirimli Kurumlar Vergisinde Bir Alt Bölge Desteğinden Yararlanan Mükelleflerin Diğer Faaliyetlerden Elde Edilen Kazançlarına İndirimli Kurumlar Vergisi Uygulanabilir mi?", Vergi Dünyası Dergisi, 36/421, 149-152, https://www.vergidunyasi.com.tr/, (24.02.2022).

T.C. Danıştay. Dokuzuncu Dairesi'nin 09.12.2021 tarihli kararı (Esas: 2018/708, Karar: 2021/6320). https://www.corpus.com.tr/#!/Danistay, (08.08.2023).

T.C. Sanayi ve Teknoloji Bakanlığı. Yatırım İstatistikleri. https://www.sanayi.gov.tr/istatistikler/yatirim-istatistikleri/mi1304021615, (12.09.2023).

Türk, Yakup. & İbrahim Fatihoğlu. (2015, Ağustos) "İndirimli Kurumlar Vergisi ve Özellikli Durumlar", Vergi Dünyası Dergisi, 408, 55-64, https://www.vergidunyasi.com.tr/, (24.02.2022).

Türkiye Cumhuriyeti Cumhurbaşkanlığı Strateji Ve Bütçe Başkanlığı. Resmi İstatistik Programına Katkılarımız. https://www.sbb.gov.tr/resmi-istatistik-programina-katkilarimiz/, (12.09.2023).

Evaluation of Incentives to the "Afet Yeniden İmar Fonu" as Tax Expenditure

Serhat Kurt[1] **Doğan Bozdoğan**[2]

Abstract

Natural disasters are natural events that cause great losses and cannot be prevented by humanity. While economic losses are experienced after natural disasters, many problems arise in the fields of zoning, health, culture and social life. In order to solve all these problems, large economic resources are needed.

Public expenditures made by states in ordinary and extraordinary periods are financed by public revenues. The important type of income through which these public expenditures are financed consists of tax revenues. Tax revenues planned within a calendar year are collected in a way that can finance ordinary public expenditures. However, public expenditures may not always be realized as planned. After extraordinary natural disasters, great economic needs arise. The majority of this needed economic resource is provided from the general budget, which is formed by tax revenues. These unexpected public expenditures bring along many economic problems such as budget deficit and postponement of planned public expenditures.

While the economic needs of the region increase after natural disasters such as earthquakes, there is a great decrease in the public revenues that the state will collect from the region. For this reason, meeting the economic needs in extraordinary periods such as earthquakes is much more difficult than ordinary public expenditures. The effects of the Kahramanmaraş-centered earthquake that took place on 06.02.2023 were felt in a large geography covering 11 provinces. After the earthquake, great economic needs emerged. For this reason, in areas declared as disaster areas effective for general life due to natural disasters; The Afet Yeniden İmar Fonu was established in order to provide, manage and transfer the necessary resources for zoning, infrastructure and superstructure works to the relevant public institutions. The Fund was enacted by the Law on the Establishment of the Afet Yeniden İmar Fonu, dated 15.03.2023 and numbered 7441.

The taxes that the states give up collecting in order to realize their economic, financial and social goals are called tax expenditures. Within the Afet Yeniden İmar Fonu, some exemptions and exceptions have been applied as tax expenditures in order to create sufficient resources in the financing of natural disasters. It is stated that the donation amounts of those who donate in cash to the fund can be shown in their income and corporate tax bases and can be deducted from their income and corporate income.
In the study, incentives for the Disaster Reconstruction Fund through tax expenditures will be evaluated and the advantages and disadvantages of these expenditures will be mentioned.Keywords: Afet Yeniden İmar Fonu, Tax Expenditure, Exemption, Exception, Earthquake

Keywords: Afet Yeniden İmar Fonu, Tax Expenditure, Exemption, Exception, Earthquake
JEL Codes: H2, H3

1. Introduction

The majority of public expenditures made by states while fulfilling their duties and responsibilities are financed by taxes. For this reason, tax revenues are indispensable for states. However, in some economic, financial or social situations, states waive their tax receivables. Tax

[1] Lecturer, Selçuk University, ORCID: 0000-0003-0997-2183, serhat.kurt@selcuk.edu.tr
[2] Assoc. Prof. Ph.D., Gaziosmanpaşa University, ORCID: 0000-0002-3961-0506, dogan.bozdogan@gop.edu.tr

expenditures, defined as the waiver of tax receivables, are made to protect, support or encourage some taxpayer groups or tax subjects.

All public resources were mobilized to eliminate the damage caused by the major earthquake disaster that took place on 06.02.2023, centered in Kahramanmaraş and affected 11 provinces, and to carry out infrastructure and superstructure works. However, after such major natural disasters, economic needs also experience extraordinary increases. For this reason, a disaster reconstruction fund was established on 15.03.2023 in order to provide the economic resources needed after natural disasters.

In the study, after explaining the scope of tax expenditure, its implementation methods and reasons, incentives for deducting cash donations and aid made to the disaster reconstruction fund from income and corporate earnings will be evaluated as tax expenditure.

2. Tax Expenditure

States have many economic, financial, and social duties and responsibilities. The most important financial source of public expenditures while fulfilling these duties and responsibilities consists of tax revenues. For this reason, states that do not want to lose revenue are working to collect all their tax receivables. However, in some cases, states give up some of their tax receivables in order to achieve certain purposes, as required by the conditions of the period. The government's waiver of tax receivables is called tax expenditure. Tax expenditure, which has many definitions, is generally defined as; It is expressed as a loss of tax revenue resulting from a legal provision that is not compatible with the basic taxpayer obligations stipulated by the law in order to achieve certain economic and social objectives (Saraç, 2010: 264). Tax expenditure definitions are made by some states and international organizations as follows (Ministry of Treasury and Finance, 2018: 5);

- World Bank, a discount outside the norm
- IMF, tax revenue forgone due to some provisions
- OECD, tax provisions that deviate from the standard rate
- USA defines it as deviations from detailed normal structure.
- Australia defines what is outside the accepted benchmark system as tax expenditure.
- Canada also accepts the benchmark system and considers deviations from it as tax expenditure.

When we look at the practices of tax expenditures around the world, it appears as a method of economic intervention frequently used by states. When looking at the purpose of application, differences can be seen. These differences arise due to the economic conditions of the period and the management approaches of the states. Tax expenditures are applied by governments to achieve some economic, social and political goals. These generally consist of providing state support to certain social groups such as the poor, retired, and orphans, and practices that encourage investment, savings, production and exports (Giray, 2002: 28). Although states' definitions and applications for tax expenditures differ due to differences in their economic structures, it is generally seen that the same methods are used. Tax expenditures generally occur in the form of exemptions, exceptions and deductions.

2.1. Exemption, Exception and Discount

Exemption and exception; These are practices aimed at excluding certain taxable persons and tax subjects (Akdoğan, 2019: 158). Exemption means excluding individuals from

tax, and exception means excluding tax subjects from tax. Exemptions and exceptions vary depending on the purpose of application and the economic conditions of the period. It can be applied to protect individuals or tax subjects from negative effects or to encourage and support certain sectors.

The discount is; It is the reduction of tax rates specified in the tax tariff for the benefit of a specific person or activity (Giray, 2002: 29). Tax deductions, like exemptions and exceptions, are applied to protect or encourage certain areas of activity. For example; The Ministry of Finance offers a 5% tax discount to tax-compliant taxpayers. With this practice, taxpayers are encouraged to fulfill their tax-related duties and responsibilities in a timely and complete manner.

2.2. Reasons for Tax Expenditure

Tax expenditure, as a concept, was first used in the USA in the 1960s and became a frequently used public policy tool around the world after being included in official documents (Yoruldu, 2021: 142). When we look at the reasons for the implementation of tax expenditures, which are generally expressed as public revenues that states give up on collecting, they differ according to the economic conditions of the period, tax understanding and development levels of the states. The reasons for applying tax expenditures, which mostly occur in the form of exemptions, exceptions and reductions in tax rates, are generally expressed as follows (Armağan, 2007: 236);

- Reducing the tax burden on taxpayers
- Achieving global competition
- Preventing the informal economy
- Increasing taxpayer compliance with taxes
- Increasing tax revenues

3. Disaster Reconstruction Fund Afet Yeniden İmar Fonu

While economic losses occur after extraordinary natural events such as large-scale earthquakes, economic needs also increase. After the Marmara earthquake on 17.08.1999, economic needs increased unusually. In order to finance these economic needs, the law dated 26.11.1999 and numbered 4481 "on the creation of certain obligations and amendments to some tax laws in order to compensate for the economic losses caused by the earthquake that occurred in the Marmara region and its surroundings on 17.8.1999 and 12.11.1999" came into force. Additional income tax, additional corporate tax, additional property tax and additional motor vehicle tax were collected by the relevant law. In addition to additional taxes, a new tax, the special communication tax, has also come into force.

A major earthquake occurred in Turkiye on 06.02.2023, affecting 11 provinces centered in Kahramanmaraş. After the earthquake, which made its impact felt in a wide geography, many lives and property were lost. Especially when looking at the region's contribution to the country's economy, it can be seen that the economic loss is even greater. According to the earthquake report of the Presidency of Strategy Development, it is seen that 11 provinces affected by the earthquake constitute approximately 10% of the national income (Presidency of Strategy and Budget, 2023: 13). This means a huge economic loss for the state. When we look

at the share of the provinces affected by the earthquake in the country's exports, it is seen that they constitute 8.6% of the total exports (Strategy and Budget Presidency, 2023: 13).

It is not possible to finance the entire economic need in the region after major natural disasters such as earthquakes, floods and fires, from the general budget prepared by calculating ordinary public expenditures, without creating a budget deficit. For this reason, when both the economic size of the damage and the contribution of the earthquake zone to the country's economy are deducted, a large loss of tax revenue will occur, so it has become necessary to create economic resources through additional practices.

For this reason, the Disaster Reconstruction Fund was established in order to meet the economic needs arising during disaster periods. The fund came into force with the "Law on the Establishment of the Disaster Reconstruction Fund" dated 15.03.2023 and numbered 7441. The purpose of the fund established under the Ministry of Treasury and Finance is stated in Article 1 of the law as follows;

“In areas declared as disaster areas affecting general life due to natural disasters; "To establish a Disaster Reconstruction Fund (Fund) in order to provide, manage and transfer the necessary resources for reconstruction, infrastructure and superstructure works to relevant public institutions and organizations, and to regulate the procedures and principles regarding the management and activities of the Fund."

3.1. Disaster Reconstruction Fund’s Source and Use

The majority of economic needs arising from natural disasters to date have been financed from the general budget. The burden of the public budget, which is created by calculating public expenditures in ordinary periods, increases after extraordinary disasters. This burden caused by disasters on the general budget is planned to decrease with the entry into force of the disaster reconstruction fund. The sources and financing of the fund are stated in Article 4 of the Law on the Establishment of the Disaster Reconstruction Fund as follows; All kinds of cash donations, aid, grants and loans from domestic and foreign sources, appropriations to be included in the budget for this purpose and other income.

The use of the resources created within the fund is subject to the decision of the fund's board of directors. The fund's board of directors; It consists of the Minister of Treasury and Finance, the Minister of Environment, Urbanization and Climate Change, the Minister of Energy and Natural Resources, the Minister of Agriculture and Forestry, the Minister of Internal Affairs, the Minister of Transport and Infrastructure and the President of Strategy and Budget. In addition, article 6 of the relevant law states that the use of the fund's resources will be audited in accordance with independent audit standards and financial data will be shared with the public on a quarterly basis.

3.2. Disaster Reconstruction Fund’s Exemptions and Exceptions

Some exemptions and exceptions have been introduced to provide economic resources in the Disaster Reconstruction Fund, which was created to provide the resources required for reconstruction, infrastructure and superstructure works in the disaster area after natural disasters. Exemptions and exceptions related to the disaster reconstruction fund are regulated in Article 7 of the Law on the Establishment of the Disaster Reconstruction Fund. Accordingly, the fund is exempt from corporate tax, stamp duty and fees. What stands out here as tax

expenditure is the exemptions and exceptions that those who donate to the fund will benefit from. This situation is explained in Article 7(3) of the relevant law as follows;

"All cash donations and aid made to the fund can be deducted from the declared income or corporate income in determining the income or corporate tax base within the framework of the provisions of Law No. 193 and Law No. 5520, provided that they are shown separately on the income or corporate tax return."

It is aimed that the economic resources generated in the fund through donations and aid will be at a level that will finance public expenditures after natural disasters. The fact that donations made to the fund can be deducted from the declared income or corporate earnings brings with it some negativities, but it is an encouraging element in terms of increasing donations and reaching the desired levels.

4. Conclusion

Taxes, which are the most important source of income for states, are extremely important in financing public expenditures. For this reason, while states are looking for new tax sources, they are also struggling with tax loss and evasion. However, states do not always take actions aimed at tax collection. In some cases, tax receivables are waived for various purposes such as protection, support and encouragement according to the economic conditions of the period.

A fund was created to be used after natural disasters to meet the great economic needs arising from the earthquake centered in Kahramanmaraş. The purpose of creating the disaster reconstruction fund is to provide the necessary resources for reconstruction, infrastructure and superstructure works that occur after natural disasters. A number of policies have been implemented to encourage the fund. In this context, it is stated that donations and aids can be deducted from income or corporate earnings during the declaration in order to ensure sufficient income within the fund. In other words, the state has taken into account a certain tax expenditure to support the fund. However, the necessity of this tax expenditure is open to debate. While it is aimed to establish a disaster reconstruction fund to provide a cash mechanism in times of natural disasters, on the other hand, the fact that the aid and donations to be made here can be deducted from the corporate income in income and corporate taxes is an indication that the fund is indirectly subject to state support. At this point;

- In general, after being included in the inefficient tax expenditure category of the Ministry of Treasury and Finance, donations and aid made to the fund are not shown as expenses and ultimately no tax expenditure is made,
- Supporting the fund by the state with the wealth fund, so that the state will provide a direct support element without spending taxes,
- 2% of monthly electricity consumption is deducted as TRT share. Transferring 1% of this directly to the Disaster Reconstruction Fund,
- It may also be suggested to allocate resources to the fund by allocating space in the general budget.

References

Akdoğan, A. (2019). Kamu Maliyesi. Ankara: Gazi Kitabevi.

Armağan, Y. (2007). Türkiye'de Gelir ve Kurumlar Vergisi Oranlarinda İndirimin Vergi Gelirleri Üzerine Etkileri. Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 12 (3), 227-252

Giray, F. (2002). Vergi Harcamaları: Harcama Vergileri Açısından Analizi. Uludağ Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 21(1), 27-52.

Hazine ve Maliye Bakanlığı. (2018). Vergi Harcamaları Raporu, Ankara.

Saraç, Ö. (2010). Vergi Harcamaları ve İktisadi Etkileri. Maliye Dergisi, 159, 262-277.

Türkiye Cumhuriyeti Cumhurbaşkanlığı Strateji ve Bütçe Başkanlığı. (2023). Kahramanmaraş ve Hatay Depremleri Raporu, Ankara.

Yoruldu, M. (2021). Türkiye'de Vergi Harcamalarının Vergilendirmenin Fonksiyonları Açısından Değerlendirilmesi: 2019-2023. Maliye Çalışmaları Dergisi, (65), 139-150.

Contingent Obligations to Increase Financial Resilience Against Disasters

Özgür Mustafa Ömür[1]

Abstract

When any natural disaster occurs, damages must first be compensated based on the resources of the insurance company. The responsibility of the state here consists of whether the insurance system is operated professionally and whether the premiums are evaluated taking into account risk return measures. If these are done properly, the damages will be covered through the insurance system and there will be no liability reflected in the public budget. Due to this responsibility, it may be possible for the state to transfer mass resources from the budget in the said period, as well as the damage that cannot be compensated. States bear a significant part of the costs of disasters. This is true for developing economies and even OECD economies where private insurance markets are underdeveloped. Human and economic losses caused by natural disasters and public measures taken within this framework put pressure on the public budget balance and cause a budget deficit. Identifying contingent liabilities is extremely important as it provides a basis for the sources of financial commitments that may arise for a state when a major natural disaster occurs. This step not only clarifies the sources of the government's explicit commitments to bear disaster-related costs, but also clarifies potential implied commitments, that is, implied obligations. Governments should disclose their disaster-related contingent liabilities and their approach to managing them. Such disclosures can create confidence that these obligations are well managed. Japan is one of the leading countries that impose conditional obligations to provide post-disaster financial assistance.

Japan makes clear commitments to finance the improvement and rehabilitation of nationally and regionally owned public infrastructure. It also provides explicit assistance to affected households for housing rehabilitation and temporary tax relief. Loan guarantees are provided to small and medium-sized enterprises (SMEs), complemented by safety net loans to overcome temporary cash flow problems. The government also retains part of the liability for Japan Earthquake Reinsurance. In the study, countries that have implemented a clear commitment to provide post-disaster financial assistance and the commitments they have implemented will be detailed, and inferences and suggestions will be made for Turkey. Emphasis will be placed on the importance of defining the central government's legal responsibility for financing post-disaster response and recovery, including cost-sharing arrangements between central and local governments.

Keywords: Koşullu Yükümlülükler, Mali Yardım, Doğal Afet

[1] Assoc. Prof. Ph.D., Giresun University, ORCID: 0000-0001-5624-1020, ozgur.omur@giresun.edu.tr

Evaluation of Income Tax Tariff in Türkiye from the Perspective of Justice in Taxation for Wage Earners[1]

Tolga Sezdi[2] **Gizem Zeren**[3]

Abstract

The taxation of wage earners in Turkiye undermines fairness in taxation in several aspects. One of these is bracket drift. Especially in a high inflation economy, wage earners are taxed at the second tax bracket more rapidly due to bracket drift. In order to solve this problem and restore fairness in taxation, the increases in tax brackets are evaluated with the help of some indices in the literature. In the study, a 10-year period between 2014 and 2023 is examined. After the calculations and comparisons, it was found that if the reappraisal rate is calculated in detail, there is a cumulative deviation of -8.32% in the 10-year period. Various calculations were also made with the help of two different indices in the literature. In this perspective, it will be possible to restore fairness in taxation when income tax increases are made carefully and with the help of the right variables.

Keywords: Income Tax, Bracket Creep, Inflation, Tax Justice
Jel Codes: H24, E64, P44

1. Introduction

Wage earners have problems when they are taxed because their income tax bracket drifts due to inflation. This is a problem that undermines fairness in taxation. Especially in high inflation economies, tax bracket drift is more severe. For this reason, this study aims to find a solution to the problem of taxation fairness that occurs due to tax bracket drift during inflationary periods. In this context, the first bracket of income tax is recalculated according to two different indices that aim to improve the income tax tariff. Through these calculations covering the last 10 years, the first brackets of the current income tax are compared. The study provides new methods and some suggestions for tax increases that should be applied during periods of high inflation.

This study consists of 4 parts. The first part of the study describes the definition, scope and taxation of wages. In the second part, the current tax tariff is evaluated from the perspective of fairness in taxation. The third section discusses the income bracket drift due to inflation. In the last section, the first bracket of income tax is recalculated with the help of some proposed indices and various evaluations are made.

2. Wage - Inflation Relationship and its Analysis in terms of Fairness in Taxation

Wage is "an element of income obtained as a result of the participation of labor, a factor of production, in production" (Şenyüz, Yüce, Gerçek, 2023: 81). The most common way of taxing wage income is through deductions at source (Bilici, 2013:54). In order to provide justice in

[1] Tolga Sezdi contributed 60% and Gizem Zeren contributed 40% to this study.

[2] Res. Assist., Bursa Uludağ University, ORCID: 0000-0003-2263-3151, tolgasezdi@uludag.edu.tr
[3] Ph.D, ORCID: 0000-0002-9837-9244, gizemzeren90@gmail.com

taxation, the tax paid must be proportional to the financial power (Edizdoğan, Çetinkaya, Gümüş, 2019: 241-242). The principle of fiscal power also serves to implement the principles of fairness and equality in taxation (Susam, 2020: 273). One of the instruments to provide fairness in taxation is the progressive income tax tariff. In a high inflation economy, the burden of the tax, the collection of which is later, decreases even more. According to Tanzi, changes in inflation will also affect tax revenues depending on the income elasticity of the tax and indexation (Cardoso, 1998:621).

Bracket creep refers to the automatic increase in average tax rates due to rising real wages or inflation. Bracket creep can be explained by the fact that a wage earner's salary increases at the rate of inflation, causing him/her to pay more tax. (Carling&Potter, 2015:3-4In the narrow definition, bracket creep arises from the fact that the increase or decrease in income tax tariff brackets lags behind the increase or decrease in the general price level (Nacar, vd., 2021:1004).

In countries with high inflation rates, bracket drift is more severe. As such, the bracket drift that occurs during inflationary periods is used by governments as a hidden tax increase (Carling&Potter, 2015:22-23). In the Turkish tax system, " reappraisal" is one of the most important measures against the negative effects of inflation.

3. Recalculation of Tax Brackets

The study analyzed the increases in the first bracket of the tax tariff over the last 10 years and observed deviations between the amount calculated according to the revaluation rate and the applied amount. Although the downward adjustments or deviations within the year appear to be small, when cumulatively totaled and calculated, only the deviation for the last 10 years exceeded 8.3%. This amounts to a hidden nominal tax increase.

There are two different index proposals in the literature that aim to improve the income tax tariff. According to the first of the indices proposed in the literature to calculate income tax increases (Eğilmez, 2016), it is proposed to increase the income tax tariff by the inflation rate every year. According to the calculation based on this index, the index suggests a higher increase in years with low inflation compared to the current income tax tariff increase.

When another index in the literature (Akalın, 1987) is analyzed, it is suggested to include the rate of increase in national income per capita in addition to the inflation rate in the relevant equation when calculating the increases in tax brackets. According to the calculation based on the addition of the rate of increase in per capita income in addition to the inflation rate, it was found that the tax bracket increases calculated in the other 9 years analyzed, except for the year 2023, were larger than the increases in the applied tax brackets. In other words, the incomes of individuals are moved to the upper bracket faster.

4. Conclusions and Recommendations

While wage earners are taxed according to the income tax, they face problems due to the drift of the income tax bracket due to inflation. Especially in high inflation environments, this drift is more pronounced. In this study, the first bracket of income tax is analyzed. First, a comparison is made between the tax brackets calculated with the reappraisal rate for the last 10 years and the applied tax brackets. According to the result, the applied tax bracket contains negative deviations. Then, new calculations and comparisons were made using two indices in the literature that include tax bracket revisions. According to the first index, which recommends

the inclusion of inflation rates in tax bracket increase calculations, bracket drift increases in periods of high inflation. According to the second index, which proposes to include the GDP per capita growth rate in addition to inflation rates in the calculation of tax bracket increases, bracket drift is eliminated.

In this context, some suggestions will be presented for the establishment of tax justice for wage earners:

- In order to ensure fairness in taxation, wage earners who pay their taxes subject to withholding at source should be given the opportunity to be taxed at a lower rate within the scope of the principle of separation,
- Reappraisal rates should be applied to tax brackets with care and fractions should not be rounded downwards,
- In a high inflation economy, reappraisal rates should be calculated using a method that also takes into account the increase in per capita income,
- The President has the authority to increase the reappraisal rate by up to 50%, and positive intervention in tax bracket increases is possible within the limits of this authority when needed,
- Salaries and wages that are lower than the poverty line should be fixed in the first tax bracket and should not move to the next tax bracket until they exceed the poverty line,
- Reducing the first bracket of income tax from 15% to 10% and increasing the number of brackets is important to ensure fairness in taxation.

