



**HACETTEPE UNIVERSITY**

Center for Market Economics and Entrepreneurship

# **4<sup>TH</sup> INTERNATIONAL ANNUAL MEETING**

OF SOSYOEKONOMI SOCIETY

**PROCEEDINGS BOOK**



**Sosyoekonomi**

**OCTOBER 27-28, 2017 VIENNA-AUSTRIA**



Hacettepe University  
Centre for Market Economics  
and Entrepreneurship (CMEE)

Sosyoekonomi  
Journal



# *4<sup>th</sup> INTERNATIONAL ANNUAL MEETING*

***Sosyoekonomi Society***

*Editors*

*Ahmet Burcin YERELI*

*Altug Murat KOKTAS*

October 27-28, 2017  
Vienna / AUSTRIA

**ISBN** : 978-605-82582-2-8

**Publisher** : Sosyoekonomi Society  
Cihan Sokak, 27/7  
06430 Sıhhiye / ANKARA  
Tel: +90 312 228 49 11  
Fax: +90 312 230 76 23

**Printing House** : Sonçağ Yayınıcılık Matbaacılık Reklam San. Tic. Ltd. Şti.  
İstanbul Caddesi, İstanbul Çarşısı, 48/48, İskitler / ANKARA  
Tel: +90 312 341 36 67

**Place and Date of Print** : Ankara / Turkey, 20.10.2017

©2017

## **President**

Ahmet Burcin YERELI, Hacettepe University, Turkey

## **International Organizing Board**

Elshan BAGIRZADEH, Azerbaijan State University of Economics, Azerbaijan  
Omer GOKCEKUS, Seton Hall University, U.S.A.  
Kamalbek KARYMSHAKOV, Kyrgyzstan-Turkey MANAS University, Kyrgyzstan  
Altug Murat KOKTAS, Nigde Omer Halisdemir University, Turkey  
Mehmed MURIC, University for Peace, Serbia  
Nevzat SIMSEK, Ahmet Yesevi University, Kazakhstan

## **International Scientific Board**

Hale AKBULUT, Hacettepe University, Turkey  
Abdilahi ALI, Aberystwyth University, United Kingdom  
Baris ALPASLAN, Ankara Yildirim Beyazit University, Turkey  
Nunzio ANGIOLA, University of Foggia, Italy  
Emre ATSAN, Nigde Omer Halisdemir University, Turkey  
Hakan AY, Dokuz Eylul University, Turkey  
Shafiul AZAM, Aberystwyth University, United Kingdom  
Necmiddin BAGDADIOGLU, Hacettepe University, Turkey  
Serdal BAHCE, Ankara University, Turkey  
Alparslan A. BASARAN, Hacettepe University, Turkey  
Joanna CHUDZIAN, Warsaw University of Life Sciences, Poland  
Basak DALGIC, Hacettepe University, Turkey  
Caterina DE LUCIA, University of Foggia, Italy  
Burcu FAZLIOGLU, TOBB University of Economics and Technology, Turkey  
Matthias FINGER, Ecole Polytechnique Fédérale de Lausanne, Switzerland  
Anna GOLOVKO, Sosyoekonomi Society, Turkey  
Aleksandra GÓRECKA, Warsaw University of Life Sciences, Poland  
Sevilay GUMUS OZUYAR, Hacettepe University, Turkey  
Jafar HAGHIGHAT, University of Tabriz, Iran  
Mubariz HASANOV, Okan University, Turkey  
Katsushi IMAI, University of Manchester, United Kingdom  
Mustafa KIZILTAN, Hacettepe University, Turkey  
Maria Paola RANA, Northumbria University, United Kingdom  
Antonio SAVOIA, University of Manchester, United Kingdom  
Isil Sirin SELCUK, Abant Izzet Baysal University, Turkey  
M. Mahruf C. SHOHEL, Aberystwyth University, United Kingdom  
Biagio SIMONETTI, Università degli Studi del Sannio, Italy  
Aysen SIVRIKAYA, Hacettepe University, Turkey  
Ismail TATLIOGLU, Bahcesehir University, Turkey  
Mustafa Erdinc TELATAR, Okan University, Turkey

## Themes & Topics

- Regional Economics and Regional Development
- Environmental Economics and Environmental Management
- Energy Economics and Energy Resource Management
- Economics of Industrial Research and Innovation
- International Economics and International Trade
- Tourism Economics and Tourism Management
- Labour Economics and Industrial Relations
- Market Economics and Entrepreneurship
- Fiscal Federalism and Decentralization
- Microeconomics and Macroeconomics
- Public Economics and Public Finance
- Gender, Diversity and Social Issues
- Local Governance and Subsidiarity
- Poverty and Income Distribution
- Rural Development Policies
- Business Administration
- Health and Education
- Finance and Banking
- Economics and Law
- Spatial Economics
- Law and Business

<b>DEADLINES</b>	
August 15, 2017	Abstract Submission
August 20, 2017	Author Notification
August 31, 2017	Registration Fee and Registration Form Submission
October 10, 2017	Announcement of Programme
October 20, 2017	Submission of Presentation Documents
October 27, 2017	Opening Ceremony and Sessions
October 28, 2017	Sessions

	<b>October 27, Friday (1<sup>st</sup> Day)</b>	<b>October 28, Saturday (2<sup>nd</sup> Day)</b>
08.30 - 09.00	Registration	
09.00 - 09.30	Opening Ceremony / <i>Festsaal Imperial</i>	Registration
09.30 - 11.00	Session I-A / <i>Festsaal Imperial</i> Session I-B / <i>Salon Imperial</i>	Session V-A / <i>Festsaal Imperial</i> Session V-B / <i>Salon Imperial</i>
11.00 - 11.30	Coffee Break / <i>Marmorsaal</i>	Coffee Break / <i>Marmorsaal</i>
11.30 - 13.00	Session II-A / <i>Festsaal Imperial</i> Session II-B / <i>Salon Imperial</i>	Session VI-A / <i>Festsaal Imperial</i> Session VI-B / <i>Salon Imperial</i>
13.00 - 14.00	Lunch / <i>Marmorsaal</i>	Lunch / <i>Marmorsaal</i>
14.00 - 15.30	Session III-A / <i>Festsaal Imperial</i> Session III-B / <i>Salon Imperial</i>	Session VII-A / <i>Festsaal Imperial</i> Session VII-B / <i>Salon Imperial</i>
15.30 - 16.00	Coffee Break / <i>Marmorsaal</i>	
16.00 - 17.30	Session IV-A / <i>Festsaal Imperial</i> Session IV-B / <i>Salon Imperial</i>	



## Preface

Professor Ahmet Burcin Yereli and his colleagues in Hacettepe University, Turkey established Center for Market Economics and Entrepreneurship (CMEE) in 2003. CMEE, which is working in close cooperation with relevant institutions and organizations, makes researches on the structure of the market economy in Turkey and seeks to provide recommendations and solutions for the entrepreneurs who are the most important actors of the free market process.

Sosyoekonomi Journal, in accordance with the objectives of CMEE mentioned above, was started publication in 2005 by the same managerial staff of CMEE and since then continues its biannual publications for ten years. First ten years of the journal has been past under the conduct of CMEE. Professor Yereli who is the Director of CMEE and editor of Sosyoekonomi Journal, in the beginning of 2015 and taken charge of Sosyoekonomi Journal in its body has founded Sosyoekonomi Society.

Sosyoekonomi Journal is an international, scientific and refereed journal and became quarterly after its eleventh publication year. 30<sup>th</sup> issue of the journal will be published in October 34<sup>th</sup>, 2018. Sosyoekonomi Journal has covered by several citation and abstracting/indexing databases like TUBITAK Ulakbim Turkish Social Sciences Database, EconLit, Proquest, EBSCO, RePEc, EconPapers, Global Impact Factor, Google Scholar, etc.

Based on a decade of its academic and publishing experience, the editorial board of Sosyoekonomi Journal has decided to hold scientific events and for this purpose, First International Annual Meeting of Sosyoekonomi Society had taken place on October 28-30, 2015 in Munich, Germany. Since 2015, three scientific events have been done in different countries. For this year's meeting Vienna had been chosen by editorial board members and made contract with Hotel Imperial as Meeting Hotel.

The main purpose of this event is to contribute to social sciences by bringing together academics, professionals and decision makers from different countries. For this purpose, *Regional Economics and Regional Development; Environmental Economics and Environmental Management; Energy Economics and Energy Resource Management; Economics of Industrial Research and Innovation; International Economics and International Trade; Tourism Economics and Tourism Management; Labour Economics and Industrial Relations; Market Economics and Entrepreneurship; Fiscal Federalism and Decentralization; Microeconomics and Macroeconomics; Public Economics and Public Finance; Gender, Diversity and Social Issues; Local Governance and Subsidiarity; Poverty and Income Distribution; Rural Development Policies; Business Administration; Health and Education; Finance and Banking; Economics and Law; Spatial Economics; Law and Business* have been selected as sub-issues of the conference.

Members of the scientific committee have played a key role by evaluating the selection process of abstracts that had submitted for consideration and only the most relevant 70 papers were selected from a large pool of applicants. This effort makes a significant contribution to academic qualifications of our meeting. We thank to all those who contributed this effort and special thanks to members of the Organizing Committee. We hope the Conference will have a very beneficial effect to the participants and the scientific world as well.

Sosyoekonomi Society



**Session: I-B / 09.30-11.00**

**27 October 2017 Friday**

**1<sup>st</sup> Day**

Room: *Salon Imperial*

Chair: **Aynur AKPINAR**

*The Relationships between Perceived Customer Value, Customer Satisfaction, Customer Loyalty and Switching Costs*

**Aybegum GUNGORDU-BELBAG & Metehan TOLON**

*Impacts of Electronic Word of Mouth Marketing on Consumer Purchase Behaviour*

**Mehmet BAS & Yasemin KASAP**

*Investigation of Web-Based Customer Relations Management of Electric Power Companies Listed at Borsa Istanbul*

**Fatih TEMIZEL & Sultan Fatih KOSTAKOGLU & Hayri BARUTCA**

*A Study on Continuity and Development of International Management and Organization Literature in Academic Areas: An Analysis of Content on Studies in Organizational Behaviour Literature*

**Ahmet ILHAN & Ercan INCE**

*The Importance and Consequences of Minority Rights on Discharge Decision in Joint Stock Companies*

**Halis KARADEMIR & Mehmet Fahrettin ONDER**

**Coffee Break 11.00-11.30**

**Session: II-A / 11.30-13.00**

**27 October 2017 Friday**

**1<sup>st</sup> Day**

Room: *Festsaal Imperial*

Chair: **Ali Vural CENGIZ**

*Refugee Economics: Case of Turkey*

**Isil Fulya ORKUNOGLU-SAHIN & Ahmet Burcin YERELI**

*Revisiting Successful Ageing with the Missing Factor; Case of Turkey*

**Seyran GURSOY-CUHADAR & Doga Basar SARIPEK**

*Economic Problems of the Social Security System in Turkey*

**Hasan Bulent KANTARCI & Suleyman SOYDAN**

*How Feminist Paradigm Can Contribute to the Struggle against Terrorism?*

**Busra OGUTCU**

*The Role of the State in the Health System in the Islamic Economy*

**Hasan Bulent KANTARCI & Adil KURBAN**

**Session: II-B / 11.30-13.00**

**27 October 2017 Friday**

**1<sup>st</sup> Day**

Room: *Salon Imperial*  
Chair: **Mehmet BAS**

*Asymmetric Relationships between Stock Price and Financial Ratios: The Case of BIST Manufacturing Sector*  
**Ekrem MERIC & Melik KAMISLI & Fatih TEMİZEL**

*The Long-Run Relationships between the CDS Indexes of Emerging Countries: Powerful Cointegration Approach*  
**Serap KAMISLI & Melik KAMISLI & Fatih TEMİZEL**

*Analysing Causality Relationships between CDS Indexes and Stock Market Volatility of European Countries*  
**Melik KAMISLI & Serap KAMISLI & Fatih TEMİZEL**

*Evaluation of Non-Current Assets in the Framework of TFRS 5 and Examination of Firms Listed in BIST (Istanbul Stock Exchange) 100 and 30 Indices as Use of Non-Current Assets Held for Sale Account in accordance with TFRS 5 in the Period 2007-2016*  
**Aynur AKPINAR**

*Index Construction via Maximum Drawdown Risk Measure: An Application for Morgan Stanley Capital Emerging Markets Index*  
**Habib KUCUKSAHIN & Göksal Selahatdin KELTEN & Furkan ERDOGMUS & Bilal GODE**

**Lunch Time 13.00 - 14.00**  
**Marmorsaal**

**Session: III-A / 14.00-15.30**

**27 October 2017 Friday**

**1<sup>st</sup> Day**

Room: *Festsaal Imperial*  
Chair: **Burcu FAZLIOGLU**

*Center-Periphery Relations in Turkey: A Conceptual and Empirical Reappraisal*  
**Joseph S. SZYLLOWICZ**

*European Union and Azerbaijan: Seeking a Stronger Energy Cooperation*  
**Cigdem SAHIN**

*Asymmetry in Fuel Geopolitics: Movement towards De-Dollarization and Strategic Objectives of the Development of Azerbaijan's Economy*  
**Aida GULIYEVA & Ulviyye RZAYEVA**

*Analysis of the Macroeconomic Indicators of the Countries with the MCDM Approach: The Case of D-8 Countries*  
**Irfan ERTUGRUL & Gozde SARI & Abdullah OZCIL & Tayfun OZTAS**

*Brazilian Debt and Its Correlation with Austerity*  
**Lucas CARVALHO**

**Session: III-B / 14.00-15.30**

**27 October 2017 Friday**

**1<sup>st</sup> Day**

Room: *Salon Imperial*

Chair: **Hasan Bulent KANTARCI**

*Environmental Policy and Issues in the United States*

**Itir OZER-IMER & Tugrul IMER**

*Influences of Industry 4.0 to Logistics Sector*

**Gul SENIR & Rabia EFEGLU**

*Dispute Settlement in Outer Space*

**Sezercan BEKTAS**

*An Evaluation of Industry 4.0 and Its Effects on Social Security*

**Bilal GODE & Fatih AKCAY**

*Reconsidering the Relationship between the Internationalization of Capital and the Technology Case in the Industry 4.0 Period*

**Suat AKSOY**

**Coffee Break 15.30-16.00**

**Marmorsaal**

**Session: IV-A / 16.00-17.30**

**27 October 2017 Friday**

**1<sup>st</sup> Day**

Room: *Festsaal Imperial*

Chair: **Aleksandra GÓRECKA**

*The Importance of the State Implication for Financial Stability in Islam Economy*

**Vedat CENGIZ & Hasan Bulent KANTARCI**

*The Effects of Organizational Citizenship Behaviours and Decision-Making Styles on Transformational Leadership Behaviour*

**Fetullah BATTAL & Ertugrul CINAR**

*The Emerging Trend of 'Expat-preneurs': A Headache for the Pre-Existing Ethnic Entrepreneur Theories*

**Richard Andrew GIRLING & Emilia BAMWENDER**

*New Evidence on Interest Rate Pass Through*

**Aysen SIVRIKAYA & Yasemin YALTA**

*Sustainable Growth and Its Finance: An Essay on Turkey*

**Nefise Tugba KART & Cihan Serhat KART**

**Session: IV-B / 16.00-17.30**

**27 October 2017 Friday**

**1<sup>st</sup> Day**

Room: *Salon Imperial*

Chair: **Basak CAKAR**

*The Importance of Competitive Intelligence for Success in Foreign Markets and Fields of Intelligence*  
**Cemalettin AKTEPE**

*Partnership versus Organising: Which has preferred by Turkish Trade Union Confederations?*  
**Sadik KILIC & Busra YUKSEL**

*The Sensitivity of Bilateral Trade to Exchange Rate: Markov Regime Switching Approach*  
**Aydanur GACENER-ATIS & Deniz ERER**

*The Bubbles in Turkish Liras/Dollar Exchange Rate and the Effects of Political and Country Risks: New Evidence from Sequential ADF Tests*

**Elif ERER & Ozge KORKMAZ & Deniz ERER & Tuba BILGIN**

*Deconstruction of Anarchy in Theories of International Relations*  
**Seyda GUDEK**

**2<sup>nd</sup> Day**

**Session: V-A / 09.30-11.00**

**28 October 2017 Saturday**

**2<sup>nd</sup> Day**

Room: *Festsaal Imperial*

Chair: **Doga Basar SARIPEK**

*Analysis of Incentives for Electricity Generation from Solar Energy in Turkey*  
**Tugba BERCINTURK & Fatih AKBAYIR & Ahmet Burcin YERELI**

*Impacts of the Tax Policies Implemented in the OECD Countries Following the Global Financial Crises on Tax Burden: The 2008 Financial Crisis and the Case of Turkey*  
**Hakan AY & Mehmet Latif HAYDANLI**

*Determinants of Tax Capacity and Tax Effort in Turkey for the Period of 1984-2012*  
**Emre ATSAN**

*The Impacts of Defence, Health and Education Expenditures on Economic Growth in Turkey*  
**Ali Eren ALPER**

*Relationship between Inflation and Unemployment: The ARDL Bound Testing Approach for Turkey*  
**Findik Ozlem ALPER**

**Session: V-B / 09.30-11.00**

**28 October 2017 Saturday**

**2<sup>nd</sup> Day**

Room: *Salon Imperial*

Chair: **Altug Murat KOKTAS**

*Globalization and the Changing in Tax Policies: Situation of Turkey After 1980*

**Ahmet INNECI & Sahin KARABULUT**

*Budgeting for Equality: The Turkey's Experience*

**Gokhan COBANOGULLARI & Ahmet Burcin YERELI**

*Development and Analysis of the Primary Income Account of Turkey*

**Fatih Hakan DIKMEN & Affan Hakan CERMIKLI & Erol BULUT**

*Is the Implementation of First Personal Income Tax in England a Coincidence?*

**Ibrahim ORGAN & Ali Gokhan GOLCEK**

*Renewable Energy and Public-Private Partnerships: A Wave Energy Case Study for Turkey*

**Sevda AKAR**

**Coffee Break 11.00-11.30**

**Marmorsaal**

**Session: VI-A / 11.30-13.00**

**28 October 2017 Saturday**

**2<sup>nd</sup> Day**

Room: *Festsaal Imperial*

Chair: **Isil Sirin SELCUK**

*Customs Duties Disputes and the Administrative Solution Methods*

**Ahmet INNECI & Mehmet TOSUNER**

*Burden of Proof in German and Turkish Tax Law: A Comparative Analysis*

**Eda OZDILER-KUCUK**

*A Novelty in Turkish Commercial Law: Execution of QR-Code on Cheques*

**Ebru TUZEMEN-ATIK**

*The Importance of the Principle of Legality in Terms of Fundamental Rights and Freedoms*

**Recep KAHRAMAN**

*The System of Transfer of the Development Rights and A Model Proposal for Turkey*

**Mehmet Ali AKSOY & Kursat YALCINER & Emine Ebru AKSOY & Murat CETINKAYA**

**Session: VI-B / 11.30-13.00**

**28 October 2017 Saturday**

**2<sup>nd</sup> Day**

Room: *Salon Imperial*

Chair: **Aysen SIVRIKAYA**

*Migrant Workers' Situation in the United Arab Emirates*

**Basak OZORAL**

*Evaluation of Human Development Scores of Turkic States*

**Nurbanu BURSA & Huseyin TATLIDIL**

*Socio-Economic Projection of Violence Against Women: A Semiotics Analysis on Yeşim Ustaoglu's Film: "Tereddüt / Clair-Obscure"*

**Merih TASKAYA**

*Well-Being Differences among the Employed: Evidence from Life Satisfaction Gap between the Public and Private Sector Employees in Turkey*

**Zehra Bilgen SUSANLI**

*Effectiveness of Education Expenditures in the Context of the Pisa Survey: A Review with Examples from Selected Countries*

**Murat ALP & Altug Murat KOKTAS & Ali Gokhan GOLCEK**

**Lunch Time 13.00 - 14.00**

**Marmorsaal**

**Session: VII-A / 14.00-15.30**

**28 October 2017 Saturday**

**2<sup>nd</sup> Day**

Room: *Festsaal Imperial*

Chair: **Hakan AY**

*The Institutional Framework of Macroprudential Policies and the Changing Role of Central Banks*

**Ali ILHAN & Metin OZDEMIR**

*Energy Consumption, Economic Growth and Current Deficit Relations in Turkey*

**Rabia EFEGLU & Gul SENIR**

*Understanding Sovereign Wealth Funds: Investment Activities and the Political Dimension*

**Ilker YAMAN & Ahmet Burcin YERELI**

*Impact of Taxes on Architectural Structures: A Historical Analysis*

**Ali Gokhan GOLCEK & Emre ATSAN & Altug Murat KOKTAS**

*Beyond Twin Deficit Hypothesis: Sectoral Financial Balances Approach*

**Serdal BAHCE & Deniz ABUKAN & Asli Ceren SARAL**

**Session: VII-B / 14.00-15.30**

**28 October 2017 Saturday**

**2<sup>nd</sup> Day**

Room: *Salon Imperial*

Chair: **Ahmet Burcin YERELI**

*The Evaluation of the Effective Use Power of the Purse in Turkey from the point of Accuracy Principle*  
**Vuslat GUNES**

*Fatality Fire of the Unemployment Hills*

**Kamil ORHAN**

*Traces of English Poor Laws in Sherlock Holmes Novels: A Socioeconomic Review*

**Altug Murat KOKTAS & Ali Gokhan GOLCEK & Ahmet Burcin YERELI & Isil Sirin SELCUK**

*University Students in Working Life: Example of Denizli Pamukkale University*

**Nagihan DURUSOY-OZTEPE**

*The Idea of Trade Protectionism and its Influence on the Ottoman Economic Thought in the Nineteenth Century*

**Anil BASARAN**



**27 October 2017 Friday**

**Session: I-A / 09.30-11.00**

## **INTERNATIONAL TRADE & DEVELOPMENT**

Room: *Festsaal Imperial*

Chair: **Tugrul IMER**

- Assessing the Determinants of Customs-Related Transaction Costs in Turkey  
**Halit YANIKKAYA & Zeynep AKTAS-KORAL**
- Efficiency of Regional Airports in Poland  
**Aleksandra GÓRECKA**
- The Relationship between the Level of Economic Development and Capacity for Generating CO<sub>2</sub> (Carbon) Emissions: Testing the Validity of the Environmental Kuznets Curve for Turkey  
**Murat PUTUN & Mehmet Sedat UGUR**
- Does It Matter Where You Export and Does Productivity Rise with Exporting?  
**Basak DALGIC & Burcu FAZLIOGLU & Michael GASIOREK**
- CO<sub>2</sub> Emissions Embodied in Exports for 40 Major Economies in 2000 and 2009: Calculating a Suggested Export Carbon Tax (SECT) Rate for Major Economies and Their Sectors  
**Ali Vural CENGIZ**

## Assessing the Determinants of Customs-Related Transaction Costs in Turkey

*Halit YANIKKAYA* (<http://orcid.org/0000-0003-1542-0174>), *Gebze Technical University, Turkey; e-mail: halityanikkaya@gtu.edu.tr*

*Zeynep AKTAS-KORAL* (<http://orcid.org/0000-0002-3755-3464>), *Gebze Technical University, Turkey; e-mail: zeynepaktas@yahoo.com*

**Keywords** : Transaction Costs, Customs Procedures, In-depth Interview, Turkey.

**JEL Classification Codes** : C93, D23, F10.

### Introduction

In the last few decades, the importance of different types of administrative and sometimes informal barriers in international trade has been increased since the most of tariffs and non-tariffs barriers have almost been successfully eliminated with the negotiations on trade liberalization under the World Trade Organization (WTO). In addition, increasingly globalizing production and distribution systems around the world also contribute to the recognition/importance of these time- (and thereby) money-consuming barriers in international trade operations.

Regarding the customs-related transaction costs, we consider the factors affecting the waiting time to clear the cargo or goods already in ports. Completing customs procedures certainly takes substantial times due to several idiosyncratic practises of these procedures. What we are interested here is the extra time consuming or additional procedures/bureaucracy though. Our study assesses whether the time span, and transaction costs in turn, is same for every similar foreign trade operations, and what factors determine and affect this time span.

### Methodology

By utilizing snowball sampling, we conduct our investigation through in-depth interviewing with 21 customs brokers and customs brokers assistants in the sample of Kocaeli province in Turkey.

Following empirical and qualitative studies in literature (e.g. APEC, 2000; Verwaal and Donkers, 2003; Oktem, 2010; Grainger, 2014), we develop our proposals as follows:

Proposal 1: Complexity of customs procedures has a positive effect on customs-related transaction costs. / Increased complexity of customs procedures increases customs-related transaction costs.

Proposal 2: Lack of experience and human capital of customs personnel can increase the customs-related transaction costs.

Proposal 3: Obtaining certificates of conformity/approval or laboratory analysis has a positive effect on (increases) customs-related transaction costs.

Proposal 4: Firm size has a negative effect on customs-related transaction costs.

Proposal 5: Implementation and integration of computerized customs systems has a negative effect on (reduces) customs-related transaction costs.

Proposal 6: Imports from relatively more risky countries has a positive effect on (increases) customs-related transaction costs.

### **Findings and Concluding Remarks**

The information obtained from interviewees confirms the relationships stated in our proposals. In APEC (2000), the complexity of customs procedures is found the most important issue about customs. Almost all the interviewees state that not only complexity of customs codes but also frequently changing structure of regulations are the main reasons for difficult procedures to comply with and these raise the customs-related transaction costs. According to experiences of interviewees, vastly different interpretations of the very same regulation are in question among different customs officers is an excellent example of the issue at hand.

Secondly, we consider the effect of customs personnel working at different hierarchical levels on customs-related transaction costs since they are responsible for conducting these complex procedures and can facilitate them. Most of the interviewees claim that customs officers do not have sufficient knowledge of customs codes and regulations. These insufficiencies of the personnel thus limit their problem-solving abilities. Disputes are generally moved to upper authorities since customs staff working at lower ranks is not willing to take any discretion. Customs personnel also affect/increase the customs-related transaction costs by completing the task in time or postponing it, or requiring unauthorized documentary controls.

As the difficulty of obtaining certificates of conformity/approval or other related documents is emphasized in Oktem (2010), Grainger (2014), and Ojala and Celebi (2015) we thirdly consider the effect of them on customs-related transaction costs. All the interviewees agree that obtaining additional documents increases the time spent for customs procedures. One of the important factors explaining why transaction costs and customs-clearance time in customs are so high/long is for the fact that it is very difficult and expensive to acquire the certificates of conformity/approval or laboratory analysis results of the imported goods. Since some laboratories are located distantly from the customs offices, obtaining the certifications and analysis reports takes days and even weeks resulting in delays and increases transaction costs. Another important entity besides the customs offices in foreign trade operations is banks. While it is very easy (relative to the past) to pay the customs duties by online banking, other banking transactions are still problematic and time-consuming such as bank transfer documents or letter of bank guarantee.

Verwaal and Donkers (2003) underline the economies of scale of transactions determined by size and frequency of transactions and find that a higher frequency and the larger transaction size result in lower customs-related transaction costs. If we expect that small size firms also engage in small transactions, we can expect a negative effect of firm size on customs-related transaction costs as stated in Proposal 5. According to information obtained from interviews, the effect of firm size on customs-related transaction costs arises from two main factors; simplified procedures and frequency of operations. On the one hand, firms having the Certificate of Customs Approved Operator Status (CCAOS) or qualified as the Authorized Economic Operator (AEO) can benefit from simplified procedures since their customs operations are generally carried out through blue and green lines. Being entitled as the CCAOS or qualified as AEO requires extremely difficult provisions that cannot be met by the smaller firms. This implies that dependent on the size, importing firms may face different

customs procedures, which is against the smaller firms and increases the transaction costs in their foreign trade operations. On the other hand, almost all the interviewees state that the frequency of import/export operations of both a firm and a product affects the time spent for customs procedures through several factors. For example, a firm can use the same laboratory analysis report in repetitive operations of the same firm for the same products imported from the same company. However, the probability of a declaration assigned to the red line is relatively high for import operations of the firms who imports for the first time, or very rarely. Although these can practically be reasonable in terms of risk analyses, they generate transaction costs against smaller firms' due to their relatively fewer foreign trade operations.

Verwaal and Donkers (2003) also reveal a negative relationship between implementation of computerized systems on customs-related transaction costs, which we also examine. Although there exists an overall satisfaction with the new electronic systems, the computerized system might have some disadvantages relative to the manual system. For instance, the electronic system imposes a penalty on all mistakes and requires a very long procedure to correct them, which causes money and time costs due to even small and inadvertent mistakes. In addition, the electronic systems are dependent to the basic infrastructure of the country, which may cause rare but significant problems.

Finally, we find the identity of exporter country is an important determinant of customs-related transaction costs in import operations, since the interviewees point out that imported goods from some risky countries mostly cleared through red line.

In short, our study finds that the most confirmatory factor indicating the importance of customs-related transaction costs is the difference in time spent for complementing the customs procedures of the same goods or the difference in time spent for complementing the customs procedures of declarations allocated to the same line. We conclude that complexity of customs procedures, lack of experience and human capital of customs personnel, institutions other than customs offices, firm size, simplified procedures, frequency of operations, country of origin, and information technology structure of the country are the principal factors affecting the customs-related transaction costs in Turkey. Any improvements in those factors could result in decrease in customs-related transaction costs.

## References

- APEC (2000), "Survey on customs, standards, and business mobility in the APEC region", A Report by the APEC for the APEC Business Advisory Council.
- Grainger, A. (2014), "Trade and customs compliance costs at ports", *Maritime Economics & Logistics*, 16(4), 467-483.
- Ojala, L. & D. Celebi (2015), "The World Bank's Logistics Performance Index (LPI) and drivers of logistics performance", in: *Document prepared for the Roundtable on Logistics Development Strategies and their Performance Measurements* (9-10 March 2015, Queretaro, Mexico).
- Oktem, M.B. (2004), "Turkey", L. De Wulf & J.B. Sokol (eds.), in: *Customs Modernization Initiatives: Case Studies*, The World Bank, Washington, D.C., 101-112.
- Verwaal, E. & B. Donkers (2003), "Customs-related transaction costs, firm size and international trade intensity", *Small Business Economics*, 21, 257-271.

## Efficiency of Regional Airports in Poland

*Aleksandra GÓRECKA* (<http://orcid.org/0000-0002-2679-561X>), Warsaw University of Life Sciences, Poland; e-mail: [aleksandra\\_gorecka@sggw.pl](mailto:aleksandra_gorecka@sggw.pl)

*Joanna BARAN* (<http://orcid.org/0000-0001-9801-4344>), Warsaw University of Life Sciences, Poland; e-mail: [joanna\\_baran@sggw.pl](mailto:joanna_baran@sggw.pl)

**Keywords** : Airport, Efficiency, DEA, EU Funds.

**JEL Classification Codes** : R11, R15, R40.

### Extended Abstract

From 2004, when Poland joined EU structures, huge amount of EU fund has been spent on the projects aimed at transport infrastructure. The development of the transport sector, especially of the infrastructure, was one of the most strategic areas that needed to be modernized. Poland's transport infrastructure after 1991 drastically collapsed, and in a young democratic country, the government was unable to meet the needs of modernizing existing infrastructure or making new investments in this area. It was known, however, that transport infrastructure is an important part of the social life and economic situation of the regions. Its structure and scope determine the mobility of the inhabitants, the potential of the area for settlement, and, from the point of view of entrepreneurship development, the possibility of locating companies or conducting commercial cooperation.

From 2004 until 2013 (two periods of EU founding program) the attention has been paid mostly on development and reconstruction of roads, though the sector which also was noticed as significant for the country was aviation. In many project applications, the most important advantages of building new airport were tourism and the economic development. These were supposed to bloom after opening new airport in region.

The aim of this article is to assess the efficiency of investments (including the use of EU co-financing) in the construction or modernization of regional airports in Poland and to establish a ranking of regional airports in Poland according to the efficiency of investments made in 2004-2013. The research covered all regional airports in Poland (i.e. excluding Warsaw Chopin Airport) which benefited from European Union funding for the construction or modernization of airports in 2004-2013 - a total of 12 facilities.

To present efficiency of airports in Poland DAE method is used. The study is based on secondary data collected from regional airport authorities and regional statistical offices. The hypothesis of this paper is that more effective airports are those which were supported stronger by external funds (e.g. EU). In the paper, I will try to deal with this problem and present findings and explain the results. From scientific point of view, currently, there are no studies in Poland based on DEA method involving airport efficiency with one of the factor where one of the input is external found from EU for airport development. From the practical site, it is strongly advisable to investigate whether supporting development of airport in the region influenced their efficiency. The following variables were used for the calculated DEA model:

input x1- the total value of funds allocated for investments in 2004-2013,

output y1 - increase in the number of passengers served between 2004 and 2013,

output y2 - increase in performed airport operations (ATM) in the years 2004-2013,

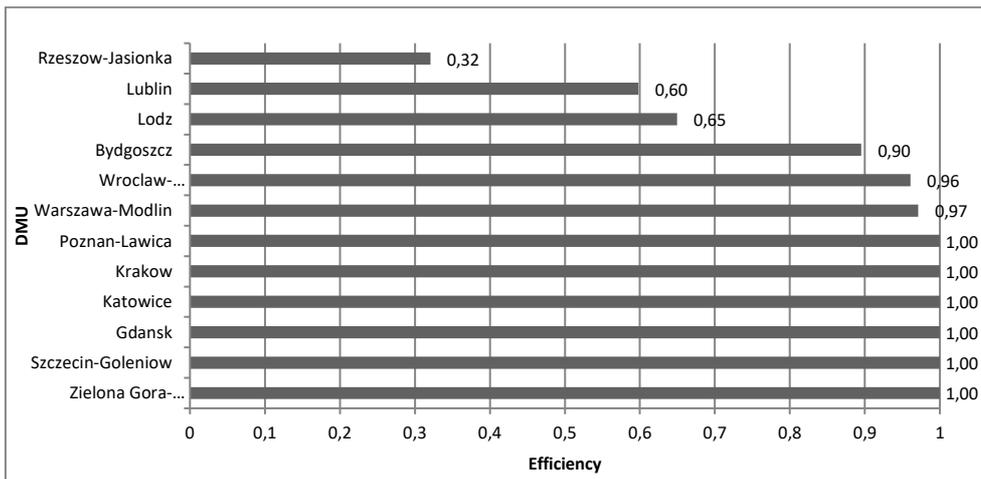
output y3 - increase in the number of parking aprons in the years 2004-2013,

output y4 - increase in the number of direct regular destinations directly operated by aircrafts in the years 2004-2013,

output y5 - increase in the number of gates in the years 2004-2013.

Based on the Data Envelopment Analysis method, a ranking of Polish airports was created (Figure: 1) Six airports were considered to be efficient in using investment outlays (Ławica, Kraków, Katowice, Gdańsk, Szczecin-Goleniów, Zielona Góra - Babimost).

**Figure: 1**  
**A Ranking of Polish Airports**



Source: Own calculation.

For ineffective airports, by benchmarking of facilities, the authors suggested changes to be made at the level of achieved effects that could improve the efficiency of the investment.

The DEA airport ranking may, however, be disputable, since the adoption of another variable list could produce other results. This ranking should therefore be an impetus for further research. According to the authors, to evaluate the efficiency of investment, one should use an integrated approach - based on different methods that complement each other and thus allow one to formulate credible conclusions. The efficiency of investment is a complex economic phenomenon, and the methods used to analyse it have their advantages and limitations. Research using other methods and various factors that determine the efficiency of the investment can provide a starting point for proper interpretation and assessment of the efficiency of airport investment, and thus for the search for directions to improve this efficiency.

## The Relationship between the Level of Economic Development and Capacity for Generating CO<sub>2</sub> (Carbon) Emissions: Testing the Validity of the Environmental Kuznets Curve for Turkey

*Murat PUTUN* (<http://orcid.org/0000-0002-8920-7555>), *Cukurova University, Turkey; e-mail: mputun@cu.edu.tr*

*Mehmet Sedat UGUR* (<http://orcid.org/0000-0002-2562-5299>), *Cankiri Karatekin University, Turkey; e-mail: sedatugur@karatekin.edu.tr*

**Keywords** : Carbon Emission, Industrial Pollutants, ARDL Model.

**JEL Classification Codes** : O13, O44, Q56.

### Extended Abstract

The environmental framework brought into the global political agenda by the Kyoto agreement have potentially stirred up positive spirit concerning concrete action aiming to protect ecological system and restoration of environmental balance. In addressing this agenda across the World, the Kyoto Protocol has been a milestone in this regard. Kyoto agreement has been followed by Paris Accord in 2015 and further consolidated with an additional Protocol in Marrakesh, Morocco. The CO<sub>2</sub> emissions generated through industrial activities are established to be the root causes for climate change across the globe and often interchangeably defined as “Global Warming”. Share of each society in carbon emission generation differ across the World. The level of industrialization and speed of growth drive and standard of development found in an economy can help us to understand a given economy’s capacity to create pollution in this regard.

Carbon emissions through industrial production have increasingly become a menace for ecological system and a peaceful co-existence with other living creatures and causes losing natural resource investment. The root-causes and domains of environmental degradation are very diverse and have reached alarmingly high levels in today’s high tech, mass consumption and production centred globalized World order. The other causes of environmental degradation ranges from systematic deforestation, water pollution, destruction of animal inhabitants, unnatural cultivation of land, illegal poaching of rare animals, destructive military battles and all forms of fighting, military exercises and so on. This paper focuses on Carbon emissions as a major source of global pollutant.

An established theoretical approach tries to explain relevant capacity to generate carbon emissions with a reference to the level of industrial development and the degree of growth. It is argued that in the early stages of industrialization (low income-middle income-state of a developing country) potential for carbon emissions is high-through increase in industrial production-reaching a peak through constant increase and starting to decline thereafter. According to this view; after industrialization reaches to maturity, the amount of relevant industrial pollution decline. In a very simplistic viewpoint, it suggests that economic growth is good for the environment, above certain levels. But, in fact there is no guarantee that economic growth will lead to an improved environment, and in general, the opposite is the case. In the common literature, the inverted U-shaped relationship between carbon emissions (CO<sub>2</sub>) releases and per capita GDP is a dominant analysing instrument

which is known as Environmental Kuznets Curve (EKC). Moreover, a variety of recent and emerging literature incorporates both the growth of economy and emissions, as well as use of energy and progress of the economy into a multivariate framework to analyse empirically the dynamic relationships altogether.

Thus, this study is an attempt to measure the validity of the above-mentioned theory through empirical treatment with the help of co-integration test, the vector error correction model and an ARDL bound test. The study then aims to find whether there is a long-term relationship between economic growth and environmental pollution. In the literature, the methodology is used by different researchers for different country levels. The findings, in general, endorse the presence of inverted U association between growth of the economy and carbon emissions releases. Given this framework, the need for empirical assessment becomes increasingly relevant in partial contribution to policy innovations in for the reduction of pollution. The primary (and raw) findings for the study supports environmental Kuznets curve in Turkey for the period of 1960-2013. The variables are obtained from World Bank database and because the natural logs are very convenient for describing relations between economic variables, we used the logarithmic forms of all variables. In the study, we have CO<sub>2</sub> emissions as a dependent variable and three independent variables that they are economic growth (measured by GDP per capita), economic growth squared (as EKC variable) and energy consumption. We use Pesaran and Shin (1999) and Pesaran, Shin and Smith (2001)'s approach for the ARDL analysis that it is superior and more effective to previous approaches on determining the relationship of (long-term and short-term) co-integration between variables. The ARDL form of variables in our model is shown below:

$$\ln\text{Co2E}_t = \alpha_0 + \sum_{i=1}^p \alpha_{1,i} \ln\text{Co2E}_{t-i} + \sum_{i=0}^q \alpha_{2,i} \ln\text{GDPpC}_{t-i} + \sum_{i=0}^v \alpha_{3,i} \ln\text{GDPpC}^2_{t-i} + \sum_{i=0}^w \alpha_{4,i} \ln\text{EnUSE}_{t-i} + \varepsilon_t$$

Before applying ARDL approach, we obtained the unit root test results to check whether the variables are stationary or not. We used three different unit root tests (named Augmented Dickey-Fuller, Phillips-Perron and Elliott, Rothenberg and Stock (1996)'s Dickey-Fuller GLS) and found that the variables are stationary at 1st difference, in general. The table below shows the results for unit root tests:

**Table: 1**  
**ADF, PP and GLS Unit Root Test Results**

(with Trend & Intercept)		Level			1 <sup>st</sup> Difference		
	Variables	ADF	PP	GLS	ADF	PP	GLS
Test statistic	lnCo2E	-2,4523 (0.3497)	-2,5335 (0.3115)	-1,2539	-7,9465 (0.0000)	-7,9359 (0.0000)	-7,4552
	lnGDP	-2,4416 (0.3549)	-2,5828 (0.2895)	-2,5501	-7,0326 (0.0000)	-7,0324 (0.0000)	-6,7227
	lnGDP2	-2,1929 (0.4835)	-2,3482 (0.4016)	-2,3922	-6,9960 (0.0000)	-6,9955 (0.0000)	-6,7519
	lnEnUSE	-2,4067 (0.3721)	-2,4578 (0.3470)	-2,2024	-7,0528 (0.0000)	-7,0697 (0.0000)	-6,6967
Test Critical values	1% level		-4,1408	-3,7586		-4,1446	-3,7624
	5% level		-3,4969	-3,1804		-3,4987	-3,1836
	10% level		-3,1776	-2,8810		-3,1786	-2,8840

Then, we estimated a bound test for ARDL model to see whether there is a long-term relationship between the variables. The table below shows the primary result and it presents that F-stat value is bigger in all levels which means CO<sub>2</sub> emissions, energy consumption and economic growth are co-integrated in the long-term:

**Table: 2**  
**ARDL (1, 0, 0, 1) Bound Test Results**

F-stat (Prob.)	%10 level	%5 level	%1 level
8.7353 (0.0000)	2.37-3.2	2.79-3.67	3.65-4.66

Also, we have estimated the ARDL model, the coefficients and the error correction form. According to the results which are shown in table below, all coefficients are statistically significant at 1% level and signs of the coefficients are consistent with the theory. The model shows that CO<sub>2</sub> emissions affect energy use and economic growth positively and affect economic growth squared (EKC variable) negatively. It means that, for the period of 1960-2013 in Turkey, the results support environmental Kuznets curve in the long run. Finally, the coefficient of ECM term is estimated as -0.5495 which is negative as expected and it is statistically significant. It means that a deviation from short term CO<sub>2</sub> emissions will be overcome around 54.95% at the next period to reach long-term equilibrium:

**Table: 3**  
**ARDL (1, 0, 0, 1) Model Estimation Results and Error Correction Form**

	Coefficient	t-stat	Prob.
lnCo2E(-1)	0.4505	3.7027	0.0006
lnGDPpC	5.1681	3.4815	0.0011
lnGDPpC^2	-0.2784	-3.5131	0.0010
lnEnUSE	1.0146	8.2537	0.0000
lnEnUSE(-1)	-0.5981	-4.2482	0.0001
C	-26.2455	-3.6665	0.0006
R2	0.99	DW-stat	2.52
F-stat	4999.928	Prob (F-stat)	0.0000
ECM(-1)	-0.549533	-6.8843	0.0000

To this end, the main results of the study show that there is a long-term co-integration with relevant variables and the results also support EKC hypothesis for Turkey. Because the environmental pollution is highly co-integrated with economic growth, the authors aim to stimulate more researches which include (particularly) the stable growth policies to minimize the environmental pollution.

### References

- Kuznets, S. (1955), "Economic Growth and Income Inequality", *American Econ. Rev.*, 49, 1-28.
- Pesaran, M.H. & Y. Shin (1998), "An Autoregressive Distributed-lag Modelling Approach to Cointegration Analysis", *Econometric Society Monographs*, 31, 371-413.
- Pesaran, M.H. & Y. Shin & R.J. Smith (2001), "Bounds Testing Approaches to the Analysis of Level Relationships", *Journal of Applied Econometrics*, 16(3), 289-326.

# CO<sub>2</sub> Emissions Embodied in Exports for 40 Major Economies in 2000 and 2009: Calculating a Suggested Export Carbon Tax (SECT) Rate for Major Economies and Their Sectors

*Ali Vural CENGİZ* (<http://orcid.org/0000-0002-1662-0023>), South University, U.S.A.; e-mail: [acengiz@southuniversity.edu](mailto:acengiz@southuniversity.edu)

**Keywords** : Emissions Embodied in Exports, Export Carbon Tax, Climate Change, Carbon Intensity, Net Export Value.

**JEL Classification Codes** : Q56.

## Introduction

The goal of this study is threefold: first, calculating the emissions embodied in exports (EEEs) in 40 major economies in 2000 and 2009; second, studying the changes in EEEs from 2000 to 2009 in developed and developing countries; and, third, calculating suggested export carbon tax (we call it SECT) rates for all 40 major economies and their 34 major producing sectors. Since carbon emissions is the most important element of climate change and 25 to 65% of total emissions of the countries get transferred by international trade, climate change problem can be fought by taxing of international trade as one of the most practical ways. Since developed countries import mostly labour-intensive consumer goods with higher carbon intent, tax rates are higher for developed country import, then such taxing is fair and very doable. Collected tax funds can be invested in environment protecting projects to solve the climate change problem and cost of pollution elimination would be picked up mostly by developed countries.

## Purpose of the Study

Calculating embodied emissions in exports of major economies, finding out how important embodied emissions in trade comparing all over emissions of each country, finding out the emission policies and realities in developed and developing economies, and calculating a suggested export carbon tax (SECT) for major economies and for each sector.

## Methods Used

SRIO (Single Region Input Output Model) and all calculations were made by Matlab. Advantages of SRIO model are simplicity and suitability for the date set. There are not any disadvantages comparing to MRIO (Multi Region Input Output Model) since we studied exports not imports.

## Tables

Table 1: Regions of the World.

Table 2: 'F' vectors calculated from Input Output tables.

Table 3: Emissions embodied in exports for 40 major economies in 2000 and 2009.

Table 4: Total production, exports and emissions in developed and developing countries.

Table 5: Emission embodied in export changes for country groups in 2000 and 2009.

Table 6: Net exports of major countries after carbon cleaning cost subtracted - 2009.

Table 7: Suggested Tax/certificate ratios for developed and developing countries - 2009.

Table 8: Suggested tax/certificate ratios for developed and developing countries - 2009.

### **Graphics**

Graphic 1: Production, exports and emission increases in the World (2000-2009).

Graphic 2: Emission embodied in export changes from 2000 to 2009.

Graphic 3: Production and EEE changes from 2000 to 2009.

### **Equations**

$X = Z \cdot I + y = Adx + y$  basic I/O formula

$X = (I - Ad) y = Ldy$  rearranged equation

$Ce = f' X = f'(I - Ad) y = f' Ld (Yd + Ye)$  CO<sub>2</sub> emissions for each industry

$Ce = f'(I - Ad) ye = f' Ld ye$  emissions embodied in exports

$Ce = f'(I - Ad) \hat{y}e$  for sectors

$Ce = f' * L * \hat{y}e$  final formula used to calculate EEEs.

### **Data Source**

World Input-Output Database (WIOD) that is kept and organized by the EU

### **Findings**

Most Far Eastern countries need to charge highest taxes between 3% and 6% to clean up the carbon mess in their country and around - since air moves. China and Republic of China (Taiwan) need to charge the highest carbon cleaning taxes being second in the list after the exception of Europe, Bulgaria. Russian Federation, India and Korea are the other countries whose cleaning cost of carbons embodied in exports are more than 2%. The countries with lowest SECT rates are Luxembourg, Ireland and Sweden who are three of the countries in Northern Europe where people are very much concerned with climate change.

In 2000, developed countries needed to charge 1.6% tax or process carbon certificates that would be 1.6% of their exports to clean up carbon emissions versus in developing countries 5.25% needed. Back then, developed countries exported five times more than the developing countries; but their emissions embodied in exports were about only 50% more as a huge difference in between developed and developing world.

In 2009, needed tax rate (or certificates ratio) was reduced to 1.1% and 3.76% respect. In 2009, developed countries were exporting 2.5 times more than the developing ones and their emissions embodied in exports were 30% less. Suggested export carbon tax was dropped for both country groups; but, the difference between two groups was still more than three times; increased from 3.28 times to 3.41 times.

While only 1% of total exports in average would clean the carbon mess in the developed World and about 4% tax needed to clean carbon emissions in the developing countries in 2009. As a practical solution, developing countries need to pay extra 1% for the technology goods to developed countries and receive 4% more for their traditional exports from the developed world as trade (export) carbon tax.

### **Conclusions and Policy Implications**

How to fight the climate change problem, with or without an export carbon tax, is one of the biggest questions for environmental economists. On one hand, a tax will remove capital from the industry, suppressing possibly useful economic activity, but conversely, the polluter will not need to hedge as much against future uncertainty since the amount of tax will track with profits. The burden of a volatile market will be borne by the controlling (taxing) agency rather than the industry itself, which is generally less efficient. An advantage is that, given a uniform tax rate and a volatile market, the taxing entity will not be able to pick “winners and losers” and the opportunity for corruption will be less.

For the countries use carbon certificates mandatory and efficiently, carbon certificates could be processed in plant base or sectoral base by Ministries of Environment to reduce the total emissions. Even for those countries an export carbon tax still can be used since certificate programs would decrease total emissions and tax rates would decrease seriously in those industries. For the countries do not press carbon certification programs, export carbon tax is a must. Developed countries would prefer dealing with the countries practising carbon certificate programs, and then, most exporters would prefer carbon certificate programs in time.

Suggested export carbon tax (SECT) is different from the carbon tax on some imported or produced goods. A carbon tax is a price-based policy since the regulator sets the price directly. In principle, all sources of CO<sub>2</sub> emissions get taxed at the same rate per ton of CO<sub>2</sub> emitted. One of the ways this can be accomplished by taxing all fossil fuel sources in proportion their carbon content. In practice, different fuels and different fuel uses may be taxed at quite different rates (or not at all) and the resulting tax may still be referred to as a carbon tax. The resulting carbon price, since it is directly regulated, is generally more predictable than the price of emission permits under a cap-and-trade system.

As of July 2014, such carbon taxes exist in India, Japan, South Korea, Denmark, Finland, France, the Republic of Ireland, the Netherlands, Sweden, the United Kingdom, Norway, Switzerland, Costa Rica, parts of Canada, and parts of the United States. Of course, if all taxes on fossil fuels counted, the list would be much longer. An additional export carbon tax can be implemented locally, nationally, or by the EU Parliament. It cannot be presented on a global scale because there is no government with that type of power. However, all countries could commit to a harmonized set of national carbon taxes. Prof. Joseph Stiglitz and Prof. James Hansen of Columbia University and Prof. of Yale University, the leading scientists on the issue, have been prominent proponents of carbon taxes. As a new exp William Nordhaus ort carbon tax, we suggest all exported goods shall have a small price-hike to cover the emissions embodied in exports. This tax can be collected easily at the customs, at the border-passes.

Taxes can be collected by an international institution developed under Paris Agreement and distribute the funds for emission-fighting projects mostly in developing countries.



**27 October 2017 Friday**

**Session: I-B / 09.30-11.00**

## **MANAGEMENT & MARKETING**

Room: *Salon Imperial*

Chair: **Aynur AKPINAR**

- The Relationships between Perceived Customer Value, Customer Satisfaction, Customer Loyalty and Switching Costs

**Aybegum GUNGORDU-BELBAG & Metehan TOLON**

- Impacts of Electronic Word of Mouth Marketing on Consumer Purchase Behaviour

**Mehmet BAS & Yasemin KASAP**

- Investigation of Web-Based Customer Relations Management of Electric Power Companies Listed at Borsa Istanbul

**Fatih TEMIZEL & Sultan Fatih KOSTAKOGLU & Hayri BARUTCA**

- A Study on Continuity and Development of International Management and Organization Literature in Academic Areas: An Analysis of Content on Studies in Organizational Behaviour Literature

**Ahmet ILHAN & Ercan INCE**

- The Importance and Consequences of Minority Rights on Discharge Decision in Joint Stock Companies

**Halis KARADEMIR & Mehmet Fahrettin ONDER**

# The Causal Relationships between Perceived Customer Value, Customer Satisfaction, Customer Loyalty and Switching Costs

*Aybegum GUNGORDU-BELBAG* (<http://orcid.org/0000-0001-8704-0045>),  
Bartın University, Turkey; e-mail: [agungordu@bartin.edu.tr](mailto:agungordu@bartin.edu.tr)

*Metehan TOLON* (<http://orcid.org/0000-0003-0832-3632>), Gazi University,  
Turkey; e-mail: [metehan@gazi.edu.tr](mailto:metehan@gazi.edu.tr)

**Keywords** : Perceived Customer Value, Customer Satisfaction, Customer Loyalty, Switching Costs, GSM Operators.

**JEL Classification Codes** : M10, M30, M31.

## Introduction

The present study examines the relationship between perceived customer value, customer satisfaction, customer loyalty and switching costs. Surveys were carried out on 234 GSM operator users in Turkey. We carried out exploratory analysis and performed a measurement model. To test the causal relationships between variables we performed a structural equation model. Our findings show that there is a positive and significant relationship between customer satisfaction and customer loyalty. There is a positive and significant relationship between perceived value and customer loyalty. However, switching costs does not have a significant relationship with customer loyalty. Furthermore, customer satisfaction totally mediates the relationship between customer perceived value and customer loyalty.

Mobile market data in Turkey shows that there are 75.724.413 mobile subscribers in Turkey, 2017. In the 1<sup>st</sup> quarter of 2017, Avea has gained 77000 mobile subscribers; Vodafone has gained 27000 mobile subscribers and Turkcell has lost 104000 mobile subscribers (Turkey Electronic Communication Sector Three Months Market Data Report, 2017). This situation reveals the concept of switching costs while transferring from one GSM operator to another. Switching costs involve the perceptions of consumers about time, effort and money while transferring from one business to another (Chang & Chen, 2009). Current study examines the relationships between perceived customer value, customer loyalty, customer satisfaction and switching costs.

## Literature Review

*Customer satisfaction* can be based on the evaluation of a specific purchase. Furthermore, it involves the consumers' general grading of the brand based on purchasing and consumption experience (Aydn et al., 2005). In several studies (Yang & Peterson, 2004; Dick & Basu, 1994; Chang et al., 2009), it is noted that customer satisfaction affects customer loyalty, positively. Furthermore, customer satisfaction mediates the relationship between customer perceived value and customer loyalty (Lam et al., 2004). *Customer loyalty*, represents the power of the relationship between a person's relative attitude and the situation of becoming a regular customer (Dick & Basu, 1994) and it is a basic consequence of customer satisfaction (Aydn et al., 2005; Aktepe et al., 2015). *Perceived value* is defined as the ratio of benefits received from providers relative to the costs sacrificed by customers (Yang & Peterson, 2004) and effects customer satisfaction (Lam et al., 2004; Edward & Sahadev,

2011; Eggert & Ulaga, 2002) and customer loyalty (Chang et al., 2009). *Switching costs* are one of the switching barriers in consumer services and the other switching barriers are interpersonal relationships and attractiveness of competing alternatives (Jones et al., 2000). Switching costs affect customer loyalty, positively (Lam et al., 2004; Aydin et al., 2005; Stan et al., 2013). Thereby, we propose:

*H1: Customer perceived value affects customer loyalty, positively.*

*H2: Customer satisfaction affects customer loyalty, positively.*

*H3: Customer perceived value affects customer satisfaction, positively.*

*H4: Switching costs affect customer loyalty, positively.*

*H5: Customer satisfaction mediates the relationship between perceived customer value and customer loyalty.*

### **Method**

In the present study, first we carried out a pilot test with 50 GSM operator users and calculated Cronbach Alpha coefficients for each scale. Hair et al. (1998) suggest that Cronbach Alpha coefficient should be above 0.60 and according to that, all our scales are reliable. After enabling reliability for all the scales, we performed exploratory factor analysis for each scale on our main sample (234 GSM operator users). Then, we performed measurement model and structural equation model. We also performed Pearson correlation analysis, reliability and validity analyses. We used customer loyalty scale (Aydin et. al, 2005; adopted from Narayandas, 1996); customer satisfaction scale (Aydin et. al, 2005; adopted from NQRC, 1995 and Feick et. al, 2001); switching costs scale (Aydin et. al, 2005; adopted from Burnham et. al, 2003, Gultinan, 1989, Jones et. al., 2002). We also used perceived value scale (Levesque & McDougall, 1996). Our sample mostly consists of women (56.4%), single (76.5%) consumers who are 18-25 years old (65.4%) and have income under 500 TLs (30.3%). Most of them are undergraduates (67.5%). 41.5% of participants are Avea (Turk Telekom) users, 32.1% of them are Turkcell users and 26.5% of them are Vodafone users.

### **Findings**

We performed exploratory factor analysis (EFA) for all scales. According to EFA, all the scales are unidimensional and factor loadings are greater than 0.50. After that we performed a measurement model. All the fit indices are acceptable according to suggested standards<sup>1</sup> (CMIN/DF: 2.8; RMSEA: 0.088; CFI: 0.905; IFI: 0.906). Factor loadings are greater than 0.50. As can be seen in Table 1, all the correlations are below 0.80. and reliability and validity for all the scales are ensured<sup>2</sup>.

---

<sup>1</sup> *These standards are CMIN/DF ≤ 5, RMSEA ≤ .10, CFI ≥ .90, IFI ≥ .90 (Marsh & Hocevar, 1985; Maccallum et al., 2001; Byrne, 2010; Engel et al., 2003; Bentler, 1992; Bollen, 1989).*

<sup>2</sup> *To test construct validity, we calculated composite reliability for all dimensions and we found that these are reliable as they are above 0.70 suggested by Nunnally and Bernstein (1994). As for convergent validity, AVE values are above 0.50 (Hair et al., 1998; Bagozzi & Yi, 1988). To test discriminant validity, we paid regard to square root of each variable's AVE value to be greater than the correlation of each dimension with other dimensions (Fornel & Larcker, 1981).*

**Table: 1**  
**Summary Statistics, Correlations, Validity and Reliability**

	Mean	St. Deviation	Switching Costs	Customer Loyalty	Customer Satisfaction	Perceived Value
Switching Costs	2.91	0.76	1	.180**	.131*	-.050
Customer Loyalty	3.50	1.01	.180**	1	.792**	.368**
Customer Satisfaction	3.61	1.01	.131*	.792**	1	.411**
Perceived Value	3.31	0.87	-.050	.368**	.411**	1
Average Variance Extracted	-	-	0.52	0.64	0.81	0.53
Composite Reliability	-	-	0.84	0.90	0.92	0.84
Cronbach Alpha	-	-	0.83	0.89	0.92	0.84

\*\* . Correlation Is Significant at the 0.01 Level (2-Tailed). \* . Correlation Is Significant at the 0.05 Level (2-Tailed).

Finally, we performed a structural equation model (Table 2). We used Maximum Likelihood method. All the fit indices are acceptable (CMIN/DF: 2.83; RMSEA: 0.089; CFI: 0.951; IFI: 0.951) and all the parameters in the model are statistically significant ( $t > 1.96$ ). We excluded insignificant paths. Table 2 presents that perceived value affects customer satisfaction positively. Moreover, there is a positive relationship between customer satisfaction and customer loyalty. According to the model, when Perceived Value goes up by 1 standard deviation, Customer Satisfaction goes up by 0.513 standard deviations. When Customer Satisfaction goes up by 1 standard deviation, Customer Loyalty goes up by 0.903 standard deviations.

**Table: 2**  
**Structural Equation Model**

Path		Standardized regression weights	S.E.	C.R.	P
Customer Satisfaction	<--- Perceived Value	.513	.107	6.791	***
Customer Loyalty	<--- Customer Satisfaction	.903	.050	11.892	***

Our findings present that customer satisfaction totally mediates the relationship between customer perceived value and customer loyalty (Table 3). We carried out the mediation test following Baron and Kenny (1986)'s suggestions. In sum, according to all our findings, H1 and H4 are rejected and H2, H3 and H5 are accepted.

**Table: 3**  
**Mediation Analysis**

Model	Path	Standardized regression weights	S.E.	C.R.	P	Fit indices
1	Customer Loyalty <--- Perceived Value	.450	.076	5.925	***	CMIN/DF: 2.85 CFI:0.95 RMSEA: 0.89 IFI:0.95
2	Customer Satisfaction <--- Perceived Value	.722	.108	6.697	***	
	Customer Loyalty <--- Customer Satisfaction	.582	.052	11.208	***	CMIN/DF: 3.6 CFI:0.93 RMSEA: 0.9 IFI:0.93
	Customer Loyalty <--- Perceived Value	.048	.043	1.106	.269	

## Conclusion and Discussion

When there is a business which has a big share in the market, the effect of switching costs on the relationship between customer loyalty and customer satisfaction will increase. Because unsatisfied customers will demand the same brand continuously as a reason of the penalty for the switching is high. In other terms, they should remain loyal to the brand (Aydin et al., 2005). However, contrary to

previous studies (Lam et al., 2004; Stan et al., 2013), our study shows that switching costs and perceived value are not significantly related with customer loyalty for the consumers of GSM operators in Turkey. However, we found that customer satisfaction affects customer loyalty, positively. GSM operators should maximize customer satisfaction to increase the loyalty of consumers. To maximize customer satisfaction, perceived value which has a positive effect on customer satisfaction must be taken account. Moreover, our study shows that customer satisfaction totally mediates the relationship between customer perceived value and customer loyalty. Future research may use switching costs as a mediator or moderator variable. Furthermore, the concept of switching costs can be studied for different sectors.