Referances

Akalın G. (1987). "Maliye Politikamızın Değerlendirilmesi ve Yeniden Düzenlenmesi", *Ankara Üniversitesi SBF Dergisi*, 42(1), 115-128.

Bilici N. (2013). *Türk Vergi Sistemi*, Güncelleştirilmiş ve Geliştirilmiş 31. B., Ankara: Seçkin Yayıncılık.

Cardoso E. (1998). "Virtual Deficits and the Patinkin Effect", *IMF Staff Papers,* 45(4), 1-28.

Carling, R. & Potter, M. (2015), "The Stealth Tax: Policy: "Exposing the Bracket Creep Rip-off"", *Centre for Independent Studies (Australia)*, Research Report No:8, 1-27.

Edizdoğan N., Çetinkaya Ö. & Gümüş E. (2019). Kamu Maliyesi, 10.Baskı, Bursa: Ekin Yayın.

Eğilmez, M. (2016). "Mali sürüklenme ve Türkiye uygulaması". Son Erişim Tarihi: 23.10.2023 http://www.mahfiegilmez.com/2016/01/mali-suruklenme-ve-turkiye-uygulamas.html

Nacar, B. , Karabacak, Y. & İçmen, M. (2021). "Düşük Enflasyon Döneminde Gelir Vergisi Dilim Sürüklenmesi: Türkiye Üzerine Bir İnceleme (2006-2019)", *Mehmet Akif Ersoy Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi* , 8 (2) , 984-1007.

Susam N. (2020). *Kamu Maliyesi Temel Kavram ve Esaslar*, 4.Baskı, İstanbul: Beta Yayınları.

Şenyüz, D., Yüce M. & Gerçek, A. (2023). *Türk Vergi Sistemi*, 20.Baskı, Bursa: Ekin Yayınevi.

Tanzi, V., 1978, "Inflation, Real Tax Revenue, and the Case for Inflationary Finance: Theory with an Application to Argentina," *Staff Papers*, IMF, 25, 417–51.

Evoluation of the Legality of the Effective Repentance Provisions of the Tax Procedure Law in light of relevant decisions from the Constitutional Court and the ECtHR

Ayşe Miray Altay[1] **Erhan Gümüş**[2]

Abstract

Provisional Article 34, which has been added to Tax Procedure Law m. 6 of Law No. 7394 to 359, comprises the provisions for effective repentance in tax criminal law. One of the requirements set forth by the law to take use of the applicable provisions, "not to file a lawsuit, if one is filed, to waive it and not to resort to legal remedies," has drawn criticism in the legal community. In particular, it's crucial to analyze the constitutional circumstances in which rights can be curtailed, including the freedom to seek justice, the right to access the legal system, the right to a fair trial, and the ability to file an appeal against the administration's decisions. Evaluations will be made on the legality of the relevant provision, taking into account the recent decisions of the Constitutional Court and the violation decisions of the European Court of Human Rights regarding the limitation of the right to apply to the court.

Keywords: Effective Repentance, Constitutional Court, European Court of Human Rights, Freedom to Seek Rights, Right to own Property
Jel Codes: K11, K34, K38

1. Introduction

The institution of effective repentence is mainly regulated in criminal law. In the Turkish Criminal Code, it is foreseen that effective remorse can be utilized for certain crimes. The legal nature of this institution is the partial or complete elimination of the damage as a result of the perpetrator regretting after the crime and making efforts to eliminate and compensate for the damages arising from the crime committed. In tax criminal law, the institution of effective remorse is included in the provisional article 34 added to Article 359 of the Tax Procedure Law by Law No. 7394.

The main subject of the study is the provision of "not filing a lawsuit or waiving the right to file a lawsuit and not applying for legal remedies", which is a condition stipulated by the law in order to benefit from the institution in the application of effective remorse in both laws. As a result of this provision, individuals choosing to waive the right to file a lawsuit by benefiting from effective remorse may lead to the limitation of rights such as the freedom to seek rights, the right of access to court, the right to a fair trial, and the right to apply for judicial remedy against the actions and transactions of the administration.

2. The Legal Nature Of Effective Repentance

The complete or partial elimination of the penalty as a result of the perpetrator's remorse after the completed crime he committed and his efforts to eliminate the damages of the crime he committed is referred to as effective remorse.

[1] Res. Assist., Çanakkale Onsekiz Mart University, ORCID: 0000-0001-5583-0085, aysemiray.cengiz@comu.edu.tr
[2] Prof. Ph.D., Çanakkale Onsekiz Mart University, ORCID: 0000-0002-5113-1006, erhang@comu.edu.tr

Although the main regulation area of effective remorse is criminal law, this practice is also included in tax criminal law.

3. Effective Repentance Regulation in Article 359 of TPL

The first effective regret regulation in the Tax Procedure Law is made in Article 359, which regulates the offenses and penalties of smuggling. According to this provision, if the specified conditions are fulfilled, the penalty will be reduced. In order to benefit from this reduction, the conditions sought are as follows:

- Completion of the Smuggling Crime

- Payment of the full amount of the tax, late payment interest and late payment penalty, half of the penalties and the corresponding late payment penalty within the legal period

- Realization of Repentance within the Legal Period

- Failure to File a Lawsuit, Waiver if filed and Failure to Apply for Legal Remedies

3. Effective Repentance Regulation in Provisional Article 34 Introduced by Law No. 7394

Provisional Article 34 introduced by Law No. 7394 was added to the Tax Procedure Law. The provisional article is actually a continuation of the effective remorse institution regulated in Article 359. According to this article, the files in the execution phase will be able to benefit from the effective remorse provisions applied in the investigation phase of Article 359. In fact, in order to benefit from the penalty reduction, the condition of not filing a lawsuit before the tax court, waiving if filed, not applying for legal remedies or waiving if applied is still sought**.**

4. Examination of the Legality of the Failure to File a Lawsuit Condition in the Context of the Constitutional Court and ECtHR Decisions

The legality of the effective repentance institution under Art. 359 and Provisional Art. 34 of the TPL is criticized in the doctrine. Because in order to exercise a recognized legal right, the right to file a lawsuit must be waived. However, the exercise of the right to file a lawsuit by making such a choice may raise important question marks for some Constitutional rights.

4.1. Freedom of Right and Right of Access to Court

The right of access to courts is also regulated as a constitutional right in our country. The limitation of fundamental rights and freedoms regulated in our Constitution is subject to certain conditions in Article 13 of the Constitution. Restriction of rights without complying with these conditions means that the Constitutional right is violated. The Constitutional Court has recognized that this right is not an absolute right and stated that the restriction will be lawful provided that 1. the essence of the right is not touched, 2. there is a legitimate purpose, 3. it is clear and proportionate and 4. it does not create a heavy burden on the person (AYM, B. No: 2022/120, 1/6/2023).

The right of access to a court is not directly mentioned in the European Convention on Human Rights. However, since it is an inherent element of the right to a fair trial (Art.6), the Court stated that the right to a fair trial should be interpreted broadly to include the right of access to a court (ECtHR, Golder, 1975). The Court stated that the right of access to a court is inherently restricted by the State, but in order to avoid a violation of Article 6/1, the following conditions are required 1. the limitations must not be restricted in such a way as to impair the essence of the right, 2. the aim must be legitimate, 3. there must be a reasonable proportionality between the aim to be achieved by the limitation and the limitation (ECtHR, Hanževačkı, 2023).

4.2. Right of Property

According to the Constitutional Court,

- The possibility that the perpetrator of the crime and the perpetrator of the tax may be different persons,

- The criminal court's decision of acquittal on whether the criminal act of tax evasion, which caused the tax loss, was committed by the defendant on the grounds that "it is fixed that the crime was not committed by the defendant",

- Erroneous determinations of taxes and penalties by the administration,

- Except for the cases of the tax evasion crime, which is characterized as a consequence crime, the fact that the criminal court will not make the determination regarding the commission of additional acts that will lead to tax loss, in such possibilities, the fact that the tax debt was paid when it should not have been paid brings up the protection of economic values within the scope of the right to property (AYM, B. No: 2022/59, 28/09/2022, p.33).

The right to property is one of the rights protected by the Constitution. As stated before, the regulation in Article 13 is taken into consideration in order to limit the rights protected under the Constitution. Article 35, which regulates the right to property, stipulates that this right can only be restricted for the purpose of public interest. It is clear that there is a public interest in the collection of tax, which is a public receivable. On the other hand, it is also clear that there is a regulation to reduce the workload of the courts. Therefore, the conditions of public interest and limitation by law are met.

The Constitutional Court has particularly evaluated the restriction of the right to property in terms of proportionality. Proportionality is the balance between the public interest to be achieved and the restricted right of the person. The person who does not actually have to make a payment but is forced to make a payment faces a heavy burden. In addition, since the person does not actually owe money to the state in this case, the necessity to transfer the tax and other payments to the treasury quickly, which is expressed as a public interest, disappears, and therefore, the only public interest in this situation will be the easing of the workload of the judiciary, but it cannot be said that this is in a fair proportion to the excessive burden imposed on the person (AYM, B. No: 2022/59, 28/09/2022, p.47).

4.3. Redress Mechanisms and the Right to Effective Remedies

The possibility of effective exercise of the right to property is among the positive obligations of the state. This means that the state must provide mechanisms to protect and remedy the right to property. The person should be given the right to apply to a competent authority for his/her violated right, his/her right to property should be protected and the

damage should be compensated. The Constitutional Court refers to these mechanisms as redress mechanisms.

The Court states that the "right to effective remedy", a right regulated under Article 40 of the Constitution, has also been violated. The right to effective remedy includes the possibility for anyone who claims that a constitutional right has been violated to apply to administrative and judicial remedies that are reasonable, accessible and favorable to the elimination of the violation and its consequences (Constitutional Court, B. No: 2022/59, 28/09/2022, p.50).

5. Conclusion

In Article 359 and Provisional Article 34 of the TPL, the provision of "not filing a lawsuit, waiving if filed, and not applying for legal remedies", which is one of the conditions required to benefit from the effective remorse, causes the limitation of some Constitutional rights.

The first of these is the right of access to the court, which is a manifestation of the freedom to seek justice. The right of access to the court is a constitutional right (Art. 36) and Constitutional rights can be restricted only if the conditions in Art. 13 of the Constitution are complied with.

The Constitutional Court, on the other hand, has not considered the right of access to the court as an absolute right, but has expressed the conditions for its limitation.

The ECHR, on the other hand, did not directly regulate the right of access to a court and stated that it falls within the scope of the right to a fair trial. Similar to the Constitutional Court, the Court explained in the Golder judgment that this right is not absolute, but that certain conditions are sought for limitations, otherwise it will rule a violation

The Constitutional Court, on the other hand, specifically mentioned the right to property. The Constitutional Court stated that the inability to file a lawsuit due to the utilization of the effective remorse provision in the case of payment of the amount not required to be paid in the four cases mentioned violates the right to property.

References

Aydın, B. (2013). “Türk İdari Yargı Düzeninde Mahkemeye Erişim Hakkı”, Türkiye Adalet Akademisi Dergisi, (15) 4, 271-296.

Bayraklı, H. H. (2017). “Pişmanlık ve Islah Hükümleri Karşısında Vergi Kaçakçılık Suçlarının Konumu”, Türkiye Adalet Akademisi Dergisi, (31), 47-64.

Özbek, V. Ö., Doğan, K. Ve Bacaksız P. (2019). Türk Ceza Hukuku Genel Hükümler, 10. Baskı. Ankara: Seçkin Yayıncılık.

Şişman, G. ve Sarsıkoğlu, Ş. (2022). “Vergi Kaçakçılığı Suçunda Etkin Pişmanlık”, Selçuk Üniversitesi Hukuk Fakültesi Dergisi, (30)3, 1591-1623.

Yılmaz Furtuna, E. Ve Laloğlu, A. (2022). “7394 Sayılı Kanun Bağlamında Vergi Kaçakçılığı Suçunda Etkin Pişmanlık Müessesesi Üzerine Bir Değerlendirme”, Necmettin Erbakan Üniversitesi Hukuk Fakültesi Dergisi, (5)2, 347-372.

Vergi Usul Kanunu. https://mevzuat.gov.tr/mevzuatmetin/1.4.213.pdf, (29.08.2023).

Türk Ceza Kanunu. https://mevzuat.gov.tr/mevzuat?MevzuatNo=5237&MevzuatTur=1&MevzuatTertip=5, (29.08.2023).

Avrupa İnsan Hakları Sözleşmesi. https://www.anayasa.gov.tr/media/3542/aihs_tr.pdf

AİHM Hırvatistan Hanževačkı Kararı. https://hudoc.echr.coe.int/tur?i=001-226419

AİHM Birleşik Krallık Golder Kararı. https://hudoc.echr.coe.int/tur?i=001-57496

AİHM Türkiye Bayar ve Gürbüz Kararı. https://hudoc.echr.coe.int/tur?i=001-120276

AYM. B. No: 2018/36533, 8/6/2023.

AYM. B. No:2022/59, 28/09/2022.

Tax Liability of the Legal Representative within the Framework of the Periodicity Principle

Yetkin Kaan Gençtürk[1]

Abstract

The aim of this study, which examines the tax liability of legal representatives, limited to joint stock and limited companies, is to determine the basic principles in determining the period in which the legal representative will be responsible. In this context, first of all, it has been determined that the determination of the legal representative should be made according to the private law relationship. Subsequently, the periodicity principle that dominates tax law is explained and, by making use of the doctrine, it is concluded that periodicity in terms of liability for public receivables should be different from the periodicity principle dominant in fiscal law. In determining the time period for which the legal representative is responsible, the effect of the trade registry was evaluated together with specific cases and it was concluded that the tax administration cannot be a bona fide third party in terms of trust in the registry. In the last part of the study, which concludes that the legal representative should be liable only for his/her fault, specific situations regarding the allocation of fault are mentioned. In accordance with the principles of liability determined in the study, which benefited from judicial decisions and literature; It has been concluded that the legal representative's tax liability should be limited only to the tax duties that he/she has failed to fulfill during his/her term of office.

Keywords: Tax Responsible, Legal Representative, Periodicity Principle, Faulty liability
JEL Codes: K34, K29.

1. Introduction

The study, which aims to determine the basic principles in determining the period in which the legal representative will be liable, is limited to the legal representatives of joint stock and limited companies.

Within the scope of the study, the term tax will be used in a broad sense, including other financial obligations. The reason for this is to provide a fluent expression along with the fact that the term tax is used in a broad sense such as “tax liable” and “tax responsible” in the Tax Procedure Law, which includes general provisions regarding other financial obligations such as duties and fees.

The tax liability of legal representatives are regulated in Article 10 of the TPL in terms of taxes and receivables directly related to taxes, and in repeated Article 35 of the Law on Procedures for Collection of Public Receivables (“LPCPR”) in terms of other public receivables. With respect to both regulations, the liability of the legal representatives is limited to the period of term of office. On the other hand, in accordance with the opinion we agree with (whether arising from Article 10 of the TPL or repeated Article 35 of the LPCPR), both liabilities should be considered as faulty liability[2].

[1] Res. Asst., Istanbul University, Faculty of Law, Department of Fiscal Law, ORCID: 0000-0002-2716-9493, yetkinkaan@gmail.com

[2] There is a prevailing opinion that the liability under Article 10 of the TPL is a fault liability (Constitutional Court PS, E. 2014/144 K. 2015/29 T. 19.3.2015; Council of State Board of the Unification of Case Law, E. 2013/1 K. 2018/1 T. 11.12.2018; Kaneti vd., p. 134; Karakoç, p. 224). The subject of debate is whether the liability under repeated Article

2. Periodicity as a Precondition for the Liability of the Legal Representative

2.1. Legal Representative

The determination of the legal representative should be made according to the private law relationship. Although it is regulated as a tax liability institution, the text of Article 10 of TPL requires this. The determination of who is the legal representative of a joint stock or limited company depends on knowing who has the authority to represent and bind the relevant company in the context of a private law relationship. Therefore, it should be stated that legal representation follows a private law relationship.

2.2. Periodicity

2.2.1. The Principle of Periodicity Dominating Fiscal Law

The notion of periodicity is defined in the case-law unification decision of the Council of State as "the division of the life span of enterprises, which is considered to be unlimited, into certain periods of limited duration and the calculation of the operating results of each period separately from the other periods"[3].

The origin of the periodicity principle that dominates fiscal law should be sought in accounting. In fact, accounting, which has developed in order to dominate the business, enables the activities and transactions to be measured in time. The result of the reflection of the periodicity of accounting reflected in tax law is the principle of periodicity (Oktar, 6).

The principle of periodicity is directly effective in determining the tax liability. Indeed, the values to be added to or subtracted from the tax assessment are determined according to the relevant period.

2.2.2. Periodicity Regarding Liability for Public Receivables

We believe that the period and liability of the legal representative should be understood differently from the periodicity of the tax.

The main reason for our opinion is that the liability of legal representatives is regulated in a narrow and reconsidered manner in Article 553/III[4] of TCC No. 6102, as compared to Article 309/III of TCC No. 6762 (abrogated). This amendment is expressed as follows: "The third paragraph acknowledges the supervisory obligations of the members of the governing body, whether the functions of such body are transferred in accordance with the law or remain with the body itself, but stipulates that this obligation does not extend to facts and matters beyond its control. In the absence of an established causal link or fault on the part of the members of the board of directors, this provision is intended to prevent the persons in charge of management from being held liable on the basis of an abstract understanding of supervision.

35 of the LPCPR is strict liability or not; and we agree with the view that the faulty liability should be applied in this regard as well (Barlass, p. 62-65). On the contrary, regarding repeated Article 35 of the LPCPR that the prevailing jurisprudence is strict liability, see 4th Chamber of Council of State, E. 2019/5697 K. 2020/1987 T. 11.6.2020 (http://www.lexpera.com.tr, access date: 27.09.2023).

[3] Council of State Board of the Unification of Case Law, E. 2004/1 K. 2004/1 T. 22.12.2004 (http://www.lexpera.com.tr, access date: 27.09.2023).

[4] It is regulated as follow: "No person shall be held liable for any violation of the law or the articles of association, or for any irregularities beyond his/her control, and such non-liability shall not be invalidated on the grounds of the duty of supervision and diligence." (TCC, 553/3).

Because, in practice, it has been observed that the members of the board of directors are held liable for any violation of the law or the articles of association in the company, with an understanding of supervision beyond human capacity." For this reason, it is considered that in case the legal representatives who do not hold office at the same time serve consecutively, even if they are in the same taxation period, one should not be liable for the failure of the other to fulfill his/her tax duties with fault, and the period and liability of the legal representative should be understood differently from the periodicity of the tax.

In summary, the period of term of office of the legal representative can be defined as the time between the legal transactions and actions that start and end his/her duty. This time period indicates the period of liability. On the other hand, it is seen that the approach of the judiciary to the issue is to determine the period for which the legal representative is liable to coincide with the taxation period[5].

2.2.2.1. The Effect of Trade Registry on Determination of the Term of Office of the Legal Representative

The only problem that may arise in the determination of the term of office of the legal representative, whether in relation to the commencement or termination of the office, is the case where the registry records and the actual situation do not coincide. In this regard, we agree with the view that the effect of the registration and announcement is declarative (Barlass, 119). Indeed, registration and announcement, which are declarative in principle, will exceptionally be constitutive, and the transaction involving a change in the duties of the legal representative is not one of these exceptional cases (Arkan, 274).

As a result of the declarative nature of the registration and announcement, the period of responsibility may extend to the period before and after the registry records of the commencement and termination of the duty. If this is not recorded in the registry, the actual situation will be determined within the framework of the rules of the law of evidence. Although the registration and announcement are declarative in nature, there are also decisions of the judiciary to the contrary[6].

At this point, in the context of the principle of trust in the registry, it should be noted that the tax administration (which does not have direct control over the internal functioning of the company and relies on the relevant registration records outside the company) is not a bona fide third party. In addition, if the relationship with the company is based on an involuntary reason, the actual situation should be considered, not the principle of trust in the registry (Yanlı, 756; Barlass, 144). Indeed, Article 36 of the TCC envisages the protection of bona fide third parties who will enter into a legal relationship with the company by relying on the registry record; while in cases where there is no legal transaction, "it is not possible to rely on Article 36 of the TCC, for example, in matters related to tax law" (Karayalçın, 40; Arkan, 275 and contra. Şener, 488). On the other hand, there are judicial decisions stipulating that the principle of trust in the registry shall also apply to the tax administration[7].

[5] See 3rd Chamber of the Council of State, E. 2011/808 K. 2013/754 T. 14.3.2013; 4th Chamber of the Council of State, E. 2016/4234 K. 2018/2846 T. 20.3.2018 and contra. 3rd Chamber of the Council of State, E. 2012/210 K. 2016/1670 T. 22.2.2016 in which the period of liability is interpreted as the period of time actually held office 2016 (http://www.lexpera.com.tr, access date: 27.09.2023).

[6] For the decision and the grounds for dissenting vote, see 3rd Chamber of Council of State, E. 2011/5061 K. 2015/512 T. 5.2.2015 (http://www.lexpera.com.tr, access date: 27.09.2023).

[7] See 3rd Chamber of the Council of State, E. 2012/210 K. 2016/1670 T. 22.2.2016; 3rd Chamber of the Council of State, E. 2011/5061 K. 2015/512 T. 5.2.2015 (http://www.lexpera.com.tr, access date: 27.09.2023).

With a paragraph added to Article 373 of the TCC in 2021, the status of public institutions and organizations has been differentiated from that of other third parties[8]. Despite this, we believe that tax offices cannot be accepted as a bona fide third party. In fact, trust in the registry should be considered limited to the condition of establishing a voluntary relationship (Yasaman & Poroy, 212). For this reason, the existence of an exception for tax administrations should be accepted even though there is no mention of it in the article. Otherwise, the right of evidence, which is a constitutional right, will be restricted. Nevertheless, it is possible to discuss the unconstitutionality of the regulation due to its lack of certainty to prevent the practice that may cause violation of rights[9].

In this context, as a result of the interpretation of Article 373/3 of the TCC and Article 36/4 of the TCC together, it may be stated that;

- It is possible to prove that the tax administration, which is a third party, knows the contrary of the situation that has not been registered or announced[10],
- Public institutions, which are in a different position than other third parties since they have direct sanction power against the companies registered in the registry, are limited in terms of the documents they may request regarding the representation authority of the company.

As a result, since Article 373/3 of the TCC is a provision that protects the company[11], a determination should first be made based on private law rules about who has the authority to represent the company, and then, in the context of tax law, it should be determined who the legal representative is and for which time period he/she is liable.

2.2.2.2. The Effect of a Legal Transaction Performed at an Inappropriate Time or Leaving the Partnership without a Legal Representative on the Determination of Liability

In the event that the authorized signatory of the company resigns from his/her position, the legal representation should automatically terminate. The discussion to be made at this point is whether the period for which the legal representative is liable will extend beyond the resignation, and if so, for how long. The period during which the legal representative, who resigns untimely, will be liable for the tax debts should not be extended beyond the resignation, since with the resignation, the representation authority of the person has ended and passed back to the board of directors. As an exceptional case, if the legal representative resigns untimely in order to put the company in a difficult situation (to the extent that it cannot fulfill its tax duties), then the legal order should not protect this behavior on the grounds of abuse of right.

[8] It is regulated as follows: "The trade registry records shall be taken as basis by public institutions and organizations regarding the persons authorized to represent registered in the trade registry and their representation forms and no document other than the documents issued by the trade registry regarding these records and the announcement published in the Turkish Trade Registry Gazette may be requested from the company." (TCC, 373/3)

[9] On the unfair consequences of the amendment, see 11th Chamber of the Court of Cassation, E. 2021/3154 K. 2022/7039 T. 17.10.2022 (http://www.lexpera.com.tr, access date: 27.09.2023).

[10] The administration is a whole with its formation and functions (Constitution, 125).

[11] Although it is not binding, our opinion is strengthened by the fact that the reasoning of the article is in this direction. For the reasoning of the article, see: Commission on Industry, Trade, Energy, Natural Resources, Information and Technology's 27th Term 4th Legislative Year Main Commission Report No. 229 (https://www.tbmm.gov.tr, access date: 25.09.2023)

3. Special Cases Regarding the Liability of the Legal Representative in the Context of the Periodicity Principle

It should be accepted that the tax liability of the legal representative arises only if he/she fails to fulfill his/her tax duties with fault.

In terms of tax duties that fall within the period of the legal representative, it is not sufficient that the obligation to fulfill the duty arises, but it should also be accepted that the due date falls within the same period. Otherwise, it will lead to unfair consequences such as not being able to benefit from the sufficient time and opportunity provided by the legal order, in other words, facing sanctions despite being flawless.

On the other hand, the due date of a duty arising and continuing during the period of the previous legal representative may also fall within the term of the subsequent legal representative. In this case, it should be stated that the second legal representative will be liable to the tax administration (except in cases where it is not possible to fulfill the duty[12]).

In the event that different legal representatives hold office successively in the same taxation period, the tax liability arising from the duties that each of them did not fulfill during their own term/period of office should be limited to their own term/period of office. For this reason, the subject of the payment order to be notified should be limited to the tax debts arising from the time limited to the term of office, excluding the term of office of the other legal representative serving in the same taxation period. As a matter of fact, joint liability of legal representatives is only possible if they hold office (together) in the same period. Here, legal representatives did not serve at the same time, but they served in different times within the same taxation period.

For example, in a situation where the former legal representative in the same taxation period does not fulfill his/her duties in a way that prevents the full accrual of the tax without committing a tax evasion crime, and the subsequent legal representative causes tax loss by not submitting the declaration to the tax administration on time, and an ex officio assessment is made; both legal representatives will be responsible for the delay interest, the amount lost and the one-fold penalty at certain rates. In other words, even if the main responsible for the tax loss is the legal representative who failed to fulfill the duty to submit the declaration, if the declaration had been submitted on time, tax loss would still occur due to the former legal representative's breach of the duty to comply with the order of books and documents. For this reason, the former legal representative should be responsible for the amount of the tax loss that would have been incurred if the declaration had been made based on the book records kept during the former legal representative's period and the one-fold tax loss penalty amount calculated over that amount; and the new legal representative should be responsible for the rest of the tax loss penalty assessment.

4. Conclusion

Making a determination on the tax liability of legal representatives based on certain faults and period assumptions drawn with strict boundaries may produce inaccurate results. In fact, within the scope of commercial law, the liability of legal representatives is narrowed pursuant to Article 553/III of the TCC. The consequence of this approach in terms of tax law is

[12] It is not possible for the new legal representative to fulfill this duty in a situation where the books and documents order was not respected in the previous period. As a matter of fact, pursuant to Article 553/3 of the TCC, the subsequent legal representative is not liable in this respect.

that the tax liability of the legal representative is interpreted as being responsible for his/her own period (indicating the term of office of the legal representative).

For each specific case, it is necessary to determine the fault of the legal representative in terms of the tax duties that he/she did not fulfill in his/her own period. In particular, it should be taken into consideration that the period for which the tax administration will issue a payment order regarding the liability of the legal representative may be different from the principle of periodicity in taxation. Therefore, legal representatives who serve consecutively at different times in the same taxation period should not be jointly liable. However, when it is examined based on the administrative practice and jurisprudence to the contrary, it is considered that the joint liability of the legal representative is misunderstood in practice.

Referances

Arkan, S. (2022). Ticari İşletme Hukuku. 28th Edition. Ankara: Banka ve Ticaret Hukuku Araştırma Enstitüsü.

Barlass, T. İ. (2006). Anonim ve Limited Ortaklıklarda Kanuni Temsilcilerin Vergisel Sorumluluğu. İstanbul: Vedat Kitapçılık.

Kaneti, S., Ekmekci E., Güneş G. & Kaşıkcı M. (2022). Vergi Hukuku. 2nd Edition. İstanbul: Filiz Kitabevi.

Karakoç, Y. (2014). Genel Vergi Hukuku. 7th Edition. Ankara: Yetkin Yayınları.

Karayalçın, Y. (1997). Özel Hukukta Meseleler ve Görüşler V. Ankara: Banka ve Ticaret Hukuku Araştırma Enstitüsü.

Lexpera Hukuk Bilgi Sistemi, http://www.lexpera.com.tr, (27.09.2023).

Oktar, S. A. (2022). Türk Vergi Sistemi. 3rd Edition. İstanbul: Türkmen Kitabevi.

Poroy, R. & Yasaman, H. (2017). Ticari İşletme Hukuku. 16th Edition. İstanbul: Vedat Kitapçılık.

Şener, O. H. (2016). Ticari İşletme Hukuku. Ankara: Seçkin.

Türkiye Büyük Millet Meclisi, https://www.tbmm.gov.tr, (25.09.2023)

Yanlı, V. (1999). "Limited Şirketlerin Amme Borçlarından Dolayı Ortakların Sorumluluğu". Prof.Dr. Erdoğan Moroğlu'na 65. Yaş Günü Armağanı. İstanbul: Beta Yayınları. 743-770.

An Evaluation on Value Increment Share (VIS) in Disaster Risk Reduction

Furkan Kılınç[1]

Abstract

The word risk, as a concept, refers to an abstract situation with the possibility of harm. According to TDK, risk is the possibility of harm from a business or initiative. Disaster risk is defined as a function of the vulnerability of a society or system to a dangerous event that may occur in a certain place and within a certain period of time, which may cause potential loss of life and damage, and its capacity to cope with the event. The content of the concept of risk has expanded over time, causing the scope of the disaster phenomenon to be re-evaluated. As a result of the realization that many factors that are not perceived as a risk source for disasters can lead to damaging events that can turn into disasters over time, the scope of the concept of disaster has expanded accordingly. In order to reduce disaster risks, financing the work to be carried out in the pre-disaster and post-disaster period has become an important problem. In this context, it first came into force with the "Law on Transformation of Areas Under Disaster Risk" dated 16.05.2012 and numbered 6306.

With this law, some of the revenues obtained from certain taxes and penalties are recorded as income in the special revenue accounts in the "B" table of the General Budget to reduce disaster risks. Value Increase Share (DAP) is an application that aims to bring the increase in value that will occur in the real estate as a result of the zoning plan change to the public as a value increase share; It entered into force with the Law No. 7221 dated 14.02.2020, and the regulation regarding its implementation was published in the Official Gazette No. 31245 dated 15.09.2020. The value increase share takes into account the increases in the value of the land as a result of changes in the zoning plan for any reason. The base of the value increase share is the difference between the value of the real estate in question in the current zoning plan and the new value that will arise as a result of the plan change. Revenues arising from this difference are deposited into the relevant accounts of the relevant ministry, the Ministry of Environment, Urbanization and Climate Change; These deposited revenues are transferred to the relevant municipalities, ministry and general budget in line with certain criteria.

The revenues transferred to the Ministry are transferred to the "Transformation Projects Special Account" and are used to carry out the activities to be carried out within the scope of Law No. 6306 on the Transformation of Areas Under Disaster Risk. In this study, the relationship between the Value Addition Share (DAP) and disasters will be discussed and how the revenues obtained since its entry into force have been used will be examined. In the light of the findings, suggestions will be made to expand the DAP application and make it more efficient.

Keywords: Disaster, Disaster Risk, Tax, Value Increase Share

[1] Res. Assist., Dokuz Eylül University, Department of Public Finance, ORCID: 0000-0002-8618-6111. furkan.kilinc@deu.edu.tr

The Effect of Force Majeure on Tıme-Related Regulatıons in Fıscal Law

Yusuf Karakoç[1]

Abstract

Force majeure is any kind of extraordinary event that prevents the exercise of a right, the fulfillment of a debt or a duty, cannot be known, prevented and eliminated in advance, and is not based on the will of the exposed person. Every force majeure has the effect of preventing the running of time. In this respect, there is no distinction such as some legal periods are running and some of them not, in the presence of force majeure, and there is no separation of force majeure that prevents and does not prevent the running of time. In this sense, force majeure prevents every period from running. This feature/function is accepted as a general principle of law. It is not possible to think otherwise.

In case of force majeure, it is absolute. However, there is uncertainty as to what is the equivalent of preventing the running of time as a concept of technical law. In this regard, it would be beneficial to make a description of stopping the legal period, and grant an extension of time or cessation. In some cases, additional time must be given, or periods must be suspended or ceased. In this framework, the periods running in favor of individuals are suspended; on the other hand, the periods running against individuals are also be ceased or additional time must be given. In any case, it is appropriate and necessary to determine and regulate them by law. In this respect, when the force majeure ends/disappears, an additional period of not less than fifteen days should be given for the fulfillment of the delayed debt or duty, or it should be accepted that the time has been interrupted and the period should be started again. This issue must be clearly regulated by law in accordance with the principles of legal security and certainty.

Keywords: Force Majeure, Fiscal Law, Suspensions of Terms, Interruption of Terms, Giving Additional Term
JEL Codes: K20, K34, K39

1. Introduction

Fiscal Law is a branch of law that examines with rules related to financial obligations, the collection of public revenues, the implementation of public expenditures, the budget, public assets, and public debts, as well as the disputes arising from them. Tax Law is the most significant part of financial law deals with relationships that directly involve individuals.

Tax Law is the desired legal framework aimed at achieving a sense of justice and fairness through substantive or procedural legal rules concerning the nature of the tax obligation, the emergence and termination of tax liabilities, penalties for non-compliance with tax obligations, resolution of disputes arising from the fulfillment of tax duties, and taxpayer rights.

Time limitations are specific or predetermined time intervals. In law, time limits are significant in terms of acquiring, exercising, and losing rights and powers. In Fiscal Law, there are various provisions related to time limits concerning the powers of public creditors, as well as the rights and obligations of public debtors.

Force majeure is an extraordinary event or circumstance that is unforeseeable, unavoidable, and beyond the control of the affected party. The primary impact of force majeure

[1] Prof. Ph.D., Dokuz Eylül University, Faculty of Law, Department of Fiscal Law, ORCID: 0000-0002-9347-471X, yusuf.karakoc@deu.du.tr

events is on the fulfillment of obligations and duties, particularly in relation to the timeframes for their performance, across various branches of law.

Force majeure not only and solely prevents the provisions of deadlines. Furthermore, it is also possible for it to affect liability situations, such as non-imposition of penalties, deferment and installment arrangements, and the remission of public debts. However, in this study, only the impact of Force Majeure on Time Limits will be examined.

2. Legal Regulation

When Customs Law is excluded for now, it is known that the only regulation in Financial Law regarding force majeure and its effects is included in the Tax Procedure Law. Article 13 of the Tax Procedure Law regulates cases of force majeure, while Article 15 reguletes the impact of force majeure on time limits. Accordingly,

"Force majeure:

1.Severe accidents, serious illnesses, and detention to an extent that will prevent the fulfillment of any tax duties;

2.Disasters such as fires, earthquakes, and floods that prevent the fulfillment of tax duties;

3.Mandatory absences occurring outside the person’s will;

4.The loss of books and documents due to reasons beyond the owner's control;

are considered such cases." (Tax Procedure Law, Article 13).

"If any of the force majeure events listed in Article 13 are present, the deadlines do not run until this reason ceases. In this case, they are extended by the same period during which the statute of limitations does not run." (Tax Procedure Law, Article 15)

3. The Scope of the Impact of Force Majeure on Time Limits

3.1. General Explanation

Due to being an extraordinary and exceptional situation, the force majeure is impossible to predict in advance, prevent its occurrence, eliminate its effect when it occurs, avoid its impact, and make it the subject of regulation. It occurs without warning, cannot be prevented, and is unavoidable.

Throughout human history, it is known that force majeure has been recognized as a circumstance preventing adverse consequences for individuals everywhere and in every era. Force majeure is a common concept in various branches of law. Preventing the passage of deadlines due to force majeure allows for the timely fulfillment of obligations and duties that cannot be performed within the specified period later; the utilization of unused rights; and, in some cases, the exemption of individuals from material or financial liability is one of the general principle of law.

In Fiscal Law, the fundamental regulation concerning force majeure is included in the Tax Procedure Law. Since it is not possible to limit the cases considered as force majeure restrictively, the legislator provides examples of situations considered as force majeure and uses

the word 'such as' to indicate that force majeure cases are not limited to those expressly mentioned in the article.

When a force majeure event occurs, it's essential to specify which times are suspended. In accordance with the clear provision of the Tax Procedure Law, it is indisputable that timeframes associated with tax obligations and the statute of limitations do not elapse when a force majeure event takes place (Tax Procedure Law, Article 15/I). Moreover, it is evident that, following the cessation of this event, the statute of limitations is extended by the same duration for which it was suspended. Any doubts concerning the impact of force majeure on deadlines in Tax Criminal Law, Public Enforcement Law, and Tax Judiciary Law are unnecessary and inconsequential.

3.2. Effects of Force Majeure on Time Limits

In accordance with the explicit provision of Article 15 of the Tax Procedure Law, it should be clear that the timeframes related to tax obligations and the statute of limitations do not run when a force majeure event occurs, and after the cessation of this event, a new period commences for taxpayers or an additional period should be granted. As for the statute of limitations, it continues from where it left off (Tax Procedure Law, Article 15/1), and there should be no doubt about this. In this context, as long as the force majeure persists, a taxpayer is not considered to have failed to fulfill their obligation due to the non-running of deadlines.

However, it's important to note that a force majeure event that hinders the completion of a particular tax obligation only leads to the postponement of the associated deadline. Deadlines for the taxpayer's other responsibilities remain unaffected. For instance, in the event of the involuntary loss of a taxpayer's records and documents, the payment deadline for previously incurred tax debts remains unaffected.

Time limits related to Public Enforcement Law also do not run in the presence of force majeure. To think otherwise would mean not understanding the nature of force majeure’s hindrance to the operation of time limits. It cannot be claimed that the provisions in the Tax Procedure Law only result in consequences related to time limits mentioned in in this Law. The Law on Procedures for the Collection of Public Claims includes all provisions related to time, including the references made to the the Tax Procedure Law in Article 8. Moreever, the hindrance of time limits by force majeure is one of the General Principles of Law. Therefore, there is no need for any additional regulation.

The time limits for filing lawsuits, resorting to legal remedies, and other procedural steps related to Tax Litigation Law are also within the scope of the effect of force majeure on time limits due to the nature of the matter.

There is no provision in the Administrative Procedure Law, which also regulates Tax Litigation Law, regarding the impact of force majeure on the time limits for filing lawsuits and resorting to legal remedies. The Code of Civil Procedure, among the referenced provisions in tax litigation law, does not include provisions for restitution to the previous status. However, it should be acknowledged that the effect of force majeure in preventing the operation of time limits, as regulated in the Tax Procedure Law, is applicable in the judicial process related to tax litigation law. Additionally, by utilizing the general principles of law, it is possible and necessary to extend the effect of force majeure on time limits to the judicial process. However, the reason for debates and convoluted searches for solutions is the lack of necessary and appropriate regulations. Yet, it is possible to put an end to such doubts and debates by explicitly including the institution of restitution to the previous status, as found in the Code of Civil Procedure

(Articles 95-101 in Turkish Code of Civil Procedure) or the German Tax Litigation Law (§ 56 FGO; § 110 AO), in the Administrative Procedure Law.

4. Consequences of the Impact of Force Majeure on Time Limits

Force majeure gives rise to its legal consequences upon its existence and occurrence. While the impact of force majeure on times is acknowledged, there are different approaches regarding the nature of this impact. Force majeure, in essence, prevents the running of any deadline. However, it should be understood that the effect of force majeure is not equally applicable to all times. In other words, it must be accepted that force majeure does not have the same effect on every time-related provisions.

When times do not run, the issue of under what principles individuals affected by force majeure should be granted additional time to fulfill their obligations and exercise their rights remains uncertain, leading to debates. The non-running of times can be described in two ways, which are expressed as 'suspension' and 'interruption.

Suspension is that the period that had run until the reason for stopping occurred continues to run from where it left off after the reason for stopping is eliminated. In such a situation, the remaining time may be too short to fulfill an obligation or exercise a right.

Interruption means that the period that has elapsed until the cause of interruption arises is erased, and after the cause ceases, the period starts anew. In this case, when the cause occurs, the past time is disregarded, and an equivalent period begins anew for the fulfillment of obligations or the exercise of rights. This method automatically puts an end to the debate about when the period began and stopped, whether the remaining time is short or long. In this way, individuals can more easily fulfill their obligations and exercise their rights. However, the periods, which serve as a vital mechanism for upholding legal order, should not become excessively prolonged or permanently non-functional.

5. General Evaluation and Conclusion

In Fiscal Law, the time limits are determined by the legislative, executive, or judicial authorities. In the case of force majeure, the time limites specified in law or determined by the administration regarding tax obligations do not run. This non-running can be understood as a suspension in terms of the statute of limitations and as an interruption or the granting of additional time for taxpayers.

It is beneficial to acknowledge that, in case force majuere prevention of the running of times should be applied as the form of suspension in time limits like statutes of limitations. Also in the case of individual force majeure events, it may be applied as a fifteen-day extension or the completion of the remaining time within fifteen days; in other cases and time limits, it may also considered as interruption. This distinction is important because if every period/ time-related regulation were to be suspended, it would inevitably lead to delayed matters and grievances.

In the case of granting additional time, it might be thought that the non-running of deadlines loses its significance. However, it should not be overlooked that the commencement and expiration of the additional time should be initiated based on the cessation of the non-running of deadlines.

The impact of force majeure events in preventing the running of deadlines results in a temporary consequence. Undoubtedly, it is important for individuals to be exempted from the legal consequences of being deemed non-compliant with deadlines, thereby avoiding certain civil or criminal sanctions.

Referances[2]

Aral, K. (1965). Danıştay Muhakeme Usulü, Ankara.

Balcı, M. (2009). "Türk Vergi Hukukunda Mücbir Sebep ve Sürelere Etkisi", Kazancı Hakemli Hukuk Dergisi, S. 55-56, s. 220-232).

Balcı, M. (2020). "Vergi Hukukunda Mücbir Sebebin Dava Sürelerine Etkisi", (https://Vergialgi.net/vergi-hukukunda-mucbir-sebebin-dava-sürelerine-etkisi,Erişim 13.10.2020).

Batun, M. (2010); "Mücbir Sebepler ve Sonuçları", Vergi Dünyası, S. 345, Mayıs 2010, s. 62-73.

Biyan, Ö. (2020). Mali Hukuk Açısından Mücbir Sebep, İstanbul: Legal Yayıncılık.

Candan, T. (2020). Açıklamalı İdari Yargılama Usulü Kanunu, 8. Baskı, Ankara: Yetkin Yayınları.

Candan, T. (2018). Açıklamalı Amme Alacaklarının Tahsil Usulü Hakkında Kanun, Dördüncü Baskı, Ankara: Yetkin Yayınları.

Coşkun Karadağ, N. (2012). "Zamanaşımı Sürelerinin Etkisi Açısından 'Mücbir Sebepler' ve 'Ödeme'ye Eleştirel Bakış", AÜHFD, 61 (3), 2012, s. 1017-1055.

Coşkun Karadağ, N./Organ, İ. (2011). "İdari ve Yargısal Açıdan Mücbir Sebepler ve VUK'da Yapılması Gereken Düzenlemeler", Vergi Dünyası, S. 357, 2011, s. 149-160.

Çağan, N. (1975). Vergi Hukukunda Süreler, Ankara 1975.

Çapar, A. (2022). "Eski Hale Getirme Kurumunun İdari Yargı Alanında Uygulanabilirliği", Marmara Üniversitesi Hukuk Fakültesi Hukuk Araştırmaları Dergisi, C. 28, S. 1, Haziran 2022, s. 184-204.

Çavuş, M. (2008). "Vergi Hukukunda Mücbir Sebep Kavramı ve Etkileri", E-Yaklaşım, Ocak 2008, S. 54.

Çölgezen Batun, Ö. (2013). Vergi Hukukunda Süreler Sorunlar ve Çözüm Önerileri, Ankara: Seçkin Yayıncılık.

Ekmekçi, E./Güneş, G./Kaşıkçı, M./Gümüşkaya, G. (2020). "Vergi Hukukunda Mücbir Sebep ve Hukuksal Sonuçları Üzerine", (İstanbul Hukuk Mecmuası, 78(2), s. 1069-1138).

Eren, F. (1975). Sorumluluk Hukuku Açısından Uygun İlliyet Bağı Teorisi, Ankara: Ankara Üniversitesi Hukuk Fakültesi Yayınları Yayın No: 361.

Erol, A. (2012). "Mükellef Hakkı Olarak Mücbir Sebepler ve Sonuçları", Türkiye Barolar Birliği Dergisi, Sayı 103, s. 199-222.

[2] The referaces has been compiled to provide a concise list of resources for those engaged in this field. Not all of the works listed in the References were directly utilized in the composition of this article. This text reflects the knowledge I have accumulated over time through reading, listening, personal expressions, and my life experiences. It is important to recognize that I cannot claim to possess exhaustive knowledge on this subject or convey every piece of information I have acquired. In this article, I have endeavored to present what I believe to be accurate, suitable, and feasible at this time. However, I remain open to revising my perspectives should I encounter more accurate, suitable, and feasible insights in the future. I encourage readers to consider these factors when evaluating this text.

Gözübüyük, A. P. (1977). Mücbir Sebepler Beklenmeyen Haller, Ankara: Kazancı Yayınları.

Gündüz, F. E. (2019). "Mücbir Sebebin İdari Dava Açma Süresine Etkisi", Ankara Hacı Bayram Veli Üniversitesi Hukuk Fakültesi Dergisi C. XXIII, S. 2, s. 237-266.

Gürses Şahin, H. (2021). "Vergi Ceza Hukukunda Yanılma, Mücbir Sebep, Pişmanlık ve Islah", Editör İzzet ÖZGENÇ, Vergi Ceza Hukuku Çalışmaları, Ankara: Seçkin Yayıncılık, s. 67-110.

Kaneti, S./Ekmekçi, E./Güneş, G./Kaşıkçı, M. (2022). Vergi Hukuku, 2. Baskı, İstanbul: Filiz Kitabevi.

Kaplan, G. (2011). İdari Yargıda Dava Açma Süreleri, Güncelleştirilmiş 2. Bası, Ankara: Turhan Kitabevi.

Karakoç, Y. (2001). "Mücbir Sebeplerin Vergi Yargılaması Hukukunda Dava Açma ve Kanun Yollarına Başvurma Sürelerine Etkisi", Mükellefin Dergisi, S. 101, Mayıs 2001, s. 45-52.

Karakoç, Y. (2019). Genel Vergi Hukuku Ders Kitabı, 2. Baskı, Ankara: Yetkin Yayınları.

Karakoç, Y. (2014). Genel Vergi Hukuku, 7. Bası, Ankara: Yetkin Yayınları.

Karakoç, Y. (2021). Vergi Yargılaması Hukuku Ders Kitabı, 5. Baskı, Ankara: Yetkin Yayınları.

Karakoç, Y. (2021). "Malî Hukukta Mücbir Sebeplerin Hüküm ve Sonuçları", Covid-19 Salgınının Hukukî Boyutu Hukukun Tüm Alanlarında Değerlendirmeler, 2. Bası, İstanbul: Oniki Levha Yayıncılık, s. 1459-1538.

Karakoç, Y. (2000). Vergi Yargılaması Hukukunda Süreler, Ankara: Yetkin Yayınları.