### References

- Aktepe, C. & M. Bas & M. Tolon (2015), *Müşteri İlişkileri Yönetimi*, Detay Yayıncılık, Üçüncü Baskı.
- Aydin, S. & G. Özer & Ö. Arasil (2005), "Customer loyalty and the effect of switching costs as a moderator variable", *Marketing Intelligence & Planning*, 23(1), 89-103.
- Bagozzi, R.P. & Y. Yi (1988), "On the Evaluation of Structural Equation Models", *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Baron, R.M. & D.A. Kenny (1986), "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic and Statistical Considerations", *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Bentler, P.M. (1992), "On the Fit of Models to Covariances and Methodology to the Bulletin", *Psychological Bulletin*, 112, 400-404.
- Bilgi Teknolojileri ve İletişim Kurumu (2017), *Turkey Electronic Communication Sector Three Months Market Data Report* (2017, 1<sup>st</sup> quarter), Sektörel Araştırma ve Strateji Geliştirme Dairesi Başkanlığı, Ankara.
- Bollen, K.A. (1989), "A New Incremental Fit Index for General Structural Equation Models", *Sociological Methods and Research*, 17, 303-316.
- Byrne, B.M. (2010), *Structural Equation Modelling with AMOS Basic Concepts Application and Programming*, Second Edition, Routledge Taylor and Francis Group.
- Burnham, T.A. & J.K. Frels & V. Mahajan (2003), "Consumer switching costs: a typology, antecedents, and consequences", *Journal of the Academy of marketing Science*, 31(2), 109-126.
- Chang, H.H. & S.W. Chen (2008), "The impact of customer interface quality, satisfaction and switching costs on e-loyalty: Internet experience as a moderator", *Computers in Human Behavior*, 24(6), 2927-2944.
- Chang, H.H. & Y.H. Wang & W.Y. Yang (2009), "The impact of e-service quality, customer satisfaction and loyalty on e-marketing: Moderating effect of perceived value", *Total Quality Management*, 20(4), 423-443.
- Dick, A.S. & K. Basu (1994), "Customer loyalty: toward an integrated conceptual framework", *Journal of the Academy of Marketing Science*, 22(2), 99-113.
- Edward, M. & S. Sahadev (2011), "Role of switching costs in the service quality, perceived value, customer satisfaction and customer retention linkage", *Asia Pacific Journal of Marketing and Logistics*, 23(3), 327-345.
- Eggert, A. & W. Ulaga (2002), "Customer perceived value: a substitute for satisfaction in business markets?", *Journal of Business & Industrial Marketing*, 17(2/3), 107-118.
- Engel, K.S. & H. Moosbrugger & H. Müller (2003), "Evaluating the Fit of Structural Equation Models: Tests of Significance and Descriptive Goodness-of-Fit Measures", *Methods of Psychological Research*, 8(2), 23-74.
- Feick, L. & J. Lee & J. Lee (2001), "The impact of switching costs on the customer satisfaction-loyalty link: Mobile phone services in France", *Journal of Services Marketing*, 15(1), 35-48.

- Fornel, C. & D.F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error", *Journal of Marketing Research*, 18(1), 39-50.
- Guiltinan, J.P. (1989), "A classification of switching costs with implications for relationship marketing", in: T.L. Childers & R.P. Bagozzi & J.P. Peter (eds.) *AMA Winter Educators' Conference: Marketing Theory and Practice*, Chicago, IL: American Marketing Association, 216-220.
- Hair, J.F. & R.E. Anderson & R.L. Tatham & W. Black (1998), *Multivariate Data Analysis*, 5th ed. Upper Saddle River, NJ. Prentice-Hall.
- Jones, M.A. & D.L. Mothersbaugh & S.E. Beatty (2000), "Switching barriers and repurchase intentions in services", *Journal of Retailing*, 76, 259-274.
- Jones, M.A. & D.L. Mothersbaugh & S.E. Beatty (2002), "Why customers stay: measuring the underlying dimensions of services switching costs and managing their differential strategic outcomes", *Journal of Business Research*, 55(6), 441-450.
- Lam, S.Y. & V. Shankar & M.K. Erramilli & B. Murthy (2004), "Customer value, satisfaction, loyalty, and switching costs: an illustration from a business-to-business service context", *Journal of the Academy of Marketing Science*, 32(3), 293-311.
- Levesque, T. & G.H.G. McDougall (1996), "Determinants of customer satisfaction in retail banking", *International Journal of Bank Marketing*, 14, 12-20.
- MacCallum, R.C. & K.F. Widaman & K.J. Preacher & S. Hong (2001), "Sample Size in Factor Analysis: The Role of Model Error", *Multivariate Behavioural Research*, 36(4), 611-637.
- Marsh, H.W. & D. Hocevar (1985), "An Application of Confirmatory Factor Analyses to the Study of Self-Concept: First and Higher Order Factor Models and Their Invariance across Groups", *Psychological Bulletin*, 97, 562-582.
- Narayandas, N. (1996), "The link between customer satisfaction and customer loyalty: an empirical investigation", *Division of Research*, Harvard Business School.
- NQRC (1995), *American Customer Satisfaction Index Methodology Report*, University of Michigan Business School, Ann Arbor, MI.
- Nunnally, J.C. & I.H. Bernstein (1994), *Psychometric Theory*, 3rd ed., New York, McGraw-Hill.
- Stan, V. & B. Caemmerer & R. Cattani-Jallet (2013), "Customer loyalty development: The role of switching costs", *Journal of Applied Business Research*, 29(5), 1541.
- Yang, Z. & R.T. Peterson (2004), "Customer perceived value, satisfaction, and loyalty: The role of switching costs", *Psychology & Marketing*, 21(10), 799-822.

## Impacts of Electronic Word of Mouth Marketing on Consumer Purchase Behaviour

**Mehmet BAS** (<http://orcid.org/0000-0002-5443-7617>), Gazi University, Turkey; e-mail: [mbas@gazi.edu.tr](mailto:mbas@gazi.edu.tr)

**Yasemin KASAP** (<http://orcid.org/0000-0002-1764-4887>), Gazi University, Turkey; e-mail: [yasemin.kasapp@gmail.com](mailto:yasemin.kasapp@gmail.com)

**Keywords** : Electronic word-of-mouth, Consumer Behavior, Consumer Affection, Purchase Intention.

**JEL Classification Codes** : M15, M31.

### Introduction

To minimize the risk of purchasing a product, consumers tend to search more information and opinion from various sources before reaching the final purchase decision. Word of mouth is an act of consumers providing information to other consumers (WOMMA, 2007). Ninety two percent of consumers around the world say that they trust earned media, such as word-of-mouth or recommendations from friends and family, above all other forms of traditional advertising. (Nielsen, 2012). While word of mouth is an important component for consumers to exchange reliable information about a product, a company or a brand with their social environment, it is also important for companies to manage consumer behaviours strategically. Therefore, word of mouth (WOM) has been accepted as a very crucial marketing activity for affecting behaviours and attitudes of the consumers and be more effective and efficient in marketing activities by companies too.

In March 2017<sup>1</sup>, approximately 3.7 billion people had access to the Internet around the world. As technology creates more digitalized world and Internet becomes omnipresent, word-of-mouth also has been transferred to the digitalized world which is named as Electronic Word of Mouth (e-WOM) and consumers started to move from only engaging in face-to-face communications, to engaging in online conversations (Pollach, 2006). Even the logic in the behind of the e-WOM is the same with traditional word of mouth, it creates more benefits to both consumers and companies. While customers able to reach reviews about a product, a brand or a company without restriction of time and location, able to stay anonymous and receive more information in the easiest and fastest way, for companies it is also easier to learn and control consumer behaviours and create online word of mouth marketing strategies. (Cheung, Luo, Sia, & Chen, 2009).

Every purchase decision contains specific risk for consumers and the buying process and consumer behaviour can be varied per the degree of customer involvement. As high involvement products are those are representing consumer personality, status and justifying lifestyle, low involvement products reflect routine purchase decisions which contains less spending and less complexity of decision making

---

<sup>1</sup> *Internet World Stats (2017), Internet Usage Statistics: The Internet Big Picture - World Internet Users and Population Stats*, <<http://www.internetworldstats.com/stats.htm>>, 28.07.2017.

process. (Chand, 2016) Therefore, while low involvement products consumers tend to spend less time for searching and sharing information, high involvement products consumers spend more time to reach information and share their opinion about their purchase.

In this manner, the main purpose of our study has been chosen to investigate the impacts of electronic word of mouth on customer's purchasing decision within the high and low involvement products and contribute the knowledge to academia.

### **Methodology**

The semi structured interview method used in collection of the data. To reach a deeper knowledge of how online consumer reviews influence consumer purchase behaviour the qualitative approach was chosen. 20 participants chosen for face to face and skype interview and the number of genders evenly distributed.

### **Findings**

e-WOM and its impacts in this study is categorized into eight sections and each section was measured with several open questions. Per answers are collected from participants for each section given below.

- Customer perception of online consumer reviews: Per answers, the participants use online consumer reviews or electronic word of mouth messages to reach a final decision. When they read word of mouth messages before purchasing, they feel more confident about their decisions. Therefore, they find online consumer reviews very beneficial and helpful. Especially before purchasing high involvement products, participants tend to check online reviews.
- Quality of online consumer reviews: Participants find electronic word of mouth messages reliable, if they are up-to-date, clearly structured, well defined, similar other reviews and opinions, grammatically right and gets approval from other users of the platform. As purchasing high involvement products riskier, they care more about reviews and online messages.
- Quantity of online consumer reviews: When it comes to quantity of online consumer reviews, most of the participants feel safer, if there are many reviews and online messages, so they can have more and detailed information about a product, a brand or a company. Participants also stated that if there are many positive messages, their purchase decision are also reinforced. Most of the participants also find very important of the quantity of online consumer reviews for high involvement products.
- The influence of positive and negative reviews: The participants point out that positive online messages and reviews support their purchase intention. However, if there are negative reviews and messages, then they need more time to search more information and consider about their decision. Therefore, before purchasing high involvement products, participants likely to check positive and negative E-WOM messages to be sure about their decision.
- Information usefulness of online consumer reviews: Every participant has the common opinion about electronic word of mouth messages which is these messages are helpful in decision

making process and help consumers to understand about the product within details especially in high involvement products.

- The company's/sellers' product information: Participants generally find product information in company websites however most of this information are not realistic and doesn't mention about drawbacks about goods or services. Therefore, especially in high involvement products participants feel the necessity of checking electronic word of mouth messages.
- Use of online consumer reviews during the buying process: Participants mostly stated that after reading online consumer reviews they decide to purchase or not and to reach these reviews they use social media websites and shopping websites' comments. For low involvement products participants, do not search for reviews generally.
- Source: Even there is an influence from unknown electronic word of mouth messages on Internet, participants mostly prefer reviews from their social environment whether they are online or in social life. However, even the participants tend to check social environment reviews for low involvement products, for high involvement products even they receive messages from their social environment, they prefer to get an insight of online messages and reviews.

### **Conclusion and Suggestions**

Within this study, it is proved that electronic word of mouth messages has a significant impact on consumer purchase behaviour due to their valence. While positive e-WOM messages and marketing strategies have a positive impact on consumers to purchase, negative word of mouth leads to consideration about purchasing behaviour. It is also found that consumer tend to spend more time, search more and learn more information on online platforms about high involvement products. Within this study valuable information provided for marketers to redesign their electronic word of mouth marketing strategies and contributed electronic word of mouth researches.

### **References**

- Chand, S. (2016), *High-Involvement Products and Low-Involvement Products Involvement Difference*, YourArticleLibrary.
- Cheung, M. & C. Luo & C. Sia & H. Chen (2009), "Credibility of Electronic Word-of-Mouth: Informational and Normative Determinants of On-Line Consumer Recommendations", *International Journal of Electronic Commerce*, 13(4), 9-38.
- Internet World Stats (2017), *Internet Usage Statistics: The Internet Big Picture - World Internet Users and Population Stats*, <<http://www.internetworldstats.com/stats.htm>>, 28.07.2017.
- Nielsen (2012), *Global Trust and Advertising in Brand Messages*, <<http://www.nielsen.com/content/dam/corporate/us/en/reports-downloads/2012-Reports/globaltrust-in-advertising-2012.pdf>>, 15.03.2017.
- Pollach, I. (2006), "Electronic word of mouth: A Genre Analysis of Product Reviews on Consumer Opinion Web Sites", *Proceedings of the 39th Annual Hawaii International Conference on System Sciences*, 3, 51c-51c.
- WOMMA (2007), Press Release: Word of Mouth Marketing Association, "Word of Mouth 101", <[www.womma.org](http://www.womma.org)>, 22.06.2017.

## Investigation of Web-Based Customer Relations Management of Electric Power Companies Listed at Borsa Istanbul

*Fatih TEMIZEL* (<http://orcid.org/0000-0002-7208-3293>), Anadolu University, Turkey; e-mail: [ftemizel@anadolu.edu.tr](mailto:ftemizel@anadolu.edu.tr)

*Sultan Fatih KOSTAKOGLU* (<http://orcid.org/0000-0003-1781-1750>), Anadolu University, Turkey; e-mail: [sfkostakoglu@anadolu.edu.tr](mailto:sfkostakoglu@anadolu.edu.tr)

*Hayri BARUTCA* (<http://orcid.org/0000-0002-8255-5821>), Anadolu University, Turkey; e-mail: [hbarutcu@anadolu.edu.tr](mailto:hbarutcu@anadolu.edu.tr)

**Keywords** : Web Based Customer Relations Management, Electric Power Companies, Borsa Istanbul.

**JEL Classification Codes** : D12, L94, D51.

### Introduction

The main objective of listed companies is to reach higher market value. This reality creates the need of managing the relations with the financial market players based on investor relations management applications. Therefore, the websites which, is main vehicle to reach the mentioned target group, is topic of the study. In the study, the vehicles; operating reports, websites, financial result disclosure tables, that electric power companies listed at Borsa Istanbul use in web-based customer relations management are analysed by Score Card developed by The Turkish Investor Relations Association (TÜYİD). The reason why we selected electric power companies is growing importance of electric energy sector in Turkey and the relations of the sector with many regional and global stakeholders.

Electric energy sector, which grows fast and have the potential of significant development, is in an important position in financial system. For this reason, sector utilizes from investor relations management. The target group of electric energy sector contains national and international financial markets and financial institutions and investors in these markets. Therefore, the investigation of web-based investor relations applications will present valuable templates for the other companies listed at Borsa Istanbul.

### Methodology and Data

The Turkish Investor Relations Association (TÜYİD) is an institution which is established for the purposes of producing professional information and reaching the World standards at investor relations applications by bringing different target groups related to investor relations together at institutional and individual platforms. TÜYİD, that discloses its mission as contributing to presentation of Turkish markets and companies to the investors, to reach the companies to their fair value and supporting the deepness of Turkish markets, developed a Score Card for making investigation and measurement of web-specific investor relations management applications. Score Card that contain 170 questions to be asked to the companies (186 for the banks) consists of three parts; operation report (66), financial result disclosure (45) and website (59). Data is collected over this score card in the study.

In the *Operation Report* category, the information that should be included in the annual activity reports that are vital to inform investor relations management and the adequacy of this information are tested. Operation report questions that touch on the subjects such as strategic targets of the companies, capital, dividend policy, understanding of social responsibility and corporate governance compliance statements are the questions that explains to what extent companies make healthy and continuous contact with the investors. In the study, the last operation report of investigated companies is examined and actuality of the data is cared.

In the *financial result disclosure* category, websites, press statements, investor presentations and operation reports are examined. In investment initiatives, investors cares if the companies contact with them transparently about the financial statement of the company, its development and forecasts or not. Therefore, the questions and their answers at this category indicates the success of the companies in investor relations management. In the *financial result disclosure* category, that contains topics such as financial structure of past years, quarterly financial analyses, profit margins, sales, pricing and stocks, investigations are made in line with the information gathered from the last reports published on the web, and actuality of the data is cared.

In the *website* category, at the content analysis of web pages that are crucial for the connection between companies and investors 59 questions are asked. These questions are the questions such as “can investors reach the important financial information about the company?”, “can investors reach general meeting information?”, “Are special presentations prepared for investors?”, “does website use the technology and new communication instruments correctly?”. At this category, it is investigated that whether the information and document that the investors need are directed to the other websites (KAP etc.), besides whether they are on the websites.

In the investigation, the answers are “YES”, “NO” or “NON-APPLICABLE”. The scoring; 1 point for the questions answered as “YES”, 0 point for the questions answered as “NO”. The scores of companies are computed as the sum of three categories separately.

### **Empirical Findings**

At Operation Report category of Score Card investigation, investigation that contains 66 questions was applied to 7 companies that are in electric energy sector and listed at Borsa Istanbul. According to Score Card investigation results ordering of these 7 companies is as at Table 1 at Operation Report category.

Question headings at Operation Report category:

- Corporate Governance Principles; 42 questions,
- Operation Contents and Visuality; 24 questions.

**Table: 1**  
**Operation Report Result**

Operation Report Order	Company	Score
1	AKSA ENERJİ	61
2	AKENERJİ	60
3	ZORLU ENERJİ	59
4	BOMONTİ ELEKTRİK	49
5	AYEN ENERJİ	48
6	ODAŞ ELEKTRİK	48
7	AKSU ENERJİ	45

At Financial Result Disclosure category of Score Card investigation, investigation that contains 45 questions was applied to 7 companies that are in electric energy sector and listed at Borsa Istanbul. According to Score Card investigation results ordering of these 7 companies is as at Table 2 at Financial Result Disclosure category.

Question headings at Financial Result Disclosure category:

- The Other Important Developments and Information about the Company; 19 questions,
- Financial Statements; 14 questions,
- Important Information about the Accounting Period; 12 questions.

**Table: 2**  
**Financial Result Disclosure**

Financial Result Disclosure Order	Company	Score
1	ZORLU ENERJİ	36
2	AKENERJİ	35
3	AKSA ENERJİ	35
4	AYEN ENERJİ	35
5	BOMONTİ ELEKTRİK	34
6	ODAŞ ELEKTRİK	33
7	AKSU ENERJİ	26

At Website category of Score Card investigation, investigation that contains 59 questions was applied to 7 companies that are in electric energy sector and listed at Borsa Istanbul. According to Score Card investigation results ordering of these 7 companies is as at Table 3 at Website category.

Question headings at Website category:

- Content; 30 questions,
- Intensiveness; 23 questions,
- Technology; 6 questions.

**Table: 3**  
**Website Result**

Website Order	Company	Score
1	AKSA ENERJİ	45
2	ZORLU ENERJİ	42
3	AKENERJİ	40
4	ODAŞ ELEKTRİK	36
5	AYEN ENERJİ	28
6	BOMONTI ELEKTRİK	28
7	AKSU ENERJİ	23

### Discussion

Nowadays diversity in communication tools one hand provide ease, speed and flexibility to the investors in reaching information, but on the other hand it causes information pollution because of the amount of the information. For this reason, the main point in informing the investors is to provide correct, punctual and up-to-date information. Company websites are suitable channels in transporting information to the investors quickly and accurately.

Customer relations should present continuous and planned information, which will structure and sustain the short and long-term relationships, to the financial analysts and overall financial community besides the current and potential investors. Day by day investors started to consider more the non-financial subjects in valuing companies. Therefore, not only numeric information about the companies, but also nonnumeric information is efficient in buy and sell decisions. All the stated subjects indicate the trust that will be constructed between the company and investor depending on the communication.

### Conclusion

In Score Card investigation that contains 170 questions operation report, financial result disclosure and website categories were applied to 7 companies that are in electric energy sector and listed at Borsa Istanbul. According to Score Card investigation results ordering of these 7 companies in grand total is as at Table 4.

**Table: 4**  
**Grand Total, Score Card Result**

Score Card Order	Company	Score
1	AKSA ENERJİ	141
2	ZORLU ENERJİ	137
3	AKENERJİ	135
4	ODAŞ ELEKTRİK	117
5	AYEN ENERJİ	111
6	BOMONTI ELEKTRİK	111
7	AKSU ENERJİ	94

# **A Study on Continuity and Development of International Management and Organization Literature in Academic Areas: An Analysis of Content on Studies in Organizational Behaviour Literature**

*Ahmet ILHAN* (<http://orcid.org/0000-0003-2857-800X>), Bayburt University, Turkey; e-mail: [ahmetilhan@bayburt.edu.tr](mailto:ahmetilhan@bayburt.edu.tr)

*Ercan INCE* (<http://orcid.org/0000-0003-4821-8140>), Iğdir University, Turkey; e-mail: [ercanince82@gmail.com](mailto:ercanince82@gmail.com)

**Keywords** : Management and Organization, Organizational Behavior, Content Analysis.

**JEL Classification Codes** : M1, D23, C80.

## **Introduction**

It is known that there are many important studies (Üsdiken & Selekler & Çetin, 1998; Dirlik & Şehitoğlu, 2015), which illustrates the studies conducted in the Turkish management and organization literature with their various dimensions. Generally, in the afore-mentioned studies, approaches and features that are predominant in the Turkish management literature are discussed. The distinctive feature of this study is constituted by the fact that the study analyses the development and continuity of the management literature in the framework of organizational behaviour studies conducted internationally. In this respect, the aim of the study is to analyse the studies in the field of organizational behaviour which has played a role in the development of management and organization literature since the year 2000. To determine the development and continuity of the management literature, there has been an endeavour to analyse and evaluate the studies on organizational behavioural literature conducted in the academia. In this context, it is intended to follow the continuity and development of the management and organization literature through adding an analysis of the studies made in the field of organizational behaviour (2000-2017) to review the development, structure and approach properties of international management literature. For this purpose, it was aimed to observe the basic characteristics and development of the management and organization field since 2000s based on the studies published in organizational behaviour in the journals published in the international field and indexed by SSCI. The study is developed by analysing the harmony and cooperation between the researchers and the development and changes in the field of management and organization because of this cooperation by and organizational behaviour studies. The starting point of the study is the intention to contributing the determination of the position and the development of the management and organization literature in academia and the academic roots.

## **Method and Data**

In this study, content analysis was chosen as the research method. Content analysis is regarded as a useful measurement technique in numerous researches. Content analysis, which is considered as one of the most important research techniques in social sciences, is a research method that acquires valid and usable inferences from the data obtained according to the selected text (Krippendorff, 1989: 403). In other words, content analysis is a research method that is used on the categorization of texts written in different categories depending on the selected criteria and is widely used in organizational studies

(Milne & Adler, 1999: 237). At this point, it is a method of scientific research that involves analysing and evaluating many subjects selected in content analysis method which is considered as a valid and useful measurement technique for social sciences. In this context, academic journals with international publications have been selected for accessing the written documents that will be analysed in content. The reason for the selection of international academic journals as the sample in this study is that these journals are commonly accepted by the scientific communities (Mihailova & Koveshnikov, 2012: 693). The process of selecting the journals to be analysed in this direction is started by accessing all the management, organization and business administration journals indexed in the social science citation index (SSCI). Then organizational and behaviour were selected as key words in the study and journals titles that comprise these key words in SSCI, were reviewed and analysed individually. Because of the review, 4 journals comprising these words were accessed. The names of the journals reviewed by the researchers are indicated in Table 1.

**Table: 1**  
**Organizational Behavior Journals Selected and Analysed for Review and Sampling in SSCI**

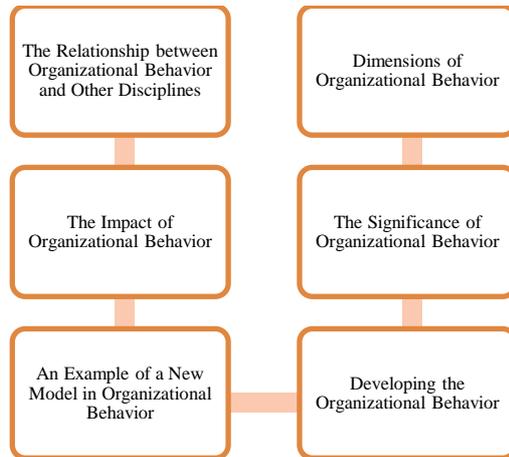
1	Journal of Organizational Behavior
2	Journal of Organizational Behavior Management
3	Organizational Behavior and Human Decision Processes
4	Research in Organizational Behavior

655 articles were scanned by the researchers in all the journals. Because of this process, the process of determining the articles that will be included to content analysis has started. At this point, the keywords selected as categorization units have been reviewed in the titles, abstracts and key words of the articles published between 2000 and 2017 in the journals on Table 1. Key words selected as categorization units are organizational and behaviour. They have been reviewed in a variety of formats including various combinations of selected categorization units. This data, which was reviewed later, was transferred to MAXQDA program providing qualitative data analysis which started the content analysis phase.

### Findings

A total of 655 articles were found in four journals within the scope of the research and by coding the “organizational” and “behaviour” words in the titles, abstracts and key words of these articles, 71 articles were detected and created the sample of the research. Firstly, the articles are classified according to year, volume, number, the repetition frequency of organizational and behaviour keywords and publication purposes. The articles were classified according to their purposes with content analysis and they were expressed in 6 themes. These themes are shown in Figure 1.

**Figure: 1**  
**Thematic Coding Created with Content Analysis**



In Figure 1 the themes created with content analysis are coded and determined. Two researchers who could use the qualitative research program coded the articles independently to determine the themes, and the reliability analysis was provided by comparing the themes obtained from these two-separate coding. The distribution of the articles according to the determined themes are shown in Table 2.

**Table: 2**  
**Article Distribution by Themes**

Article Distribution by Themes	f	%
Articles aiming to reveal the relation between organizational behaviour and other sciences	25	35
Articles aiming to reveal the impact of organizational behaviour	19	27
Articles aiming to develop a new model in organizational behaviour	8	12
Articles aiming to reveal the dimensions of organizational behaviour	7	10
Articles aiming to reveal the significance of organizational behaviour	6	8
Articles aiming to the development of organizational behaviour	6	8
<b>Total</b>	<b>71</b>	<b>100</b>

When the articles aiming to reveal the relation between organizational behaviour and other sciences are examined, it is seen that especially the subjects related to psychology are abundant, while in the articles that aim to reveal the impact of organizational behaviour, the focus is more on the subjects related to the institutionalization and human orientation. When the articles aiming to develop a new model in organizational behaviour are examined, it is observed that there is a great deal of emphasis on subjects related to building a performance model, while in the articles aiming to reveal the dimensions of organizational behaviour, there is a great focus on morality. In addition to this, when the articles aiming to reveal the significance of organizational behaviour are examined, it is seen that subjects related to the continuity and profitability of the enterprises are abundant. Finally, in the articles aiming to the development of organizational behaviour, it is observed that subjects related to change and development are high in number. In addition, when 71 articles which were suitable for studying organizational behaviour subject, were analysed for repetition frequency of the organizational and

behaviour words in the titles, abstracts and key words, it was determined that the key words were repeated 173 times.

### **Discussion**

The fact that only 71 articles out of 655, which were analysed to be able to examine the development and continuity of the international management and organization literature, include organizational behaviour subject, gives us some clues that the studies conducted in this field is not both quantitative and qualitative enough and not at desired level. In this context, organizational behaviour, which can be regarded as an important field for the institutionalization of organizations, workers and administrators, is not reflected enough in academic literature. And this be a shortcoming for the development and continuity of the management literature.

### **Conclusions and Recommendations**

The fact that only 71 out of 655 articles included in this study are related to organizational behaviour shows that the contribution of organizational behaviour to the development of this field is relatively small. We can say that the 6 units determined by the researchers and coders from the articles examined in the study, give us the opportunity to make interpretations about the future of international management literature. Today, businesses employ workers that are trained with organizational culture and that are aligned with organizational and individual goals. Because, in today's global world, continuity, change and improvement can only be achieved with employees who have a certain organizational culture and knowledge. It has been found that the relation between organizational behaviour and other branches of science is intensely emphasized in the studies carried out in 2000s; while studies conducted after 2015 have begun to focus more on the effects and dimensions of organizational behaviour. With this change, it can be said that in the management literature, organizational behaviour field has become more practical rather than theoretical. In other words, in today's world where institutionalization is gaining importance, the effects of the well-known and implemented organizational behaviour dimensions must be emphasized for organizations to have a healthy and long-lasting functioning. Finally, moral dimension mentioned in the research findings also plays a significant role in organizational behaviour. From this it can be argued that the preservation of morality can positively effect of organizational behaviours such as attachment, job satisfaction and motivation.

### **References**

- Dırlık, S. & Y. Şehitoğlu (2015), "Türkiye'deki Yönetim Yazınında Süreklilik ve Değişim: 2000'li Yıllarda Türkiye'de Yönetim Yazını", 23. *Ulusal Yönetim ve Organizasyon Kongresi Kitabı*, 59-68.
- Krippendorff, K. (1989), "Content Analysis", *International Encyclopedia of Communication*, Vol. 1, New York, NY: Oxford University Press, 403-407.
- Mihailova, I. & A. Koveshnikov (2012), "International Activities of Emerging Market Firms a Critical Assessment of Research in Top International Management Journals", *Management International Review*, 52, 691-725.
- Milne, M.J. & R.W. Adler (1999), "Exploring the Reliability of Social and Environmental Disclosures Content Analysis", *Accounting Auditing & Accountability Journal*, 12(2), 237-256.
- Üsdiken, B. & N. Selekler & D. Çetin (1998), "Türkiye'de Yönetim Yazınına Egemen Anlayışın Oluşumu: Sevk ve İdare Dergisi Üzerine Bir İnceleme", *Amme İdaresi Dergisi*, 31(1), 57-87.

## The Importance and Consequences of Minority Rights on Discharge Decision in Joint Stock Companies

**Halis KARADEMİR** (<http://orcid.org/0000-0002-0382-0560>), *Nigde Omer Halisdemir University, Turkey; e-mail: haliskarademir@ohu.edu.tr*

**Mehmet Fahrettin ONDER** (<http://orcid.org/0000-0002-1808-5378>), *Suleyman Demirel University, Turkey; e-mail: fahrettinonder@sdu.edu.tr*

**Keywords** : Joint Stock Company, Minority, Minority Rights, Discharge Decision, Turkish Commercial Code.

**JEL Classification Codes** : K300, K330.

### Extended Abstract

Joint stock companies are managed according to majority rule. Decisions made by the general assembly in accordance with the majority rule are also binding upon the shareholders who fail to participate or countervote in the meeting pursuant to Article 423 of the Turkish Commercial Code (TCC). It is also a fact that this principle serving the purpose of corporate democracy would not always result in democratic consequences. It would be highly optimistic to expect the majority to make decisions for protecting the rights of minority shareholders. It is quite common that dominant shareholders regarding capital, shares, and votes tend to prioritize their special interests rather than the interests of the company.

According to TCC, the concept of minority stands for the shareholders who represent at least one-tenth of the capital in non-public joint stock companies and at least one-twentieth of the capital in public joint stock companies. Certain amendments are arranged in the TCC so that majority shareholders could not make any decisions as they please with the sovereignty of the company and that they should observe the rights of minority shareholders. By courtesy of these amended rights in the TCC, the minority shareholders can prevent the majority from making decisions on certain issues and may carry out certain transactions on behalf of the company despite the majority voters. At this point, conflicts of interest in the company are balanced.

The minority shareholders' rights set forth under the TCC are comprised of the right of representation in the board of directors, the right to request the board of directors to convene a general assembly meeting and inclusion of an item to the agenda, the right to request adjournment of financial statement discussions and related issues, the right to interfere with discharge of liabilities in relation to the incorporation and capital increase of the company, the right to request the appointment of an special auditor, the right to request issuance of share and the right of filing a lawsuit in the presence of a just cause regarding the company's dissolution. The minority right to request the opening of liability lawsuits about the board of directors arranged in Article 341 of the abolished Law No. 6762 in the (former) Turkish Commercial Code is excluded from the TCC. However, it became controversial in terms of the TCC whether or not a decision should be made at the general assembly for the opening of the liability case against the board of directors. In this regard, opinions in the doctrine should be discussed, and the Supreme Court of Appeals' opinion must be criticized.

In a joint-stock company, the general assembly's approval on the release of the board of directors from their related liabilities is called the discharge decision. With the discharge decision, it is declared that the board of directors would not be held liable for any duties and transactions within the scope of the related activity period. The discharge of the board of directors is also binding upon the minority shareholder as required by the majority rule. Discharge of directors and managers who conduct businesses and transactions that would hinder the minority rights may have adverse consequences for the minority shareholders. Although they may disagree with the discharge decision, it is probable that the minority shareholders who fail to file a lawsuit within the six-month prescription period would endure the consequences of the decision. It is in the best interest of the minority shareholders to counteract the decision as much as possible prior to the discharge decision by exercising their voting rights. Minority rights are crucial in terms of the discharge decision.

The study aims to determine the importance and consequences of the minority rights regarding discharge decision in the light of the TCC, the doctrine and the Supreme Court of Appeals' decisions, as well as to identify results and to detect the problems that may arise. In this first part of the study, the functioning of the joint stock company and the minority rights are briefly explained. In the second part, the minority rights which are important in terms of the discharge decisions are mentioned, the obtained results and possible problems that may arise are revealed, and suggestions for possible solutions are put forward.

In the aspect of minority shareholders, the study concludes that the right to request adjournment of financial statement discussions as well as related issues and the appointment of special auditor has an indirect importance in terms of the discharge decisions, while the right to interfere with the discharge of the liabilities stemming from incorporation and capital increase has a direct significance. The minority shareholders must be recommended to exercise their right to request an adjournment of financial statement discussions first, and in the meanwhile, to request the appointment of special auditors about the issues they deem suspicious should they wish to oppose the discharge decision. The right to interfere with the discharge of the liabilities arising from the incorporation and capital increase is the most important right accorded to the minority. Despite most of the votes, there would be no discharge with the exercise of this right. The minority may be suggested to reserve the right to file a probable liability lawsuit by opposing the discharge decision after four years since the incorporation or capital increase to prevent the problems that may arise. Moreover, Article 341 of the (former) Turkish Commercial Code which regulates the necessity of decision-making regarding the right (to be accorded to minority shareholders) to request opening liability lawsuits is not included in the TCC. Although it is not regulated in the TCC, upon evaluation along with opinions in the doctrine and Article 479 of the TCC, it is likely to say that it is necessary for the general assembly of the joint stock company to pass a motion in favour of opening liability lawsuits.

In the same direction on this issue, The Supreme Court of Appeals' decision would be cited as follows: "To open liability lawsuits against joint-stock company managers/directors, it is necessary to pass a motion in the general assembly meeting in pursuant to the amendments to Articles 408/1 and 479/3-a [should be perceived as "c"] of the TCC". The Supreme Court of Appeals' decision in this regard complies with the doctrine that we also support.

## References

- Akdağ Güney, N. (2016), *Anonim Şirket Yönetim Kurulu*, İstanbul: Vedat Kitapçılık.
- Altaş, S. (2016), *6102 Sayılı Türk Ticaret Kanunu Kapsamında Şirketler Hukukuna İlişkin Yüksek Yargı Kararları*, Ankara: Seçkin Yayıncılık.
- Aytaç, Z. (1982), *Anonim Ortaklıklarda İbra*, Ankara: Banka ve Ticaret Hukuku Araştırma Enstitüsü.
- Bahtiyar, M. (2015), *Ortaklıklar Hukuku*, İstanbul: Beta Yayıncılık.
- Bilgili, F. & E. Demirkapı (2013), *Şirketler Hukuku*, Bursa: Dora Yayıncılık.
- Çamoğlu, E. (2010), *Anonim Ortaklık Yönetim Kurulu Üyelerinin Hukuki Sorumluluğu*, İstanbul: Vedat Kitapçılık.
- Çelik, A. (2007), *Anonim Ortaklıklarda Yönetim Kurulu Üyelerinin İbrası*, Ankara: Adalet Yayınevi.
- Devellioğlu, F. (2015), *Osmanlıca-Türkçe Ansiklopedik Lûgat*, Ankara: Aydın Kitabevi Yayınları.
- Eriş, G. (2017), *Açıklamalı-İçtihatlı Ticari İşletme ve Şirketler*, C.2, Ankara: Seçkin Yayıncılık.
- Helvacı, M. (1995), *Anonim Ortaklıkta Yönetim Kurulu Üyesinin Hukuki Sorumluluğu*, İstanbul: Beta Yayıncılık.
- İmregün, O. (1974), *Anonim Ortaklıklar*, İstanbul: Gün Matbaası.
- Kendigelen, A. (2012), *Yeni Türk Ticaret Kanunu Değişiklikler Yenilikler ve İlk Tespitler*, İstanbul: On İki Levha Yayıncılık.
- Moroğlu, E. (2016), *6102 Sayılı Türk Ticaret Kanunu: Değerlendirme ve Öneriler*, İstanbul: On İki Levha Yayıncılık.
- Poroy, R. & Ü. Tekinalp & E. Çamoğlu (2014), *Ortaklıklar Hukuku I*, İstanbul: Vedat Kitapçılık.
- Pulaşlı, H. (2016), *Şirketler Hukuku Genel Esaslar*, Ankara: Adalet Yayınevi.
- Pulaşlı, H. (2015), *Şirketler Hukuku Şerhi*, C.2, Ankara: Adalet Yayınevi.
- Şener, O.H. (2017), *Teorik ve Uygulamalı Ortaklıklar Hukuku*, Ankara: Seçkin Yayıncılık.
- Tekil, F. (1998), *Anonim Şirketler Hukuku*, İstanbul: Alkım Yayınları.
- Tekinalp, Ü. (2015), *Sermaye Ortaklıklarının Yeni Hukuku*, İstanbul: Vedat Kitapçılık.

**27 October 2017 Friday**

**Session: II-A / 11.30-13.00**

## **SOCIAL ISSUES & SOCIAL POLICIES**

Room: *Festsaal Imperial*

Chair: **Ali Vural CENGIZ**

- Refugee Economics: Case of Turkey  
**Isil Fulya ORUNOGLU-SAHIN & Ahmet Burcin YERELI**
- Revisiting Successful Ageing with the Missing Factor; Case of Turkey  
**Seyran GURSOY-CUHADAR & Doga Basar SARIPEK**
- Economic Problems of the Social Security System in Turkey  
**Hasan Bulent KANTARCI & Suleyman SOYDAN**
- How Feminist Paradigm Can Contribute to the Struggle against Terrorism?  
**Busra OGUTCU**
- The Role of the State in the Health System in the Islamic Economy  
**Hasan Bulent KANTARCI & Adil KURBAN**

## Refugee Economics: Case of Turkey

*Isil Fulya ORKUNOGLU-SAHIN* (<http://orcid.org/0000-0002-7238-1215>),  
Gazi University, Turkey; e-mail: iforkunoglu@gazi.edu.tr

*Ahmet Burcin YERELI* (<http://orcid.org/0000-0002-8746-6756>), Hacettepe  
University, Turkey; e-mail: aby@hacettepe.edu.tr

**Keywords** : Refugee Economics, International Law, Turkey.

**JEL Classification Codes** : F5, R5, K3.

### Introduction

Today, civil wars and terrorist incidents, especially in Muslim countries, brought up refugees' issues. However, as a refugee is known to be under not the protection of his own country as an immigrant, he may be subject to various human rights violations. On the other side, this situation includes the legal troubles and the economic opportunities and problems, which arise because of various social, political, health, education, tourism, population and settlement, adjustment of the refugees and regulation of their legal status, in the country where refugees live. In this context, according to the Global Threats Report 2017 published by the World Economic Forum, there is the first rank risk in 2016 for the first time in the list of possible global risks and the large scale unintentional migration which is the second rank threat after 2017's extraordinary weather events. In parallel, according to the Global Trends 2015 report issued by the United Nations High Commissioner for Refugees (UNHCR) The number of people displaced by forced violence and violence, conflict and violations of human rights has reached 65.3 billion in worldwide by the end of 2015. Of this number, 21.3 million are refugees, 40.8 million are displaced in the country they live in, and 3.2 million are seek asylum. According to the figure of end of 2015, between the 2,754,540 persons come to Turkey; 2,541,352 persons are refugees, 212,408 persons are seeking asylum, 780 persons are stateless.

However, according to the results of the International Amnesty International 2015 report, Turkey is ranked as first in the list of the countries with the highest number of refugees in the world (with about 2.5 million refugees). The biggest contributor to this result is the presence of Syrian refugees. Following the Syrian civil war broke out in March 2011, the first wave of migration began from Syria to Turkey in May 2011. Therefore, worth considering the human rights granted to refugees, the possibilities provided and the economic situation and economic contributions before and after the refugees. For this reason, it was discussed refugee economics in Turkey which is very up-to-date subject in the study.

In the study, Republic of Turkey Prime Ministry Disaster and Emergency Management Presidency (AFAD), the Ministry of Interior General Directorate, the United Nations High Commissioner for Refugees and Amnesty International's refugee data was used. In this respect, the number of Syrian refugee, which is 3.72% of Turkey's population, registered in Turkey is 2.969.669.

With respect to the 2016 Turkey migration report, the distribution of the Syrians, which had temporary protection and which are in the Temporary Welfare Centers, according to the provinces is as follows: 6% in Adana, 4% in Adıyaman, 2% in Burdur, 3% in Bursa, 3.5%, 16% in Gaziantep, 24%,

93% in Kilis, 2% in Istanbul, 4% in Kayseri and in Şırnak, 8% in Osmaniye, 20% in Urfa, 11% in Mardin and 8% in Malatya and in Maraş and 3% in Konya.

According to the AFAD's description dated July 17, 2017, the number of Syrians in the centers of marriage is 242,771. Also, Hatay, Gaziantep, Urfa, Kilis, Mardin, Kahramanmaraş, Osmaniye, Adıyaman, Adana, Malatya are within the 10-province tent city or container city in the form of shelter is provided. According to another AFAD statement on the same date, 25 million dollars of aid to Syrian refugees belongs to Turkey. The amount of aid of the world to Syrians in Turkey is 526 million dollars. Health services and medicines registered in Turkey are provided free of charge in cooperation with the Ministry of Health and 1,143,393 inpatients and 25,919,750 patients have received outpatient services. 508,846 students from kindergarten to high school last year were collected from the streets and participated in education system. 1.75 billion TL of humanitarian aid was delivered directly to Syria.

### **Positive Studies in Turkey for Syrian Refugees**

- Law No. 6358 dated 11.04.2013 and Temporary protection regulation are entered into force.
- Signed a protocol between the Prime Ministry Disaster and Emergency Management Authority (AFAD) and the Women and Democracy Association (KADEM) for the social, economic and cultural integration of the Syrian women on February 23, 2017.
- Submitted the Draft Law on the Amendment of the Population Services Law and Some Laws to the Presidency of the Assembly on 25.07.2017.
- Established in 1995, the Association for Solidarity with Asylum Seekers and Migrants (SGDD) has launched various projects of the Refugee Council established in 2014.
- Young Refugees Support Program was supported by the United States and the European Union Humanitarian Aid Office (ECHO).
- The Syrian Refugee Project, in which the Ministry of Youth and Sports supports via EU Project Management, implemented on 5th of December 2015 approximately with 600 thousand TL budget.
- A circular (No. 2014/21 dated 23.09.2014) was issued by the Ministry of National Education for the education services of the Syrian refugees.
- In the period of 01.07.2015-31.12.2015 a commitment amounting to TL 375,000 a protocol was signed between the Ministry of Health and AFAD for 2015 health service procurement.

### **The Negative Effects of the Syrians Refugees on Turkey's Economy**

- The crisis of a large number incoming refugees.
- Because of many Syrian may not want to return to Syria, there is a need for more projects and financing for adaptation to the new financial, legal and economic conditions in Turkey.
- Existence of negative prejudices against the refugees in most of the citizens of Turkey and the deterioration of the social peace especially due to the possibilities of having the right to citizenship of them.

- Budget-increasing costs, which are set aside for the social and cultural needs of the refugees.
- The possibility of increase in the crime rates of the Syrians who are not integrated enough in the social life and their possible contribution to terrorist events in the country.
- Many diseases in Turkey, including pediatric diseases that have been treated in the past, come back on the agenda and the health of the community is being under threat.
- The significant decreases in imports and exports with Syria affected employment and caused to economic stagnation.
- The fact that the Syrians can easily establish companies in Turkey without having some legal sanctions, and that they are present in the economic world.
- The fact that there are not yet serious steps taken to deal with the language problem of Syrian refugees in Turkish education system and their education orientation.
- Promoting the commission of humanitarian crimes subject to abuse because of the shortage of the legal regulations that will protect the rights of the Syrians.
- Increase in unregistered employment by making use of cheap labour force.
- -When meeting the residential needs of refugees, the cost increases in the housing sector negatively effects the citizens home purchase and renting prices.
- The short-term vitality of the economy with the refugees entering the country has adversely affect the economy with the increasing budget costs in the long term.
- The possibility that the effects of international political threats and the increase in the intensity of pressures on Turkey in the geographic area where the political circle of borderline has narrowed more and more in the coming period.
- In the long-term, the signing of Readmission agreement between EU and Turkey will destroy the balance of between refugee and citizen, in point of political, cultural, social and legal aspects, and actuarial balance in Turkey.

### **Positive Effects of the Syrians on the Turkish Economy**

- Short-term economic vitality.
- The social spiritual satisfaction by the humanitarian aid provided to needy people.
- Sectoral cheap labour force with agriculture sector, construction sector etc. and some additional Employment opportunities in the fields.
- New opportunities for Turkish construction companies and other service sector companies in the reconstruction of Syria.
- Although limited to international funding, the possibility of financing additional costs with humanitarian assistance.

### **Policy Suggestions for Syrian refugees**

- To revive hand crafts such as tinning, silk, weaving, shoemaking, goldsmithing, leatherworking, ironworking, tailoring, carpentry, training in the field of textiles, occupational training courses can provide in some cities like Mardin, Şanlıurfa, and Kilis. In this respect, a certain percentage of the labour force needs in the relevant areas will be met by Syrian refugees and this situation will compensate for the loss of trade with Syria.
- When meet the Syrian refugees sheltering need, should be followed the program of transfer to non-touristic provinces for reasons of prevention of negative influence of the possible crime and terror effects to tourism.
- Syrian refugee women can be provided with occupational training courses and child care trainings, which can be employed at certain percentages in kindergartens to be opened under state supervision.
- Complicated and prolonged procedure of citizenship granted to only Syrian refugees who are not involve in any crime, not contagious diseases, and having the right to apply to the registered owner of vocational labour force participation will be an appropriate practice.
- Although some work is being done to overcome the legal gaps in Syrian refugees' access to settlement, work permit, health and education services, these are insufficient in Turkey. Completion and supervision of such legal deficiencies are critical. Especially education of refugee children should be continued as Arabic and Turkish, the orientation of orphaned children to society should be executed with the child protection agency to return. At the same time, some precautions should be taken against the abuse of refugee children.
- As encountered the language problem with the employment of the Syrians affects the quality of the offered services and brings up unfair competition for the employment of Turkish citizens, must be brought some limitations on refugee employment. Should be avoided from refugee politics based on intense refugee recruitment which is likely to create employment opportunities with low salaries for refugees. Also, making the increasing frequency of unregistered inspections of refugees in employment and the increase of sanctions against them will be positively affect employment policies in the country.
- In terms of combined risk factors according to the 2016 results of a questionnaire survey study of Syrian refugees; it was being found a risk of infectious diseases at rate on exceeding 50% between 18-69 age years. So, in a group of Syrian refugees in Turkey is a serious threat to health. Therefore, must be taken urgently health policy measures relating to refugees.
- Especially with the contribution of collaborative studies of international institutions and organizations, should be taken political measures to an end of the war and carry out reconstruction in Syria and the return of Syrian refugees to their homeland.

### **References**

Aalandslid, V. (2017), *Statistics on Refugees: Examples from a National Statistical Office*, UN Statistical Commission, 8<sup>th</sup> March 2017, <<https://unstats.un.org/unsd/statcom/48th-session/side-events/documents/20170308-2L-Vebjorn-Aalandslid.pdf>>, 1-10, 23.06.2017.

- Afet ve Acil Durum Yönetimi Başkanlığı (AFAD) (2017), “Barınma Merkezlerindeki Son Durum”, *Geçici Barınma Merkezleri Bilgi Notu*, <[https://www.afad.gov.tr/upload/Node/2374/files/18\\_09\\_2017\\_Suriye\\_GBM\\_Bilgi\\_Notu2+1.pdf](https://www.afad.gov.tr/upload/Node/2374/files/18_09_2017_Suriye_GBM_Bilgi_Notu2+1.pdf)>, 25.03.2017.
- AFAD (2017), *Suriyeli Sığınmacılara Yapılan Yardımlar*, 17 Temmuz 2017.
- Ağır, O. & M. Sezik (2015), “Suriye’den Türkiye’ye Yaşanan Göç Dalgasından Kaynaklanan Güvenlik Sorunları”, *Birey ve Toplum*, Bahar 2015, 5(9), 95-123.
- Altun, A. (2016), “AB’nin Vize Politikası Bağlamında Sığınmacıların Durumu ve Türkiye-AB Geri Kabul Antlaşması”, *International Journal of Academic Value Studies*, 2(2), 36-47.
- Apurva, S. & H. Önder & V. Vemuru (2016), “The Economics of Refugees and Their Social Dynamics in Kakuma, Kenya”, *Report No: AUS14056*, <<https://openknowledge.worldbank.org/handle/10986/25855>>, 21.06.2017.
- Balcılar, M. (2016), *Türkiye’deki Suriyeli Mültecilerin Sağlık Durumu Araştırması, Türkiye’de Yaşayan Suriyeli Mültecilerde Bulaşıcı Olmayan Hastalık Risk Faktörleri Sıklığı*, AFAD, World Health Organisation, Ekim.
- Bodewig, C. (2015), *Is the Refugee Crisis an Opportunity for an Aging Europe?*, September 22, <<http://www.worldbank.org/en/news/opinion/2015/09/22/is-refugee-crisis-opportunity-for-aging-europe>>, 21.06.2017.
- Boz, D. (2016), “Dış Göçler Olgusu ve Etkisi: Türkiye-Suriye Üzerine Bir İnceleme”, *Sosyoekonomi*, 24(30), 147-153.
- Bozkurt, K. (2016), “Geri Kabul ve Vize Serbestisi Anlaşması”, *TBB Dergisi*, 125, 387-408.
- Daoudov, M. (2015), “Suriyeli Mülteciler Konusunda Yerel Yönetimlerin Rolü”, İstanbul Ticaret Üniversitesi Komşu ve Çevre Ülkeler Uygulama ve Araştırma Merkezi *Ekonomik, Sosyal ve Kültürel Boyutlarıyla Suriyeli Mülteciler Paneli*, <<http://ww4.ticaret.edu.tr/komsuulkeler/wp-content/uploads/sites/65/2015/05/Suriyeli-M%C3%BClteciler-Panelli.pdf>>, 48-51, 21.06.2017.
- Dillioğlu, B. (2015), “Suriyeli Mültecilerin Entegrasyonu: Türkiye’nin Eğitim ve İstihdam Politikaları”, *Akademik Orta Doğu*, 10(1), 1-22.
- Ekinci, M.U. (2016), *Türkiye-AB Geri Kabul Anlaşması Vize Diyalogu Raporu*, Siyaset, Ekonomi ve Toplum Araştırmaları Vakfı Yayını, <<https://istihbaratveanaliz.files.wordpress.com/2016/05/trkiye-ab-geri-kabul-anlamas-ve-vize-diyalou.pdf>>, 59-60, 21.06.2017.
- Erdogan, M. (2014), *Türkiye’deki Suriyeliler: Toplumsal Kabul ve Uyum Araştırması*, Hacettepe Üniversitesi Göç ve Siyaset Araştırmaları Müdürlüğü Yayını, Aralık.
- Erdogan, M. & C. Ünver (2015), *Türk İş Dünyasının Türkiye’deki Suriyeliler Konusundaki Görüş Beklentisi ve Önerileri*, Türkiye İşveren Sendikaları Kurumu, 23 Kasım 2015, Yayın No: 353.
- Ereş, F. (2015), “Türkiye’de Göçmen Eğitimi Sorunsalı ve Göçmen Eğitiminde Farklılığın Yönetimi”, *Çankırı Karatekin Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 6(2), 17-30.
- Faas, B. & L. Bettin & M.A. Dalar (2016), “AB ve Türkiye’de Mülteci ve Sığınmacılar”, *Sivil Toplum Diyalogu Kadınlar Göç Yolunda Projesi*, Kadın ve Demokrasi Derneği, Mayıs.
- Hasan Kalyoncu Üniversitesi Sürekli Eğitim ve Araştırma Merkezi (2013), *Suriye Mültecileri Sorununun Olası Ekonomik Etkileri ve Tedbir Stratejileri*, İpekyolu Kalkınma Ajansı 2013 Yılı Doğrudan Faaliyet Destek Programı Kapsamında Hazırlanan Rapor.
- İçduygu, A. (2015), “Türkiye’nin Sığınma Politikaları: Geçmiş, Suriye Vakası ve Gelecek”, İstanbul Ticaret Üniversitesi Komşu ve Çevre Ülkeler Uygulama ve Araştırma Merkezi, *Ekonomik, Sosyal ve Kültürel Boyutlarıyla Suriyeli Mülteciler Paneli*, <<http://ww4.ticaret.edu.tr/komsuulkeler/wp-content/uploads/sites/65/2015/05/Suriyeli-M%C3%BClteciler-Panelli.pdf>>, 20-25, 21.06.2017.
- International Crisis Group (2016), “Türkiye’nin Mülteci Sorunu: Kalıcılığın Siyaseti”, *Avrupa Raporu No. 241*, 30 Kasım.

- Karabacak, M. (2015), “Savaşın 1000. Gününde Suriye’de İnsani Kriz ve Sağlık Durumu”, İstanbul Ticaret Üniversitesi Komşu ve Çevre Ülkeler Uygulama ve Araştırma Merkezi, *Ekonomik, Sosyal ve Kültürel Boyutlarıyla Suriyeli Mülteciler Paneli*, <<http://ww4.ticaret.edu.tr/komsuulkeler/wp-content/uploads/sites/65/2015/05/Suriyeli-M%C3%BClteciler-Paneli.pdf>>, 65-68, 21.06.2017.
- Kaypak, Ş. & M. Bımay (2016), “Suriye Savaşı Nedeniyle Yaşanan Göçün Ekonomik ve Sosyo-Kültürel Etkileri: Batman Örneği”, *Batman Üniversitesi Yaşam Bilimleri Dergisi*, 6(1), 84-110.
- Koç, M. & İ. Görücü & N. Akbıyık (2015), “Suriyeli Sığınmacılar ve İstihdam Problemleri”, *Bilgi ve Toplum*, Bahar, 5(9), 63-93.
- Lordoğlu, K. (2015), “Türkiye’ye Yönelen Düzensiz Göç ve İşgücü Piyasalarına Bazı Yansımalar”, *Çalışma ve Toplum*, 2015/1, 29-44.
- MacDonald, A. (2015), *Report of the International Conference on Refugee Statistics*, <<https://unstats.un.org/unsd/statcom/47th-session/documents/BG-2016-14-report-of-the-international-conference-on-refugee-statistics-E.pdf>>, 7-9 October 2015, Antalya, Turkey, 1-19.
- Öner, I. & S. Gülfer (2014), “Türkiye’nin Suriyeli Mültecilere Yönelik Politikası”, *Ortadoğu Analiz*, Mart-Nisan, 6(61), 42-45.
- Öztürkler, H. & T. Göksel (2015), “Suriyeli Mültecilerin Türkiye’ye Ekonomik Etkileri: Sentetik Bir Modelleme”, Ortadoğu Stratejik Araştırmalar Merkezi, *Rapor* No: 196, Ocak, 1-44.
- T.C. İçişleri Genel Müdürlüğü Türkiye Göç İdaresi Genel Müdürlüğü (2017), *2016 Türkiye Göç Raporu*, Yayın No: 40, Nisan.
- Taşkın, Y. (2017), “Regional Migration Affair and Its Effects onto the Fiscal System”, *3rd International Annual Meeting of Sosyoekonomi Society*, <<http://www.sosyoekonomijournal.org/AMSS17PB-A.pdf>>, 267-269, 25.06.2017.
- Toksöz, G. 6 S. Erdoğan & S. Kaşka (2012), “Türkiye’ye Düzensiz Emek Göçü ve Göçmenlerin İşgücü Piyasasındaki Durumları”, *International Organization for Migration*, Ekim.
- Tuğsuz, N. & A. Yılmaz (2015), “Siyasi Partilerin Mülteci Politikaları”, *Siyaset Ekonomi ve Toplum Araştırmaları Vakfı Perspektif Yayını*, Haziran, Sayı 106, <[http://file.setav.org/Files/Pdf/20150703162350\\_siyasi-partilerin-multeci-politikalari-pdf.>](http://file.setav.org/Files/Pdf/20150703162350_siyasi-partilerin-multeci-politikalari-pdf.>), 1-6.
- Uzun, A. (2015), “Günümüzün Sosyal ve Ekonomik Sorunu Olan Suriyelilerin Mülteci ve Ekonomi Hukuku Bakımından Değerlendirilmesi”, *Ankara Barosu Dergisi*, 2015/1, 107-120.
- Ünal, S. (2014), “Türkiye’nin Beklenmedik Konukları: ‘Öteki’ Bağlamında Yabancı Göçmen ve Mülteci Deneyimi”, *Zeitschrift für die Welt der Türken Journal of World of Turks*, 6(3), 65-89.

## Revisiting Successful Ageing with the Missing Factor; Case of Turkey

*Seyran GURSOY-CUHADAR* (<http://orcid.org/0000-0001-7443-4184>),  
Kocaeli University, Turkey; e-mail: [seyran.gursoy@kocaeli.edu.tr](mailto:seyran.gursoy@kocaeli.edu.tr)

*Doga Basar SARIPEK* (<http://orcid.org/0000-0002-3525-5199>), Kocaeli  
University, Turkey; e-mail: [sariipek@kocaeli.edu.tr](mailto:sariipek@kocaeli.edu.tr)

**Keywords** : Ageing, Successful Ageing, Spiritually Positive.

**JEL Classification Codes** : J14, J17, J19.

### Introduction

Today, there is a large series of description regarding the concept of “good aging”, such as active aging, positive aging, productive aging and competent aging. All these concepts are built on the idea of aging may include numerous potentials and achievements. Successful aging, in this sense, was introduced by Rowe and Kahn (1997) by putting on the ground of Disengagement/Activity Theory. Rowe and Kahn have identified three elements for successful aging. These are engaged in active life, minimizing risks and maximizing physical and mental abilities. While many authors consider Rowe and Kahn’s model useful, particularly Crowther et al. (2002) call for adding a new and fourth element, namely “positive spirituality”. Crowther et al. suggest that being positive in spiritual sense has a positive impact on chronic diseases, poverty and other challenges in addition to enhancing successful aging. From this point of view, this study aims to discuss how important the forgotten factor- positive spirituality- of Rowe and Kahn’s model is in the successful aging of older adults in Turkey.

### Successful Aging

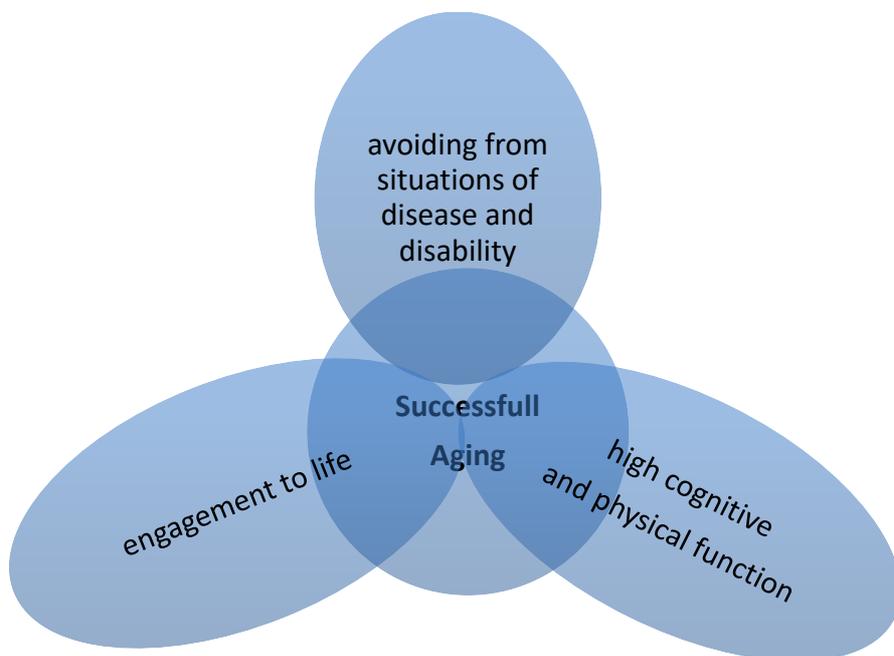
There is a variety of attempts today to define “good aging”, such as successful aging, healthy aging, positive aging, productive aging and competent aging. The idea that aging process may mean new achievements and potentials constitutes the common point of all these definitions. (Foster & Walker, 2015: 84).

As is already known, there is Disengagement/Activity Theory underlying the successful aging theory (Foster & Walker, 2015: 84). According to this theory, which was developed by Cumming and Henry in 1961, the roles and activities of individuals declines as they get older and this process is unavoidable. (Schroots, 1996: 744; Collins, 2014: 1). In 1987, Rowe and Kahn (1997: 433) firstly divided the aging concept into two under the titles of pathological and non-pathological aging and afterwards, they classified the non-pathological aging into two again under the sub-titles of being under low risk and high risk of catching diseases. In this sense, the non-pathological group represents successful aging while the second group represents ordinary aging.

Rowe and Kahn’s successful aging model has 3 elements as seen in Figure 1 (1997: 433-434). These are having a low risk of catching a disease and/or related disabilities, having a capacity of improved cognitive and physical function and active engagement to life. There are, also, sub-divisions of these elements. Low risk of catching disease suggests not only the absence of disease but also not to have any risk factors that would lead to the disease. The high level of functionality, on the other

hand, shows both cognitive and physical capacity is high and not only what the individual is doing presently but also what activities that the individual can do. Finally, the engagement element is composed of interpersonal relations and productive activities. Interpersonal relationships include being in touch with others, exchanging the knowledge, emotional support and cooperation. Besides, an activity needs to create a social value to be productive. As a result, while these three elements with their sub-elements are very important on their own, they are involved in an interaction as well. Successful aging, thus, is the combination of other two elements and the engagement to the life.