Kılıç, R./Şekerci, D. (2015). "Türk Vergi Hukukunda Mücbir Sebep ve Zor Durum", 30. Türkiye Maliye Sempozyumu (Tebliğ), Manavgat ANTALYA, 20-24 Mayıs 2015, s. 843-870.

Öncel, M./Kumrulu, A./Çağan, N./Göker, C. (2023). Vergi Hukuku, 32. Bası, Ankara: Turhan Kitabevi.

Öngören, G. (1990). Türk Hukukunda İdari Dava Açma Süreleri, İstanbul: Kazancı Yayınları.

Şenyüz, D./Yüce, M./Gerçek, A. (2023) Vergi Hukuku (Genel Hükümler), 14. Baskı, Bursa: Ekin Kitabevi.

Taş, M. (1997). Vergi Uyuşmazlıklarının İdari ve Yargısal Çözüm Yolları, Bursa: Ekin Kitabevi.

Taş, M. (1997). "Mücbir Sebepler Dava Açma Süresini Etkiler Mi?", Yaklaşım, S. 53, Mayıs 1997, s. 50-55.

Yekebaş Değirmenci, D. (2023). İdare Hukukunda Mücbir Sebep, İstanbul: Platon Plus Yayınları.

Yerlikaya, G. K. (2012). "Türk Vergi Hukukunda Mücbir Sebep Halinin Dava ve Temyiz Süresini Durdurup Durdurmayacağı Sorunu", Yalova Üniversitesi Hukuk Fakültesi Dergisi, Yalova, 2012(1), s. 43-56.

Yıldırım, T. (2019). "Danıştay Kararlarında Mücbir Sebep Kavramı", (Marmara Üniversitesi Hukuk Fakültesi Hukuk Araştırmaları Dergisi, Cilt: 25, Sayı: 2, Prof. Dr. Ferit Hakan Baykal Armağanı, Aralık 2019, s. 1520-1538.

Taxational Truth: Shadow Metaphor[1]

Müslüm Gümüş[2] **Mustafa Erkan Üyümez**[3]

Abstract

In the allegory of the cave, Plato uses the metaphor of the shadow to point out that the phenomenal and the perceptual are different. With the shadow metaphor, Plato tries to explain that in order to reach the truth, one should not be satisfied with what is visible, but should grasp its essence. Shadow is used as a metaphor in this study to discuss tax truth theoretically. Taxes, the existence of which is parallel to the emergence of the concept of the state, are nowadays realized as a purely economic value. While the accounting science focuses on the calculation aspect and the legal science focuses on the regulation of taxes, politics, psychology and sociology are also considered in tax regulations, due to the taxpayer-oriented understanding of taxation. This is also a necessity to ensure equitable taxation, which is a prerequisite for taxational truth. As such, tax truth can only be possible if the true nature of the tax-generating event is revealed in its economic, legal and financial aspects, with tax legislation prepared in accordance with the changing economic and social conditions by giving wide coverage to sociological and economic contents and in accordance with the conditions of the day and social needs and employing a regulation to spread the tax burden to the base.

Keywords: Fair Tax Order, Truth, Perception of Truth.
Jel Code: K34, H21.

1. Introduction

Used as a metaphor in many senses, the “shadow” is depicted in Plato's allegory of the cave as the truth of the captives in the cave: *“In a cave with an entrance that opens into the light, there are people who have been imprisoned since childhood. At the entrance to the cave there are people holding various tools and equipment. The shadows of these tools and equipment are projected into the cave by the light at the entrance of the cave and the captives in the cave see the shadows of these tools and equipment and hear the voices of the people outside the cave. In such a situation, the people in the cave associate the tools and equipment they see with the voices they hear and attribute different meanings to these shadows. They think that the shadows they see are truth and that these shadows are talking to them.” (Plato, 2017: 231-232).* For those in Plato's cave, the shadows and their speech are truth. The fact that the voices do not belong to the images can only be understood when one leaves the cave.

Discussions on truth and justice have been debated since the beginning of society. The search for truth has always continued and what is fair has always been considered to be in accordance with the truth. In the presentation of tax truth, conformity with justice is the most important argument that will lead us to tax truth.

[1] This study is based on Müslüm Gümüş Ph.D thesis titled "Ensuring Truth in Taxation of Business Income: Problems and Solutions", which was defended on 28.06.2022 in Anadolu University Graduate School of Social Sciences, Department of Finance, Ph.D Program, under the supervision of Prof. Dr. M. Erkan Üyümez.

[2] Assist. Prof. Ph.D., Hakkari University, ORCID: 0000-0001-9790-7028, muslumgumus@hakkari.edu.tr.
[3] Prof. Ph.D., Anadolu University, ORCID: 0000-0001-7567-3486, meuyumez@anadolu.edu.tr.

2. The Legal Dimension of Taxational Truth

Law (Işıktaç & Metin, 2016: 49), which characterizes human behaviors that produce results in the field of truth, "refers to the whole set of rules that regulate the relations between individuals in society and whose compliance is sanctioned by state power" (Yılmaz, 2005: 274). However, in positivist legal philosophy, which disregards the relationship between law and social conditions and ethical values, which can be referred to as the soul of law, law is viewed as a set of norms established by the legislator (Aral, 2012: 146). Phenomena that change over time and space necessitate the review and renewal of legal norms at regular intervals. As a result, the reaction to a legal regulation made or to be made in the eyes of society is directly proportional to the extent to which it provides justice. Therefore, legal regulations should contribute to social order, daily life requirements, and the realization of justice inherent in social reality (Türközer, 2006: 100). The law was born out of the need to apply the measure of justice to social events and relations and to evaluate them according to this measure (Aral, 2012: 44). However, the fact that the essence of law is not the future, that is, that it sets rules for the future based on the past, poses a problem in terms of the law's ability to always reveal truth. For this reason, the rule of law must make use of concepts such as reason, logic, morality, justice, modernity, legitimacy, human rights and general principles of law while determining "what should be" rather than "what is" (Can, 2002: 140). Only in such a case can equity be achieved.

It is unavoidable that the rules of law, which govern all aspects of life, govern economic relations as well. The state, which intervenes in all aspects of life and does so within a specific legal framework, uses its taxation authority to tax based on its sovereignty over its territory (Öncel et al., 2018: 35), which has a direct impact on the economy. The state interferes with the fundamental rights and freedoms of individuals through its taxation power. The limitations of this intervention are also determined by legal regulations. According to Article 73 of the Constitution, "Everyone is required to pay taxes in proportion to their financial capacity to meet public expenditures. The fair and balanced distribution of the tax burden is the social objective of fiscal policy." As such, the state intervenes in the economy within certain constraints and by considering certain factors. To achieve a healthy outcome, the event that gave rise to the tax must be evaluated and determined in light of its economic nature and content.

3. An Economic Approach to Ensuring Taxational Truth

Legal regulations shall be effective in their wording. However, in some cases, in order to understand what a legal regulation means, interpretation methods are applied by taking into account the sociological, economic and psychological factors, the purpose of the regulation, the norm to be applied to the concrete material event and the conditions at the time of regulation (Gözler, 2016: 259). In law, there are four basic interpretation methods: literal interpretation, systematic interpretation, historical interpretation, and teleological interpretation. In tax law, interpretation based on the purpose of the law results in the application of the economic approach. The economic approach, which rejects the formalist legal approach in the context of tax law's sui generis nature, has two main elements: economic analysis and economic interpretation (Öncel et al., 2018: 27). Economic analysis refers to the determination of the taxable event based on economic truth (Sarıcaoğlu, 2017: 67). This aspect of the economic approach is also part of the proof and constitutes an important principle of proof (Sarıcaoğlu, 2017: 69). The legal basis for economic scrutiny is Article 3/B of the Tax Procedure Law (TPL), which stipulates that "the taxable event and the true nature of the transactions related to this event are essential" and Article 9/2 of the TPL, which stipulates that "the fact that the taxable event is prohibited by law will not remove the tax liability and tax responsibility". (Akkaya, 2002:

81). The economic scrutiny element is addressed in the doctrine in relation to collusive transactions and tax-veiling activities before the administration and the judiciary. Collusion is defined as the deliberate inconsistency between the declared and actual intentions of the transaction's parties. In collusive transactions, the parties agree that they will not be bound by the outward appearance and that it will have no effect between the parties, and they either pretend to have a relationship that does not exist or reflect the relationship they actually want to have in a different way (Akkaya, 2002: 91). Tax-veiling is the practice of using private legal structures and institutions for purposes other than their intended purpose to evade taxes (Öncel et al., 2018: 28). In tax-veiling, the contracting parties appear to comply with the wording of the legal regulation but in fact violate the essence of the regulation and defeat the purpose of the regulation (Öncel et al., 2018: 30).

What is important for tax law is that the economic content of facts and transactions takes precedence over formal patterns when evaluating facts and transactions according to their economic consequences (Kaneti, 1989: 48). The tax law relationship is based on economic content and economic events, from which it follows that taxation should be based on substance, not form (Birsenoğul, 2019: 96). After the economic analysis is made during the determination of the nature of the taxable event, economic interpretation is also applied at the decision stage (Karakoç, 2014: 179). Economic interpretation is a special application of teleological interpretation, which also includes systematic interpretation, as a means of realizing the constitutional and legal objectives of taxation (Akkaya, 2002: 66-67). Economic interpretation means that the rule to be applied in determining the taxable event is based on economic realities (Öncel et al., 2018: 27). The economic approach, which in Turkish tax law is limited to eradicating opaque and collusive transactions and ensuring the guarantee of public revenues, by itself cannot reveal the true nature of taxes. To ensure tax truth, in addition to determining the true nature of taxation, the true economic qualities and contents should be revealed in the determination of the concrete material event and in the application of tax regulations, and taxation should be based on financial power.

4. Conclusion

The concepts of justice and truth have been discussed since the formation of early societies. The search for truth has always continued, and what is fair has always been thought to be in accordance with the truth. Sometimes the situation in harmony was considered more just than the just one. However, article 73 of the Constitution indicates that “fair and balanced distribution of the tax burden is the social objective of fiscal policy”. However, it is impossible to claim that taxes, which should be levied on everyone based on their financial capacity, are distributed fairly and evenly. The principle of justice in taxation is overshadowed by the fact that taxation is focused on indirect taxes that are easy to collect, the protection of capital accumulation, the inability to expand the tax base, and the simplicity of taxation techniques. The legal regulations can be likened to the Sun, and tax truth remains in the shadows made by the Sun. In other words, in light of the existing legal regulations, taxation is thought to reflect the tax truth.

The conclusion we reach in our search for tax truth is that a fair tax system must be established. In making the legal arrangements necessary for a fair tax system, the legislator must consider the actual inequalities that arise with regard to tax liabilities and tax subjects. However, it is often impossible to factor in the actual inequalities due to social, political, extraordinary circumstances and economic reasons, and justice in the distribution of tax burden is ignored and this situation overshadows the taxational truth. The perception that the law applies to everyone,

that everyone is subject to the law, and that everyone bears the tax burden creates a perception of tax justice, and this perception overshadows the factual taxational truth.

References

Akkaya, M. (2002). Vergi Hukukunda Ekonomik Yaklaşım. 2. Baskı. Ankara: Mali Akademi Yayınları.

Aral, V. (2012). Hukuk Felsefesinin Temel Sorunları. 3. Baskı. İstanbul: XII Levha Yayıncılık.

Birsenoğul, H. (2019). Vergi Hukukunda Yorum. Ankara: Yetkin Yayınları.

Can, C. (2002). Hukuk Sosyolojisinin Antropolojik Temelleri ve Genel Gelişim Çizgisi. 2. Baskı. Ankara: Seçkin Yayıncılık.

Gözler, K. (2016). Hukuka Giriş. 13. Baskı. Bursa: Ekin Basım Yayın Dağıtım.

Işıktaç, Y. & Metin, S. (2016). Hukuk Metodolojisi. 5. Baskı. İstanbul: Filiz Kitabevi.

Kaneti, S. (1989). Vergi Hukuku. 2. Baskı. İstanbul: Filiz Kitabevi.

Karakoç, Y. (2014). Genel Vergi Hukuku. 7. Baskı. Ankara: Yetkin Yayınları.

Öncel, M., Kumrulu A. & Çağan, N. (2012). Vergi Hukuku. 21. Baskı. Ankara: Turhan Kitabevi.

Platon (2017). Devlet. (Çev.) Eyüboğlu, S. & Cimcoz, M. A., 24. Baskı. İstanbul: İş Bankası Kültür Yayınları.

Sarıcaoğlu, E. (2017). Vergi Suç ve Kabahatleri Bakımından Yorum ve İspat. Ankara: Adalet Yayınevi.

Türközer, B. G. (2006). Hukuk Toplumsal Bir Gerçekliktir. Türkiye Barolar Birliği Dergisi, 19 (62), 84-100.

Yılmaz, E. (2005). Hukuk Sözlüğü. 3. Baskı. Ankara: Yetkin Yayınları.

TPL 359 Dilemma in the Oil Market

Serkan Ağar[1]

Abstract

With the subparagraph (g) added to the second paragraph of Article 20 of the Petroleum Market Law No. 5015 with the Law No. 7318, in case of committing a number of crimes listed in Article 359 of the Tax Procedure Law No. 213 regarding the activities subject to license in the petroleum market, the activity will be temporarily suspended and in case the court decision is finalized, the license It was stated that it would be canceled and this situation caused the grievances of thousands of companies in the fuel sector and dragged the sector into a serious legal dilemma. In this study, the reflections of this situation on the fuel sector and the resulting "immeasurable" scene, in case of committing the actions in Article 359 of the Tax Procedure Law No. 213, were tried to be explained with their legal basis. 2. Amendment to Law No. 5015 In order to prevent informality in the fuel sector, which is estimated to have an annual tax loss of 7.6 billion TL, subparagraph (g) has been added to the second paragraph of Article 20 of the Law No. 5015 by Law No. 7318. With this amendment, preparing or using misleading documents in terms of their content within the scope of paragraphs (a) and (b) of Article 359 of the Tax Procedure Law No. 213 regarding the activities subject to license, arranging the originals or copies of the documents as forged in whole or in part, or using these documents. All activities subject to license in any facility (except refinery) will be temporarily suspended until the decision not to prosecute or the court decision is finalized. According to the finalized court decision, the license of the licensees will be canceled, unless the administrative fines for the aforementioned acts are paid, no license will be issued for the facility subject to the license, and no license will be granted to any other natural or legal person for the said facility until the tax investigation regarding these crimes is concluded. 3. Legal Dilemma The legal amendment has caused an “immeasurable” penalty system and the penalty has turned into a “cash” penalty for the company. For example; When the matter is submitted to the Office of the Chief Public Prosecutor, along with the Tax Crime Report and Commission Opinion, on the grounds that a taxpayer operating in the fuel sector has issued or used a false invoice, the situation is reported to the Energy Market Regulatory Authority and the gas station belonging to the taxpayer is sealed. In this case, even if the taxpayer sues in the tax court against the penalty assessment suggested by the Tax Inspector and the possible "special principles" transaction, this result will not ensure that the gas station is reopened. Because, Article 20/2-g of Law No. 5015 requires either a decision not to prosecute (non-prosecution) or a "final" court decision (acquittal). This process is likely to take years. The fact that the taxpayer's workplace will be closed for years turns the administrative measure into a cash penalty. Moreover, the "specialized" court to evaluate whether the invoices are fake or not is the tax courts. The law has ignored this possibility. On the other hand, the authorized and responsible court against the sealing process is the Ankara administrative courts. This situation limits the freedom of claim for companies operating outside Ankara. For example, although a company operating in İzmir files a lawsuit in a tax court against the penalty tax assessment and special principles transaction, and the company's official is tried in İzmir Criminal Court of First Instance, the proceedings regarding the sealing process will be held in Ankara and an

[1] Assoc. Prof. Ph.D., Ankara Bilim University, ORCID: 0000-0001-7875-38365, serkan.agar@ankarabilim.edu.tr

administrative court that is not specialized in taxation. It is clear that this result does not meet the firm's justified expectation for a legal resolution of the issue. In this respect, the legal amendment is "inconsistent" and imposes an "excessive burden" on taxpayers. 4. Conclusion The amendment made in the Law No. 5015 has caused an "immeasurable" penalty system, and the addressee of the penalty turns into an "advance" penalty for the company and does not meet the rightful expectation of the taxpayers for the legal solution of the issue. The aforementioned legal amendment is "inconsistent" in this respect and imposes "excessive burden" on taxpayers.

Keywords: Oil market, Tax evasion, Spurious bill, Tax audit, Affixing seal

Tax Amnesties in Turkey: As a Means of Primitive Accumulation and Wealth Transfer

Kamil Karatepe[1]

Abstract

Tax amnesties, which have become the primitive accumulation tool of capital in Turkey, not only disrupt tax justice and damage faith in the rule of law, but also openly encourage taxpayers to commit all kinds of tax crimes, including using false documents, and lead public finances to bankruptcy. Tax amnesty, which was issued approximately every three years as of the 100th anniversary of the Republic, has become a continuity and regularity in the last twenty years and has come to the point of driving the financial system into bankruptcy. Companies and their partners that receive public tenders are not included in the corporate and income tax record holders lists. The issue of why the "tender champions", who are at the top of international lists in public tenders, are not included in the tax record holder lists is not discussed sufficiently in the public and academic circles. The main reason why the lists of "champions" and "record holders" do not overlap is the continuous and regular tax amnesties. Tax amnesties, which have become commonplace before every general/local election held in the country, lead taxpayers to erode the tax base by using all kinds of accounting and tax fraud, especially using fake documents. The fact that tax inspections generally stay away from taxpayers close to the government, that they almost never touch the "big five" and especially the large taxpayers, and that they are carried out only in the presence of opposition taxpayers and capital groups, clearly encourages taxpayers close to the government to commit all kinds of tax crimes. While the situation arising from tax amnesties is a great opportunity/blessing for some taxpayers, it turns into a much greater cost/burden for society. Laws regulating tax amnesty numbered 4811, 5811, 6111, 6486, 6552, 6736, 7143 and 7440, issued since 2003, have been a great "blessing" for a limited number of companies and their partners, and a great "disaster" for the welfare of the majority of society and public finances. " became like that. In order to see the extent of the transformation of tax amnesty into a tool of primitive accumulation of capital, the main question regarding the financial system is "Why are the Tender Champions not on the Tax Record Winners List in Turkey?", and the answer is the economic/financial changes made in the provisions of the Public Procurement Law and the Public Financial Management and Control Law. is included in the legal provisions regulating tax amnesty, which has become a major "disaster" for the social and political system. In short, financial instruments or regulations can become disasters for society and the financial system.

Keywords: Public Finance, Tax Amnesty, Financial Disaster, Public Procurement

[1] Ph.D. Student, Chief Tax Inspector, ORCID: 0009-0002-3736-4775, karatepekamil@gmail.com

Exploring the Link Between Fiscal Autonomy and Performance in Turkish Universities

Nisa Yazıcı Aydemir[1] **Yüksel Çağdaş**[2] **Eyüp Akbulut**[3] **Çağrı İşler**[4]

Abstract

Decentralization is commonly defined as "the transfer of authority, decision-making power, and responsibility from a central governing body to lower levels of government or non-governmental entities, often at the regional or local level. It aims to distribute power, resources, and decision-making closer to the people, allowing for greater participation, autonomy, and responsiveness in governance" (World Bank, 2000, p. 1). Consequently, decentralization is widely advocated as a means to promote democracy, enhance citizen satisfaction, and facilitate the efficient utilization of resources. Universities exemplify administrative decentralization in terms of function. They are established to provide a range of higher education services, including but not limited to offering courses across various academic programs, conducting research and development activities, and fostering the development of human capital necessary for the social, cultural, and economic development of the country. In order to properly fulfill these responsibilities, universities require adequate administrative and fiscal autonomy. The fiscal autonomy of universities has a positive impact on performance, as it provides them with the flexibility to allocate resources more efficiently (Altbach & Balán, 2007; Johnstone, 2004). This autonomy allows universities to adopt to changing demands from the environment and empowers them to make strategic decisions that align with their goals (Maassen & Olsen, 2007; Yudkevich et al., 2016). Despite the findings in the scientific literature, the financial, as well as the administrative autonomy has been a topic of debate in Turkiye. Turkish public universities have been facing challenges due to budgetary constraints and limited financial resources, which have negatively impacted their performance. As a result, policymakers, academics, and university administrators have engaged in a debate focusing on granting greater financial autonomy to universities through legal and administrative reforms. The objective of this research is to investigate the relationship between the fiscal autonomy of Turkish higher education institutions and their performance. This study will utilize budgetary data from the years 2010 to 2023, obtained from the website of the Presidency of Strategy and Budget, encompassing over a hundred public universities in Türkiye. The analysis will be conducted at the level of individual university, with the variables of interest measured accordingly. The fiscal autonomy variable will be quantified as the percentage of own-source revenues in relation to the total revenues of each university. Also, the university performance will be measured in terms of the multiple academic and research outcomes generated by universities on an annual basis. The findings of this research will have practical implications on the ongoing policy discussion on the administrative and fiscal autonomy of universities.

Keywords: Fiscal Autonomy, Own-Source Revenues, Higher Education, Academic Performance

[1] Assist. Prof. Ph.D., Bolu Abant İzzet Baysal University, ORCID: 0000-0003-1198-3404, nisayazici@ibu.edu.tr
[2] Assist. Prof. Ph.D., Bolu Abant İzzet Baysal University, ORCID: 0000-0002-0112-2427, yukselcagdas@ibu.edu.tr
[3] Assist. Prof. Ph.D., Bolu Abant İzzet Baysal University, ORCID: 0000-0003-4314-8462, eyupakbulut@ibu.edu.tr
[4] Res. Assist., Bolu Abant İzzet Baysal University, cagriisler@ibu.edu.tr

Exploring the Satisfaction of Democracy in the Pandemic Emergency: A Focus on Economic Stress and the Role of Institutions

Tarkan Çavuşoğlu[1] **Erica Poma**[2]

Abstract

Many scholars have begun to investigate the effect of the socio-economic threats induced by the pandemic on citizens' support for democracies, finding controversial results. This paper delves into this debate by investigating, on the one hand, whether the effect of perceived economic hardship during the pandemic worsened levels of (dis)satisfaction with democracy. On the other hand, it also analyses the role of institutions in influencing satisfaction with democracy, especially during the pandemic, by taking into consideration both individual perceptions of the quality of institutions and government performance as well as macro-indicators of the quality of institutions and the socio-economic development of countries. To this aim, two-level mixed-effects ordered-probit (MEOP) models are estimated on the citizens' satisfaction with democracy measured over time. In particular, we adopt a longitudinal perspective by integrating the data obtained from the 4th wave (2016) of the European Quality of Life Survey and the 2nd, 3rd and 5th rounds (Summer 2020, Spring 2021 and Spring 2022, respectively) of the Living, Working and COVID-19 Survey. Our results show that economic difficulties worsen citizens' satisfaction with democracy and that this effect is particularly strong during the pandemic, especially between spring 2021 and 2022. Despite this effect, we also highlight the critical role of institutions in times of crisis, particularly in terms of both the subjective perceptions of citizens and objective indicators of the quality of institutions at the macro level.

Keywords: Satisfaction with Democracy, Covid-19 Pandemic, Economic Distress, Multi-level Mixed Effects.
JEL Codes: C81, D72, J18, Z13

1. Introduction

Satisfaction with Democracy is a widely adopted measure in various surveys to gauge citizens' political support and their evaluations of the good functioning of democracies (Easton, 1975; Bol et al., 2021). Therefore, this dimension can be an important indicator to measure the success of democratic systems (Chang, 2018; De Simone et al., 2022) and their stability (Kölln & Aarts, 2021). There has been increased attention toward this measure, following the spread of the COVID-19, whose effects has affected multiple aspects of individuals' lives, including a general worsening of economic and financial conditions and uncertainty about the future (Fetzer et al., 2020; Mann, Krueger & Vohs, 2020). Consquently, many scholars have begun to investigate the effect of the socio-economic threats induced by the pandemic on citizens' support for democracies, finding controversial results.

[1] Prof. Ph.D., Hacettepe University, Department of Public Finance, ORCID: 0000-0002-9479-9241, tarkan.cavusoglu@gmail.com (Corresponding Author)
[2] Ph.D. Student, University of Modena and Reggio Emilia, Department of Economics Marco Biagi, ORCID: 0000-0002-0601-7335, erica.poma@unimore.it

This paper mainly aims to investigate whether the effect of perceived economic hardship during the pandemic worsened levels of (dis)satisfaction with democracy and aims also to analyse the role of institutions in influencing satisfaction with democracy, especially during the pandemic, by taking into consideration both individual perceptions of the quality of institutions and government performance as well as macro-indicators of the quality of institutions and the socio-economic development of countries. For this purpose, two-level mixed-effects ordered-probit (MEOP) models are estimated on the citizens' satisfaction with democracy measured over time.

2. Estimation Results

Our estimations are based on the combination of the comparable data obtained from the 4th wave (2016) of the European Quality of Life Survey and the 2nd, 3rd and 5th rounds (Summer 2020, Spring 2021 and Spring 2022, respectively) of the Living, Working and COVID-19 Survey. The study mainly questions how individuals' financial distresses during the Covid-19 pandemic affected citizens' satisfaction with the democracy.

Perceptions on how democracy works in a country may depend on country-specific administrative characteristics. Therefore, several country-level democracy indices are employed interchangeably in the regression analyses to control for the influences due to cross-country variations in the institutional quality of democracy. Additionally, our regressions include dummy variables for differentiating the Covid-19 pandemic period from the pre-pandemic one. In general, our estimations are carried out by two groups of regressors. One is based on the individual-level survey responses that reflect various socio-demographic differences among individuals, while the other consists of country-level variables that represent the cross-country differences in the levels of economic and social development.

An individual's satisfaction with democracy involves in subjective perceptions influenced by various factors both at the individual- and country-level. As a preliminary step to our analysis, we start with an emphasis put on the institutional quality of the democracy at the country-level, and then continue with the attempt of identifying the influence of the Covid-19 pandemic on individuals' satisfaction with democracy. In this context, alternative two-level mixed-effects ordered-probit (MEOP) models are employed for our regression estimations. In the benchmark model, Democracy-FIW variable stands for controlling the effect of the country-level quality of democracy on the individual's satisfaction with the way democracy works in his/her country. Hence, the statistically significant coefficient estimate reported for Democracy-FIW variable implies that the quality of democracy in a country increases the probability of having higher levels of satisfaction with democracy at the individual-level. This effect is re-considered in interaction with the adverse conditions of the Covid-19 pandemic, in order to see if the negative effect of the pandemic on individuals' satisfaction with democracy depends also on the quality of democracy at the country-level. In this regard, the pandemic period is treated separately for years 2021 and 2022, by the help of the dummy variables named as Pandemic-2021 and Pandemic-2022, respectively, where the reference year information is based on the 4th wave of the European Quality of Life Survey held in 2016. Separating the pandemic period on annual basis for the years 2021 and 2022 helps accounting for changes in the severity levels of the pandemic influences over consecutive years.

Within the context of the setting defined above, the dummy variable representation used in the estimation lends statistically significant support for the inference that the probability of having high satisfaction with democracy is lower during the pandemic years than that in the reference year 2016, depicted by the statistically significant and negative regression coefficients

on the dummy variables Pandemic-2021 and Pandemic-2022. Hence, according to the relative magnitudes of the regression coefficients on the two dummy variables, the adverse effects of the pandemic on satisfaction with democracy seem to be significantly stronger in 2021 than that in 2022. Additionally, when the negative regression coefficients on Pandemic-2021 and Pandemic-2022 dummy variables are evaluated together with the significantly positive regression coefficients on the interaction variables Pandemic-2021×Democracy-FIW and Pandemic-2022×Democracy-FIW, the likelihood of the adverse effect of the pandemic on satisfaction with democracy appears to be lower in countries with better quality of democracy. Similar inferences can be drawn when Pandemic-2020 and Pandemic-2020×Democracy-FIW variables are added to the regression. The size of the estimated coefficient on Pandemic-2020, compared to those on Pandemic-2021 and Pandemic-2022, implies that the highest likelihood of the adverse effect of the pandemic on satisfaction with democracy is observed during the first and most chaotic stage of the pandemic, that is, in 2020.

However, the slightness of the difference between the coefficients of Pandemic-2020 and Pandemic-2021 seems to be reflecting the persistence of the adverse effects of the pandemic on satisfaction with democracy in 2021. The estimated coefficient on Pandemic-2022, which is substantially lower than those on Pandemic-2020 and Pandemic-2021, implies that the adverse effect of the pandemic on satisfaction with democracy weakens significantly as the pandemic becomes less severe in the third year.

The robustness of these findings is checked through estimations that interchangeably exploit three other cross-country democracy indicators as alternatives to Democracy-FIW variable. In this context, the democracy index of the Economist Intelligence Unit (Democracy-EIU), the scores of the Varieties of Democracy Institute (Democracy-VDEM) and the Global State of Democracy index of the International Institute for Democracy and Electoral Assistance (Democracy-GSoD) are appropriated in the estimations. All of the three cross-country democracy indicators unanimously result in findings that are similar to those obtained for Democracy-FIW. That is, the pandemic conditions significantly reduce the probability of having higher satisfaction with democracy, especially in the first two years of the pandemic. This effect declines in 2022, or even disappears according to the coefficient estimates. Moreover, consistent with the previous findings obtained for Democracy-FIW, the extent of the adverse effects of pandemic on individual's satisfaction with democracy is found to be highly dependent on the quality of democracy at the country-level. More specifically, the good-quality of national democracy appears to have a compensatory impact through lessening the adverse effects of the pandemic on satisfaction with democracy.

Satisfaction with democracy is analyzed further with respect to the effect of the financial distress. This effect is represented by the coefficient estimates obtained through exploiting three individual-level indicators of financial distress, in a setting where all other individual- and country-level effects are controlled. These indicators, i.e., Make ends meet, Being in arrears and Affordability risk in accommodation, represent households' declarations about their ability to finance basic needs. We presume that the affordability concerns increase the financial distress of a representative individual. When individuals deem policy makers responsible for the financial problems they face, their faith in the procedural fairness of the political system is expected to erode. The estimation results provide strong evidence in favor of this hypothesis, according to all of the three alternative indicators of the financial distress. Thus, the statistically significant coefficient estimates on Make ends meet variable show that the difficulty in households' making ends meet with their monthly income reduces the likelihood of the satisfaction with democracy. Similarly, according to the estimated coefficients on Being in arrears variable, satisfaction with democracy is more likely to increase as households are less in arrears with their loan payments

and bills. Evidence is confirmed also by the statistically significant coefficient estimates obtained on Affordability risk in accommodation variable. Individuals with low likelihoods of leaving their accommodation due to an affordability problem are more likely to be satisfied with the way democracy works in their countries. Overall, there is strong statistical evidence justifying the negative effects of financial distress on the satisfaction with democracy.

The focus of our second step analysis is on how satisfaction with democracy is affected by the interaction of the pandemic conditions and the financial distress. Our previous findings provide significant evidence on the separate adverse effects of both the pandemic and the financial distress on individual's satisfaction with democracy. However, depending on the cross-country differences in the effectiveness of the social and economic policies conducted to circumvent the turmoil of the pandemic, it is a matter of concern how the financial distress faced by individuals influences the perceptions on democracy during the pandemic, compared to that in the pre-pandemic period. In this regard, the benchmark model is re-specified and estimated so that the effect of the financial distress on satisfaction with democracy can be disaggregated with respect to the three consecutive periods of the pandemic.

When the focus is moved on the coefficient estimates of the interaction variables, they point out that the financial distress faced by individuals is likely to reduce their satisfaction with democracy more during the pandemic, with reference to the pre-pandemic period. This is because all interaction terms with the sub-period dummy variables appear with statistically significant coefficient estimates, except for the interactions including the variable Being in arrears. Although the regression specification obtained does not provide any empirical evidence for differentiating the pandemic adverse effects on satisfaction with democracy for 'households being in arrears', the specification given in the third column does, especially, for the second and third years of the pandemic. Nevertheless, in general, our estimations help to conclude that the adverse effects of the financial distress on satisfaction with democracy are more pronounced in years 2021 and 2022, stemming from the prolonged economic and social uncertainties fed by the unexpected features of the pandemic regulations. Accordingly, the insignificant or the relatively low but significant regression coefficients reported for interactions with the Pandemic-2020 dummy variable seem to imply the delay in the arrival of the adverse effects in the outbreak year of the pandemic.

4. Conclusion

Our estimations, which account for the several sources of financial distress faced by individuals, strongly justify that individuals' satisfaction with democracy is affected negatively by the degradation of the individual's financial situation. Households' difficulties in the ability to make ends meet with their monthly total income, their incapability to pay their basic living expenses and their failures in affording their accommodation costs are found likely to feed their unpleasant feelings about the way democracy works in the country. Moreover, this adverse feeling is found to be propagated significantly during the Covid-19 pandemic, by getting stronger especially after the initial year of the turmoil, between spring 2021 and 2022. Our estimations further put forth that the institutional quality of democracy at the country-level is likely to dampen the adverse effect of the pandemic on individual's satisfaction with democracy. We highlight the critical role of institutions in times of crisis, particularly in terms of both the subjective perceptions of citizens and objective indicators of the quality of institutions at the macro level.

References

Bol, D. et al. (2021). "The effect of COVID-19 lockdowns on political support: Some good news for democracy?". European Journal of Political Research. 60 (2), 497–505.

Chang, W.-C. (2018). "Media Use and Satisfaction with Democracy: Testing the Role of Political Interest". Social Indicators Research. 140 (3), 999–1016.

De Simone, E. et al. (2022). "Expectations About Future Economic Prospects and Satisfaction with Democracy: Evidence from European Countries during the COVID-19 Crisis". Social Indicators Research. 159 (3), 1017–1033.

Easton, D. (1975). "A Re-assessment of the Concept of Political Support". British Journal of Political Science. 5 (4), 435–457.

Fetzer, T. et al. (2020). "Coronavirus Perceptions And Economic Anxiety". arXiv. Available at: http://arxiv.org/abs/2003.03848 (Accessed: 4 August 2023).

Kölln, A.-K. & Aarts, K. (2021). "What explains the dynamics of citizens' satisfaction with democracy? An integrated framework for panel data". Electoral Studies. 69, 102271.

Mann, F.D., Krueger, R.F. & Vohs, K.D. (2020). "Personal economic anxiety in response to COVID-19". Personality and Individual Differences. 167, 110233.

The Nexus Between Information Asymmetry, Risk and Governance in Public and Private Sector Projects

Mian Sajid Nazır[1]

Abstract

The projects have been evolving and making their mark in the different industries such as construction, manufacturing, and real estate development. According to the Haq, Liang, Gu, Du & Zhao (2018), projects as strategic tool has the potential to help the organization reach their desired goals. Over the years, researchers and practitioners have been puzzled over the low efficiency and poor performance of the projects. Previous literature has tried to uncover the variety of critical factor, including project governance, project risk management, governance and trust, which can trigger the performance of the project. Information asymmetry concept has been widely used in different areas and subfield of management research and its existence is the main assumption of many leading theories on organizations such as agency theory. However, the area remains underdeveloped. The main objective of the study is to examine the impact of project governance on project performance in the presence of information asymmetry and project risk as mediator and trust as moderator in the public and private sector organizations of Pakistan. The study has used 374 responses from various project-based firms in the public and private sector organizations and Hayes Process has been used to infer the research model. The study finds that project governance has significant positive impact on the level of information asymmetry directly. Moreover, the current study also observed the influence of project governance on project performance through information asymmetry and project risk mediation. The study also found significant relationship between level of information asymmetry and project risk, whereas serial mediation and moderation was found to be insignificant. The findings of the study have managerial and theoretical contribution for this unique area of research. It will also help the public and private sector firms of developing countries who want to improve their performance through the use of project governance.

Keywords: Project risk, Project governance, Trust, Information asymmetry, Agile, Public and private organizations

[1] Assoc. Prof. Ph.D., University of the Punjab, ORCID: 0000-0003-1857-4531, sajid.ias@pu.edu.pk

Budget Planning at Local Level in a Period of Crisis: The Case of Bulgaria

Desislava Kalcheva[1]

Abstract

Over the recent years, public finances have been affected as multiple crises, including health crisis - regarding the COVID-19 pandemic, energy crisis, inflation crisis as well as political crisis. Local authorities which provide the essential public services and goods to the citizens face significant challenges. The purpose of the report is to present the planning of municipal budgets in Bulgaria in times of crisis. The research provides suggestions for refining budget planning in the context of the targeted crisis. The results of the implementation of the municipal budgets for the period 2015-2020 are presented, with an overview of the degree of implementation of the revenue and expenditure part. The main problems faced by the municipalities in Bulgaria in terms of planning in the absence of an adopted state budget for 2022 and 2023 are outlined. In order to review and evaluate the three-year budget forecast of the municipalities, the forecasts of two municipalities - medium and large - were analyzed. The main task is to present and summarize recommendations, on the basis of which the municipalities will plan the budgets more precisely, create a sustainable capital program and to be able to build the budget buffers to fight the coming crises.

Keywords: Local finance, Crisis, Bulgaria, Budgeting, Local level
JEL Code: H12, H72, 021, R58

1. Introduction

Over the recent years, public finances have been affected as multiple crises, including health crisis - regarding the COVID-19 pandemic, energy crisis, inflation crisis as well as political crisis. Local authorities which provide the essential public services and goods to the citizens face significant challenges. The purpose of the report is to present the planning of municipal budgets in Bulgaria in times of crisis. Among the tasks of the report are: presentation of the methodology and legal requirements for budget planning of local authorities, financial analysis of the implementation of municipal budgets for the period 2015-2020, present of examples of the actual implementation of the three-year budget forecast of two selected Bulgarian municipalities. The main hypothesis in the research is that the municipalities implement their budget planning, despite the political crisis led to the late adoption of the state budget last two years,

The research provides recommendations for refining budget planning in the context of the current crisis. The main problems faced by the municipalities in Bulgaria in terms of planning in the absence of an adopted state budget for 2022 and 2023 are outlined. In order to review and evaluate the three-year budget forecast of the municipalities, the forecasts of two municipalities a medium and a large one is analyzed. The main task is to present and summarize

[1] Chief Assistant Professor, Department Industrial Economics & Management, Faculty of Economics and Business, Sofia University; ORCID: 0000-0002-4361-8981; d.kalcheva@feb.uni-sofia.bg

recommendations, on the basis of which the municipalities will plan the budgets more precisely and create a sustainable capital program.

This report is structured in three parts - in the first part a brief description of the Bulgarian municipalities is made, as well as data on the implementation of the municipal budgets for the period 2015-2022 are presented; in the second part the legal regulations and the meaning of the three-year local budget forecasts are presented, as well as an analysis of the implementation of the forecasts of medium and large municipalities (according to the number of local residents). The municipalities are also selected based on the available financial information published on their websites. The third part presents recommendations for improving budget planning and main gaps that were found among the municipalities' forecasts.

2. Characteristics of Bulgarian municipalities. Planning and implementation of municipal budgets for 2015-2022.

According to the Constitution of the Republic of Bulgaria: The municipality is the main administrative-territorial unit in which local self-government is carried out. The body of local self-government in the municipality is the municipal council, which is elected by the population of the respective municipality for a period of four years in accordance with the procedure established by law. The executive authority in the municipality is the mayor. The municipality has the right to its property and has an independent budget.

Municipalities have the power to determine the amount of local taxes within the limits set by law and do not have the power to determine the tax base. Local authorities can independently determine the amount of local fees and introduce new fees.

There are currently 265 municipalities in Bulgaria. The average population in a municipality in Bulgaria is 24,603, the municipality with the smallest population is Treklyano (470), and the municipality with the largest population after Sofia is Plovdiv (321 824).

According to Art. 45 of the Public Finance Act, the municipal budget includes revenues from: local taxes; fees; services and rights provided by the municipality; disposal of municipal property; fines and financial penalties; interest and penalties; other receipts; financial aid and donations. Municipal budgets also receive revenues from state transfers, including revenues from a general equalization subsidy, from a subsidy for the financing of activities delegated by the state, from a subsidy for the financing of capital expenditures and other transfers.

The local expenditures are separated in three groups: local expenditures, expenditures for financing of state delegated activities, and expenditures for financing of state delegated activities with own local revenue.

According Public Finance Act the draft budget of the municipality is considered according to the procedure determined by the municipal council. The municipal council adopts a decision on the municipal budget within 15 working days of its submission by the mayor. The size of the budgetary relationship with the state budget must correspond to the state budget law for the relevant year, as well as other relevant indicators and provisions for the municipality. With the decision, the municipal council also approves: the maximum amount of new expenditure obligations; the maximum amount of expenditure commitments; the amount of arrears from the previous year, which will be paid from the budget for the current year; the amount of overdue receivables expected to be collected during the budget year; the limit for taking on new municipal debt, the maximum amount of municipal debt and municipal

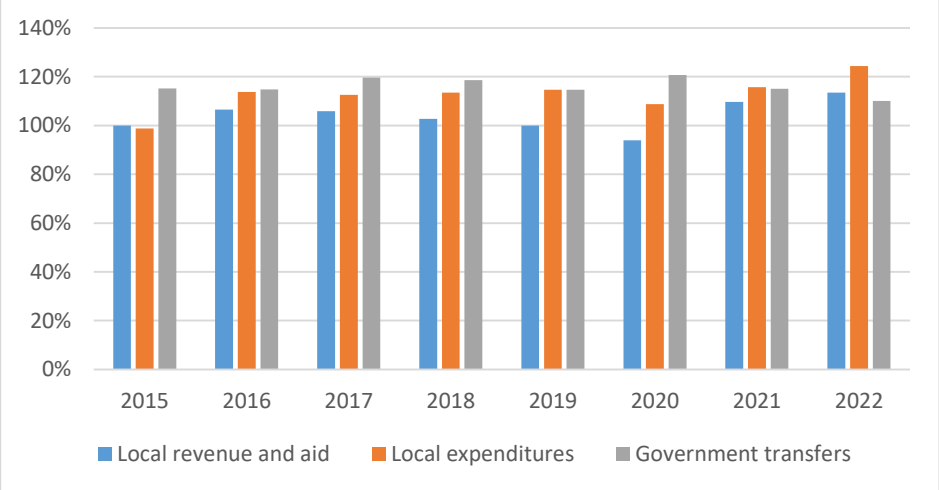
guarantees at the end of the budget year; the estimates for the financing of capital expenditures, including the distribution of the target subsidy for capital expenditures, determined by the law on the state budget for the relevant year, by objects for construction and major renovations, for the acquisition of tangible and intangible fixed assets and for research and design works, including for co-financing and for payments on loans for capital expenditure; other indicators; indicative annual budget for accounts for funds from the European Union; updated 3-years budget forecast.

In case that by the beginning of the budget year, the state budget is not adopted by the National Assembly, the budget is collected in accordance with the laws in force, and the expenditure and the provision of transfers are in an amount that is not greater than their amount for the same period of the previous year, up to the amount of received income, aid and donations, taking into account acts of the National Assembly and the Council of Ministers that have entered into force, which provide for a reduction or additional budget funds, and in compliance with the fiscal rules under this law and those approved by The Council of Ministers with the medium-term budget forecast fiscal goals. In cases where the state budget is not adopted within the period, The National Assembly, on the proposal of the Council of Ministers, determines by decision an additional period for collecting revenues, for making expenses and for providing transfers.

It should be noted, that the state budget for 2022 and 2023 was not adopted on time. The 2022 State Budget Act was adopted in July 2022. The 2023 State Budget Act was adopted in July 2023. The local governments have been operating for more than half a year, in rising inflation environment, without information and payment of updated amount of government transfers. We should take into account that the revenues from government transfers form about 70% of the revenues of most small and medium-sized municipalities in Bulgaria (Kalcheva, D., 2022, p.105). This led to significant difficulties in the implementation of the policy of the local authorities, including limited funds to carry out important municipal expenses

Figure 1. presents data on the percentage implementation of planned municipal revenues, expenditures and transfers for the period 2015-2020.

Figure 1. Implementation of local own revenue, local expenditures and state budget transfers for the period 2015-2020 (%)



Source of information: MoF, own calculation

The data shows that there has been an overachievement of planned revenues and expenditures over the years. A failure in the plan in the revenue part is observed only in 2020, when the revenue is fulfilled at 93%. The main reason for this is the negative economic consequences of the COVID-19 pandemic and the measures that municipalities are taking to relieve the local population and local businesses (Nenkova P., Kalcheva D., 2021, p. 218). It should be emphasized that during the studied period the revenues from state transfers marked an overperformance. In the course of the budget year, the state approves additional transfer revenues that are not planned in the law on the state budget. This complicates planning at the local level and creates a risk to the sustainability of municipal capital programs. The OECD (2021) confirms the finding and conclude in their report „course of budget execution further undermines medium-term planning" (OECD, 2021, p. 4).

3. Analysis of the implementation of the three-year budgets' forecasts of medium and large municipalities.

Based on the Public Finances Act, municipalities are obliged to prepare three-year budget forecasts. The forecast should contain information on planned own revenues, revenues from state transfers, municipal expenditures, indicators for commitments and expenditure obligations and a plan for using debt financing for the next three years. The forecast is prepared in accordance with the strict financial rules defined in the law (Art. 66, PFA).

Municipalities have access to the input data for the formation of own revenue assumptions. However, when determining the plan for state transfers, municipalities must use data from the Mid-term budget forecast of the MoF.

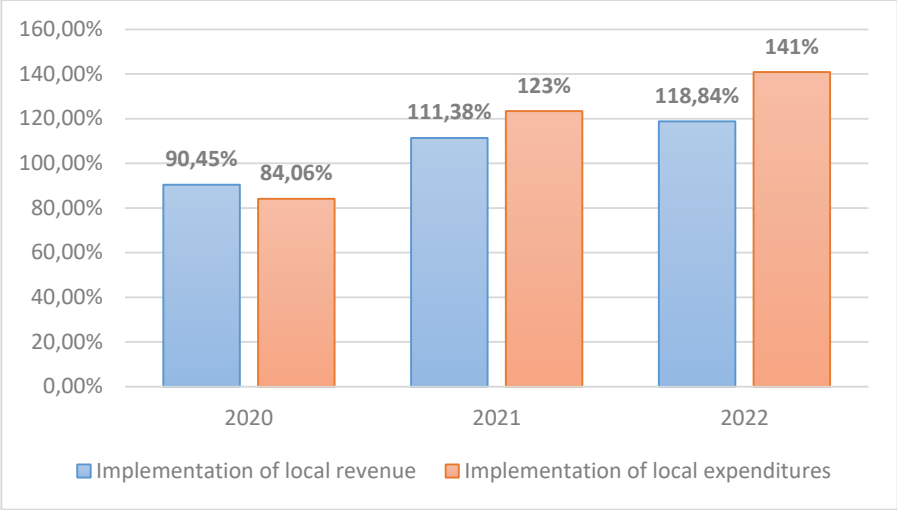
Given the turbulent economic situation of recent years and the lack of a state budget adopted on time, the main problem in the preparation of budget forecasts is the lack of information on estimated revenues from state transfers.