**Figure: 1**  
**Model of Successful Aging**



*Source: Rowe & Kahn, 1997: 434.*

A different perspective claims there is another element which is required to be added into Rowe and Kahn's model of successful aging which is composed of above mentioned three elements (Crowther et al., 2002). The allegedly missing element in successful aging approach is being "positive spiritually". According to Crowther et al. (2002: 615), the main features of Rowe and Kahn's model are as follows; (i) interrelatedness of the elements, (ii) variables activating the features of strength and weakness at the same time, and (iii) taking into consideration the individual features, such as contextual factors. Within this scope, being positive spiritually addresses the missing part of the model since it connects the beliefs and values of older adults, the society, and impacts of interventions that focus on successful aging. In the approach developed by Crowther et al. (2002), pioussness and being positive spiritually are discriminated from each other clearly. Spiritual activities, such as praying, help to cope

with poverty, chronic diseases and other threats to life since piety brings along believing in a transcendent power.

Rowe and Kahn's successful aging approach is criticized not only by Crowther et al. but also Lehr (1982) and Siegrist et al (2004) as well. To this end, while Lehr suggests that subjective appraisal and life satisfaction should be added into the primal elements, Siegrist et al. claim that activity and productivity are the elements that should be added into. After all, if we are about to indicate the primal factors in the context of all these approaches, these would be health conditions, the optimum level of physical function, high cognitive function, multi dimensions of successful aging such as positive impacts and social participation (Fernandez-Ballesteros et al. 2002: 94).

### References

- Rowe, J.W. & R.L. Kahn (1997), "Successful Aging", *The Forum*, 37(4), 433-440.
- Crowther, M.R. et al. (2002), "Rowe and Kahn's Model of Successful Aging Revisited: Positive Spiritually - The Forgotten Factor", *The Gerontologist*, 42(5), 613-620.
- Foster, L. & A. Walker (2015), "Special Issue: Successful Aging", *The Gerontologist*, 55(1), 83-90.
- Schroots, J.J. (1996), "Theoretical Developments in the Psychology of Aging", *The Gerontologist*, 36(6), 742-748.
- Collins, N. (2014), "A brief introduction to the Social theory of Ageing and Ageism", *Old Age Psychiatrist*, 59, 1-3.
- Siegrist, J. & O. Knesebeck & C.E. Pollack (2004), "Social Productivity and Well-Being of Older People: A Sociological Exploration", *Social Theory and Health*, 2, 243-263.
- Lehr, U. (1982), "Socio-Psychological Correlates of Longevity", *Annual Review of Gerontology and Geriatrics*, 3, 102-147.

## Economic Problems of the Social Security System in Turkey

*Hasan Bulent KANTARCI* (<http://orcid.org/0000-0002-7217-9367>), *Kocaeli University, Turkey; e-mail: hbkantar@kocaeli.edu.tr*

*Suleyman SOYDAN* (<http://orcid.org/0000-0001-7351-0616>), *Kirsehir Province Directorate of Social Security Institution, Turkey; e-mail: fsulsoy2012@gmail.com*

**Keywords** : Social Security System, Budget Deficit, Social Security System in Turkey.

**JEL Classification Codes** : H55, H41, H49.

### Introduction

The social security system faced serious financing problems after 1990 in Turkey. The funding of the social security system is mainly based on prime. For this reason, every element that will affect premium income is very important. Economic problems are demographic backgrounds such as population aging and the expectation of survival in developed countries. In Turkey, this situation is different from the developed countries. Political legal arrangements have been made to permanently offset the income and expenditure balances that affect premium incomes. One of the most important reasons for the increase in public debt stock in Turkey is the increase in social security deficits. If these deficits are reduced, the debt stock will decrease. Therefore, it will be possible for the primary surplus to increase and the budget deficit to rise. Because of the deficits in the social security system, the state must borrow. This situation leads to the reduction of public expenditures and therefore capital accumulation and investments are adversely affected. This reduces the employment rate and causes unemployment problems. The solution proposal for these is addressed in this research.

### Purpose of Work

Politicians, social partners, scientists and bureaucrats are constantly being debated about the problems of the social security system. Everyone is in the same opinion about the problems of the system and there is no difference in opinion (Türk-İş, 2006: 6). It will be seen that the problem does not have a demographic origin like the aging of the population and the expectation of survival as in developed countries. Turkey's influence has a young structure. Since long-term balances are not adequately addressed, serious financial problems arise (Izgi, 2008: 95).

The problems of the social security system in Turkey are focused both structurally and financially.

**Structural Issues:** Social insurance organizations SSK, Bağ-Kur and Emekli Sandığı have imbalances and differences between the rights of the insured and the pension and health services they provide to their beneficiaries.

**Different rights provided by organizations:** The salaries of the insurance companies are also different depending on the rights of the insured (SSK, 2001: 60, SGK, 2009: 65, SSK, 2004: 122).

**No administrative and financial autonomy:** The ways in which the incomes of social security institutions can be used in the direction of politicians' preferences are open. Therefore, applications

that are contrary to the principles of the social security system, the shortage of funding and the deterioration of the income - expenditure balances have been realized (Türk-İş, 2006: 7).

**Amnesty Practices and Borrowing Laws Issued:** As a result, the insurers entered a new amnesty expectation. As of March 2005, expectations regarding the implementation of a new structuring increased and the premium collections of insurance institutions decreased (SPO, 2007: 16). For this reason, the balance of the system has been disturbed and the deficits between income and expenses must be met with transfers from the general budget (DPT, 2007: 16).

**Unregistered Employment and Leak Issue:** There is a direct interaction between the employment structure and the income sources of the social security institutions, as the financing source of the social security system in Turkey is mainly based on prime.

### **Financial Issues**

The ways in which the incomes of social security institutions are used in line with political preferences are kept open; Practices contrary to the principles of the social insurance system have caused the funds to expire soon (Güzel, 2005: 68).

**Financial Openings:** The financial deficits of the social insurance system constitute the first dimension of the problem of financing. The ratio of transfers made from budget to the social security system made in 2013 to GDP is 4.7% and targeted as 4% for 2018 (Kalkınma Bakanlığı, 2013: 77).

**Problems with Early Retirement:** On the other hand, the fact that women can retire at the earliest age of 38 and men at the earliest at the age of 43 since a certain period of premium payment and insurance period is sufficient without qualifying age conditions to qualify for long term old age pension in our country. People who were insured before the age of 18 could retire before the age of 43 and 38. On April 1, 1981, a change was made in the Law No. 506 that services before the age of 18 should not be counted as years (DPT, 2007: 10).

**High Premium Rates and Collection Problem:** A high premium rate is another reason for the problem of financing. There was no state contribution until 2008. In 2008, employers who regularly fulfil their insurance obligations were backed by government contributions by applying a 5% discount to the premium rates they paid.

**Non-Balance of Benefits Provided in the Active Period and in the Passive Period:** The fact that the retirement age is low, the recent earnings of the working age are considered, and the insurance premiums paid during the active periods of the insured (during the working period) and during the passive periods, i.e. retirement benefits, are not compensated by the insurance technique negatively affected the financing of the system.

**Increasing health spending:** Especially population increase, change of demographic structure, technological developments, improvement of social life conditions together with increase of expectation of people and increase of quality of health services in our country have led to increase in health expenditures.

**Not Efficient Operation of Funds:** Social insurance institutions are established based on fund accumulation and the main purpose of the funds is to operate in productive areas and provide additional income to the system. While the funds collected in the system should be used in accordance with

criteria such as efficiency, liquidity, reliability and profitability, the funds were not used in accordance with these criteria in our country and the government used them as cheaper loans (Gürbüz, 2009: 193).

**Effective handling of the control and control mechanism in the system:** Failure to achieve efficiency in the management of institutions and the fact that full automation has not been made is an important reason for the weakness of the control and control mechanisms in the system.

### **Regulations to be made in the Turkish Social Security System**

If the social security deficits are reduced, the debt stock will decrease and the primary surplus will increase and the budget deficit will get out of the way. The borrowing requirement due to the deficits in the social security system, the decrease in public expenditures and the increase in incomes also negatively affect capital accumulation and investments. This reduces the employment rate and causes unemployment problems.

Several regulations are also needed to ensure that income and expenditure balances are achieved. If we could sort them:

- Increasing informal employment and decreasing unemployment, switching to the Social Security Tax system to increase the collection rate,
- The general health service is transferred to the Ministry of Health as social security general health insurance expenses decreasing regulation,
- In some practice and organizational arrangements,
- To increase the national saving rate, it is necessary to switch to compulsory Individual Pension System.

### **References**

- Balcı-İzgi, B. (2008), "Türk Sosyal Güvenlik Sisteminde Son Gelişmeler", *Çalışma ve Toplum Dergisi*, 1-23.
- Devlet Planlama Teşkilatı (2007), *2007-2013 Dokuzuncu Kalkınma Planı Sosyal Güvenlik Özel İhtisas Komisyonu Raporu*, Yayın No: DPT:2729-ÖİK:681.
- Gürbüz, R. (2009), *Sosyal Güvenliğin Finansmanı*, S.G.K. Strateji Geliştirme Başkanlığı Yayını.
- Güzel, A. (2005), "Türk Sosyal Güvenlik Sisteminde Öngörülen Reform Mevcut Sorunlara Çözüm mü?", *Çalışma ve Toplum Dergisi*, 2005/4, 61-76.
- Kalkınma Bakanlığı (2013), *Onuncu Kalkınma Planının (2014-2018) Onaylandığına İlişkin Karar*, Karar No: 1041, Karar Tarihi: 02.07.2013, <<http://www.kalkinma.gov.tr/1pdf/>>, 15.12.2014.
- S.G.K. (2006), *Tarihçe*, <<http://www.sgk.gov.tr/wps/portal/tr/kurumsal/tarihce/>>, 01.02.2015.
- S.G.K. (2009), *Bir Reformun Anatomisi*, Ankara: Sosyal Güvenlik Kurumu Yayını.
- S.S.K. (2004), *4958 Sayılı Sosyal Sigortalar Kurumu Kanunu*, Ankara: SSK Yayını.
- Türk-İş (2006), *Sosyal Güvenlik: Reform Adı Altında Yapılan Yasal Düzenlemeler Sorunları Çözmeyecek*, Türk-İş Yayını Ankara, <<http://www.turkis.org.tr/dosya/3F28VsTHQMRy.pdf/>>, 06.12.2014.

## How Feminist Paradigm Can Contribute to the Struggle against Terrorism?

*Busra OGUTCU* (<http://orcid.org/0000-0002-0773-1311>), *Uludag University, Turkey*; e-mail: [busraogutcu@gmail.com](mailto:busraogutcu@gmail.com)

**Keywords** : Feminism, Terrorism, Counter-Terrorism.

**JEL Classification Codes** : F50, F51.

### Extended Abstract

Aim of this study is to analyse feminist approach on counter-terrorism. Main questions are how feminist paradigm sees the terrorism (perception of terrorism) and how feminist paradigm can contribute to the struggle against terrorism. First, main arguments of feminist paradigm will be given in this study. After that, in the study information related to terrorism will be given. Then the study will focus on perception of terrorism of feminist paradigm. Main argument of the study is that feminist paradigm can contribute to the struggle against terrorism with characteristics attributed to women in the dominant paradigm such as irrationality, sensuality, etc.

Feminism basically argues that women should be more visible in all areas of life. It is a theory that states that women are inactivated by gender roles during the socialization process, and roles played by women are secondary roles. According to feminism, the male-dominated order has associated the public sphere together with rationality, analytical thinking, power and strength with men; and positioned the woman as an actor in the private sphere, and identified her with not being rational, being lack of analytical thought and being powerless. As a result, woman cannot be visible in this male dominant world. This problem is mainly due to gender roles. These roles ignore the woman and her experiences as the opposite of glorifying man.

The view of feminism regarding security issues is also critical in general. It opposes the dominant concepts related to security. Feminists are particularly opposed to sense of security of the realism, which dominates the discipline. They criticize realisms' important thinkers' approaches to human nature and security. They oppose the perception of security that is perceived as state security in realism because feminism perceives security multidimensional not only as state security, and defines it as "a reduction in all forms of physical, structural, and ecological violence" (Koyuncu-Tür, 2010: 13).

In the TDK's (Turkish Language Institution) dictionary, terrorism is defined as intimidation, killing people and destroying property, threatening, and terrorizing. In Article 1 of the 1937 Convention for the Prevention and Punishment of Terrorism, terrorism is defined as follows: They are criminal acts designed or planned to create a state of terror in the minds of individuals or groups of individuals or the public and directed against a state (Taşdemir, 2005: 25).

Terror is basically a form of politics, even the most radical kind of politics and called low-tension war (Ergil, 1992: 1). The reason is that the target group is not ready and not willing to struggle (Ergil, 1992: 1). The aim of terrorism is to create a climate of fear, to remove the trust in the state by creating a sense of fear, panic and despair in society and people, to disrupt social integrity and thus to achieve the desired goals by disturbing the peace in the society (Ergil, 1992: 1).

According to feminism terrorism has masculine purposes and women have secondary roles as victims, lovers, daughters and spouses. Feminist attitudes towards terrorism are negative because terrorism instigates militarization and nationalism, even racism (Arman & Şerbetçi, 2012: 71). However, feminists oppose the concept of “terrorist” and the condemnation of every type of violence, regardless of by whom and why violence campaigns are conducted (Arman & Şerbetçi, 2012: 73). Sexual violence against women is very common. While resorting to this action, aim of the armed groups is to punish the women they think are on the wrong side or the enemy to whom they belong (Arman & Şerbetçi, 2012: 71). Many women are being kidnapped, raped or forced to serve to the guerrillas and paramilitaries (Arman & Şerbetçi, 2012: 71).

The reason why women join to terrorist groups is related to dominant gender perception. To object this perception women involved in terrorist group, because they believe joining terrorist groups will provide gender equality. Maybe they think they would break the boundaries of dominant gender perception by joining terrorist groups. Female terrorists are very active in terrorist groups. Surprisingly, they are more efficient than male terrorists. Because female terrorists can move more easily than men. Also, female terrorists are more furious and angry, because they join the group after a traumatic situation. For this reason, their rehabilitation is difficult.

According to feminist theory, women are not allowed to be in an effective position in the struggle against terrorism, even though they are most affected by terrorist incidents. It seems or is perceived that politics belongs to man, and man is also positioned in the center of politics. The women’s perspective and agenda have been removed from politics. Things related to women do not appear in politics. Even if women go into politics, they focus on feminine issues, whereas men focus on issues such as economy and defence (Arman & Şerbetçi, 2012: 71). Even though they become successful, this is regarded as strange, and their successes are generally in feminine areas because the patriarchal order based on the separation of the private and the public sphere limits the woman with the private sphere (home and family) while making the man dominant in the public sphere (politics, work, protection of the motherland, cultural life) (Öztürk, 4). Sovereign states in today’s international order systematically demonstrate a patriarchal system through their policies, their social, economic and political priorities, and ensure the continuation of patriarchal social order by ensuring that the core values of patriarchy are reproduced (Öztürk, 4).

In fact, when this situation changes and women’s experiences take place in politics together with their problems and solution offers, women and the feminist paradigm would be able to provide effective solution strategies in the struggle against terrorism. Characteristics such as irrationality, sensuality, etc. attributed to the woman in the dominant paradigm, may approach the problems in the background of the problem from a different point of view and contribute to the solution. At this point, it would be seen that the game is not “zero sum” which is accepted given in the classical paradigm and there can be different perspectives for the solution. Woman excluded from politics because of the characteristics attributed to her, may be able to consider the problem from a more humanistic point of view especially thanks to these exact characteristics and contribute to the construction of peace. Until today, no successful results have been obtained in terms of constructing peace in the struggle against terrorism carried out with the classical viewpoint. In general, one side has won and maybe the hot conflict has stopped and negative peace has been established, but peace construction has not been accomplished. If women’s experiences are involved in politics in this humanitarian direction, a truly permanent peace could be created.

### References

- Arman, M.N. & D. Şerbetçi (2012), "Postkolonyal Feminist Teoride Milliyetçilik, Militarizm ve Savaş Karşıtlığı", *Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 14(3), 65-83.
- Ergil, D. (1992), "Uluslararası Terörizm", *Ankara Üniversitesi Siyasal Bilgiler Fakültesi Dergisi*, 47(3), 139-143.
- Tür, Ö. & Ç. Aydın-Koyuncu (2010), "Feminist Uluslararası İlişkiler Yaklaşımı: Temelleri, Gelişimi, Katkı ve Sorunları", *Uluslararası İlişkiler Dergisi*, 7(26), 1-23.
- Ortbals, C.D. & L. Poloni-Staudinger (2011), "Gender and Terrorism: Responses by and Portrayals of Women Politicians", *APSA 2011 Annual Meeting Paper*, <[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1901292##](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1901292##)>, 28.06.2017.
- Öztürk, Z.A. (2012), "Uluslararası Siyasette ve Karar Alma Mekanizmalarında Kadın", *Ege Üniversitesi Stratejik Araştırmalar Merkezi Dergisi*, 3(1), <<http://esam.ege.edu.tr/makaleler/ocak-2012/makale-1.pdf>>, 28.06.2017.

## The Role of the State in the Health System in the Islamic Economy

*Hasan Bulent KANTARCI* (<http://orcid.org/0000-0002-7217-9367>), *Kocaeli University, Turkey; e-mail: hbkantar@kocaeli.edu.tr*

*Adil KURBAN* (<http://orcid.org/0000-0002-0306-964X>), *Kocaeli Izmit Directorate of Public Health Institution, Turkey; e-mail: drkurban@hotmail.com*

**Keywords** : Healthcare, Islamic Economy, State Role.

**JEL Classification Codes** : I10, E58, H70.

### Introduction

Health services are at the forefront of issues that are of great importance in terms of people, society and the state. In the Islamic economy, it is very important for the state to protect and maintain the health of individuals. The Qur'an, where human health must be preserved and protected, has also been expressed in many verses and in many hadiths mentioned by our Prophet Muhammad (pbuh). In the presentation of health services, the share of the state is very important. Even in the backward countries, private health services have very little place. The Islamic religion has been explained by the Qur'an and hadiths as harm to human health such as smoking and alcohol. It is explained that they should not be used. It is desirable to educate healthy people and a healthy society in this way. Again, it has been declared that women should pay much attention to their health for giving birth and that other people should give them all kinds of help. In the Islamic economy, it is necessary for the state to fulfil health services. However, health services can also be offered by the private sector. The following is how the Islamic economy can fulfil them when presenting health services to the government.

### Purpose of Work

When we look at the construction of healthcare services, we see that healthcare services are mostly provided by the state and private sector in a mixed system. When we look at developing countries and underdeveloped countries, it is seen that the share of the state in the presentation of health services is very high (European Commission, 201: 9-11).

The benefits of people's health services are their most natural rights. If there are poor people, these people in the Islamic economy must be taken under state security and their health needs must be fulfilled. The fact that the state trains doctors, nurses and similar health workers and employs them in different parts of the state is also part of the state's main responsibilities in the Islamic economy.

In the determination of health services, the resources allocated to the health sector are the priority. It is an important decision-making process by the government to decide on which regions, programs, diseases or diseases the health services should be separated from (Yereli & Köktaş & Selçuk, 2014). Priorities identified in health services will be used with limited government resources (Top, 2006: 95). The health system of each country includes life expectancy, disease reduction, maternal and infant survival rates (Akbolat, 2017: 7). The priorities of health services in the Islamic economy should be determined and used according to the needs of the state.

## **The Influence of the Islamic Economy on the Health System of the State**

Some people in society are rich and some people are poor. Poor people may not be able to fully fulfil their healthcare financially. The main asset is the social benefit of the state in fighting poverty. It is also important to provide the best health services to all segments of the society and equally to all health services (Çınaroğlu & Şahin, 2016: 74).

In the Islamic economy, rich people are helped by zakat up to the poor. But zakat can only meet the daily living needs of the people. Therefore, in the Islamic economy, state-poor people must take the state's safeguards and offer health services to them. Even in developed countries where health services are left in the private sector, preventive health services are being implemented by the state.

The aim of all healthcare is to raise the health level of the community. It is in health systems that health professionals are bad or health services are bad (Hunt, 2002). In the Islamic economy, people are given great value. In the universe, everything is created by God for man. Therefore, in the Islamic economy, state administrators have a great deal to do about health. How successful it is in this situation is left to the state administrators and managers.

### **Conclusion**

In the Islamic economy, there are a wide variety of reasons why the state cannot provide a healthcare service effectively. The reason why the health services cannot be in the desired quality may be due to lack of healthy human power, lack of knowledgeable manager, and lack of physical infrastructure, inadequacy of financial resources and misuse of resources. As in all sectors in all the countries of the world, innovations are emerging about the efficient use of resources. That's why the government has begun to change its role in the healthcare market, and the private sector has begun to do more in healthcare.

Islam has a great influence on health. Islam continually encourages learning of science. This is the case in health sciences as it is in all sciences. In the middle ages, while trying to heal mental patients, the Ottomans attempted to cure the patients with the voice of music, the voice of water, and the voice of the Qur'an in Beyazıt Mosque, in the capital city Edirne. The issue of fighting diseases in Islam and raising people's awareness about diseases has been mentioned in many places in Qur'an and hadith books.

In the Islamic economy, the state plays an important role, directly and indirectly, in a significant part of healthcare. In health services, the effect of health institutions, legal regulations on health, and the share of healthcare budgets are important. We can say that the resources allocated to the health services are the primary tasks of the government to meet the needs of the society's health services.

### **References**

- Akbolat, M. (2017), *Karşılaştırmalı Sağlık Sistemleri, Dünya Sağlık Sistemlerine Genel Bir Bakış ve Uygulanmakta Olan Sağlık Sistemi Modelleri*,  
<[http://content.lms.sabis.sakarya.edu.tr/Uploads/48358/46376/3\\_d%C3%BCnnya\\_sa%C4%9Fl%C4%B1k\\_sistemlerine\\_genel\\_bir\\_bak%C4%B1C5%9F\\_ve\\_uygulanmakta\\_olan\\_sa%C4%9Fl%C4%B1k\\_sistemi\\_modelleri.pdf](http://content.lms.sabis.sakarya.edu.tr/Uploads/48358/46376/3_d%C3%BCnnya_sa%C4%9Fl%C4%B1k_sistemlerine_genel_bir_bak%C4%B1C5%9F_ve_uygulanmakta_olan_sa%C4%9Fl%C4%B1k_sistemi_modelleri.pdf)>, 20.08.2017.
- Çınaroğlu, S. & B. Şahin (2016), "Katastrofik Sağlık Harcaması ve Yoksullaştırıcı Etki", *Hacettepe Sağlık İdaresi Dergisi*, 19(1), 73-86.

- European Commission (2010), *Patient Safety and Quality Healthcare: 2010*,  
<[http://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs\\_327\\_en.pdf](http://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs_327_en.pdf)>, 23.06.2017.
- Hunt, L. (2002), *Patient Safety - A Major Government Priority*, ECRI Europe Welt Center.
- Top, M. (2006), "Sağlık Hizmetlerinde Önceliklerin Belirlenmesi: Türkiye'de Öncelik Belirleme Sürecinde Rol Alan Tarafların Görüşleri ve Sağlık Politikalarına İlişkin Değerlendirmeleri", *Hacettepe Sağlık İdaresi Dergisi*, 9(1), 93-123.
- Yereli, A.B. & A.M. Köktaş & I.Ş. Selçuk (2014) "Türkiye'de Katastrofik Sağlık Harcamalarını Etkileyen Faktörler", *Sosyoekonomi*, 22(22), 273-295.



**27 October 2017 Friday**

**Session: II-B / 11.30-13.00**

## **FINANCE & BANKING**

Room: *Salon Imperial*

Chair: **Mehmet BAS**

- Asymmetric Relationships between Stock Price and Financial Ratios: The Case of BIST Manufacturing Sector

**Ekrem MERIC & Melik KAMISLI & Fatih TEMİZEL**

- The Long-Run Relationships between the CDS Indexes of Emerging Countries: Powerful Cointegration Approach

**Serap KAMISLI & Melik KAMISLI & Fatih TEMİZEL**

- Analysing Causality Relationships between CDS Indexes and Stock Market Volatility of European Countries

**Melik KAMISLI & Serap KAMISLI & Fatih TEMİZEL**

- Evaluation of Non-Current Assets in the Framework of TFRS 5 and Examination of Firms Listed in BIST (Istanbul Stock Exchange) 100 and 30 Indices as Use of Non-Current Assets Held for Sale Account in accordance with TFRS 5 in the Period 2007-2016

**Aynur AKPINAR**

- Index Construction via Maximum Drawdown Risk Measure: An Application for Morgan Stanley Capital Emerging Markets Index

**Habib KUCUKSAHIN & Göksal Selahatdin KELTEN & Furkan ERDOGMUS & Bilal GODE**

## **Asymmetric Relationships between Stock Price and Financial Ratios: The Case of BIST Manufacturing Sector**

**Ekrem MERIC** (<http://orcid.org/0000-0001-6256-8249>), Anadolu University,  
Turkey; e-mail: [emerik@anadolu.edu.tr](mailto:emerik@anadolu.edu.tr)

**Melik KAMISLI** (<http://orcid.org/0000-0001-6419-2257>), Bilecik Seyh  
Edebali University, Turkey; e-mail: [melikkamisli@gmail.com](mailto:melikkamisli@gmail.com)

**Fatih TEMIZEL** (<http://orcid.org/0000-0002-7208-3293>), Anadolu  
University, Turkey; e-mail: [fatemizel@anadolu.edu.tr](mailto:fatemizel@anadolu.edu.tr)

**Keywords** : Asymmetric Relations, Financial Ratios, BIST Manufacturing Sector.

**JEL Classification Codes** : C58, D53, L60.

### **Introduction**

One of the most common techniques used in financial statement analysis is ratio analysis. Financial ratio is defined as the mathematical expression of the relationship between two items. Too many ratios can be obtained from the financial statements, but the important thing is to select the ratios that are suitable for the purpose and to analyse the relationships between these ratios. Significant information about the economic use of the assets and the economic and financial structure, profitability, productivity and liquidity of the companies and can be obtained by the help of ratio analysis.

There are known asymmetric relationships between the ratios computed for the companies. This kind of relationship can be seen for example between liquidity ratios and profitability ratios. High liquidity ratios are considered as favourable in terms of company operations, but on the other hand profitability ratios decrease because the profitability of the funds allocated to liquid assets is low. It can be monitored that low liquidity ratios increase the profitability ratios but also cause financial hitches and increase the business risk. It is expected from finance manager to create a balance between two groups. Similarly, risk increases in the companies that focus on debt financing to benefit from financial leverage effect. As debt ratios that are in financial structure ratios increase, return on equity ratio increases at first, but later it decreases due to increment in the debt level. It is desired by the companies that the inventory turnover, which is a measure of inventory liquidity and shows the relationship between the inventories and sales, is to be high. On the other hand, a very high turnover ratio in terms of business shows that some items do not stay in inventories and naturally there may be some hitches in sales and some orders cannot be met. Therefore, there may be an asymmetry between the inventory turnover ratio, which one of the operating ratios, and return on sales ratio.

In the literature, it is assumed that there are symmetric and stereotyped between stock price and financial ratios and investment decisions are made in this direction. When it is considered that changes in stock prices affect investment decisions significantly, the importance of investigation of asymmetry in relationships emerges. In this context, the main purpose of this study is to examine the asymmetric relationships between stock price and dividend yield ratio and price-earnings ratio that are used to evaluate the market performance.

## Methodology and Data

In the study, logarithmic price, price-earning and dividend yield ratios of the companies “Arçelik A.Ş. (ARCLK), Coca Cola İçecek A.Ş. (COLA), Ereğli Demir ve Çelik Fabrikaları T.A.S. (EREGL), Ford Otomotiv Sanayi A.Ş. (FROTO), Kardemir Karabük Demir Çelik Sanayi ve Ticaret A.Ş. Class D (KRDMD), Otocar Otomotiv ve Savunma Sanayi A.Ş. (OTKAR), Petkim Petrokimya Holding A.Ş. (PETKM), Soda Sanayii A.Ş. (SODA), Tofaş Türk Otomobil Fabrikası A.Ş. (TOASO), Türkiye Petrol Rafinerileri A.Ş. (TUPRS) ve Ülker Bisküvi Sanayi A.Ş. (ULKER)” listed at BIST30 Manufacturing sector between 2008M10-2017M3 are analysed by Asymmetric Causality test (2012) developed by Hatemi-J.

Traditional Granger causality test and many of the causality tests developed after Granger (Sims, 1972; Hsiao, 1981; Toda and Yamamoto, 1995) that have been widely used examining causality relationships assume that the effects of positive and negative shocks are symmetric. But this assumption may be misleading because of human behaviour and dynamic financial relationships. Therefore, in the study we use Hatemi-J's (2012) asymmetric causality test that is proposed based on the approach of Granger and Yoon (2002).

## Empirical Findings and Discussion

In the study, the causality relationships between financial ratios and stock prices are analysed as follows;

- From price to dividend yield ratio
- From price to price-earnings ratio
- From dividend yield ratio to price
- From dividend yield ratio to price-earnings ratio
- From price-earnings ratio to price
- From price-earnings ratio to dividend yield ratio

To determine the asymmetry, the effects of positive shocks to positive shocks, negative shocks to negative shocks, negative shocks to positive shocks and positive shocks to negative shocks are investigated and results are given at Table 1 in detail.