For the purposes of the report, we examine the implementation of the three-year budget forecast of two municipalities. Among the main obstacles to the research is the lack of information on the three-year budget forecasts of the sites of the small municipalities, with less than 6,000 inhabitants. For this reason, no example of a three-year budget forecast of a small municipality is included. The first municipality, according to the number of its inhabitants, is defined as large – Veliko Tarnovo (over 30,000 people), and the second municipality is defined as medium - Pomorie (up to 30,000 people). The results are presented in the figures belove.

In both research examples, we observe a slight non-fulfillment of the assumed revenues and expenses in the first year of the budget forecast. Over the next two years, the forecast was significantly overachieved.

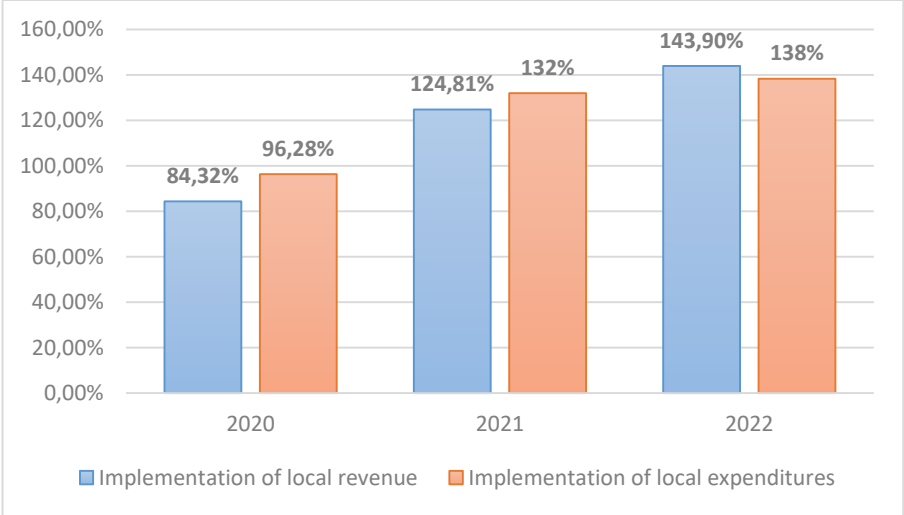
One of the main reasons for the over-implementation is related to increased tax revenues. As a result of the boom in the real estate market, revenue from immovable property tax and from tax on acquisition of property for consideration are increasing. Over-implementation is also observed in the revenues from municipal fees.

Figure 2. Implementation of the three-year budget forecast of municipality of Veliko Tarnovo



Source: Municipality`s site, own calculation

Figure 3. Implementation of the three-year budget forecast of municipality of Pomorie



Source: Municipality`s site, own calculation

In terms of planned expenditure, an overrun was observed in subsistence expenditure and in remuneration expenditure. Maintance expenditures are increasing as a result of higher electricity prices and inflation. Remuneration costs are increasing as a result of an increase in the minimum wage in the public sector in Bulgaria.

4. Conclusion

We can summarize that the main reasons for the over-implementation of the planned revenues and expenses are beyond the competences of the municipalities. However, we recommend incorporating the underlying macroeconomic assumptions into the municipalities' three-year forecasts. An example of such forecasts are the macroeconomic forecasts of the IMF, the European Commission and the World Bank as well as forecasts of Bulgarian National Bank.

We must emphasize that a conservative manner is observed in the preparation of the budget forecast. Revenues are rather underestimated. Possibilities to increase revenue collection have not been assessed and realized, precise planning is not taken into account in relation to the revenues from the sale of municipal property.

There are also inaccuracies in the planning of government transfer revenues. It should be taken into account that values are staked in the forecasts equal to the revenues received in the last budget year. The actual amount received is several times higher than the wagered amount. The central government should prepare more precise forecasts regarding the relations with the local authorities. This will also lead to greater accuracy in planning. Last, but no least, the lack of real capital budget is observed. It is recommended to create prerequisites for capital and program budgeting of local authorities.

References

Constitution of Republic of Bulgaria

Kalcheva D. (2022) How to increase local revenue in Bulgaria - mission im(possible), Review of Economic and Business Studies. Volume 15, Issue 1/2022, p.101-121

Kalcheva D., Goleminova S. (2023) Revenue system of local self-governments in Bulgaria, Inernational Conference on "Income systems of local self-governments in selected countries" at the Institute of Political Science and Public Administration at the University of Natural Sciences and Humanities. Siedlce, Poland 27-28, 2023

Local Taxes and Fees Act

Ministry of Finance (2023), Reports on the implementation of the State budget for the period 2015 – 2022, available online at: www.minfin.bg (accessed September, 18, 2023)

Ministry of Finance, (2023), Recommendations of the MoF for the preparation of the three-year budget forecasts available online at: www.minfin.bg (accessed September, 28, 2023)

Municipality of Pomorie (2023) available online at: https://www.pomorie.bg/ (accessed September, 28, 2023)

Municipality of Veliko Tarnovo (2023) available online at: https://www.veliko-tarnovo.bg/bg/ (accessed September, 15, 2023)

National Statistical Institute (2023) available online at: www.infostat.bg (accessed September, 10, 2023)

Nenkova P. Kalcheva D. (2021) Pandemic crisis and local government fiscal health. Nauchni trudove na UNSS. vol. 1/2021 p. 217-232

OECD (2021), Journal of Budgeting - Budgeting in Bulgaria available online at: https://www.oecd.org/gov/budgeting/budget-review-bulgaria-journal-on-budgeting-2021-1.pdf) (accessed September, 28, 2023)

Public Finance Act

The Effect of Kahramanmaraş Earthquakes in Türkiye on Tax Revenues

Adem Demirbozan[1] **Arınç Boz**[2]

Abstract

The earthquakes occurred in Türkiye on 6 February 2023 have spread over a wide geography, especially Adana, Adıyaman, Diyarbakır, Elazığ, Gaziantep, Hatay, Kahramanmaraş, Kilis, Malatya, Osmaniye and Şanlıurfa and caused the collapse of many buildings. Apart from the primary effects of earthquakes, which are loss of life and property, they have many effects on social life, psychology and economy. The impact of earthquakes on the economy can be seen as a change in the inflation rate, an increase in public expenditures, a change in unemployment and employment rates, as well as a decrease in public revenues and, in particular, tax revenues. In this context, the effect of the 6 February earthquakes on public revenues is the starting point of the research. Due to its approximately 80% share in public revenues in Türkiye, the research has been limited to tax revenues. In this direction, the effect of the earthquakes in Kahramanmaraş on 6 February 2023 on tax revenues has been calculated on the basis of eleven provinces, taking into account the total tax revenues of Türkiye. Data on tax revenues obtained from the Ministry of Treasury and Finance and have been analyzed on a monthly basis. With the monthly data, the difference between january and february, which in february earthquakes occured, and the other following months has been evaluated. When the findings of the research evaluated in general, it was seen that tax revenues decreased by 29% in february compared to the previous month after the earthquakes in Türkiye. It was observed that the share of eleven provinces in total, tax revenues were around 5% in the month before the earthquake, and this rate decreased to 2.5% after the earthquake.

Keywords: Earthquake, Tax Revenues, Türkiye.
JEL Codes: H20, H71, Q54.

1. Introduction

The public sector has to generate revenue in order to carry out the services it plans and spend. Tax revenues constitute a significant part of the public revenues obtained. The fact that there is evidence that the tax dates back to 3000 BC shows the importance of this type of income not only for today's states but also for ancient states (Şen & Sağbaş, 2017: 7). For this reason, modern countries can not be considered tax-free today.

Türkiye has frequently encountered natural disasters in the past centuries due to its geography. Türkiye is one of the most vulnerable countries, especially against earthquakes. The earthquakes that occurred on February 6, 2023 spread over a wide geography, especially Adana, Adıyaman, Diyarbakır, Elazığ, Gaziantep, Hatay, Kahramanmaraş, Kilis, Malatya, Osmaniye and Şanlıurfa, and caused the collapse of many buildings. Apart from the loss of life caused by the collapsed buildings in the earthquake, the earthquake also had social, psychological and economic effects.

In this context, the limitation of the research is to consider the impact of the earthquakes that took place in Türkiye on February 6, 2023, on tax revenues. It is important to

[1] Res. Assist., Zonguldak Bülent Ecevit University, ORCID: 0000-0003-0611-276X, adem.demirbozan@beun.edu.tr
[2] Res. Assist. Ph.D., Zonguldak Bülent Ecevit University, ORCID: 0000-0002-4936-1339, arincboz@hotmail.com

know the factors affecting tax revenues due to its share of approximately 80% in public revenues in Türkiye. In this regard, the impact of the Kahramanmaraş-centered earthquakes on February 6, 2023, on tax revenues was calculated on the basis of eleven provinces, taking into account total tax revenues of Türkiye.

2. Natural Disasters and Their Effects

As a result of natural disasters, effects such as loss of life, social imbalances, food shortage due to lack of resources and psychological traumas may occur in a society. Apart from these, disasters may also have effects on macroeconomic indicators such as growth, inflation and employment.

Table 1. Effects of Natural Disasters

Direct Effects	**Indirect Effects**	**Secondary Effects**
Building and Real Estate Damages	Decrease in Product Demand Quantity	Epidemic Diseases
Individuals' Wage Loss	Decrease in the Chances of Finding a Job for Individuals Who Lost Their Jobs	Inflation
Damages to Bridges, Highways, Railways and Communication Networks	**Decrease in Tax Revenues**	Opportunity Losses
Production Losses		Changes in Nature
Emergency and Restructuring Expenses		Budget Deficits
		Export/Import Losses

Source: Şahin & Kılınç, 2016: 35

The effects of natural disasters on countries are showed in table 1. The effects of natural disasters are divided into three groups: direct, indirect and secondary effects. The decrease in tax revenues is also an indirect effect of natural disasters. Natural disasters cause many imbalances in daily life. Loss of life as a result of natural disasters causes a decrease in human capital. In addition, natural disasters negatively affect capital by destroying buildings, vehicles and technical infrastructure. The necessity arises for individuals affected by natural disasters to relocate to a new area. These and similar reasons cause the economic balance in a society to change and the demand for money to increase.

3. Literature

Different researches were conducted after the February 6 Kahramanmaraş earthquakes. Tetik & Akbulut (2023) examined the effect of Kahramanmaraş earthquakes on exports; Say & Doğan (2023) examined the effect on stock returns. Marangoz & İzci (2023) discussed the economic, social and environmental effects of Kahramanmaraş earthquakes; Şen (2023) discussed the economic dimensions of the earthquake, and Bardakçı & Demirtaş (2023) discussed the impact of Kahramanmaraş earthquakes on foreign trade. In another study,

Özüdoğru (2023) examined the 1999 Marmara earthquake, the 2011 Van earthquake and, in more detail, the Kahramanmaraş earthquakes that occurred in Türkiye, and made policy recommendations by analyzing the effects of earthquakes on macroeconomic variables.

4. Research Methodology And Evaluation Of Findings

In this research, using the cumulative data published by the Ministry of Treasury and Finance, tax revenues of Türkiye in general and eleven provinces affected by the February 6 earthquakes were calculated monthly between 2013 and 2023. Using the available data, the share of eleven provinces in total tax revenues was calculated for a ten-year period. By examining the period before and after the earthquake, the change in both tax revenues of Türkiye and the share of eleven provinces affected by the earthquake in total tax revenues is discussed. Then, changes in tax revenues were evaluated in terms of tax types.

Table 2. Tax Revenues of Türkiye (Million Turkish Lira)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1	28,446	32,707	34,877	39,685	48,420	51,995	55,675	67,416	79,227	147,418	252,826
2	27,582	29,523	34,613	38,361	39,994	52,558	57,499	71,729	98,437	180,329	179,620
3	21,323	22,865	26,797	30,497	33,201	41,249	41,088	36,954	77,433	127,410	198,590
4	24,122	25,858	31,913	32,446	37,082	45,049	48,771	49,125	76,322	136,281	232,703
5	30,177	32,385	36,222	42,368	50,949	61,218	59,833	55,281	92,283	289,718	507,413
6	26,705	24,758	30,249	33,195	36,442	42,749	44,877	55,443	73,238	152,635	231,158
7	29,601	30,736	35,994	36,112	46,062	54,360	58,322	76,014	84,747	168,848	
8	28,089	33,582	38,063	45,425	51,377	60,934	66,620	98,456	131,121	271,858	
9	24,216	26,238	29,542	30,884	41,838	49,235	52,607	68,311	95,619	173,468	
10	26,022	27,925	35,068	30,061	45,559	48,504	54,586	76,615	96,117	181,806	
11	33,094	35,085	39,408	54,060	58,372	67,930	73,363	99,248	148,864	312,001	
12	26,791	30,854	35,073	39,907	47,336	45,751	60,618	78,658	111,579	211,514	

Source: Ministry of Treasury and Finance, General Directorate of Accounting

Tax revenues of Türkiye between 2013 and 2023 are showed in table 2. Considering the last five years, it can be said that an increase in tax revenues was expected in the first months of 2023. There was a 29% decrease in tax revenues from January to February 2023. This decrease is remarkable compared to previous periods. Assuming that no earthquake disaster occurred, it was predicted that there would be an increase in tax revenues in the January-February period of 2023. In this case, in addition to a 29% decrease, a possible tax increase that did not occur should also be taken into account when calculating the tax loss in February.

When the change in tax revenues is evaluated specifically for the eleven provinces affected by the earthquake, it can be said that there is a decrease in tax revenues in all eleven provinces, but the decrease varies from province to province. It is seen that the province whose tax revenues decreased the most in the post-earthquake period was Kahramanmaraş with 92%, and the province whose tax revenues decreased the least was Hatay with a rate of 48%. Considering the other nine provinces affected by the earthquake, post-earthquake, It is seen that tax revenues decreased by 60% in Adana, 69% in Adıyaman, 61% in Diyarbakır, 92% in Elazığ, 60% in Gaziantep, 52% in Kilis, %78 in Malatya, 81% in Osmaniye and 62% in Şanlıurfa.

5. Conclusion

A tax loss of 29% was calculated in February, when the earthquake occurred, compared to the previous month. Assuming that no earthquake disaster occurred, it was estimated that there would be an increase in tax revenues in the January-February period of 2023. In this case, when calculating the tax loss in February, in addition to a 29% decrease, it is necessary to take into account a possible tax increase that did not occur.

When the eleven provinces whose tax revenues were affected by the earthquake within a ten-year period are examined, it is seen that there was a decrease in tax revenues in all provinces in February 2023. While this decrease in tax revenues was low in some provinces, it was high in some provinces. When considered on a provincial basis, the province whose tax revenues decreased the most in the period after the earthquake was Kahramanmaraş with a decrease of 92%, and the province whose tax revenues decreased the least was Hatay with 48%. While the contribution of eleven provinces to tax revenues was 5% before the earthquake, it decreased by half to 2.5% after the earthquake. When the decrease in tax revenues throughout Türkiye and in the eleven provinces affected by the earthquake is considered by tax types, it is observed that the effect of the earthquake on taxes on income and earnings is remarkable compared to other tax types.

References

Bardakçı H. & Demirtaş, F. (2023). "Doğal Afetlerin Dış Ticarete Etkisi: 2023 Türkiye Depremleri ve Sonuçlarının Değerlendirilmesi", *Avrasya Dosyası Dergisi*, 14(1), 183-204.

Hazine ve Maliye Bakanlığı Muhasebat Genel Müdürlüğü. (2023). https://muhasebat. hmb.gov.tr/merkezi-yonetim-butce-istatistikleri, (20.08.2023).

Hazine ve Maliye Bakanlığı Muhasebat Genel Müdürlüğü. (2023). https://muhasebat. hmb.gov.tr/genel-butce-gelirlerinin-iller-itibariyle-tahakkuk-ve-tahsilati-2004-2019, (12.09.2023).

Marangoz, M. & Çağrı, İ. (2023). "Doğal Afetlerin Ekonomik, Sosyal ve Çevresel Etkilerinin 6 Şubat 2023 Kahramanmaraş Merkezli Depremler Bağlamında Girişimciler Açısından Değerlendirilmesi", *Sosyal ve Beşeri Bilimler Araştırmaları Dergisi*, 24(52), 1-30.

Özüdoğru, B. A. (2023). "2023 Yılında Gerçekleşen Kahramanmaraş Merkezli Depremin Etkileri ve Politika Önerileri", Türkiye Ekonomi Politikaları Araştırma Vakfı, 1-35.

Say, S. & Doğan, M. (2023). "Depremlerin Hisse Senedi Getirileri Üzerindeki Etkisi: 2023 Yılı Kahramanmaraş Depremi Örneği", *Sosyal Bilimler Araştırma Dergisi*, 12(1), 90-97.

Şahin, I. & Kılınç, T. (2016). "Türkiye'de 1980-2014 Yılları Arasında Görülen Depremlerin Ekonomik Etkileri", *Siirt Üniversitesi İktisadi ve İdari Bilimler Fakültesi İktisadi Yenilik Dergisi*, 4(1), 33-42.

Şen, H. & Sağbaş, İ. (2017). *Vergi Teorisi ve Politikası*, 3. Baskı. Anakara: Barış Arıkan Yayınları.

Şen, S. (2023). "Kahramanmaraş Depremlerinin Ekonomiye Etkisi", *Diplomasi ve Strateji Dergisi*, 4(1), 1-55.

Tetik, N. & Akbulut, İ. İ. (2023). "6 Şubat 2023'te Yaşanan Depremin Ekonomik ve Finansal Etkileri: İhracat Üzerinden Bir İnceleme". *Kahramanmaraş Merkezli Depremler Sonrası için Akademik Öneriler*. (Ed.) Öztürk M. Kırca M., Gaziantep: Özgür Yayınları, 93-103.

Public Policies in The Struggle Against Natural Disasters: Comparison of 1999 Gölcük Earthquake and 2023 Kahramanmaraş Centered Earthquakes

Zümre Ercan[1]

Abstract

The policies developed by the public authority before and after natural disasters are extremely important, especially in minimizing the negative situations that occur after the disaster. In this context, it is of great importance to effectively implement coordination and organization for all affected sectors and the region where the natural disaster occurred. Especially for a country like ours, which is in a first-degree earthquake zone, the importance of these plans maintains its importance from past to present. In this context, the study aims to compare public policies regarding the major earthquakes in Gölcük in 1999 and in Kahramanmaraş in 2023. In this regard, the earthquake disasters that occurred in Gölcük in 1999 and in February 2023, the central city of which is Kahramanmaraş and affected 11 provinces, will be examined in detail. The public policies implemented in these two earthquakes will be evaluated in terms of the differences in the period in which they took place, political authority and the current conjuncture structure. The fact that the region affected by the Gölcük earthquake in 1999 occurred in the Marmara region, which is the locomotive of the economy, and the Kahramanmaraş-centered earthquakes in 2023 spread over a very wide area, makes these two earthquakes comparable. The reflections of these two earthquake disasters on public finance form the basis of this study. It will be discussed how effective the path followed and the policies implemented are in the process of taking precautions against natural disasters and healing the wounds afterwards. In addition, within the scope of the precautions and precautions taken, public policies implemented to minimize the victimization of citizens will also be examined specifically for these two earthquakes. Within the scope of comparing the economic outlook for the years 1999 and 2023, the extent to which policies were affected by the earthquake disaster will also be the subject of examination. In the first part of the study, natural disasters will be mentioned and Turkey's geographical susceptibility to natural disasters will be explained, and in the second part, information about the two earthquake disasters will be given. While explaining macroeconomic quantities, their impact on policies will be evaluated as the main theme in this study. In the last part, the problems that occurred after these two earthquake disasters and the policies implemented for the public authority's approach to these problems will be evaluated within the scope of macroeconomic variables (inflation, foreign trade, employment, growth).

Keywords: Natural disasters, Public policies, Earthquake, Macroeconomic indicators

[1] Res. Assist., Kırıkkale University, Department of Public Finance, ORCID: 0000-0002-3753-0449, zumreercann@gmail.com

Relationship Between Environmental Tax and Ecological Footprint: An Empirical Investigation on Turkiye and Selected EU Member Countries

Ebru Bilgin[1] **Zerife Yıldırım**[2]

Abstract

Climate change and environmental concerns intertwine with some of today's most intricate social, political, and economic issues. Concerns about environmental problems often debated and highlighted on both national and global scales. The degradation of nature and the quality of the environment are now widely recognized as global issues, rather than merely local ones. Environmental problems, perceived as posing a threat to humanity, are measured through various variables. Concepts such as biocapacity, ecological footprint, resource recovery, preservation of ecosystem functions, and sustainability address these variables. One of the individual measures taken by countries to confront these challenges is the introduction of environmental taxes.

In this study, the relationship between environmental tax and the ecological footprint is analyzed for selected EU countries (Germany, Austria, Belgium, France, Italy, Spain, Switzerland) and Turkiye for the period of 1994-2022 using a panel data set. The Autoregressive Distributed Lag Bound Test (ARDL) method is employed for the analysis. Findings from the analyses indicate that environmental taxes, implemented with the aim of reducing environmental pollution, are not identified as an effective tool to decrease the current levels of environmental degradation. The coefficients related to per capita GDP and long-term capital investments have been found to be positive in direction, and their impacts on the ecological footprint are statistically significant.

Keywords: Environmental Pollution, Environmental Tax, Ecological Footprint, Panel ARDL Analysis

JEL Codes: H23, Q51, Q56

1. Introduction

Global environmental issues have taken the spotlight in scientific research in recent years. At the forefront of these concerns are the environmental impacts caused by economic activities, industry, and transportation. Notably, effects like pollution, erosion, and deforestation are counted among the key problems these activities lead to (Özer, 2020: 48). Climate change reflects humanity's adverse impact on the ecosystem. While the EU is making progress toward achieving sustainable development goals (EC, 2019), member countries are still grappling with environmental challenges like urban air quality and waste management. The ecological footprint emerges as a pivotal concept among sustainability metrics. Nations resort to economic measures like taxation to address these environmental issues. This study aims to

[1] Res. Assist., Harran University, Department of Public Finance, ORCID: 0000-0002-2394-4157, ebrubilgin@harran.edu.tr

[2] Assoc. Prof. Ph.D., Harran University, Department of Econometrics. ORCID: 0000-0002-2478-2823, zerifeyildirim@harran.edu.tr

explore the impacts of environmental tax implementations on the ecological footprint and will present a period analysis for selected EU countries and Turkiye.

2. Method and Analysis Results

In this section, the theoretical information of the chosen econometric method and its justification will be presented, followed by sample analyses and findings.

2.1. Econometric Method

The study employs the Autoregressive Distributed Lag Bound Test (ARDL) for econometric analysis. Developed by Pesaran and Shin in 2001, this test investigates the long-term and short-term causality relationships between variables. ARDL provides more reliable results by utilizing the unrestricted error correction model, distinguishing it from other causality tests. Pesaran et al. (1999) have introduced two estimators for ARDL: Mean Group Estimator (MG) and Pooled Mean Group Estimator (PMG). While MG imposes no constraints on parameters, PMG requires long-term parameters to be homogeneous but allows for variations in short-term parameters. Pesaran et al. (1999) recommend conducting the long-term homogeneity test using the Hausman (1978) test. Under the assumption of long-term homogeneity, both PMG and MG are consistent estimators, but only PMG is an efficient estimator (Güler & Özyurt, 2011: 14-15; Erdem et al., 2010: 375-376).