**Table: 1**  
**Asymmetric Causality Test Results**

	Wald Stat.	Critical bootstrap value				Wald Stat.	Critical bootstrap value		
		1%	5%	10%			1%	5%	10%
Price <sub>ARCLK</sub> <sup>+</sup> ⇒ DY <sub>ARCLK</sub> <sup>+</sup>	0.05	9.54	4.42	2.65	DY <sub>KRDMD</sub> <sup>+</sup> ⇒ PE <sub>KRDMD</sub> <sup>+</sup>	0.13	24.1	9.22	5.89
Price <sub>ARCLK</sub> <sup>-</sup> ⇒ DY <sub>ARCLK</sub> <sup>-</sup>	0.81	11.3	4.80	2.81	DY <sub>KRDMD</sub> <sup>-</sup> ⇒ PE <sub>KRDMD</sub> <sup>-</sup>	1.64	13.2	6.50	4.77
Price <sub>ARCLK</sub> <sup>+</sup> ⇒ DY <sub>ARCLK</sub> <sup>-</sup>	0.67	13.1	4.37	2.78	DY <sub>KRDMD</sub> <sup>+</sup> ⇒ PE <sub>KRDMD</sub> <sup>+</sup>	3.55	10.8	5.69	4.34
Price <sub>ARCLK</sub> <sup>-</sup> ⇒ DY <sub>ARCLK</sub> <sup>+</sup>	5.68	13.0	4.80	2.50	DY <sub>KRDMD</sub> <sup>-</sup> ⇒ PE <sub>KRDMD</sub> <sup>-</sup>	2.63	11.4	6.99	5.14
Price <sub>ARCLK</sub> <sup>+</sup> ⇒ PE <sub>ARCLK</sub> <sup>+</sup>	12.5	15.0	10.5	8.78	PE <sub>KRDMD</sub> <sup>+</sup> ⇒ Price <sub>KRDMD</sub> <sup>+</sup>	<b>11.8</b>	10.8	6.29	4.96
Price <sub>ARCLK</sub> <sup>-</sup> ⇒ PE <sub>ARCLK</sub> <sup>-</sup>	0.01	12.5	4.54	2.35	PE <sub>KRDMD</sub> <sup>-</sup> ⇒ Price <sub>KRDMD</sub> <sup>-</sup>	<b>8.3</b>	12.1	7.06	5.43
Price <sub>ARCLK</sub> <sup>+</sup> ⇒ PE <sub>ARCLK</sub> <sup>+</sup>	0.22	18.0	11.3	8.70	PE <sub>KRDMD</sub> <sup>+</sup> ⇒ Price <sub>KRDMD</sub> <sup>+</sup>	1.43	7.28	3.30	2.42
Price <sub>ARCLK</sub> <sup>-</sup> ⇒ PE <sub>ARCLK</sub> <sup>-</sup>	2.21	18.1	12.3	9.15	PE <sub>KRDMD</sub> <sup>-</sup> ⇒ Price <sub>KRDMD</sub> <sup>-</sup>	0.17	9.28	4.72	3.24
DY <sub>ARCLK</sub> <sup>+</sup> ⇒ Price <sub>ARCLK</sub> <sup>+</sup>	1.28	9.67	4.17	2.95	PE <sub>KRDMD</sub> <sup>+</sup> ⇒ DY <sub>KRDMD</sub> <sup>+</sup>	0.80	19.7	8.42	5.17
DY <sub>ARCLK</sub> <sup>-</sup> ⇒ Price <sub>ARCLK</sub> <sup>-</sup>	0.38	13.7	4.49	2.75	PE <sub>KRDMD</sub> <sup>-</sup> ⇒ DY <sub>KRDMD</sub> <sup>-</sup>	3.70	10.3	6.03	4.79
DY <sub>ARCLK</sub> <sup>+</sup> ⇒ Price <sub>ARCLK</sub> <sup>-</sup>	8.30	15.8	9.69	7.21	PE <sub>KRDMD</sub> <sup>-</sup> ⇒ DY <sub>KRDMD</sub> <sup>+</sup>	<b>16.6</b>	25.5	15.2	11.1

DY <sub>ARCLK</sub> <sup>+</sup> ≠ Price <sub>ARCLK</sub> <sup>-</sup>	3.57	13.3	8.69	6.62	PE <sub>KRDMD</sub> <sup>+</sup> ≠ DY <sub>KRDMD</sub> <sup>-</sup>	<b>14.9</b>	19.2	12.6	9.68
DY <sub>ARCLK</sub> <sup>+</sup> ≠ PE <sub>ARCLK</sub> <sup>-</sup>	0.93	17.1	11.0	8.69	Price <sub>PETKTM</sub> <sup>+</sup> ≠ DY <sub>PETKTM</sub> <sup>+</sup>	0.21	18.4	4.72	2.73
DY <sub>ARCLK</sub> <sup>+</sup> ≠ PE <sub>ARCLK</sub> <sup>-</sup>	0.04	19.3	4.95	2.40	Price <sub>PETKTM</sub> <sup>-</sup> ≠ DY <sub>PETKTM</sub> <sup>+</sup>	0.99	12.3	4.89	2.99
DY <sub>ARCLK</sub> <sup>+</sup> ≠ PE <sub>ARCLK</sub> <sup>+</sup>	44.8	16.3	10.6	8.45	Price <sub>PETKTM</sub> <sup>-</sup> ≠ DY <sub>PETKTM</sub> <sup>-</sup>	<b>7.4</b>	12.3	5.74	3.69
DY <sub>ARCLK</sub> <sup>+</sup> ≠ PE <sub>ARCLK</sub> <sup>-</sup>	35.9	17.5	10.8	8.48	Price <sub>PETKTM</sub> <sup>+</sup> ≠ DY <sub>PETKTM</sub> <sup>+</sup>	0.40	9.38	4.80	2.98
PE <sub>ARCLK</sub> <sup>-</sup> ≠ Price <sub>ARCLK</sub> <sup>+</sup>	19.0	14.3	10.2	8.51	Price <sub>PETKTM</sub> <sup>+</sup> ≠ PE <sub>PETKTM</sub> <sup>-</sup>	0.16	8.24	4.31	2.79
PE <sub>ARCLK</sub> <sup>-</sup> ≠ Price <sub>ARCLK</sub> <sup>-</sup>	0.19	27.4	5.80	2.53	Price <sub>PETKTM</sub> <sup>-</sup> ≠ PE <sub>PETKTM</sub> <sup>-</sup>	0.82	8.32	4.88	3.52
PE <sub>ARCLK</sub> <sup>-</sup> ≠ Price <sub>ARCLK</sub> <sup>+</sup>	2.07	19.0	10.0	7.18	Price <sub>PETKTM</sub> <sup>-</sup> ≠ PE <sub>PETKTM</sub> <sup>+</sup>	<b>8.4</b>	9.66	4.58	3.03
PE <sub>ARCLK</sub> <sup>-</sup> ≠ Price <sub>ARCLK</sub> <sup>-</sup>	3.32	19.1	11.2	8.11	Price <sub>PETKTM</sub> <sup>+</sup> ≠ PE <sub>PETKTM</sub> <sup>-</sup>	0.01	8.17	4.29	3.11
PE <sub>ARCLK</sub> <sup>-</sup> ≠ DY <sub>ARCLK</sub> <sup>+</sup>	1.85	19.0	12.0	9.00	DY <sub>PETKTM</sub> <sup>-</sup> ≠ Price <sub>PETKTM</sub> <sup>+</sup>	0.03	11.5	4.78	2.90
PE <sub>ARCLK</sub> <sup>-</sup> ≠ DY <sub>ARCLK</sub> <sup>-</sup>	0.07	20.2	5.06	2.43	DY <sub>PETKTM</sub> <sup>-</sup> ≠ Price <sub>PETKTM</sub> <sup>-</sup>	0.99	10.7	4.98	3.07
PE <sub>ARCLK</sub> <sup>-</sup> ≠ DY <sub>ARCLK</sub> <sup>+</sup>	0.01	23.2	5.17	2.51	DY <sub>PETKTM</sub> <sup>-</sup> ≠ Price <sub>PETKTM</sub> <sup>+</sup>	2.56	12.1	8.08	5.84
PE <sub>ARCLK</sub> <sup>-</sup> ≠ DY <sub>ARCLK</sub> <sup>-</sup>	0.07	19.4	4.38	2.51	DY <sub>PETKTM</sub> <sup>+</sup> ≠ Price <sub>PETKTM</sub> <sup>-</sup>	<b>19.3</b>	15.7	8.64	6.13
Price <sub>CCOLA</sub> <sup>+</sup> ≠ DY <sub>CCOLA</sub> <sup>+</sup>	<b>3.52</b>	6.90	4.32	2.62	DY <sub>PETKTM</sub> <sup>+</sup> ≠ PE <sub>PETKTM</sub> <sup>-</sup>	1.38	24.2	13.0	8.83
Price <sub>CCOLA</sub> <sup>+</sup> ≠ DY <sub>CCOLA</sub> <sup>-</sup>	0.88	13.6	4.42	2.80	DY <sub>PETKTM</sub> <sup>-</sup> ≠ PE <sub>PETKTM</sub> <sup>-</sup>	<b>56.2</b>	19.4	12.0	9.09
Price <sub>CCOLA</sub> <sup>+</sup> ≠ DY <sub>CCOLA</sub> <sup>+</sup>	2.33	11.0	4.37	2.51	DY <sub>PETKTM</sub> <sup>-</sup> ≠ PE <sub>PETKTM</sub> <sup>-</sup>	0.04	12.6	4.64	2.94
Price <sub>CCOLA</sub> <sup>+</sup> ≠ DY <sub>CCOLA</sub> <sup>-</sup>	0.03	26.4	4.86	2.55	DY <sub>PETKTM</sub> <sup>+</sup> ≠ PE <sub>PETKTM</sub> <sup>-</sup>	0.21	12.1	4.87	3.21
Price <sub>CCOLA</sub> <sup>+</sup> ≠ PE <sub>CCOLA</sub> <sup>-</sup>	0.09	6.81	4.21	3.02	PE <sub>PETKTM</sub> <sup>-</sup> ≠ Price <sub>PETKTM</sub> <sup>+</sup>	0.03	8.92	4.45	3.20
Price <sub>CCOLA</sub> <sup>+</sup> ≠ PE <sub>CCOLA</sub> <sup>-</sup>	0.24	12.2	5.49	2.76	PE <sub>PETKTM</sub> <sup>-</sup> ≠ Price <sub>PETKTM</sub> <sup>-</sup>	0.34	12.8	5.95	4.02
Price <sub>CCOLA</sub> <sup>+</sup> ≠ PE <sub>CCOLA</sub> <sup>+</sup>	1.98	11.2	4.29	2.61	PE <sub>PETKTM</sub> <sup>+</sup> ≠ Price <sub>PETKTM</sub> <sup>+</sup>	0.17	7.91	4.42	3.09
Price <sub>CCOLA</sub> <sup>+</sup> ≠ PE <sub>CCOLA</sub> <sup>-</sup>	0.13	10.1	4.43	2.74	PE <sub>PETKTM</sub> <sup>+</sup> ≠ Price <sub>PETKTM</sub> <sup>-</sup>	0.26	12.5	7.03	3.92
DY <sub>CCOLA</sub> <sup>+</sup> ≠ Price <sub>CCOLA</sub> <sup>+</sup>	1.42	7.68	4.52	2.88	PE <sub>PETKTM</sub> <sup>+</sup> ≠ DY <sub>PETKTM</sub> <sup>+</sup>	2.43	28.6	19.9	10.0
DY <sub>CCOLA</sub> <sup>+</sup> ≠ Price <sub>CCOLA</sub> <sup>-</sup>	0.02	17.4	4.95	3.15	PE <sub>PETKTM</sub> <sup>-</sup> ≠ DY <sub>PETKTM</sub> <sup>-</sup>	<b>9.32</b>	18.7	11.8	8.93
DY <sub>CCOLA</sub> <sup>+</sup> ≠ Price <sub>CCOLA</sub> <sup>+</sup>	2.69	6.91	3.83	2.77	PE <sub>PETKTM</sub> <sup>-</sup> ≠ DY <sub>PETKTM</sub> <sup>+</sup>	0.36	23.0	6.67	3.47
DY <sub>CCOLA</sub> <sup>+</sup> ≠ Price <sub>CCOLA</sub> <sup>-</sup>	0.20	7.20	4.18	2.73	PE <sub>PETKTM</sub> <sup>+</sup> ≠ DY <sub>PETKTM</sub> <sup>-</sup>	0.15	13.6	5.19	2.93
DY <sub>CCOLA</sub> <sup>+</sup> ≠ PE <sub>CCOLA</sub> <sup>-</sup>	0.02	15.5	4.14	2.44	Prices <sub>SODA</sub> <sup>+</sup> ≠ DY <sub>SODA</sub> <sup>-</sup>	0.62	9.50	4.23	2.63
DY <sub>CCOLA</sub> <sup>+</sup> ≠ PE <sub>CCOLA</sub> <sup>+</sup>	0.13	11.4	4.49	2.28	Prices <sub>SODA</sub> <sup>-</sup> ≠ DY <sub>SODA</sub> <sup>-</sup>	0.97	13.2	5.00	3.05
DY <sub>CCOLA</sub> <sup>+</sup> ≠ PE <sub>CCOLA</sub> <sup>+</sup>	0.78	14.3	4.18	2.47	Prices <sub>SODA</sub> <sup>-</sup> ≠ DY <sub>SODA</sub> <sup>+</sup>	0.15	18.6	4.72	2.32
DY <sub>CCOLA</sub> <sup>+</sup> ≠ PE <sub>CCOLA</sub> <sup>-</sup>	<b>4.43</b>	12.7	4.79	2.81	Prices <sub>SODA</sub> <sup>+</sup> ≠ DY <sub>SODA</sub> <sup>+</sup>	0.01	14.7	4.45	2.26
PE <sub>CCOLA</sub> <sup>-</sup> ≠ Price <sub>CCOLA</sub> <sup>+</sup>	1.25	6.80	3.71	2.82	Prices <sub>SODA</sub> <sup>+</sup> ≠ PE <sub>SODA</sub> <sup>-</sup>	1.28	9.55	6.55	4.69
PE <sub>CCOLA</sub> <sup>-</sup> ≠ Price <sub>CCOLA</sub> <sup>-</sup>	0.00	15.9	5.22	2.93	Prices <sub>SODA</sub> <sup>-</sup> ≠ PE <sub>SODA</sub> <sup>-</sup>	0.12	16.1	4.71	2.34
PE <sub>CCOLA</sub> <sup>-</sup> ≠ Price <sub>CCOLA</sub> <sup>+</sup>	0.24	6.88	4.04	2.72	Prices <sub>SODA</sub> <sup>-</sup> ≠ PE <sub>SODA</sub> <sup>+</sup>	1.44	8.92	4.44	2.92
PE <sub>CCOLA</sub> <sup>-</sup> ≠ Price <sub>CCOLA</sub> <sup>-</sup>	0.09	7.38	4.05	2.76	Prices <sub>SODA</sub> <sup>+</sup> ≠ PE <sub>SODA</sub> <sup>-</sup>	1.18	9.15	4.13	2.85
PE <sub>CCOLA</sub> <sup>-</sup> ≠ DY <sub>CCOLA</sub> <sup>+</sup>	0.08	13.1	5.69	2.54	DY <sub>SODA</sub> <sup>-</sup> ≠ Prices <sub>SODA</sub> <sup>+</sup>	0.66	9.52	4.41	2.75
PE <sub>CCOLA</sub> <sup>-</sup> ≠ DY <sub>CCOLA</sub> <sup>-</sup>	0.33	12.3	4.18	2.44	DY <sub>SODA</sub> <sup>-</sup> ≠ Prices <sub>SODA</sub> <sup>-</sup>	0.74	14.5	5.45	2.83
PE <sub>CCOLA</sub> <sup>-</sup> ≠ DY <sub>CCOLA</sub> <sup>+</sup>	1.17	20.2	11.4	8.29	DY <sub>SODA</sub> <sup>+</sup> ≠ Prices <sub>SODA</sub> <sup>-</sup>	0.06	7.69	3.86	2.88
PE <sub>CCOLA</sub> <sup>-</sup> ≠ DY <sub>CCOLA</sub> <sup>-</sup>	<b>48.5</b>	42.1	17.7	11.8	DY <sub>SODA</sub> <sup>+</sup> ≠ Prices <sub>SODA</sub> <sup>+</sup>	0.64	9.71	4.36	2.64
Price <sub>EREGL</sub> <sup>+</sup> ≠ DY <sub>EREGL</sub> <sup>+</sup>	0.84	8.92	4.36	2.88	DY <sub>SODA</sub> <sup>+</sup> ≠ PE <sub>SODA</sub> <sup>+</sup>	0.84	8.34	3.49	2.60
Price <sub>EREGL</sub> <sup>+</sup> ≠ DY <sub>EREGL</sub> <sup>-</sup>	1.06	9.96	4.43	2.91	DY <sub>SODA</sub> <sup>-</sup> ≠ PE <sub>SODA</sub> <sup>-</sup>	1.39	19.5	9.72	5.78
Price <sub>EREGL</sub> <sup>+</sup> ≠ DY <sub>EREGL</sub> <sup>+</sup>	0.74	10.8	4.44	2.67	DY <sub>SODA</sub> <sup>-</sup> ≠ PE <sub>SODA</sub> <sup>+</sup>	1.83	8.78	3.94	2.77
Price <sub>EREGL</sub> <sup>+</sup> ≠ DY <sub>EREGL</sub> <sup>-</sup>	0.03	12.2	4.69	2.80	DY <sub>SODA</sub> <sup>+</sup> ≠ PE <sub>SODA</sub> <sup>-</sup>	0.10	8.97	4.81	3.17
Price <sub>EREGL</sub> <sup>+</sup> ≠ PE <sub>EREGL</sub> <sup>+</sup>	<b>12.2</b>	14.7	9.22	6.97	PE <sub>SODA</sub> <sup>-</sup> ≠ Prices <sub>SODA</sub> <sup>+</sup>	<b>54.3</b>	12.6	8.30	6.30
Price <sub>EREGL</sub> <sup>+</sup> ≠ PE <sub>EREGL</sub> <sup>-</sup>	1.48	11.0	4.72	2.58	PE <sub>SODA</sub> <sup>-</sup> ≠ Prices <sub>SODA</sub> <sup>-</sup>	<b>0.56</b>	20.9	6.42	3.06
Price <sub>EREGL</sub> <sup>+</sup> ≠ PE <sub>EREGL</sub> <sup>-</sup>	1.46	11.0	3.91	2.50	PE <sub>SODA</sub> <sup>+</sup> ≠ Prices <sub>SODA</sub> <sup>-</sup>	0.75	7.87	4.45	3.07
Price <sub>EREGL</sub> <sup>+</sup> ≠ PE <sub>EREGL</sub> <sup>+</sup>	0.14	11.2	4.53	2.59	PE <sub>SODA</sub> <sup>+</sup> ≠ Prices <sub>SODA</sub> <sup>+</sup>	0.61	8.76	4.21	2.66
DY <sub>EREGL</sub> <sup>+</sup> ≠ Price <sub>EREGL</sub> <sup>+</sup>	0.56	8.92	3.78	2.58	PE <sub>SODA</sub> <sup>+</sup> ≠ DY <sub>SODA</sub> <sup>-</sup>	0.45	7.98	3.83	2.79
DY <sub>EREGL</sub> <sup>+</sup> ≠ Price <sub>EREGL</sub> <sup>-</sup>	0.54	9.22	3.69	2.44	PE <sub>SODA</sub> <sup>-</sup> ≠ DY <sub>SODA</sub> <sup>-</sup>	<b>14.7</b>	19.2	9.10	5.97
DY <sub>EREGL</sub> <sup>+</sup> ≠ Price <sub>EREGL</sub> <sup>+</sup>	<b>14.8</b>	12.8	8.59	6.76	PE <sub>SODA</sub> <sup>+</sup> ≠ DY <sub>SODA</sub> <sup>+</sup>	0.18	25.0	6.72	2.81
DY <sub>EREGL</sub> <sup>+</sup> ≠ Price <sub>EREGL</sub> <sup>-</sup>	<b>6.97</b>	13.1	7.89	6.25	PE <sub>SODA</sub> <sup>-</sup> ≠ DY <sub>SODA</sub> <sup>+</sup>	0.13	22.8	5.56	2.44
DY <sub>EREGL</sub> <sup>-</sup> ≠ PE <sub>EREGL</sub> <sup>+</sup>	0.03	19.8	4.15	2.27	Price <sub>TOASO</sub> <sup>+</sup> ≠ DY <sub>TOASO</sub> <sup>+</sup>	0.45	16.2	9.00	7.08
DY <sub>EREGL</sub> <sup>-</sup> ≠ PE <sub>EREGL</sub> <sup>-</sup>	0.02	19.5	4.24	2.33	Price <sub>TOASO</sub> <sup>-</sup> ≠ DY <sub>TOASO</sub> <sup>+</sup>	1.33	9.75	4.24	2.39
DY <sub>EREGL</sub> <sup>-</sup> ≠ PE <sub>EREGL</sub> <sup>+</sup>	<b>31.9</b>	28.7	15.0	10.1	Price <sub>TOASO</sub> <sup>-</sup> ≠ DY <sub>TOASO</sub> <sup>-</sup>	0.30	8.46	4.33	2.55
DY <sub>EREGL</sub> <sup>-</sup> ≠ PE <sub>EREGL</sub> <sup>-</sup>	<b>10.2</b>	22.8	12.0	8.89	Price <sub>TOASO</sub> <sup>+</sup> ≠ DY <sub>TOASO</sub> <sup>-</sup>	1.49	11.0	4.44	2.25
PE <sub>EREGL</sub> <sup>+</sup> ≠ Price <sub>EREGL</sub> <sup>+</sup>	2.71	12.9	7.87	6.10	Price <sub>TOASO</sub> <sup>+</sup> ≠ PE <sub>TOASO</sub> <sup>+</sup>	7.42	15.8	11.5	9.33
PE <sub>EREGL</sub> <sup>+</sup> ≠ Price <sub>EREGL</sub> <sup>-</sup>	0.15	11.7	4.79	2.82	Price <sub>TOASO</sub> <sup>-</sup> ≠ PE <sub>TOASO</sub> <sup>-</sup>	0.13	8.11	3.79	2.58
PE <sub>EREGL</sub> <sup>+</sup> ≠ Price <sub>EREGL</sub> <sup>+</sup>	0.15	7.39	4.28	2.81	Price <sub>TOASO</sub> <sup>-</sup> ≠ PE <sub>TOASO</sub> <sup>+</sup>	1.48	7.39	3.83	2.68
PE <sub>EREGL</sub> <sup>+</sup> ≠ Price <sub>EREGL</sub> <sup>-</sup>	0.66	9.17	4.26	2.72	Price <sub>TOASO</sub> <sup>+</sup> ≠ PE <sub>TOASO</sub> <sup>-</sup>	3.02	8.93	4.37	2.94
PE <sub>EREGL</sub> <sup>+</sup> ≠ DY <sub>EREGL</sub> <sup>+</sup>	0.72	15.2	5.53	2.70	DY <sub>TOASO</sub> <sup>+</sup> ≠ Price <sub>TOASO</sub> <sup>+</sup>	4.59	13.9	8.40	6.39
PE <sub>EREGL</sub> <sup>+</sup> ≠ DY <sub>EREGL</sub> <sup>-</sup>	0.04	17.8	3.88	2.52	DY <sub>TOASO</sub> <sup>-</sup> ≠ Price <sub>TOASO</sub> <sup>-</sup>	0.32	11.8	4.29	2.48
PE <sub>EREGL</sub> <sup>-</sup> ≠ DY <sub>EREGL</sub> <sup>+</sup>	<b>12.8</b>	26.9	8.90	4.78	DY <sub>TOASO</sub> <sup>-</sup> ≠ Price <sub>TOASO</sub> <sup>+</sup>	<b>44.3</b>	12.1	8.27	6.69
PE <sub>EREGL</sub> <sup>-</sup> ≠ DY <sub>EREGL</sub> <sup>-</sup>	1.44	26.5	7.85	4.89	DY <sub>TOASO</sub> <sup>+</sup> ≠ Price <sub>TOASO</sub> <sup>-</sup>	1.00	12.1	8.37	6.79
Price <sub>FROTO</sub> <sup>+</sup> ≠ DY <sub>FROTO</sub> <sup>+</sup>	0.52	13.3	5.17	3.36	DY <sub>TOASO</sub> <sup>+</sup> ≠ PE <sub>TOASO</sub> <sup>+</sup>	1.55	8.16	4.28	2.96
Price <sub>FROTO</sub> <sup>+</sup> ≠ DY <sub>FROTO</sub> <sup>-</sup>	0.35	12.2	3.99	2.48	DY <sub>TOASO</sub> <sup>-</sup> ≠ PE <sub>TOASO</sub> <sup>-</sup>	0.00	18.7	4.95	2.42
Price <sub>FROTO</sub> <sup>+</sup> ≠ DY <sub>FROTO</sub> <sup>+</sup>	0.08	11.7	4.53	2.85	DY <sub>TOASO</sub> <sup>-</sup> ≠ PE <sub>TOASO</sub> <sup>+</sup>	2.19	6.73	4.05	2.72
Price <sub>FROTO</sub> <sup>+</sup> ≠ DY <sub>FROTO</sub> <sup>-</sup>	1.15	11.6	4.67	2.68	DY <sub>TOASO</sub> <sup>+</sup> ≠ PE <sub>TOASO</sub> <sup>-</sup>	0.09	8.02	3.76	2.59
Price <sub>FROTO</sub> <sup>+</sup> ≠ PE <sub>FROTO</sub> <sup>+</sup>	0.77	14.0	8.99	6.87	PE <sub>TOASO</sub> <sup>-</sup> ≠ Price <sub>TOASO</sub> <sup>+</sup>	<b>27.9</b>	16.7	11.2	8.32
Price <sub>FROTO</sub> <sup>+</sup> ≠ PE <sub>FROTO</sub> <sup>-</sup>	0.16	12.1	4.23	2.59	PE <sub>TOASO</sub> <sup>-</sup> ≠ Price <sub>TOASO</sub> <sup>-</sup>	<b>3.48</b>	18.6	6.10	3.08
Price <sub>FROTO</sub> <sup>+</sup> ≠ PE <sub>FROTO</sub> <sup>+</sup>	0.23	7.29	4.07	2.78	PE <sub>TOASO</sub> <sup>+</sup> ≠ Price <sub>TOASO</sub> <sup>+</sup>	2.02	12.7	8.54	6.87
Price <sub>FROTO</sub> <sup>+</sup> ≠ PE <sub>FROTO</sub> <sup>-</sup>	0.68	7.00	3.96	2.84	PE <sub>TOASO</sub> <sup>+</sup> ≠ Price <sub>TOASO</sub> <sup>-</sup>	3.14	12.4	8.63	6.75
DY <sub>FROTO</sub> <sup>+</sup> ≠ Price <sub>FROTO</sub> <sup>+</sup>	2.17	8.73	4.78	3.24	PE <sub>TOASO</sub> <sup>-</sup> ≠ DY <sub>TOASO</sub> <sup>+</sup>	0.75	10.1	4.89	3.13