2.2. Econometric Analysis

In the econometric analysis of the study, the Autoregressive Distributed Lag (ARDL) boundary test, colloquially referred to as "Delay Distributed Autoregressive" in Turkish, has been the preferred method for the panel dataset. For investigating the stationarity of the variables, the Levin, Lin & Chu-t test, Augmented Dickey-Fuller (ADF) test, and Phillips Perron unit root tests have been employed. Diagnostic tests for method assumptions have been conducted, and the model satisfies the relevant assumptions.

2.2.1. Data Set

The objective of this study is to investigate whether taxes levied on the environment have an impact on the ecological footprint. Therefore, while exploring the reasons for the occurrences related to the ecological footprint variable, other potential influencing variables are also incorporated into the models. In this context, the relationships between the ecological footprint (EFP), taxes levied on the environment as a percentage value of the gross domestic product per capita (TAX), the annual percentage change in the gross domestic product per capita (GDP), and the annual percentage change in foreign direct investments (FDI) are estimated using the Panel ARDL method, utilizing annual data from 1994-2022 for seven accessible EU countries (Germany, Austria, Belgium, France, Spain, Switzerland, Italy) and Turkiye.

2.2.2. Econometric Analyses and Findings

Initially, the series are prepared for analyses by investigating whether they contain unit roots. For this purpose, Levin, Lin & Chu-t, Augmented Dickey-Fuller (ADF), and Philips Perron tests have been used. The findings from the unit root tests are presented in Table 1. Based on the results of the unit root tests, the EFP variable has been found to be stationary at the level

according to both Levin, Lin & Chu-t test and Phillips Perron test. Since the TAX variable was not found to be stationary at the level, it was examined in the first differences and has been identified as stationary in the first differences based on the Levin, Lin & Chu-t test, Augmented Dickey Fuller (ADF), and Phillips Perron tests. The GDP variable has been identified as stationary at the level according to both Levin, Lin & Chu-t test and Phillips Perron test.

Table 1. Unit Root Test Results

Variable	Levin, Lin & Chu-t	ADF	PP
EFP	-2,1808***	20.9678	25.8213**
ΔTAX	-11.8209***	148.4290***	171.2700***
GDP	-1.7549**	19.1223	42.7343***
FDI	-11.8699***	142.9840***	190.2860***

Note: "" *denotes 1% significance, "" is 5%, and* "" is 10%. Δ signifies the first difference.

To investigate the relationship between the ecological footprint (EFP) variable and other variables included in the study; DTAX, GDP, and FDI, a panel ARDL model has been established, considering these variables as functions of EFP. The results of the model are presented in Table 2.

Table 2. PMG and MG Estimation Results

	PMG	MG	Hausman Test
Long-term coefficient			
DTAX	0.0201	-2.1993	X^2 [prob.]
GDP	0.1604***	-0.1112	2.51 [0.4730]
FDI	0.0003*	-0.0017	
Error correction coefficient			
Φ	-0.2549**	-0.3818***	
Short-term coeeficient			
DTAX	0.0223	-0.2108	
GDP	0.0003	0.0021	
FDI	-0.0004	-0.0001	

Note: "" *denotes 1% significance, "" is 5%, and* "" is 10%. Δ signifies the first difference.

The error correction coefficient (φ) derived from the estimated models points to the existence of a long-term relationship between the Ecological Footprint and the other variables in the model. It also serves as an indicator that this relationship ensures long-term equilibrium and converges the variables. In the results of the PMG estimator, the long-term coefficients for the GDP and FDI variables were found to be statistically significant. On the other hand, the coefficients pertaining to the DTAX variable, which represents taxes collected from the environment, were statistically insignificant both in the short and long term. In short, there is no direct relationship between the taxes collected from the environment and the Ecological Footprint. According to the PMG estimator's long-term coefficient results, the GDP growth rates have a positive effect on the EFP. The coefficient has been found statistically significant at the 1% level. An increase in per capita income level, perceived as an enhancement in welfare and living conditions, can lead to increased consumption as a consumer society, subsequently leading to increased production, thereby potentially escalating adverse environmental impacts. Another variable, the FDI growth rates, was also found to have a positive effect on the EFP. The FDI variable, representing direct capital investments, can reflect the negative impacts of long-term substantial investments, especially industrial ones, on the natural environment. The coefficient was found to be positively influential and statistically significant. While the long-term coefficients have an effect on the ecological footprint, the error correction coefficient indicates the system's

continuation around this influence or balance. According to the test result, the existence of long-term homogeneity was concluded, and the PMG estimator, which is efficient and consistent under the null hypothesis, was found suitable for model estimation.

3. Conclusion

This study, which meticulously examines the relationship between environmental tax and ecological footprint among Turkiye and some EU member countries for the period 1994-2022, has arrived at noteworthy results using the ARDL approach. The analyses indicate that there is a significant positive effect of increased economic activities and direct foreign investments on the ecological footprint. Similarly, the expected causality relationship of environmental taxes on the ecological footprint hasn't been directly established; in fact, it is understood that there is no positive influence. It has been identified that the scope of Turkiye's environmental tax policies is limited and these taxes are not effective in response to environmental issues. Considering the rising interest in renewable energy, the role of the environmental tax hasn't been sufficiently highlighted in the literature. This study aims to fill that gap. A revision of tax policies is imperative to address current environmental pollution issues. Enhancing incentives for renewable energy is of critical importance both in terms of energy independence and environmental sustainability. In conclusion, it has been stressed that there is a need to develop policies and strategies for society to transition more swiftly and supportively from fossil fuels to sustainable energy sources.

References

Erdem, E., Güloğlu, B. & Nazlıoğlu, Ş. (2010). The Macroeconomy and Turkish Aggricultural Trade Balance with the EU Countries: Panel ARDL Analysis. International Journal of Economic Perspectives. Vol.4. Issue.1. 2010 ss. 371-79.

European Commission. Statistical Office of the European Union, 2019. Sustainable development in the European Union: monitoring report on progress towards the SDGs in an EU context: 2019 edition

Global Footprint Network. Advancing the Science of Sustainability https://data.footprintnetwork.org/#/ (08.09.2023)

Güler, A. & Özyurt, H. (2011). Merkez Bankası Bağımsızlığı ve Reel Ekonomik Performans: Panel ARDL Analizi. Ekonomi Bilimleri Dergisi. Cilt 3. No 2. ISSN 1309-8020. ss 11-20. https://dergipark.org.tr/tr/download/article-file/56679 .

Hausman, J. A. (1978). Specification tests in econometrics. Econometrica: Journal of the econometric society, 1251-1271. http://www.econ.uiuc.edu/~econ536/Papers/ hausman78.pdf.

Özer, S. (2020) "İklim Değişikliği ve Çatışmalar", Doğu batı: düşünce dergisi, (45-70).

Pesaran, M. H., Shin, Y. & Smith, R. P. (1999). Pooled Mean Group Estimation of Dynamic Heterogeneous Panels. Journal of the American Statistical Association. Vol. 94. No. 446 (Jun.1999), 621-634.

TUİK (2023a) https://data.tuik.gov.tr/Bulten/Index?p=Dis-Ticaret-Istatistikleri-Agustos-2023-49631&dil=1, (07.09.2023).

TUİK (2023b) https://www.tuik.gov.tr/#, (06.09.2023).

World Bank (2023) https://data.worldbank.org/country, (06.09.2023).

Regulation on Income and Corporate Tax Base Deduction of Donations and Aids Made After Disasters

Özge Ömür[1]

Abstract

The financial impact of disasters on a state's budget can be quite large depending on the size of the disaster. Depending on the level of impact of the disaster, it can pose a significant risk to government finances. Major disasters or a series of small events occurring in a short period of time will cause significant increases in public expenditures and will require revenue sources to finance these expenditures. This situation causes deviations from predictable fiscal events and leads to significant increases in public debt. States bear a significant part of the costs of disasters. This is true for developing economies and even OECD economies where private insurance markets are underdeveloped. Human and economic losses caused by natural disasters and public measures taken within this framework put pressure on the public budget balance and cause a budget deficit. Disasters affect the budget balance; On the spending side, it causes direct effects such as post-disaster aid payments or reconstruction of infrastructure damage, or indirect effects such as the decrease in production causing a loss of welfare, reducing tax revenues and leading to higher expenditures on unemployment payments or other social assistance. GVK art. in Turkey. 89 and KVK art.

According to Article 10, the deduction of all or part of the donations and aid made from the income tax or corporate tax base is subject to certain principles, depending on the nature of the institution or donation to which the donation is made. Accordingly, while the deduction for some donations and aids is limited to 5% of the declared income, the entirety of some donations and aids can be deducted from the taxable base. While donations and aids made to public institutions for education, health and social purposes, and donations and aids for cultural and artistic purposes are included in this category, donations and aids made to food and aid banks, cash donations and aids made to the Red Crescent and Green Crescent associations, and donations and aids made to aid campaigns are included in this category. All of it can be deducted from the tax base. Among these donations and aids, the deduction of all in-kind and cash donations made in return for receipts to the aid campaigns initiated by the Presidency, especially after major natural disasters, from the taxable income is a matter of debate. In this context, after the earthquakes with the epicenter in Kahramanmaraş in Turkey, all cash donations and aid made to the accounts declared by the Disaster and Emergency Management (AFAD) Presidency and the Turkish Red Crescent for the victims affected by the earthquakes can be deducted by income and corporate taxpayers. After this major natural disaster, approximately 115 Billion TL donations were collected.

The donations in question can be deducted from the relevant period earnings of commercial, agricultural and self-employment income etc. taxpayers and corporate taxpayers who file annual returns. However, a large segment of the population, such as wage earners, cannot benefit from these discounts. It is extremely important for the state to be able to deduct all

[1] Lecturer, Giresun University, ORCID: 0000-0003-3736-1021, ozge.omur@giresun.edu.tr

donations made in income and corporate taxes, to heal the wounds of natural disasters with many other aids such as reconstruction of infrastructure damage in the post-disaster period, construction of new ones of destroyed houses, investments and social services to increase the decrease in production and loss of welfare. causes deprivation of tax revenue. While the reduction in question is either limited to 5% of the income, as in other discounts, or is completely abolished, it will contribute significantly to the state's tax revenues, it would be a real example of philanthropy if real and legal persons who donate do not receive a portion of their donations back in the form of a tax refund.

We believe that taxpayers will not object to the removal of this discount in such a situation where society needs to be united. If the tax deduction will be limited to 5% of the income, as in other donations, it would be an appropriate practice to ensure that a large segment of the population, such as wage earners, also benefit from this deduction, in accordance with the principles of justice and equality in taxation.

Keywords: Donations and aid, Income tax, Corporate tax, Tax base deduction

Tax and Similar Financial Obligations in the Framework of Financial Problems of Women's Entrepreneurship in Türkiye

Gülay Akgül Yılmaz[1] **Gözde Nalbant Efe**[2]

Abstract

The labor force participation and employment rate of women, who make up half of the population in Türkiye, are at very low levels. In fact, the rate of women not participating in the labor force is 65%. The women unemployment rate is 14.7%. 65% of women employed in the agricultural sector are unpaid family workers. Establishing income-generating businesses by women who are not participating in the labor force, unemployed and unpaid family workers, has the potential to increase the level of social welfare by reducing female poverty and related child poverty. Increasing the rate of woman entrepreneurs, which is 10.8% in 2022, is important in terms of both increasing the national income and employment level and empowering women by making them earn income, accumulate capital and accumulate wealth instead of sharing men's income. In this study, in order to shed light on policies that will improve women's entrepreneurship, findings based on the results of an online survey conducted with 1535 women entrepreneurs from 80 provinces regarding the financial difficulties faced by women entrepreneurs in Türkiye and their situation against taxes and similar financial obligations are presented. The study also evaluates women entrepreneurs' attitudes towards taxes and similar financial obligations and the types of taxes they have the most difficulty in paying. Finally, based on the findings, the study makes tax incentive suggestions to guide public policies that will increase social welfare by ensuring that women who do not participate in the labor force and employment take part in economic activities as entrepreneurs.

Keywords: Woman labor force participation, Women's entrepreneurship, Tax attitude, Coercive taxes, Tax exemption
JEL Codes: H24, H25, L26, E62

1. Introduction

The participation of women in production as entrepreneurs who are not in the labor force, unemployed and unpaid family workers, creates an opportunity for the Turkish economy to increase growth and development by improving employment opportunities with the existing production capacity. It creates the potential to become a more stable economy with a more equitable income distribution and less poverty. It will be effective in establishing a healthy social structure based on the principles of equality and justice. It will contribute to a healthier balance in the public sector as it will increase tax revenue by improving the tax capacity based on income increase. Developing women's entrepreneurship is important for an economy to become stronger in international competition and to receive a higher share of the world's income.

In Türkiye, the rate of woman entrepreneurs in total employment is quite low. They are surrounded by macroeconomic conditions and issues related to business management, as well as the duties that society imposes on women (gender roles) and the obstacles imposed by prejudices against women. Barriers to women becoming employers include the duties that

[1] Prof. Ph.D., Marmara University, Department of Public Finance, ORCID ID: 0000-0002-5445-6842, gulayyilmaz@marmara.edu.tr
[2] Assist. Prof. Ph.D., Istanbul Medeniyet University, Department of Public Finance, ORCID ID: 0000-0002-4651-2007, gozde.nalbant@medeniyet.edu.tr

society imposes on women, its perspective on female employers, and difficulties in obtaining capital. Obstacles in obtaining capital stem from the fact that the inheritance institution has traditionally operated against women, the invisible obstacles (glass ceilings) that prevent girls from receiving education, participating in working life, and becoming managers in the workplace where they can earn higher wages, and the prejudiced approaches of institutions. It is important to remove barriers to women in order to raise their economic and social status, strengthen them, and ensure gender equality.

This study includes findings based on the information obtained regarding the financial problems of women entrepreneurs, taxes and similar financial obligations, as a result of an online survey consisting of 40 questions conducted with 1535 women entrepreneurs from 80 provinces in 2022, mostly through KOSGEB (Small and Medium Scaled Industry Development and Support Directorate), some of them through TOBB (The Union of Chambers and Commodity Exchanges of Türkiye) Women Entrepreneurs Board and some other non-governmental organizations.

2. Development in the Status of Employers, Self-employed and Women Entrepreneurs in Türkiye

The labor force participation rate (LFPR) of the women in Türkiye in 2022 is 35.1%. Accordingly, 64.9% of our country's female population remains as idle labor and does not participate in income-generating economic activities. However, the average woman LFPR in OECD member countries is 53.2%. Türkiye ranks last among OECD countries. The reason for 47.8% of our country's women who do not participate in the labor force is because they are busy with housework, and 10.22% are due to family and personal reasons. In short, approximately 60% of women who do not participate in the labor force do not/cannot participate due to “gender roles". The woman employment rate in Türkiye in 2022 is 30.4%. This rate is 50.5% on average in OECD countries, and Türkiye ranks last among OECD. In 2022, 70.88% of employed women are wage earners or casual workers, and 18.31% are unpaid family workers. While the rate of self-employed is 9.15%, the rate of those who are employers is 1.65%. In the agricultural sector, the rate of unpaid family workers reaches a very high rate of 76.99%, and there are almost no female employers (0.097%). In the non-agricultural sector, on the contrary, the wage/salaried/daily employee ratio increases to 86.31%, while the employer ratio is 2.04%. While the self-employed rate is 11.6% in agriculture, it is 8.52% in non-agricultural sectors (TURKSTAT, 2022; OECD, 2022). In short, women in employment participate in production as wage earners, instead of taking risks and engaging in economic activities that provide employment opportunities. Sociocultural and socioeconomic conditions are effective in the emergence of this situation, which being an employer is seen as a man’s job in society, and that business life is male-dominated when the data revealed by TURKSTAT surveys are examined (TURKSTAT, 2021).

According to TURKSTAT data, while the number of female employers in Turkiye was 94,000 in 2014, it increased continuously and reached 164,000 in 2022. While the number of self-employed women was 701,000 in 2014, it increased to 875,000 in 2018, and decreased due to the contraction in economic activities in 2019. This trend continued during the COVID-19 pandemic period, and the number decreased by 758,000 in 2020 because 117,000 women ended their businesses. This situation reveals that female employers are stronger than self-employed in terms of continuing their jobs under extraordinary conditions. At the same time, while the female LFPR decreased by 10% and employment rate by 8% during the pandemic, the continuous increase in the employer rate has shown that being employer provides a stronger

and more sustainable working environment for women. When the data for the years 2014-2022 were examined, it shows that there is a transition between the rate of female employers and the rate of self-employed. While the male entrepreneur rate in Turkiye is 25.58%, the female entrepreneur rate is 10.80% in 2022 (TURKSTAT, 2022).

3. Financial Problems of Women Entrepreneurs

The study investigated the needs of women entrepreneurs for three phases of businesses: the initial phase, continuation phase and development phase. When they were asked about the difficulties encountered in starting the business, they had nine options and could tick more than one, 74% ticked the option "I did not have enough capital" and 16% ticked the option "The cost of bureaucratic procedures was high." Those who stated lack of information and problems with gender roles were at relatively low rates. When the source of the initial capital was analyzed and asked to mark the relevant options among eight options, 50.75% of the participants said "my own savings", 45.3% of the participants said "borrowed from family", 26.7% said "government support", 24% said "bank loan", 21.63% "women entrepreneur loan", 3.72% “partner capital”, 2.02% “micro loan” and, 1.6% "other". The fact that the most important source of capital is their own capital is because 69% of the participants have been employees before (Akgül Yılmaz&Nalbant Efe, 2022: 90-96). A small portion of the participants (17%) benefited from the young entrepreneur exemption and gained tax advantages. The rate of benefiting from the exemption is slightly higher among self-employed (18.6%) than employers (16.4%). When the financial difficulties they encountered while running the business analyzed and asked to mark the appropriate ones out of eight options, the most frequently marked option was "insurance premium payments" with 65.44%, followed by "tax payments" with 63.2%, followed by "business general expenses" with 53.81%, "rental payments" with 47.10%, followed by “other mandatory payments” with 33.70%, and “wage payments” with 22.8%. Only 6.12% of the participants stated that they did not experience any difficulties (Akgül Yılmaz&Nalbant Efe, 2022: 103). When the needs to strengthen and develop their businesses analyzed and asked to mark three out of twelve options, participants stated that, they mostly needed "capital" (80.13%) and "Tax discounts/employees’ insurance premium discounts" (57.85%). The other important selected options were "advertising promotion" (40.59%), "finding sales channels" (33.88%), "finding qualified personnel" (31.14%), "being able to export" (21.82%) (Akgül Yılmaz&Nalbant Efe, 2022: 127). When the distribution of those who received support from any institution related to their business is analyzed, 68.7% of the participants stated that they received support in the initial phase, 19.15% in the continuation phase, and 12.05% in the development phase of the business. It can be said that the capital need is more important in the beginning phase (Akgül Yılmaz&Nalbant Efe, 2022: 107).

4. Women Entrepreneurs' Attitudes toward Taxes and Similar Financial Obligations and Their Situation against Them

When the statement "tax should be paid in full and on time" was asked to determine the participants' attitudes towards taxes and similar financial obligations; 68% marked "agree", 22.3% marked "partially agree", and 6.8% marked "disagree". This showed that a significant portion of them had positive tax attitudes. The rate of those who stated that they agreed, especially among employers, was higher. Participants were asked to mark the taxes they paid, and the most common ones were income tax (85.21%), value added tax (80.91%), stamp duty (66.84%), corporate tax (47.69%), environment tax (% 45.28), motor vehicles tax (36.42%) and

announcement and advertising tax (34.59%). When the three tax and similar obligations that they have the most difficulty in paying were asked, “employees’ insurance premium” (30.2%), “rent withholding tax” (15.2%) and “value added tax” (13.4%) were the most chosen ones. The rate of those who stated that they do not have difficulty paying taxes is only 6.7%. When the taxes and similar obligations that the participants have the most difficulty to pay are examined depending on the age of their businesses, most marked answers were "employees’ insurance premium" in businesses with 0-10 years of age, "value added tax" (23.5%) in businesses with 11-20 years of age, "corporate tax" in businesses with more than 21 years of age (21.1%). According to the number of employees; "Rent withholding tax" (23.6%) for those who have no employees, "employees’ insurance premium" for those with 1-49 employees, and "corporate tax" for those with 50 or more employees are the most difficult tax and similar obligations to pay. When examined from a sectoral perspective, “employees’ insurance premium” is the most difficult obligation for all four main sectors (agriculture, industry, construction and services) (Akgül Yılmaz&Nalbant Efe, 2022: 128-141). Although the order may vary across sectors, “employees' insurance premiums”, “value added tax” and “rent withholding taxes” are obligations that are paid every month and therefore are difficult to pay. From a regional perspective, “employees’ insurance premium” is the most difficult obligation in all regions. Southeastern Anatolia Region comes first (45.8%), followed by Middle Eastern Anatolia, Western Black Sea, Northeastern Anatolia and Eastern Black Sea. 36.3% of the participants declared that they benefited from tax/insurance premium structuring. This rate is 40.4% for employers and 25.9% for self-employed. As the number of employee and the age of the business increases, the rate of benefiting from tax/insurance premium structuring increases. 91.5% of the participants stated that they agreed with the statement "Income tax exemption should be applied to newly established businesses", 5.1% partially agreed, 2.1% disagreed, and 1.3% had no opinion. At the end of the survey participants were asked, "What do you think should be done to develop women's entrepreneurship?" and the suggestions were categorized. The most mentioned statement was "capital support should be given" and the second was "tax exemption, tax deduction should be given".

5. Conclusion

The survey results showed that the most important difficulty faced by women entrepreneurs in Turkiye is finding “capital”. It has been determined that especially “employees' insurance premiums”, “value added tax” and “rent withholding tax”, which are financial obligations that must be paid regularly every month, create financial difficulties. In this regard, in order to increase women's entrepreneurship, tax incentive measures can be applied until the baby businesses get up and start walking, which takes a period of 3-5 years. These incentive suggestions can be listed as follows:

1. Women entrepreneurs can be exempt from fees and similar financial obligations to be paid for bureaucratic procedures in starting a business,
2. The insurance premiums of the people they employ can be covered by the state,
3. The obligation to withhold income tax on workplace rent can be abolished. During this period, workplace property owners can pay their taxes directly.
4. Provisional tax payments may not be received during this period. Tax can be assessed on an annual basis and collected in installments.
5. A 50% discount can be applied to professional chamber dues,
6. Insurance premium payments can be made easier for self-employed women.

References

Akgül Yılmaz, G. & Nalbant Efe, G. (2022). Türkiye'de Kadın Girişimciliği, Durum Tespiti, İhtiyaçlar ve Politika Önerileri. İstanbul: Maliye Hesap Uzmanları Vakfı Yayınları-35.

TURKSTAT. (2021). Türkiye Aile Yapısı Araştırması. https://data.tuik.gov.tr/Bulten/Index?p= Turkiye-Aile-Yapisi-Arastirmasi-2021-45813, (17.11.2022).

TURKSTAT. (2022). İşgücü İstatistikleri. https://data.tuik.gov.tr/Kategori/GetKategori?p= istihdam-issizlik-ve- ucret-108&dil=1, (29.08.2023).

OECD. (2022). Labour Force Statistics. https://stats.oecd.org/viewhtml.aspx?datasetcode= LFS_SEXAGE_I_R&lang=en, (29.08.2023).

The Effect of Tax Education on Tax Awareness: An Experimental Research in Diyarbakır Province[1]

Osman Geyik[2] **Gamze Yıldız Şeren[3]** **Yusuf Yakşi[4]**

Abstract

This study used experimental methods to create intervention and control groups in order to examine the impact of tax education on tax awareness, based on the hypothesis that tax awareness can be learned at a young age. The Ministry of National Education and the Provincial Directorates of National Education gave their assent for the research, which was conducted at four pilot schools chosen in Diyarbakır. Prior to and following the 2-month tax awareness training, a survey was administered in a few chosen schools, and the findings were analysed using the SPSS programme. It is determined from the results that tax awareness education significantly raises children's tax awareness levels. After receiving tax awareness training, it was determined that children's views on taxes had changed, and they were more aware of the reason behind tax collection. Within the context of the study's findings, policy recommendations were made.