DY <sub>FROTO</sub> → Price <sub>FROTO</sub>	0.07	9.05	4.34	2.93	PE <sub>TOASO</sub> → DY <sub>TOASO</sub>	0.07	15.1	3.67	2.09
DY <sub>FROTO</sub> → Price <sub>FROTO</sub> <sup>+</sup>	<b>10.6</b>	13.1	7.61	5.48	PE <sub>TOASO</sub> → DY <sub>TOASO</sub> <sup>+</sup>	0.06	22.3	9.19	5.33
DY <sub>FROTO</sub> <sup>+</sup> → Price <sub>FROTO</sub>	0.69	10.6	6.36	4.83	PE <sub>TOASO</sub> <sup>+</sup> → DY <sub>TOASO</sub>	3.01	25.9	8.78	4.81
DY <sub>FROTO</sub> <sup>+</sup> → Price <sub>FROTO</sub> <sup>+</sup>	0.00	6.66	4.17	2.89	Price <sub>TUPRS</sub> → DY <sub>TUPRS</sub>	1.87	7.51	4.08	2.88
DY <sub>FROTO</sub> → PE <sub>FROTO</sub>	0.11	11.6	4.60	2.76	Price <sub>TUPRS</sub> → DY <sub>TUPRS</sub> <sup>+</sup>	0.02	8.50	4.11	2.56
DY <sub>FROTO</sub> <sup>+</sup> → PE <sub>FROTO</sub>	3.27	9.74	6.32	4.66	Price <sub>TUPRS</sub> <sup>+</sup> → DY <sub>TUPRS</sub>	2.22	18.1	9.71	7.76
DY <sub>FROTO</sub> <sup>+</sup> → PE <sub>FROTO</sub> <sup>+</sup>	1.20	10.6	6.05	4.62	Price <sub>TUPRS</sub> <sup>+</sup> → DY <sub>TUPRS</sub> <sup>+</sup>	<b>21.9</b>	14.2	9.16	7.05
PE <sub>FROTO</sub> → Price <sub>FROTO</sub>	<b>65.1</b>	13.4	8.97	6.85	Price <sub>TUPRS</sub> → PE <sub>TUPRS</sub>	<b>5.67</b>	10.4	6.85	5.25
PE <sub>FROTO</sub> → Price <sub>FROTO</sub> <sup>+</sup>	2.65	10.6	4.57	3.00	Price <sub>TUPRS</sub> <sup>+</sup> → PE <sub>TUPRS</sub>	0.01	7.23	3.97	2.57
PE <sub>FROTO</sub> <sup>+</sup> → Price <sub>FROTO</sub>	0.06	9.97	4.08	2.53	Price <sub>TUPRS</sub> <sup>+</sup> → PE <sub>TUPRS</sub> <sup>+</sup>	0.00	8.30	4.25	3.02
PE <sub>FROTO</sub> <sup>+</sup> → Price <sub>FROTO</sub> <sup>+</sup>	0.09	12.8	5.10	2.93	Price <sub>TUPRS</sub> <sup>+</sup> → PE <sub>TUPRS</sub> <sup>+</sup>	0.01	7.67	4.41	2.91
PE <sub>FROTO</sub> → DY <sub>FROTO</sub>	1.08	6.59	3.78	2.76	DY <sub>TUPRS</sub> → Price <sub>TUPRS</sub>	0.03	7.15	3.89	2.91
PE <sub>FROTO</sub> <sup>+</sup> → DY <sub>FROTO</sub>	1.22	13.1	4.54	2.72	DY <sub>TUPRS</sub> → Price <sub>TUPRS</sub> <sup>+</sup>	0.32	11.1	4.54	2.79
PE <sub>FROTO</sub> <sup>+</sup> → DY <sub>FROTO</sub> <sup>+</sup>	0.15	16.6	5.04	2.86	DY <sub>TUPRS</sub> <sup>+</sup> → Price <sub>TUPRS</sub>	0.18	6.28	3.81	2.59
PE <sub>FROTO</sub> <sup>+</sup> → DY <sub>FROTO</sub> <sup>+</sup>	0.01	14.6	4.46	2.63	DY <sub>TUPRS</sub> <sup>+</sup> → Price <sub>TUPRS</sub> <sup>+</sup>	2.42	6.14	3.42	2.54
Price <sub>KRDMD</sub> → DY <sub>KRDMD</sub>	0.03	10.0	4.79	3.01	DY <sub>TUPRS</sub> <sup>+</sup> → PE <sub>TUPRS</sub>	0.01	9.41	4.13	2.56
Price <sub>KRDMD</sub> <sup>+</sup> → DY <sub>KRDMD</sub>	0.03	10.8	4.45	2.59	DY <sub>TUPRS</sub> <sup>+</sup> → PE <sub>TUPRS</sub> <sup>+</sup>	0.08	14.0	5.37	2.70
Price <sub>KRDMD</sub> → DY <sub>KRDMD</sub> <sup>+</sup>	0.80	9.92	5.44	3.41	DY <sub>TUPRS</sub> <sup>+</sup> → PE <sub>TUPRS</sub> <sup>+</sup>	<b>6.3</b>	11.5	4.30	2.81
Price <sub>KRDMD</sub> <sup>+</sup> → DY <sub>KRDMD</sub>	0.55	9.39	4.37	2.58	DY <sub>TUPRS</sub> <sup>+</sup> → PE <sub>TUPRS</sub> <sup>+</sup>	<b>37.8</b>	9.66	4.80	2.93
Price <sub>KRDMD</sub> <sup>+</sup> → PE <sub>KRDMD</sub>	0.20	10.2	4.57	2.91	PE <sub>TUPRS</sub> → Price <sub>TUPRS</sub>	<b>36.7</b>	10.3	6.44	4.80
Price <sub>KRDMD</sub> <sup>+</sup> → PE <sub>KRDMD</sub> <sup>+</sup>	0.57	14.9	5.63	2.81	PE <sub>TUPRS</sub> → Price <sub>TUPRS</sub> <sup>+</sup>	1.65	10.3	4.24	2.53
Price <sub>KRDMD</sub> → PE <sub>KRDMD</sub>	0.00	13.2	5.14	2.55	PE <sub>TUPRS</sub> <sup>+</sup> → Price <sub>TUPRS</sub>	0.07	6.90	3.99	2.81
Price <sub>KRDMD</sub> → PE <sub>KRDMD</sub> <sup>+</sup>	1.86	8.74	4.02	2.44	PE <sub>TUPRS</sub> <sup>+</sup> → Price <sub>TUPRS</sub> <sup>+</sup>	0.15	7.74	4.35	3.01
DY <sub>KRDMD</sub> → Price <sub>KRDMD</sub>	0.40	7.66	3.85	2.75	PE <sub>TUPRS</sub> <sup>+</sup> → Price <sub>TUPRS</sub> <sup>+</sup>	1.82	7.71	3.83	2.65
DY <sub>KRDMD</sub> <sup>+</sup> → Price <sub>KRDMD</sub>	0.44	8.83	4.35	2.72	PE <sub>TUPRS</sub> <sup>+</sup> → DY <sub>TUPRS</sub>	0.02	12.8	4.00	2.22
DY <sub>KRDMD</sub> <sup>+</sup> → Price <sub>KRDMD</sub> <sup>+</sup>	0.01	7.82	3.67	2.55	PE <sub>TUPRS</sub> <sup>+</sup> → DY <sub>TUPRS</sub> <sup>+</sup>	1.50	13.7	7.81	5.64
DY <sub>KRDMD</sub> → Price <sub>KRDMD</sub> <sup>+</sup>	0.02	7.09	3.78	2.46	PE <sub>TUPRS</sub> <sup>+</sup> → DY <sub>TUPRS</sub> <sup>+</sup>	0.03	12.6	7.60	5.69
DY <sub>KRDMD</sub> <sup>+</sup> → PE <sub>KRDMD</sub>	0.01	24.0	3.90	2.17	Price <sub>ULKER</sub> → DY <sub>ULKER</sub>	0.46	10.1	4.16	2.87
DY <sub>KRDMD</sub> <sup>+</sup> → PE <sub>KRDMD</sub> <sup>+</sup>	<b>30.8</b>	23.1	12.6	8.24	Price <sub>ULKER</sub> → DY <sub>ULKER</sub> <sup>+</sup>	0.40	8.31	4.45	2.98
DY <sub>KRDMD</sub> → PE <sub>KRDMD</sub>	0.00	22.7	4.61	1.94	Price <sub>ULKER</sub> <sup>+</sup> → DY <sub>ULKER</sub>	0.39	10.4	5.85	3.15
DY <sub>KRDMD</sub> → PE <sub>KRDMD</sub> <sup>+</sup>	0.02	23.4	5.66	1.95	Price <sub>ULKER</sub> <sup>+</sup> → DY <sub>ULKER</sub> <sup>+</sup>	1.08	8.01	4.15	2.75
PE <sub>KRDMD</sub> → Price <sub>KRDMD</sub>	0.41	8.33	3.83	2.55	Price <sub>ULKER</sub> <sup>+</sup> → PE <sub>ULKER</sub>	0.61	7.19	4.01	2.84
PE <sub>KRDMD</sub> <sup>+</sup> → Price <sub>KRDMD</sub>	0.50	11.4	4.42	2.92	Price <sub>ULKER</sub> <sup>+</sup> → PE <sub>ULKER</sub> <sup>+</sup>	3.18	12.1	7.17	5.25
PE <sub>KRDMD</sub> <sup>+</sup> → Price <sub>KRDMD</sub> <sup>+</sup>	2.01	8.73	3.81	2.50	Price <sub>ULKER</sub> → PE <sub>ULKER</sub>	0.60	8.14	4.26	3.02
PE <sub>KRDMD</sub> → Price <sub>KRDMD</sub> <sup>+</sup>	0.27	8.44	4.56	3.04	Price <sub>ULKER</sub> → PE <sub>ULKER</sub> <sup>+</sup>	0.98	9.08	4.51	2.81
PE <sub>KRDMD</sub> <sup>+</sup> → DY <sub>KRDMD</sub>	0.03	27.1	5.79	2.13	DY <sub>ULKER</sub> → Price <sub>ULKER</sub>	0.14	8.30	4.06	2.68
PE <sub>KRDMD</sub> <sup>+</sup> → DY <sub>KRDMD</sub> <sup>+</sup>	<b>51.2</b>	43.8	18.5	12.2	DY <sub>ULKER</sub> → Price <sub>ULKER</sub> <sup>+</sup>	0.79	8.17	4.39	2.85
PE <sub>KRDMD</sub> → DY <sub>KRDMD</sub>	<b>29.4</b>	21.1	6.91	3.53	DY <sub>ULKER</sub> <sup>+</sup> → Price <sub>ULKER</sub>	<b>12.7</b>	8.53	4.07	2.89
PE <sub>KRDMD</sub> → DY <sub>KRDMD</sub> <sup>+</sup>	<b>22.3</b>	16.9	9.98	6.93	DY <sub>ULKER</sub> <sup>+</sup> → Price <sub>ULKER</sub> <sup>+</sup>	0.74	7.96	3.84	2.88
Price <sub>OTKAR</sub> → DY <sub>OTKAR</sub>	0.06	9.93	5.04	3.49	DY <sub>ULKER</sub> <sup>+</sup> → PE <sub>ULKER</sub>	<b>97.2</b>	20.3	11.5	8.92
Price <sub>OTKAR</sub> <sup>+</sup> → DY <sub>OTKAR</sub>	1.59	9.75	6.54	4.81	DY <sub>ULKER</sub> <sup>+</sup> → PE <sub>ULKER</sub> <sup>+</sup>	0.13	21.2	8.04	4.55
Price <sub>OTKAR</sub> <sup>+</sup> → DY <sub>OTKAR</sub> <sup>+</sup>	<b>24.7</b>	14.8	8.84	6.01	DY <sub>ULKER</sub> → PE <sub>ULKER</sub>	4.32	3.06	0.58	0.13
Price <sub>OTKAR</sub> → DY <sub>OTKAR</sub> <sup>+</sup>	0.14	11.2	7.03	5.13	DY <sub>ULKER</sub> → PE <sub>ULKER</sub> <sup>+</sup>	<b>16.4</b>	18.0	11.0	8.71
Price <sub>OTKAR</sub> <sup>+</sup> → PE <sub>OTKAR</sub>	1.62	11.5	6.66	5.18	PE <sub>ULKER</sub> → Price <sub>ULKER</sub>	<b>13.1</b>	8.21	4.31	3.01
Price <sub>OTKAR</sub> <sup>+</sup> → PE <sub>OTKAR</sub> <sup>+</sup>	<b>55.7</b>	12.2	7.38	5.68	PE <sub>ULKER</sub> → Price <sub>ULKER</sub> <sup>+</sup>	<b>9.16</b>	11.6	7.48	5.35
Price <sub>OTKAR</sub> → PE <sub>OTKAR</sub>	0.01	10.1	7.17	5.40	PE <sub>ULKER</sub> <sup>+</sup> → Price <sub>ULKER</sub>	2.21	10.7	6.68	4.90
Price <sub>OTKAR</sub> → PE <sub>OTKAR</sub> <sup>+</sup>	5.07	15.7	8.30	5.99	PE <sub>ULKER</sub> <sup>+</sup> → Price <sub>ULKER</sub> <sup>+</sup>	0.96	11.3	7.56	5.20
DY <sub>OTKAR</sub> → Price <sub>OTKAR</sub>	1.67	7.37	4.37	2.82	PE <sub>ULKER</sub> <sup>+</sup> → DY <sub>ULKER</sub>	0.27	34.8	15.3	9.16
DY <sub>OTKAR</sub> <sup>+</sup> → Price <sub>OTKAR</sub>	1.95	11.0	6.03	4.72	PE <sub>ULKER</sub> <sup>+</sup> → DY <sub>ULKER</sub> <sup>+</sup>	0.14	22.5	9.23	5.25
DY <sub>OTKAR</sub> <sup>+</sup> → Price <sub>OTKAR</sub> <sup>+</sup>	<b>28.1</b>	10.3	6.80	4.98	PE <sub>ULKER</sub> → DY <sub>ULKER</sub>	1.33	39.9	11.0	6.11
DY <sub>OTKAR</sub> <sup>+</sup> → Price <sub>OTKAR</sub> <sup>+</sup>	1.80	11.0	6.27	5.01	PE <sub>ULKER</sub> <sup>+</sup> → DY <sub>ULKER</sub> <sup>+</sup>	0.27	33.8	10.5	5.89

As it can be seen from Table 1 that there are asymmetric relationships between stock price and price-earning ratio and dividend yield ratio of the companies listed at BIST30 in different dimensions. For example, increases in price of ARCLK and TUPRS stocks cause decrease in dividend yield ratio. Increases in the price of ARCLK, EREGL and TUPRS stock are the reason of increase in price-earnings ratio. Also decreases in dividend yield ratio of ARCLK, EREGL, FROTO, OTKAR, TOASO and ULKER are the reason of increases in the prices. On the other hand, decreases in the price-earning ratio of KRDMD, PETKM and SODA cause decrease in dividend yield ratio. Another finding of the study is that decreases in the stock price are not reason of the decreases in dividend yield ratio and increases in the stock price are not reason of the decreases in price-earnings ratio. Analyses also indicate that, decreases in dividend yield ratio do not cause decreases in stock price and increases in price-earnings ratio do not cause increases in dividend yield ratio.

## **Conclusion**

The main purpose of this study is to examine the asymmetric relationships between stock price and dividend yield ratio and price-earnings ratio. In this context, asymmetric causality “from price to dividend yield ratio”, “from price to price-earnings ratio”, “from dividend yield to price”, “from dividend yield to price-earnings ratio”, “from price-earnings ratio to price” and “from price-earnings ratio to dividend yield” for 11 companies listed at BIST30 Manufacturing sector are analysed with Hatemi-J Asymmetric Causality test (2012). Analyses show that there are asymmetric relationships in different dimensions between mentioned variables. But there is no asymmetric causality between some of the variables. Therefore, analyses indicate that the relationships between stock prices and financial ratios may be asymmetric contrary to that is expressed in the literature. On the other hand, the structure of the relationships may change over the time. So, in further studies valuable information about timing can be presented to investors by using the techniques that both consider time and asymmetry dimensions of the relationships, such as time-varying asymmetric causality test.

## The Long-Run Relationships between the CDS Indexes of Emerging Countries: Powerful Cointegration Approach

**Serap KAMISLI** (<http://orcid.org/0000-0002-4714-6678>), Bilecik Seyh Edebali University, Turkey; e-mail: [satbas@gmail.com](mailto:satbas@gmail.com)

**Melik KAMISLI** (<http://orcid.org/0000-0001-6419-2257>), Bilecik Seyh Edebali University, Turkey; e-mail: [melikkamisli@gmail.com](mailto:melikkamisli@gmail.com)

**Fatih TEMIZEL** (<http://orcid.org/0000-0002-7208-3293>), Anadolu University, Turkey; e-mail: [ftemizel@anadolu.edu.tr](mailto:ftemizel@anadolu.edu.tr)

**Keywords** : CDS Indexes, Emerging Markets, Cointegration.

**JEL Classification Codes** : C40, D40, F30.

### Introduction

In recent years, the relationships have increased between the financial markets especially due to the financial liberalization, and an event that occur in a market affect the other market or markets. This situation has caused the risks to transfer to other countries. So, investors must consider the risks of other countries besides considering internal risks. To evaluate the riskiness of the other countries, in other words to evaluate the external risks investors follows global risk indicators. Country CDS is one of these indicators. CDS is fundamentally defined as an insurance policy and it can be used as an investment vehicle. But also, they can be used to evaluate the riskiness of the other countries.

Emerging markets present opportunity of higher returns for investors. But on the other hand, these markets are very sensitive to external shocks and fragile in comparison to developed countries. So, the CDS index of these countries changes rapidly due to the events that occur in other markets. On the other hand, CDS index of country can affect CDS index of another country and there may be transmissions between the CDS indexes. Therefore, investors who are willing to invest in these countries should analyse the relationships between the CDS indexes. These relationships may be analysed by the techniques that are used in the literature to examine the relationships between the financial variables. One of these techniques is cointegration analysis which shows the long-run relationships between two variables. In the light of this information, in the study long run relationships between CDS index of 11 emerging countries will be analysed by cointegration test of Bayer and Hanck (2012) which brought 4 different cointegration tests together. It is thought that results of the study will provide information to the investors that can be used in portfolio and risk management.

### Methodology and Data

The main purpose of this study is to determine the relationships between CDSs of the emerging countries. In this context, the long-run relationships between 10 year-CDS indexes of 11 emerging countries “Argentina (ARG), Brazil (BRA), Chile (CHL), Colombia (COL), Egypt (EGY), Malaysia (MYS), Mexico (MEX), Peru (PER), Philippines (PHL), South Africa (ZAF), Turkey (ZAF)” are investigated by using powerful cointegration test proposed by Bayer and Hanck (2012) for the period of 8/20/2009 - 7/28/2017.

Cointegration analysis reveals the long-run relationships between nonstationary variables. Different cointegration tests (Johansen, 1991; Boswijk, 1994; Banerjee et al. 1998) were developed after first cointegration test proposed by Engle and Granger (1987). But none of them are perfect or exactly powerful. Starting from this point, based on the study of Fisher (1932) Bayer and Hanck (2012) developed a powerful cointegration test that consider cointegration tests of Engle and Granger (1987), Johansen (1991), Boswijk (1994) and Banerjee, et al. (1998) together. Therefore, in the study, the analyses are made by the cointegration test of Bayer and Hanck.

### Empirical Findings and Discussion

To apply cointegration test variables must be nonstationary. So, before analysing the cointegration relationships stationarity of the series is tested with Augmented Dickey Fuller (ADF) Unit Root Test. The results of ADF test are shown at Table 1.

**Table: 1**  
**ADF Unit Root Test Results**

	t-Stat	Prob.
ARG	-1.3574	0.6045
BRA	-1.2906	0.6368
CHL	-2.2934	0.1742
COL	-1.7295	0.4162
EGY	-1.8814	0.3414
MEX	-2.0068	0.2841
MYS	-2.3276	0.1633
PER	-2.5612	0.1014
PHL	-1.9265	0.3202
TUR	-2.1334	0.2316
ZAF	-2.3267	0.1636

As it can be seen from Table 1 that none of the 11 selected countries' is not stationary. So, In the second step, the cointegration relationship between these countries are examined with powerful cointegration test dyadically and results are given at Table 2.

**Table: 2**  
**Bayer and Hanck Powerful Cointegration Test Results**

	BRA	CHL	COL	EGY	MEX	MYS	PER	PHL	TUR	ZAF
ARG	3.638	3.606	<b>20.721</b>	2.341	11.998	2.782	7.791	2.945	2.948	4.402
BRA		6.508	10.504	1.359	8.190	3.183	4.763	<b>17.841</b>	3.454	11.106
CHL			13.162	13.706	<b>17.343</b>	<b>52.659</b>	<b>19.462</b>	13.506	<b>32.416</b>	<b>26.797</b>
COL				4.522	10.706	5.606	3.917	16.660	5.035	6.797
EGY					11.416	5.936	9.594	7.500	7.266	7.475
MEX						<b>18.659</b>	7.722	<b>18.131</b>	16.451	11.687
MYS							28.717	6.808	<b>22.543</b>	<b>18.745</b>
PER								15.840	<b>22.137</b>	<b>18.914</b>
PHL									7.068	11.540
TUR										<b>6.794</b>

Cointegration analyses shows that there are long-run relationships between CDS of many of the emerging countries. The results indicate that especially Chile, Malaysia and Turkey CDSs are related with more emerging countries' CDS than other countries. On the other hand, Egypt's CDS is the only CDS that has no relationship with the other countries' CDS. This situation especially indicates to the volatility effect caused by Arab Spring that occurred in the analysis period.

### **Conclusion**

The main purpose of the study is to examine the long-run relationships between the CDS of emerging countries. In this context, the long-run relationships between the CDSs of 11 emerging countries were analysed by powerful cointegration test. According to the results there are cointegration relationships between the CDS of many of the emerging countries except Egypt. These findings indicate that CDSs are related with the external shocks of the other similar countries besides internal shocks. On the other hand, volatility in the CDS indexes may be transmitted to CDS index of other countries. Therefore, in further studies, volatility transmissions between the CDS of emerging countries may be analysed by Dynamic Conditional Correlation (DCC-GARCH) model.

## **Analysing Causality Relationships between CDS Indexes and Stock Market Volatility of European Countries**

**Melik KAMISLI** (<http://orcid.org/0000-0001-6419-2257>), *Bilecik Seyh Edebali University, Turkey; e-mail: melikkamisli@gmail.com*

**Serap KAMISLI** (<http://orcid.org/0000-0002-4714-6678>), *Bilecik Seyh Edebali University, Turkey; e-mail: satbas@gmail.com*

**Fatih TEMIZEL** (<http://orcid.org/0000-0002-7208-3293>), *Anadolu University, Turkey; e-mail: ftemizel@anadolu.edu.tr*

**Keywords** : CDS Indexes, European Markets, Causality Relationships.

**JEL Classification Codes** : N24, G15, G10.

### **Introduction**

Credit default swap (CDS) is a contract that buyer transfers credit risk of a company or country to the seller in exchange for a premium paid periodically. As it can be understood from the definition that credit default swaps generated in 1990s are contracts developed for protection. As the premium that the buyer pays to the seller is determined according to the default risk, CDS spreads are regarded as a risk indicator and measure of financial wealth and represent risk perception of the market. For this reason, changes in CDS indexes that constructed for a country and region are followed closely by investors, financial institutions and policy makers. CDS indexes contain information about many credit risk components and changes in credit market and contribute price discovery in credit market. Credits are repriced if credit events such as bankruptcy, reconstruction and default happen and spreads increase. In this context, increases in spreads due to the credit event indicate increase in credit risk in the economy.

Popularity of CDS contracts which are firstly constructed for protection increased in advancing years and contracts are started to be sold in secondary markets. In 2008, the crisis originated in USA put the CDS to the center of the financial markets and many studies have been made related to CDS which is an indicator of financial risk. In these studies, co movements of CDS markets and other markets and lead-lag relations were examined, the relationships between spreads and stock and bond markets were investigated and some information was presented to the investors to be used in portfolio management decisions. In this context, in the study the casual relationships between volatility of stock markets and country CDS indexes of European countries will be analysed by Bootstrapped Toda-Yamamoto causality test. At the end of the study, by the determination of the causal relationships between stock market volatility and CDS indexes, valuable information will be presented to the stock market investors to be used in portfolio construction and buying/selling decisions and to the policy makers to be used in decision processes.

### **Methodology and Data**

The main purpose of this study is to determine the causality between CDS index and stock market volatility of European countries. Thus, it will be produced information that can be used portfolio

management, to the investors who are willing to invest in European stock markets but do not have enough information to analyse the risk structure of the markets and effects of the risks on stock markets. The weekly CDS index and stock index of 25 European countries (Austria (AUT), Belgium (BEL), Bulgaria (BGR), Cyprus (CYP), Czech Republic (CZE), Denmark (DNK), Finland (FIN), France (FRA), Germany (DEU), Greece (GRC), Hungary (HUN), Ireland (IRL), Italy (ITA), Latvia (LVA), Malta (MLT), Netherlands (NLD), Norway (NOR), Poland (POL), Portugal (PRT), Slovakia (SVK), Spain (ESP), Sweden (SWE), Switzerland (CHE), Turkey (TUR) and UK (GBR)) between 1/09/2009 - 7/28/2017 is used in the scope of the study.

In the study, firstly GARCH(1,1) model is applied to stock index of each European countries to obtain the volatility series. In the next step, the causality relationship between stock market volatility and CDS indexes is analysed by Bootstrapped Toda-Yamamoto causality test introduced by Hacker and Hatemi-J (2006).

In traditional Granger Causality Test (1969) it is tested that if a variable can provide valuable information in forecasting the future value of another variable, or not. To use this test, the series must be stationary. If the series are not stationary, difference of the series are taken to make series stationary and taking the difference of the series because information loses. But in Hacker and Hatemi-J's (2006) causality test which is a developed version of Toda and Yamamoto (1995) causality test, it can series to be stationary in different degrees. Also, determination of the critical values by bootstrap provides superiority to this method. For this reason, in the study causality test of Hacker and Hatemi-J was selected to analyse the relationships.

### Empirical Findings and Discussion

The results of Bootstrapped Toda-Yamamoto causality test are given at Table 1.

**Table: 1**  
**Bootstrapped Toda-Yamamoto Causality Test Results**

	Wald Stat.	Critical bootstrap value			Wald Stat.	Critical bootstrap value			
		1%	5%	10%		1%	5%	10%	
AUTCDS => SMVOL	1.326	7.637	4.248	2.859	GRC <sub>CDS</sub> => SMVOL	0.021	6.024	4.065	2.774
BEL <sub>CDS</sub> => SMVOL	0.228	7.436	4.326	3.077	HUN <sub>CDS</sub> => SMVOL	0.029	6.857	3.786	2.757
<b>BGR<sub>CDS</sub> =&gt; SMVOL</b>	<b>2.809***</b>	8.059	4.004	2.727	IRL <sub>CDS</sub> => SMVOL	0.192	5.802	3.555	2.485
CHE <sub>CDS</sub> => SMVOL	0.834	7.688	4.028	2.703	ITA <sub>CDS</sub> => SMVOL	0.008	9.477	4.224	2.792
CYP <sub>CDS</sub> => SMVOL	0.013	15.26	4.791	2.291	LVAC <sub>CDS</sub> => SMVOL	2.184	7.908	3.311	2.309
CZE <sub>CDS</sub> => SMVOL	0.668	10.08	3.906	2.727	<b>MLT<sub>CDS</sub> =&gt; SMVOL</b>	<b>8.043***</b>	11.73	8.682	6.64
DEUC <sub>CDS</sub> => SMVOL	4.638	7.971	4.406	2.801	<b>NLD<sub>CDS</sub> =&gt; SMVOL</b>	<b>6.884**</b>	10.49	6.058	4.859
<b>DNK<sub>CDS</sub> =&gt; SMVOL</b>	<b>29.51*</b>	22.09	15.54	13.02	NOR <sub>CDS</sub> => SMVOL	0.088	7.316	4.302	2.991
<b>ESP<sub>CDS</sub> =&gt; SMVOL</b>	<b>8.560***</b>	16.69	11.77	5.081	<b>POL<sub>CDS</sub> =&gt; SMVOL</b>	<b>5.392**</b>	6.435	4.153	2.612
FIN <sub>CDS</sub> => SMVOL	2.266	7.153	3.918	2.958	PRT <sub>CDS</sub> => SMVOL	0.285	8.028	4.207	2.941
FRA <sub>CDS</sub> => SMVOL	1.198	7.714	4.263	2.964	SVK <sub>CDS</sub> => SMVOL	1.952	10.67	6.177	4.669
GBRC <sub>CDS</sub> => SMVOL	0.005	7.299	4.072	2.854	SWEC <sub>CDS</sub> => SMVOL	2.907	8.612	4.147	2.963

As it can be seen from Table 1, there is causality between the CDS of these 25 countries and the volatility of Bulgaria, Denmark, Germany, Malta, Netherlands, Poland and Spain stock markets. According to results from the analysis, country CDS indexes do not only affect emerging countries' stock markets volatility such as Bulgaria and Malta's but also developing countries for example; Denmark, Germany, Netherlands. Hence, in general, it is not possible to make a distinction in terms of development of the financial markets for the relationships between CDS and stock market volatility.

### **Conclusion**

In this study, causality was examined between volatility and the CDS index of 25 European countries. For this purpose, firstly volatility series was obtained by application of GARCH(1,1) model to stock index of each European countries. At the following step, the causality between CDS indexes and stock markets was investigated with Bootstrapped Toda-Yamamoto Causality Test. According to the analysis results, there is causality only between the CDS index of Bulgaria, Denmark, Germany, Malta, and Netherlands, Poland and Spain and their stock market volatility. The results show that it not possible to generally categorize this relationship based on the development of financial markets. In further studies, by the analysis of frequency and time dimensions of the relationships it is believed that useful information will be provided to the investors who take volatility into consideration regarding investment timing.

# **Evaluation of Non-Current Assets in the Framework of TFRS 5 and Examination of Firms Listed in BIST (Istanbul Stock Exchange) 100 and 30 Indices as Use of Non-Current Assets Held for Sale Account in accordance with TFRS 5 in the Period 2007-2016**

*Aynur AKPINAR* (<http://orcid.org/0000-0003-2108-8454>), *KTO Karatay University, Turkey; e-mail: aynur.akpinar@karatay.edu.tr*

**Keywords** : Asset Held for Sale, TFRS 5, Fair Value, Discontinued Operations.

**JEL Classification Codes** : M40, M41.

## **Introduction**

International Accounting Standards have been developed and are being used to ensure that the Financial Statements are prepared to show the entity's position, performance and cash flows in a manner that fully meets the information needs of the related parties. In Turkey, the Public Oversight (accounting and auditing standards authority) is authorized to establish and update Turkish Accounting Standards in line with International Accounting Standards. The objective of TFRS 5 Standard for Non-Current Assets Held for Sale and Discontinued Operations is to determine the accounting principles of "Non-current Assets Held for Sale" and disclosures and presentations that should be made in relation to "Discontinued Operations". The classification and presentation requirements of TFRS 5 apply to the entity's all noncurrent-assets and assets held for sale reflected in the financial statements. Non-current assets refer to amounts that are expected to be recovered for more than 12 months after the reporting period.

## **Materials and Methods**

Measurement principles stated in TFRS 5 apply to all non-current assets and to disposal groups except those listed below. These ones;

- Deferred tax assets (TAS 12),
- Assets, because of the benefits provided to employees (TAS 19),
- TAS 39 Financial Instruments: financial instruments within the scope of Recognition and Measurement (TFRS 9 Financial Instruments),
- Non-current assets, which are accounted for by using the fair value model within the framework of TAS 40 Investment Property Standard,
- Non-current assets measured at fair value less sales cost in the framework of TMS 41 Agricultural Activities Standard,
- Rights arising out of the contract on insurance policies in the framework of the TFRS 4 Insurance Contracts Standard.

According to this Standard, entities should classify their non-current assets for use and for sale purposes according to their objectives. Assets obtained for sale or held for sale should be reported separately under "Assets classified as held for sale" within current assets according to TFRS 5.

Debts belonging to these assets should be shown separately from other debts.

According to TFRS 5, a non-current asset or a group of assets to be disposed must have the following criteria to be classified as non-current assets held for sale:

That the non-current asset or group of assets to be disposed can be sold immediately and the probability of their sales are needed to be high (in the usual circumstances which are frequently found in the sale of such assets).

For potential high sales; a plan for the sale of the asset (or the group of assets to be disposed of) has been made by an appropriate management level and an active program for the identification of the buyers and the completion of the plan has been initiated.

The asset or group of assets to be disposed of must be actively marketed at a price in agreement with the current fair value (the possibility of acceptance by the partners of this sales plan should be high if the approval of the partners is necessary according to the legislation).

It is necessary to anticipate that the sale transaction will be realized within one year from the date of classification as held for sale asset and the probability of making a change in the plan for sale should be low.

If it becomes clear that the sales transaction will take place longer than a year due to events or conditions outside the control of the operator, the asset is classified as held for sale if there is sufficient evidence that the sale plan for the sale of that asset or asset group is in place.

If a non-current asset is acquired only to be disposed of in the future, it can be recognized as an asset held for sale if it initially provides criteria for non-current assets held for sale (such as expected to be eliminated in a year, prepared for sale within 3 months).

If the entity makes a sales plan that will lose its control over a subsidiary, the entity classifies all assets and liabilities of the subsidiary as held for sale if the criteria for the assets held for sale are met.

The asset cannot be classified as held for sale if the determined criteria for assets held for sale (such as expectation of elimination within one year, preparation of sales plan) is provided after the reporting period and before the presentation of the financial statements. However, the situation is explained in the footnote.

An entity cannot classify an asset to be withdrawn as an asset or disposal a group of assets to be withdrawn for sale as held for sale. Assets to be withdrawn from use compose of the assets that can be used until the end of the economic life and the fixed assets that will not be sold and will be discontinued operations.

A non-current asset or group of assets, classified as held for sale, are evaluated at the lower of fair value less costs to sell and net book value of the related asset at the time of initial accounting and at future reporting times or asset group and their amortization process is ceased.

This process also affects the performance and tax burden of the enterprises, as well as causing changes in the financial statements.

In this study, accounting records of non-current assets held for sale in enterprises, which should be made at the time they are owned, they are evaluated at the end of the period and they are disposed, are explained with examples in agreement with standard and tax legislation.

In addition, independently audited financial statements and footnote explanations published on the Public Disclosure Platform of companies in BIST 100 and 30 indices have been examined individually for 10 years and it has been determined whether the accounts for assets held for sale are used.

For this purpose, Statement of Financial Position and Comprehensive Income Statement and footnote explanations of the firms, whose shares traded on the Istanbul Stock Exchange, were used in 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015 and 2016 which were prepared according to Turkish Accounting Standards and independent audit of BIST 100 and BIST 30 indices.

### **Findings**

Accounting records of non-current assets held for sale in enterprises, which should be made at the time they are owned, they are evaluated at the end of the period and they are disposed, have been explained by comparison with the standard and tax legislation and the effects have been discussed.

The percentages of fixed assets held for sale in the BIST 100 indices are 26% in 2007, 26% in 2008, 18% in 2009, 19% in 2010, 26% in 2011, 23% in 2012 and 25% 24%, 21% in 2015 and 25% in 2016.

In the BIST 30 indices, the percentage of use of fixed assets held for sale is 40% in 2007, 47% in 2008, 40% in 2009, 37% in 2010, 50% in 2011, 43% in 2012 and 48% 45%, 43% in 2015 and 46% in 2016.

### **Discussion**

The accounting of the concept of non-current assets held for sale, which is implemented by TFRS 5 non-current assets held for sale and discontinued operations standards, and the intensity of the use of these assets at determined companies has been examined. However, it has been found that companies outside the banks are not overly credited for using this account. This might have two results.

Indeed, the entity does not have an asset or group of assets within the scope of asset held for sale,

The Firm has a group of assets or assets held for sale, but does not show it in the related account.

This is because the standard entities cease the amortization process for assets held for sale.