Key Words: Tax Awareness, Tax Education, Primary School Students, SPSS Analysis

JEL Codes: H20, H29, H26

1. Introduction

The problem of tax collection is fundamentally related to tax awareness. Like all other fundamental standards, raising tax awareness is a value that should be learned early in life. Supporting it throughout the education and training process, starting with the family, will enable one to fully acquire this awareness. In Turkey, the issue of tax awareness is remembered only with some events during tax week, and tax information programs are held for students only on these days. This circumstance is insufficient to raise tax awareness, particularly among students. The aim of this study is to increase tax awareness, considering that primary school students are potential taxpayers. In this context, the tax awareness of the students who will be included in the project was measured. Then, it was aimed to increase the tax awareness levels of the students with 2-month periodic tax training. After the tax training, various activities were held with the students and the survey form applied before the training was re-applied. According to the survey findings, it was observed that there was an increase in the tax awareness levels of students.

The study consists of three parts. In the first chapter, the concept of tax awareness was examined and tax awareness in children was specifically discussed. In the second part of the

[1] This research was supported by Dicle University Scientific Research Projects.

[2] Assoc. Prof. Ph.D., Dicle University, Faculty of Economics and Administrative Sciences, ORCID: 0000-0001-9885-9638, osman.geyik@dicle.edu.tr

[3] Assoc.Prof. Ph.D., Tekirdağ Namık Kemal University, Faculty of Economics and Administrative Sciences, ORCID: 0000-0002-5063-1172, gyseren@nku.edu.tr.

[4] Ph.D., Dicle University, Rectorate, ORCID:0000-0001-6247-0268, yusuf.yaksi@dicle.edu.tr.

study, the results of the survey conducted to measure and increase tax awareness in children are shared and the research method and findings are included. Policy recommendations and other findings regarding all outcomes of the study are discussed in the conclusion section.

2. Tax Awareness

Tax awareness means having understanding and knowledge about the tax system and tax laws in a country (Faizal, Zaini & Somasundaram, 2021: 66). It also includes being aware of the rules, regulations and procedures when fulfilling tax obligations. Tax awareness, in a sense, is a cognitive process about why taxes are paid and why tax regulations should be followed (Sanusi et al, 2021: 91). Buehler (1940:237) stated that tax awareness can also be defined as tax education or tax knowledge. Accordingly, tax awareness means increasing knowledge about the tax burden and its connection with public expenditures and obtaining more taxpayers. This definition actually stems from the belief that some segments of the society are not aware of the burden imposed by taxes or are partially aware of this burden (Buehler, 1940: 238).

2.1. Children and Tax Awareness

Education; It is a lifelong process that prepares society as an aspect of socialization in order to learn appropriate attitudes, values and behaviors. These norms and values may also include compliance with tax laws. "Understanding tax", which is made a part of this process, is very important in order to improve the awareness of the new generation about tax. This should be seen as a duty of states and the tax issue should be clarified in the minds of the new generation (Koster, 2012: 1-2). Lack of tax education is one of the main causes of noncompliance with tax responsibilities. Tax education initiatives that cover subjects like the economic consequences of tax evasion and the advancement of accountability and transparency have a big influence on taxpayers' voluntary compliance. Early provision of this training will influence the prospective taxpayer's perception and way of thinking in addition to increasing voluntary compliance with regard to tax payment and reporting obligations (Albert ve Fadjarenie, 2022:1913)

Countries around the world reach taxpayers through various channels to increase tax awareness. In this context, relevant institutions and organizations, especially tax administrations, are implementing programs to inform taxpayers about some tax issues and deadlines. Apart from this, initiatives such as TV programs, digital platforms, and various other mass media are also being implemented (OECD, 2021). Tax weeks (the last week of February), held every year in Turkey since 1990, are supported by tax awareness campaigns not only for children but also for all members of society. In these events, various posters are prepared for children's tax awareness and activities such as games/competitions are organized (OECD, 2021; Vergialgı, 2021; GİB, 2023d: 93-94).

3. Findings

This study was implemented in 4 public schools affiliated with the Ministry of National Education in Diyarbakır province. The group that created the scale was selected from 6th, 7th and 8th grades. A total of 427 students attended the tax training (188 female and 239 male students). Students are between the ages of 11-14. The unique and meaningful part of the study is that the survey was applied to the same 427 selected students before and after the tax awareness training. Firstly, a tax awareness survey was applied to 427 students selected in

schools, and after the survey, tax awareness training was given for 2 months. After the tax awareness training, the survey applied to the same students at the beginning of the research was repeated and the results of the experimental research were as follows.

Students were asked whether they had heard the word tax before. It was observed that there was a normal familiarity with the word tax before and after the survey. It is seen that there is an increase in the number of students who answered the question "Where did they hear the word tax" from their family before the training, and the number of students who answered the same question from their teacher after the survey. When the answers given before the survey to the question "What do you think taxes are?" were examined, it was determined that there was a significant increase in the answer "It is the money collected by the state to take care of us", while there was also an expected decrease in the answer "I don't know". It can be stated that there is an increase in tax awareness after tax training. When the answers to the question of who pays taxes are examined, it is concluded that children have the awareness that everyone who earns money must pay taxes. In addition, the decrease in the response of "I don't know" is considered as a result showing the importance of tax awareness education. When the answers to the question "why is paying taxes important" are examined, it can be stated that there is a decrease in the answers "it is not important" and "I don't know".In addition, it is observed that children who participate in tax awareness training have an awareness that taxes are important for the presentation of public goods. These results reveal that tax education is important for tax awareness. The answers given to the question "What comes to your mind when you think of taxes" before and after the tax awareness training were examined. It is observed that there has been a slight decrease in the perception of taxes only as money, as well as an increase in the perception of the concepts of schools, hospitals, parks, and security and protection when taxes are mentioned. This shows that after tax awareness training, there is an increase in tax awareness and awareness of what the main purposes of taxes are. When the answers to the question of why people pay taxes were examined, it was determined that after the tax awareness training, there was a decrease in the perception that they pay because it is compulsory, and in addition, an awareness emerged that it is a civic duty to contribute to the state.

4. Conclusion

Lack of sufficient tax awareness negatively affects tax payment and taxation processes. In connection with this, it causes tax losses and evasion to increase. This research was based on the idea that tax awareness is important in terms of tax revenues. In this context, the importance of tax awareness education is emphasized. According to the findings obtained as a result of the experimental research applied to 427 selected students in 4 schools in Diyarbakır, tax awareness education caused a significant increase in the tax awareness levels of children. It was concluded that after the tax awareness training, children's perspective on taxes changed and they became aware of the purpose for which taxes are collected. In addition, their perception of people who do not pay taxes is negative, which can be considered a positive development in terms of tax awareness. In line with the findings obtained from the study, it is recommended to add a tax awareness education course to the National Education curriculum. In addition, the Revenue Administration needs to update and diversify the content it has prepared for children.

References

Albert, A., Fadjarenie, R.A. (2022). Early tax education: Could it change the future compliance behavior?. International Journal of Evaluation and Research in Education (IJERE). 11(4), 1912~1922

Buehler, A. G. (1940). The tax system and tax consciousness. The Bulletin of the National Tax Association, 25(8), 237-246.

Faizal, S. M., Zaini, R. M., & Somasundaram, N. R. (2021). Tax Awareness and Tax Knowledge of Students at Secondary School Level in Malaysia. International Business Educatio

GİB. (2023d). 2022 Faaliyet Raporu. https://www.gib.gov.tr/sites/default/files/fileadmin/faaliyetraporlari/2022/2022_faaliyet_raporu.pdf?id=1

Koster, L. (2012). The incorporating of basic tax education in the secondary school curriculum (Doctoral dissertation, University of Pretoria).

OECD. (2021). Building Tax Culture, Compliance and Citizenship A Global Source Book on Taxpayer Education, Second Edition. https://www.oecd-ilibrary.org/sites/18585eb1-en/index.html?itemId=/content/publication/18585eb1-en

Sanusi, S., Abdullah, N. H. N., Chin, L. T., Rastam,F., & Rozzani,N. (2021). Tax Awareness Among Students from Higher Learning Institutions in Malaysia: Education Area as A Moderator. International Journal of Economics and Management, 15(1), 89-102.

Vergialgı. (2021). 1990'dan Günümüze Toplumsal Vergi Bilinci İçin "Vergi Haftası". https://vergialgi.com/1990dan-gunumuze-toplumsal-vergi-bilinci-icin-vergi-haftasi

Political Preferences in Tax and Benefit Morale: Do Right-wing and Left-wing Voters Have Different Costs to Public Finances?

Erkam Sarı[1] **Sacit Hadi Akdede**[2]

Abstract

With the spread of the welfare state model, the size of public expenditures made by states has increased and their items have expanded. In this process, welfare states began to make social expenditures through transfers for disadvantaged groups in terms of various factors within society. In Europe, the size of these social expenditures varies between 35-45% of total public expenditures (Eurostat, 2023) and attracts attention as the largest public expenditure item. The financing of public expenditures is carried out through capital, sales and tax revenues. Considering that the share of employees and employers and the share of taxes in total public revenues is close to 90% (Eurostat, 2023), it can be argued that tax revenues form the backbone of financing public expenditures. On the other hand, certain individuals in society receive social aid that they are not entitled to through illegal means and create a free-riding problem through tax evasion. Depending on this situation, they cause unintended consequences in terms of both public expenditures and public revenues. For example, due to tax evasion and avoidance, tax revenues worth €1 Trillion in Europe and €823.5 Billion in the EU cannot be collected, creating a burden on public finances.

In this context, understanding individuals' tax and aid morality stands out as an important topic in terms of reducing this burden on public finances. It is necessary to know the basic factors that determine individuals' willingness (not) to pay taxes and receive (not) illegal social assistance. Studies in the literature investigating the factors that determine both tax and aid morality have included many factors such as income, tax rates, financial satisfaction, age, gender, religiosity and education level in their analyses. However, individuals' political preferences and wishes were not included in the analysis. Considering the political nature of tax revenues and public expenditures, it is necessary to investigate the role of ideological preferences among the determining factors of tax and aid ethics. In this context, this study used European Values Survey (EVS) data to investigate whether ideological preferences have any importance in tax and aid morality between 1981 and 2017, and if so, what the differences are between left and right voters. Due to the structure of EVS questions and answers, the ordered probit method was used. According to the findings, right-wing voters have lower tax morale compared to left-wing voters.

On the other hand, right voters have a higher helping morale compared to left voters. These basic findings are parallel to the economic preferences of the right and left ideological segments. As a matter of fact, the attitudes of the right wing in favor of economically narrower and lower taxes, and the left wing in favor of expanded welfare programs and increased public expenditures coincide with the findings. Taken together, first, policymakers need to consider ideological differences as a factor. Secondly, the right wing imposes a cost on the public in terms of public revenues and prevents public revenues from rising to the desired levels. Thirdly, the left wing becomes a financial burden on the public in terms of public expenditures and causes

[1] Res. Assist. Ph.D., Adnan Menderes University, Department of Public Finance, erkam.sari@adu.edu.tr
[2] Prof. Ph.D., İzmir Bakırçay University, ORCID: 0000-0002-7220-9220, sacithadi.akdede@bakircay.edu.tr

an increase in public expenditures. Finally, although through different channels, both the right and the left cause a free-rider problem in terms of public finance in a way that coincides with their own political preferences.

Keywords: Tax morale, Aid morality, Political preferences

Taxpayer Psychology in Earthquake Experienced Cities in Turkey: A Review of Studies in the Literature

Ali Fuat Uruş[1]

Abstract

The basis of taxpayer psychology is the taxpayer's view and perception of tax in taxation process. Among the most important factors or determining variables affecting taxpayers' attitudes and behaviors towards taxes are factors such as voluntary tax compliance, tax ethics, tax awareness, and tax culture level. The topic of the study is to examine academic research on the psychology of taxpayers in cities that suffered earthquakes in Turkey. The purpose of the study is to handle the studies about taxpayer psychology domain on cities where earthquakes occurred. The importance of the study is to bring a new perspective to the subject and to make future predictions by drawing attention to the attitudes and behaviors of taxpayers towards taxes in earthquake regions. In this context, the cities where the last three major earthquakes occurred in Turkey were selected as samples. Literature review was conducted as a method. Based on the findings, the tax burden is heavy, tax rates are high, the tax system is unfair, tax audits and penalties are insufficient, public expenditures are inefficient, public services are ineffective, and tax amnesties discourage paying taxes. Surprisingly, increasing number of immigrants in Turkey has a negative impact on taxpayer psychology. Taken together, efforts are needed for participatory structural reforms in which taxpayers are also included in the taxation process.

Keywords: Taxpayer Psychology, Tax Perception, Tax Compliance, Earthquake Cities
JEL Code: H30, H31, E70, E71, Z13

1. Introduction

Taxpayer psychology refers to all taxpayers' perceptions, attitudes and behaviors regarding taxes and taxation. Internal/personal/demographic (such as age, gender, education, profession, marital status, belief structure, income level) and external/environmental (such as high tax rates, tax burden level, frequency of tax amnesties, deterrence of tax penalties and audits) factors that determine tax perception, attitudes and behaviors. These are also factors that affect tax compliance and tax awareness.

In this study, research in the literature on the psychology of taxpayers in cities, which have experienced the last three major earthquake disasters in Turkey and were heavily damaged by these earthquakes, will be discussed. Thanks to the findings obtained from the studies in the literature specifically for selected earthquake cities, similar and different aspects between the general taxpayer psychology and the psychology of taxpayers living in the region can be determined. The effect of the current tax system and tax practices to taxpayers will offer a future perspective for tax management. In this context, first of all, a short theoretical framework will be presented in the study and then a general evaluation of the literature review and research findings will be discussed.

[1] Res. Assist. Ph.D., İzmir Kâtip Çelebi University, Department of Public Finance, ORCID ID: 0000-0002-3716-3298, alifuat.urus@ikc.edu.tr

2. Theoretical Framework

Tax psychology, as a discipline that addresses all dimensions of taxpayer psychology, basically focuses on "tax mentality" and "tax morality". Tax mentality is used for expressing all attitudes and behaviors adopted towards taxation. According to research, issues such as citizens' financial knowledge which enables them to establish a connection between the taxes they pay and the services provided, the approach of the tax administration to taxpayers, the excess of administrative formalities, the frequency of audits and the high level of tax penalties affect the attitudes and behaviors adopted towards taxation. Tax morale, which constitutes another dimension of tax psychology and taxpayer psychology, is used for directly expressing attitudes towards tax evasion. Therefore, tax morale basically focuses on tax losses and evasion (User, 1992: 184-187). Research conducted demonstrates that factors such as tax administration, tax system and perceived tax burden (subjective tax burden), tax awareness, perceptions of compliance, perception of public expenditures, trust in authorities, the state and bureaucrats, institutional quality such as perception of corruption, formal and informal education, gender and belief, willingness to obey and religiosity have a relatively strong effect on tax morale (Torgler vd., 2008: 313; Demir, 2008).

3. Literature Review

Due to its geographical location, Turkey is a country crossed by active fault lines, which have high risk of producing massive earthquakes. Historically, there have been many massive and destructive earthquakes. The 17 August 1999 Gölcük/Kocaeli earthquake and the 6 February 2023 Elbistan and Pazarcık centered Kahramanmaraş earthquakes are the prominent ones. Therefore, the scope of the literature review is based on research on the cities (Kocaeli, Hatay, Gaziantep, Malatya, Adıyaman, Diyarbakır, Şanlıurfa, Adana), where the impact of these earthquakes was great. As a result of detailed research conducted within the scope of the literature review, the findings of selected studies on taxpayers/citizens in cities of the last three major earthquake disasters are given below chronologically (from recent to past) by drawing attention to the findings obtained.

The findings from Ekici's survey conducted with taxpayers in Adana in 2022 are as follows: Increasing tax rates, low income levels, continuity of tax amnesties reduces voluntary compliance with taxes.

The findings from Doğan's survey conducted with taxpayers in Hatay province in 2021 are as follows: Paying taxes is a civic duty. Tax awareness is at a high level. The most important reason for tax evasion is high tax rates. The taxes paid do not return as services to society. Weak enforcement power of tax penalties increases tax crimes. The most important elements that can increase tax awareness are eliminating injustice in the tax system and utilizing public expenditures in order to increase social welfare.

The findings from the survey conducted by Çelik with taxpayers in Kocaeli province in 2019 are as follows: Financial advisors have a higher perception of tax ethics than tradesmen, women have a higher perception of tax ethics than men and those with a higher education level have a higher perception of tax ethics than those with lower education. Increasing tax ethics, awareness and compliance depend on the fair distribution of taxes and public expenditures.

The findings from the survey conducted by Küçükgöz in Gaziantep, Hatay, Şanlıurfa and Kilis provinces in 2019 are as follows: The opinion that Syria origined citizens do not pay taxes is extremely high. The biggest problem is that Syrian origined citizens work for low wages without

insurance. There is a strong desire to access the financial aid provided to Syrian origined citizens (especially among tradesmen).

The finding obtained from the survey conducted by Mutlu and Taşçı for taxpayers in Malatya in 2013 is as follows: The state's customer-oriented approach to the taxpayer has a positive effect on the taxpayer's voluntary compliance with the tax.

The findings of the comprehensive research conducted by Zenginobuz et. al. across Turkey in 2010 are as follows: Paying taxes means having a say in the governance of the country. Tax is a mandatory payment and civic duty for the development of the country. Problems of the tax system in Turkey in accordance with importance are; high taxes on consumption, not high enough taxes on those who earn more and inability to collect taxes due to the informal economy. The most important reasons why taxes cannot be collected regularly are; the unfairness of the tax system, the informal economy and the fact that taxes do not return as services to the society. Tax audits are ineffective.

The results obtained from the comprehensive research conducted by Çiçek et. al. in the Southeastern Anatolia Region (Adıyaman, Diyarbakır, Gaziantep, Mardin, Şanlıurfa) in 2008 are as follows: The tax burden is high and the taxes applied are unfair. The taxes paid are not returned as services and are not used effectively by the government. The most important reason why taxes cannot be paid in full is the high tax rates. This situation pushes taxpayers to evade taxes. Tax evaders are not welcomed. The multitude of formalities regarding tax payments and the incomprehensibility of the legislation reduce tax compliance. The approaches of the tax administration are not liked, but the approaches of the tax inspectors are liked. Honest taxpayers are punished through tax amnesties and this situation also disrupts tax justice. Public expenditures are used wastefully.

4. A General Evaluation of Research Findings

When the research findings are evaluated, the findings can be summarized as follows: Since there was no study conducted specifically for Kahramanmaraş on taxpayer psychology, it could not be included in the review. Other cities; Kocaeli, Hatay, Gaziantep, Malatya, Adıyaman, Diyarbakır, Şanlıurfa, Adana, where three major earthquake disasters occurred in the history of Turkey; were included in the analysis. The research conducted by Zenginobuz et. al., is the most comprehensive study throughout Turkey, makes possible to reveal the general trend and make comparisons.

Based on the findings obtained from this study on a large group of citizens across Turkey, it has been observed that there are similar views regarding tax structure and implementation (such as paying taxes is a civic duty, tax rates and tax burdens are very high, the tax system is not fair, frequent tax amnesties reward those who do not pay, taxes are not adequately reflected in public services, public expenditures are presented ineffectively and used wastefully) among citizens living in cities that experienced earthquakes. Compared to metropolitan cities such as Istanbul and Kocaeli (located in the Marmara Region), in cities where the February 6 earthquakes occurred (mainly located in the Eastern and Southeastern Anatolia Region), tax outlook and tax compliance were found to be lower, and the cost of tax compliance (psychological cost of taxation) was higher. In the findings of the research conducted specifically for the cities where the February 6 earthquakes occurred, unlike the research conducted for other cities, the taxpayers' view towards tax inspection staff was found to be positive. The same taxpayers expressed a negative opinion that offering privileges to Syrian refugees/immigrants disrupts the fair competition.

5. Conclusion

In this study, which examines the previous studies in the literature investigating taxpayer psychology in the cities that experienced the last three major earthquakes in Turkey's history, it is concluded that there are taxpayer structures that are common and different in comparison to Turkey in general and similar and different psychologies even among the cities that experienced three major earthquake disasters. While a similar view prevails among taxpayers regarding the structural features (tax practices) of the Turkish tax system, it has been observed that different views prevail depending on the regional and local structures. Turkish society has a common opinion on issues such as high individual tax burden and tax rates, low tax justice, careful approach to tax audits, penalties and tax amnesties, and proper management of the tax revenues-public expenditures relationship. Another striking result is the impact and consequences of the migration wave on the taxpayers. Considering all these results, the study reveals that there is a need for more participatory structural reforms that include taxpayers to the process.

References

Çelik, Aslıhan (2019). Vergi Kaçırma Etiği: Kocaeli Bölgesindeki Vergi Mükellefleri Üzerine Bir Araştırma. Gebze Teknik Üniversitesi Sosyal Bilimler Enstitüsü (Yayımlanmamış Yüksek Lisans Tezi). Gebze.

Çiçek, H., Karakaş, M. & Yıldız, A. (2008). Güneydoğu Anadolu Bölgesi'nde Vergi Yükümlülerinin Vergiyi Algılama ve Tutum Analizi: Bir Alan Araştırması, Ankara: Maliye Bakanlığı Strateji Geliştirme Başkanlığı Yayın No:2008/381.

Demir, İ. C. (2008). Vergi Ahlâkı ve Belirleyenleri Ege Bölgesi Örneği. Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü (Yayımlanmamış Doktora Tezi). İzmir.

Doğan, G. (2021). Türkiye'de Gönüllü Vergi Uyumunu Etkileyen Faktörler. Adnan Menderes Üniversitesi Sosyal Bilimler Enstitüsü (Yayımlanmamış Yüksek Lisans Tezi). Aydın.

Ekici, G. (2022). Davranışsal İktisat Çerçevesinde Vergiye Karşı Tutumlar. Çukurova Üniversitesi Sosyal Bilimler Enstitüsü (Yayımlanmamış Yüksek Lisans Tezi). Adana.

Küçükgöz, N. M. (2019). Suriyeli Mültecilerin İl Ekonomilerine Etkisi: Gaziantep, Hatay, Şanlıurfa, Kilis Örneği. Sakarya Üniversitesi Sosyal Bilimler Enstitüsü (Yayımlanmamış Yüksek Lisans Tezi). Sakarya.

Mutlu, A. & Taşcı, K. (2013). "Vergi Dairelerinin Mükellefe Davranış Biçimlerinin Vergilemede Gönüllü Uyuma Etkisi: Malatya Örneği", Elektronik Sosyal Bilimler Dergisi, 12(45), 214-232.

Torgler, B., Demir, İ. C., Macintyre, A. & Schaffner, M. (2008). "Causes and Consequences of Tax Morale: An Empirical Investigation", Economic Analysis & Policy, 38 (2), 313-339.

User, İ. (1992). Vergilemenin Sosyal Psikolojik Sınırı. Marmara Üniversitesi Sosyal Bilimler Enstitüsü (Yayımlanmamış Doktora Tezi). İstanbul.

Zenginobuz, Ü., Adaman, F., Gökşen, F., Savcı, Ç. & Tokgöz, E. (2010). Vergi, Temsiliyet Ve Demokrasi İlişkisi Üzerine Türkiye'de Vatandaşların Algıları, İstanbul: Açık Toplum Vakfı Yayını.