### **Conclusion**

According to findings obtained in the study for the last ten years, the highest rate of use in the firms in the BIST 100 index is 26%, the lowest 18% and the highest in firms BIST 30 index is 50% and the lowest is 37%.

These usage rates of asset held for sale account are very low. For example, in the same universe, the utilization rate of investment property accounts in the same period was 54% and lowest 34%, respectively, in the BIST 100 index and 68% and 50% in the BIST 30 index.

## Index Construction via Maximum Drawdown Risk Measure: An Application for Morgan Stanley Capital Emerging Markets Index

**Habib KUCUKSAHIN** (<http://orcid.org/0000-0003-2967-9814>), Pamukkale University, Turkey; e-mail: [hkucuksahin@pau.edu.tr](mailto:hkucuksahin@pau.edu.tr)

**Goksal Selahatdin KELTEN** (<http://orcid.org/0000-0002-7273-7613>), Pamukkale University, Turkey; e-mail: [gkelten@pau.edu.tr](mailto:gkelten@pau.edu.tr)

**Furkan ERDOGMUS** (<http://orcid.org/0000-0002-2617-2674>), Bayburt University, Turkey; e-mail: [furkanerdogmus@bayburt.edu.tr](mailto:furkanerdogmus@bayburt.edu.tr)

**Bilal GODE** (<http://orcid.org/0000-0001-8377-5909>), Pamukkale University, Turkey; e-mail: [bgode@pau.edu.tr](mailto:bgode@pau.edu.tr)

**Acknowledgement** : This paper is supported by the Scientific Research Projects Unit (BAP) of Pamukkale University.

**Keywords** : Social Sciences, Finance, Portfolio Management, Smart Beta, Maximum Drawdown.

**JEL Classification Codes** : E44, G11, G15, G32.

### Introduction

Innovation and continuous improvement have become the most important characteristic of the era that we live in. Hence, mankind needs constant development and transformation to adapt and keep pace with this age. The variability of the age, adding new variables to the people's life and compel the people for novelty and improvement who take part in a system. One of the most important factors that force human beings to change and innovate is the opportunities and threats that alteration and continuous innovation reveal. Within the context of avoiding threats and benefiting from opportunities, there is a chance that we can watch the simulations of change and transformation in the financial markets where humankind is actively involved every day. It is possible to observe at any moment the instantaneous reaction of mankind in the face of the risks and opportunities that appear in financial markets. Therefore, the field of portfolio management within the financial system be one of the most important examples of change and transformation.

The human factor that plays the most important role in portfolio management is one of the most important reasons for the fluctuation and transformation that are experienced in the stock market. Instant decisions and trading positions, due to the rapid flow of information on financial markets are constantly changing. For this reason, a system is needed to operate the decision mechanism in the most effective way to adapt to the flow of this information process. Systematization of the decision-making mechanism in portfolio management has been made with the Modern Portfolio Theory (1952) put forth by Harry Markowitz. According to the Modern Portfolio Theory, the fluctuation that each stock has experienced is called riskiness, which is calculated using the standard deviation measure. At the point of calculation of the portfolio risk, the risk of each stock together with the co-movement or inactivity (covariance and correlation coefficient) of that stock with other stocks is taken into consideration.

The concept of the market portfolio has been set forth with the help of Modern Portfolio Theory. In this theory, it has been stated that the market portfolio is the most efficient portfolio to be created

by considering risk and return, and it is not possible to obtain a return on this portfolio. However, this did not prevent the search for portfolios that would provide a return on the portfolio. Efforts, to create a portfolio that provides more return than the market portfolio, have revealed the concept of an active portfolio management strategy. In 1970 and 1980, the success of the active portfolio management strategy was tried to be measured in comparison with the return of the market portfolio (Podkaminer, 2015: 9). To obtain a return above the market portfolio, various methods and techniques have been put forward. Having a certain cost and complexity of the methods and techniques presented, the investor has led to a preference for a simpler and cheaper market portfolio. As a result, the market portfolio has become more popular for those times. (Podkaminer, 2015: 9).

Nowadays, the volatility and risk of stock prices are increasing and the market portfolio from this change and riskiness is also significantly affected. It is noted that before today's time there are only five factors affecting stock prices, but today, more than 250 of these factors are stated (Hsu et al., 2015: 89). In addition, previous statement, it is necessary to specify that the market portfolio, which most portfolio managers and investment specialists' use as a benchmark for their portfolio success has a riskiness (Almahdi, 2015: 202). It is important to note that it has also led investors to consider the risk of the market portfolio, especially with the impact of the bubble in the financial markets and especially the effect of recent 2008 financial crisis. It is also worth mentioning that investors follow less risky investment strategies after the 2008 financial crisis (Denoiseux, 2014: 127). Therefore, it is possible to say that when we consider the present conditions, market portfolio takes place in Modern Portfolio Theory is still used as an important indicator, but it has lost its old popularity.

In the study, a different approach has been dealt with, to be an alternative to the market portfolio where risk gain importance for investors now. This strategy, generally defined as Smart beta, has different weighting techniques than the market value-weighted market portfolio. We can define the smart beta as an index creation strategy that is presented as an alternative to the market portfolio with a capitalization weighting methodology and followed by alternative indexing methods to provide a higher return than the market portfolio (Malkiel, 1999: 127; Jacobs & Levy, 2014: 1).

The aim of our work in the direction of the above mentioned is to present an alternative approach to the market portfolio that has a certain risk and to demonstrate the results of this approach. In the light of the results, besides contributing to the literature on indexing with Smart beta strategy, an alternative investment instrument has been tried to be offered to investors, mutual funds, etc.

### **Materials and Methods**

The indices set as alternatives to the market portfolio are called Smart beta indices in the finance literature. Smart beta indices are an indexing strategy that tries to take advantage of both active and passive investment strategies (Podkaminer, 2015: 7). In one hand, the Smart beta strategy is like the active investment strategy because of applying transparent weighting techniques and making dynamic the index building on the other hand some kin to the passive investment strategy in terms of sustainability (Blitz & Swinkels, 2008: 264; Bruce & Levy, 2014: 1; Podkaminer, 2015: 7). In this respect, we can say that the strategy of indexing with Smart beta is taken advantage to both active and passive investment strategies (Kahn & Lemmon, 2015: 76). With the Smart beta indices, the investor does not only have an alternative index but also has an investment strategy in which he can evaluate and control the risk (Amenc et al., 2015: 4). Investors can use different weighting techniques according to their own risk and preferences within the scope of Smart beta index creation strategies. In this

context, the investor has various weighting opportunities in the context of Smart beta index creation strategy, which is simple, risk-aware and return-aware.

In the study, on the purpose of creating a risk-based index, the Maximum Drawdown risk criterion was used. In other words, the weight of each stock or each portfolio in the index is determined by means of the expected Maximum Drawdown risk measure. The Maximum Drawdown risk criterion determines the maximum fall point of a security, portfolio or index at a specified time interval and calculates the relative risk of the securities based on the determined drop point (Vecer, 2007: 1). In other words, the Maximum Drawdown criterion displays the loss between the highest and lowest point in the price of securities at a given period (Ismail et al., 2004: 243). In addition, this criterion is often used as a risk measure in practice by investors (Harding et al., 2005: 2). It should be noted, however, that despite lacking the theoretical basement of the Maximum Drawdown risk measure, in practice it gives interesting results at the point of long-term return (Revez & León, 2013: 2).

According to the Maximum Drawdown risk measure, the weight of each country included in the Morgan Stanley Capital (MSCI) Emerging Markets Index is determined by the lowest points estimated for the year 2016. In the price estimates for the year 2016, 2004-2015 daily data of each country index was used. On the point of price estimates, the Geometric Brownian Motion approach took place in the articles of Önalán (2007), Ladde and Wu (2009), Abidin and Jaffar (2012), Alp (2015), Reddy and Clinton (2016) was utilized.

### Findings

In the study, the main indices of the 24 countries take part in the MSCI Emerging Markets index were used. The highest expected loss estimates for these 24 indices were carried out using daily data from 2004 to 2015. The reason for the election of 2016 in the study is that there are important events taking place all over the world this year. The historical data range to be used for estimating the maximum loss for 2016 was tried to be as wide as possible. Using the Maximum Drawdown methodology, risky, non-risky and equal weighted indices were created in the study. Average returns (arithmetic and geometric), risks (standard deviation) identified and finally the performance of the generated indices for 2016 were calculated using the Sharpe (1966) ratio. In addition, capitalization-weighted MSCI Emerging Markets index (the benchmark) for 2016 (arithmetic and geometric), risk and performance were also calculated.

When we look at the indexes created for the year 2016 using the Maximum Drawdown criterion because of the calculations made:

- The daily arithmetic mean of the risky index was about 0.14%, the daily geometric mean return was about 0.13%, the risk (standard deviation) was about 1% and the Sharpe ratio was about 12% (according to the arithmetic mean).
- The daily arithmetic mean return of the non-risky index was calculated as 0.09%, the daily geometric mean return was approximately 0.08%, the risk (standard deviation) was about 0.9% and the Sharpe ratio was nearly 9%.
- The daily arithmetic average of the equally weighted index was calculated as 0,11.9%, the daily geometric mean return was roughly 0,11.2%, the risk (standard deviation) approximately % 1 and the Sharpe ratio was calculated as 10.9%.

- On the other hand, the daily arithmetic average of the Emerging Markets index was 0.07%, the daily geometric mean return was 0.05%, the risk was 1.7% and the Sharpe ratio was 3.9%.
- If we take into consideration the cumulative returns of the MSCI Emerging Markets index for the year 2016 with the indices created;
- Approximately 15.7% of the risky index,
- About 10% of non-risky index,
- Approximately 13% of the equally weighted index,
- The MSCI Emerging Markets Index performance is figured up as %7.7.

### **Discussion**

The following inferences can be made when we examine the findings made in the study.

- Each index created using the Maximum Drawdown criterion yields more average daily returns than the MSCI Emerging Markets Index. Therefore, it can be said that the indices created in the context of Smart beta index strategy have reached its purpose in terms of return.
- When we consider the risk of alternative indexes created, it is possible to say that we get better results than MSCI Emerging Markets Index which is capitalization weighted.
- When we consider the indexes in terms of portfolio performance, it is seen that indices perform much better according to the Maximum Drawdown scale.
- When we look at the outcomes, these indices created according to riskiness are more efficient indices for the year 2016 and generate a good alternative for the investor.

Eventually, when we evaluate the indexes which are composed via Maximum Drawdown measure among themselves, we can say that the highest return is the risky index and the lowest return is the non-risky index. The return of the equally weighted index is among these two portfolios. As a result, it is important to note that the returns and performance of the indices created with the Maximum Drawdown criterion are realized in the direction of expectations in terms of portfolio management.

### **Conclusion**

The process of creating alternative indexes to the market portfolio has given new methods and techniques to finance literature. One of these methods and techniques created by means of studies that are made scholars is the Smart beta index creation strategies. In this context, as the Smart beta index creation strategy mentioned in the material and methods in the study, a risk-based indexing strategy was followed and a performance evaluation of the index was examined. The maximum drawdown risk criterion is used for the creation of Smart beta indices. According to the results of the study, it is revealed that the indices are a strong alternative to the market capitalization weighted MSCI Emerging Markets index. In addition, the results are in line with the portfolio management theory. Moreover, to the results obtained within the scope of the study, we contribute the literature about Smart beta index strategy and Maximum Drawdown risk criterion. Unlike in the literature on Smart beta index strategy, performance analysis was based on predictive data rather than historical data. Besides with the difference of the Maximum Drawdown literature, an index was created by calculating the expected

maximum drop points. Thanks to the indices created, a new indexing strategy has been gained to investors, mutual funds etc.

Briefly, it should be noted that different weighting techniques and methods can be followed as well as indices adjusted according to risk. Parallel to the situation mentioned above, there is a possibility to utilize different methods in the finance literature. In addition to this situation, it is also possible to use a different estimation tool instead of the Geometric Brownian Motion approach that we use for price estimation in accordance with Maximum Drawdown methodology. In addition, different historical and forecasting periods can be utilized to ensure that the study results can be assessed in a healthy manner. Finally, it should be noted that the study could be expanded by adding various indices such as MSCI Developed, MSCI Frontier, and MSCI Standalone indices.

### References

- Abidin, S.N.Z. & M.M. Jaffar (2012), "A review on Geometric Brownian Motion in forecasting the share prices in Bursa Malaysia", *World Applied Sciences Journal*, 17, 87-93.
- Al Mahdi, S. (2015), "Smart beta portfolio optimization", *Journal of Mathematical Finance*, 5(02), 202.
- Alp, Ö.S. (2015), "Sıçramalı Difüzyon Modelinin Sürekli Zaman Portföy Seçimine Etkisi: Borsa İstanbul Üzerine Bir Uygulama", *World of Accounting Science*, 17(2), 331-345.
- Amenc, N. & F. Goltz & L. Martellini (2013), *Smart Beta 2.0* (Doctoral dissertation, EDHEC Business School).
- Blitz, D. & L. Swinkels (2008), "Fundamental Indexation: An Active Value Strategy in Disguise", *Journal of Asset Management*, 9(4), 264-269.
- Bruce, I. & K.N. Levy (2014), "Smart beta versus smart alpha", *The Journal of Portfolio Management*, 40(4), 4-7.
- Denoiseux, I. (2014), "Smart Beta: Building Low-Volatility Portfolios of ETFs", *The Journal of Index Investing*, 5(1), 127-135.
- Harding, D. & G. Nakou & A. Nejjar (2003), "The pros and cons of "drawdown" as a statistical measure of risk for investments", *Aima Journal*, 23, 16-17.
- Hsu, J. & V. Kalesnik & V. Viswanathan (2015), "A framework for assessing factors and implementing smart beta strategies", *Journal of Index Investing*, 6(1), 89-97.
- Jacobs, B.I. & K.N. Levy (2014), "Smart Beta versus Smart Alpha", *The Journal of Portfolio Management*, 40(4), 4-7.
- Kahn, R.N. & M. Lemmon (2015), "Smart Beta: The owner's Manual", *Journal of Portfolio Management*, 41(2), 76-83.
- Ladde, G.S. & L. Wu (2009), "Development of modified geometric Brownian motion models by using stock price data and basic statistics", *Nonlinear Analysis: Theory, Methods & Applications*, 71(12), e1203-e1208.
- Magdon-Ismail, M. & A.F. Atiya & A. Pratap & Y.S. Abu-Mostafa (2004), "On the Maximum Drawdown of a Brownian Motion", *Journal of Applied Probability*, 41(1), 147-161.
- Malkiel, B.G. (2014), "Is Smart Beta Really Smart?", *Journal of Portfolio Management*, 40(5), 127.
- Markowitz, H. (1952), "Portfolio Selection", *The Journal of Finance*, 7(1), 77-91.
- Önalın, Ö. (2007), "Finansal Zaman Serileri İçin Ortalamaya Dönme Sıçrama Difüzyonu Modeli", *İktisadi ve İdari Bilimler Dergisi*, 22(1), 201-224.
- Podkaminer, E. (2015), "The Education of Beta: Can Alternative Indexes Make Your Portfolio Smarter?", *The Journal of Investing*, 24(2), 7-34.
- Reddy, K. & V. Clinton (2016), "Simulating Stock Prices Using Geometric Brownian Motion: Evidence from Australian Companies", *Australasian Accounting, Business and Finance Journal*, 10(3), 23-47.

- Reveiz, A. & C. León (2009), "Efficient portfolio optimization in the wealth creation and Maximum Drawdown space", in: *Interest Rate Models, Asset Allocation and Quantitative Techniques for Central Banks and Sovereign Wealth Funds*, A. Berkelaar & K. Nyhlom & J. Coche (eds), Palgrave MacMillan: Basingstoke, 134-157.
- Sharpe, W.F. (1966), "Mutual Fund Performance", *The Journal of Business*, 39(1), 119-138.
- Vecer, J. (2007), "Preventing Portfolio Losses by Hedging Maximum Drawdown", *Wilmott*, 5(4), 1-8.



**27 October 2017 Friday**

**Session: III-A / 14.00-15.30**

## **INTERNATINAOL ECONOMICS & INTERNATIONAL RELATIONS**

Room: *Festsaal Imperial*

Chair: **Burcu FAZLIOGLU**

- Center-Periphery Relations in Turkey: A Conceptual and Empirical Reappraisal  
**Joseph S. SZYLLOWICZ**
- European Union and Azerbaijan: Seeking a Stronger Energy Cooperation  
**Cigdem SAHIN**
- Asymmetry in Fuel Geopolitics: Movement towards De-Dollarization and Strategic Objectives of the Development of Azerbaijan's Economy  
**Aida GULIYEVA & Ulviye RZAYEVA**
- Analysis of the Macroeconomic Indicators of the Countries with the MCDM Approach: The Case of D-8 Countries  
**Irfan ERTUGRUL & Gozde SARI & Abdullah OZCIL & Tayfun OZTAS**
- Brazilian Debt and Its Correlation with Austerity  
**Lucas CARVALHO**

## Center-Periphery Relations in Turkey: A Conceptual and Empirical Reappraisal

*Joseph S. SZYLIOWICZ* (<http://orcid.org/0000-0001-6120-6000>), University of Denver, U.S.A.; e-mail: [jszylow@du.edu](mailto:jszylow@du.edu)

**Keywords** : Center Periphery, Dichotomies, Development, Political Relations, Rural-Urban, Local Politics.

**JEL Classification Codes** : Z13, Z18.

### Extended Abstract

Like much of the area studies literature, Turkish studies is widely acknowledged to have evolved along a-theoretical lines. In one area, however, it has used a theoretical approach which dates back over 60 years and continues to be widely used despite growing challenges.

In this paper, we examine the utility and validity of this dichotomous framework, the center-periphery. Following a theoretical analysis of the validity of dichotomous frameworks generally, the paper turns to a consideration of the ways in which this framework has been and continues to be utilized in Turkish studies and the empirical issues that have been raised. We then test its validity by analysing the nature and functioning of local political processes and their relationship to the state over time, in a specific community, using socio-political data dating back to the 1940's. Our results do not fit the dichotomous scheme, providing further support to the view that the center-periphery frameworks are empirically as well as conceptually flawed. Its past and continuing use deserves critical consideration as it may explain, at least in part, the limited theoretical contributions that scholars dealing with various aspects of political change in Turkey have made to their relevant disciplines.

## European Union and Azerbaijan: Seeking a Stronger Energy Cooperation

*Cigdem SAHIN* (<http://orcid.org/0000-0002-1728-3890>), *Nigde Omer Halisdemir University, Turkey; e-mail: csahin@ohu.edu.tr*

**Keywords** : European Union, Azerbaijan, Energy, Energy Security.

**JEL Classification Codes** : F19, F55, Y8.

### Extended Abstract

Transportation of energy resources and energy supply security have been among the top issues of European Union (EU) since the beginning of the 21<sup>st</sup> century. But the real story begins with the 1973 oil crisis which made the Europe dependent to Russian hydro-carbons. This dependency has been reconsidered in a serious manner by EU after the 2006-2009 Russia-Ukraine energy crises. Direct and indirect losses for and negative impacts on European economy and people caused EU to react immediately in community level to find alternative resources and diversify routes or accelerate, reinforce and develop current energy relations with the third parties. Because Russia is the main supplier of energy. In 2016, while crude oil was the largest imported energy product with a 68.5% of total EU energy imports, natural gas in gaseous state was 21.3% of total energy imports. According to data extracted in April 2017, Russia is the largest supplier of natural gas to the EU with a share of 39.7% and of petroleum oils with a share of 31.8%.

Russia's domination on EU's energy imports, as even the simple numbers showed, motivated EU to search for new cooperation's or strengthen ties with alternative partners. As a partner of the European Neighbourhood Policy (ENP) and Eastern Partnership, Azerbaijan has been a closer country to EU since 1991. Especially with the Partnership and Cooperation Agreement (PCA) dated 1999, EU and Azerbaijan have built gradually strong ties. While the Agreement covers the topics such as trade, investment, legislation, culture and economy, another document in 2006 (in the form of Memorandum of Understanding) only includes a matter critically important to both sides, which is energy. A strategic partnership between EU and Azerbaijan in the field of energy has been built with the MoU including 'enhancing security of supply and transit systems' as one of the priority areas of cooperation. Energy relations between two parties have been growing stronger to date. Today Azerbaijan's share in total EU oil demand is about 5% and country also plays a key role in transportation of Caspian gas to European markets through Southern Gas Corridor.

Considering the both side's situations, expectations and purposes in their energy policies, this paper aims to assess the current cooperation efforts between EU and Azerbaijan in the field of energy and investigate prospective courses of relations. It is planned to state briefly how EU and Azerbaijan conduct relations from past to present in the first part. The second part emphasizes energy dimension of the relations asserting energy and trade figures, energy projects and programmes and their affects. Then reviewing the both side's expectations and purposes that are identified by the literature in general and supported by evident, the third part assesses the efforts that have been made to strengthen energy cooperation in the future. The conclusion is likely to show how important to deepen energy ties for both sides on political, economic and social grounds.

## References

- Alieva, L. & S. Natalia (2015), "Energy Security in the South Caucasus: Views from the Region", *Working Paper*, FRIDE: A European Think Tank for Global Action.
- Amirova, S. (2010), *European Neighbourhood Policy in South Caucasus: Azerbaijan as a Case*, Germany: Lambert Academic Publishing.
- Ateşoğlu Güney, N. (2014), "Where Does the EU Stand in Energy Dependence on Russia After the Ukrainian Crisis: Are there Any Alternatives at Hand?", *Perceptions*, XIX(3), 15-34.
- Ćwiek-Karpowicz, J. (2013), "The Importance, Role and Place of Azerbaijan in the EU Energy Security", in: R. İbrahimov (ed.), *Energy and Azerbaijan: History, Strategy and Cooperation*, Baku: Strateji Araştırmalar Merkezi, 79-92.
- European Commission (1999), *Partnership and Cooperation Agreement between the European Communities and their Member States, of the one part, and the Republic of Azerbaijan, of the other part*, OJ L 246, 17/9/1999, 3-38.
- European Commission (2006), "Memorandum of Understanding on a Strategic Partnership between the European Union and the Republic of Azerbaijan in the Field of Energy", 7 November 2006, <[http://ec.europa.eu/dgs/energy\\_transport/international/regional/caucasus\\_central\\_asia/memorandum/doc/mou\\_azerbaijan\\_en.pdf](http://ec.europa.eu/dgs/energy_transport/international/regional/caucasus_central_asia/memorandum/doc/mou_azerbaijan_en.pdf)>, 3.11.2016.
- European Commission (2014), *European Energy Security Strategy, Communication from the Commission to the European Parliament and the Council*, COM(2014) 330 final, Brussels.
- Eurostat (2017), *EU Imports of Energy Products - Recent Developments*, Statistics Explained, <[http://ec.europa.eu/eurostat/statistics-explained/index.php/EU\\_imports\\_of\\_energy\\_products\\_-\\_recent\\_developments](http://ec.europa.eu/eurostat/statistics-explained/index.php/EU_imports_of_energy_products_-_recent_developments)>, 11.07.2017.
- Hüseynov, F. (2003), *Avrupa Birliđi-Azerbaycan İlişkileri*, Ankara: Yeni Avrasya Yayınları.
- Jamalov, R. & T. Alizada (2015), "Energy Security and Energy Union: Perspectives for Azerbaijan", *Policy Paper*, Baku: CESD Researchers Group, <[http://cesd.az/new/wp-content/uploads/2015/11/Energy\\_security\\_and\\_Energy\\_union\\_perspectives\\_for\\_Azerbaijan\\_CESD\\_Policy\\_Paper.pdf](http://cesd.az/new/wp-content/uploads/2015/11/Energy_security_and_Energy_union_perspectives_for_Azerbaijan_CESD_Policy_Paper.pdf)>, 12.10.2016.
- Kobzova, J. & A. Leila (2012), "The EU and Azerbaijan: Beyond Oil", *Policy Memo*, No. 57, London: European Council on Foreign Relations, <[http://www.ecfr.eu/page/-/ECFR57\\_EU\\_AZERBAIJAN\\_MEMO\\_AW.pdf](http://www.ecfr.eu/page/-/ECFR57_EU_AZERBAIJAN_MEMO_AW.pdf)>, 22.7.2016.
- Oktay, E.G. (2015), "Avrupa Komşuluk Politikası ve Azerbaycan: Eleştirel Bir Değerlendirme", *Bilig*, (75), 75-102.
- Shirinov, R. (2011), "A Pragmatic Area for Cooperation: Azerbaijan and the EU", *Internationale Politik und Gesellschaft*, (3), 74-81.
- TEAS and IRIS (2014), *Report of the Seminar on the Role of Azerbaijan in the New Geopolitics of Energy*, Paris: The European Azerbaijan Society and the French Institute for International and Strategic Affairs.
- Telli, A. (2015), "Azerbaycan Enerji Diplomasisi", in: H. Çomak & C. Sancaktar & Z. Yıldırım (eds.) *Enerji Diplomasisi*, İstanbul: Beta Yayıncılık, 347-372.

## **Asymmetry in Fuel Geopolitics: Movement towards De-Dollarization and Strategic Objectives of the Development of Azerbaijan's Economy**

*Aida GULIYEVA* (<http://orcid.org/0000-0001-5614-591X>), *Azerbaijan State University of Economics, Azerbaijan*; e-mail: [guliyevaaida@gmail.com](mailto:guliyevaaida@gmail.com)

*Ulviyye RZAYEVA* (<http://orcid.org/0000-0001-5881-6633>), *Azerbaijan State University of Economics, Azerbaijan*; e-mail: [ulviyye.rza@hotmail.com](mailto:ulviyye.rza@hotmail.com)

**Keywords** : Geostrategic Instability, Anti-Dollar Campaign, Dutch Illness, Stock Market, Gold.

**JEL Classification Codes** : D82, F63.

### **Introduction**

In the second half of the XX century there was a classical version of the great cycle of N. Kondratieff, when the USA and other developed countries dominated the world economy. At the beginning of the XXI century, in the upward wave of the modern large cycle, significant changes were observed in all characteristics due to radical shifts in the global economy. Developing countries have become locomotives of modern economic development with higher rates of return and investment in fixed assets.

Today the USA as the largest importer of oil and the only super state in fact monopolized the right to convert geopolitics of spaces into geopolitics of streams, geostrategic in geo-economics and vice versa. Historically, commodity markets have used the US currency as a settlement facility. Traditionally, oil quotations are exposed in US dollars. Both sellers and buyers prefer to conduct calculations in dollars to avoid unnecessary transaction costs. From this perspective, the greatest danger is political: any trade in the national currency is a blow to the dollar, and the US usually does not leave strikes without an answer.

In foreign trade, economic dependence is manifested not only in the overall asymmetry of exports and imports, but also primarily in the commodity structure of these composite. This problem is doubly urgent for Azerbaijan, as raw materials and semi-finished products are mainly dominated in the exports of developing countries.

### **Materials and Methods**

The object of our consideration is the meaning of the concept of asymmetry and polarization of hydrocarbon resources in a small group of developing countries and countries with economies in transition. Historically, commodity markets have used US currency as means of payment. However, active anti-dollar campaign is gradually unfolding in the world. These efforts often lead to serious and not always positive developments in global politics. The purpose of the work is finding answers to the following questions: what should be done to ensure that the rejection of the dollar would be real? What can the economy of the small developing country expect in global crisis, falling prices for raw materials, after two devaluations?

The novelty of this work is to study the structure of the Azerbaijani economy, aimed at getting rid of the “resource curse” - a theory that points to the relationship between large revenues from the export of natural resources and the weak economic development of the country. The relevance of work consists in need of studying of a phenomenon of geopolitical asymmetry, the dependence on oil dollars, how the beginning of the de-dollarization company will affect the economy of Azerbaijan and what are the ways of development of a small developing country.

### **Results or Findings**

The strategic goal of economic development of any country is to attract foreign investment, they characterize the long-term interest of foreign investors in the development of economic activity in a certain state. The stock market develops when investors appear on it, because the securities are needed for those issuers that have an area of business and profit. And it is important to take into consideration the negative investment climate for Azerbaijan, since there is a high probability of escalation of the conflict in Nagorno-Karabakh.

The population provides the bulk of investment in the stock market, if it has incomes that exceed consumption costs. Thus, the model of the undeveloped securities market in Azerbaijan is characterized by the fact that there are practically no national investment resources, national production cannot effectively consume foreign investment.

### **Discussion**

What needs to be done to ensure that the rejection of the dollar will be real and not virtual? To do this, countries need to sell their oil and gas, either for gold or for national currency tied to gold, and not to the US dollar, as it is now.

Here a reasonable question arises: how to determine the value of oil relative to gold, without the participation of the US dollar, in which today both oil and gold are quoted (estimated) in world markets? The answer is “no way”. It’s just not necessary. The market itself will determine the relative value of oil against money (gold).

If the future expectations of the global economy are bad, as it is happening now in Azerbaijan, people are trying to protect the dollar and gold and sell shares in countries where the stock market is developed. This creates an additional burden on the economy, since inflation increases with energy costs. Because of high inflation, people invest more in gold and less in stocks, which leads to a drop in stock markets.

There are many combinations of oil, gold and shares, but as a rule:

Gold and oil are positively correlated. Increase in prices for oil testifies to bad times, and prices of gold raise respectively.

Gold and shares negatively correlate. If stocks rise, gold falls and vice versa.

### **Conclusions**

The accumulation of huge monetary and financial resources has an ambiguous impact on the economy of oil-producing countries. On the one hand, it creates unprecedented financial conditions for boosting the economic development of these countries. On the other hand, it generates such

problems as, for example, inflation growth, deepening of structural disproportions (flawed development of the “non-oil” sector), and difficulties in the social sphere. In current conditions, Azerbaijan should treat the idea of de-dollarization more restrainedly. First, if the country switches to calculations for oil and gas in manats, then the budget will lose additional income from devaluation. To date, since the beginning of the year, manats has depreciated more than 100% against the dollar and the euro. Transformation of manats into the international currency with a high probability will not lead to the stabilization of the national currency, but to its even greater volatility. Conversion of currency into freely convertible means that its circulation is not limited in any way, the state cannot influence it in any way, and its rate is determined only by speculation on the stock exchange - the dependence on the dollar is only strengthened.

### References

- Baumeister, C. & L. Kilian (2016), “Forty Years of Oil Price Fluctuations: Why the Price of Oil May Still Surprise Us”, *Journal of Economic Perspectives*, 30(1), 139-160; doi:10.1257/jep.30.1.139
- Bourguignon, F. & C. Morrison (2002), “Inequality among World Citizens: 1820-1992”, *American Economic Review*, 92(4), 727-44.
- Musayev, E. (2012), “Securities Market in Azerbaijan: State and Tendencies of Development”, *Russian Business*, No. 10, <<http://cyberleninka.ru/article/n/rynok-tsennyh-bumag-v-azerbaydzhane-sostoyanie-i-tendentsii-razvitiya>>, 25.03.2017.
- Nefiodov, L.A. (2006), *The Sixth Kondratieff*, 6th edition.
- Paul, T.V. (1994), *Asymmetric Conflicts: War Initiation by Weaker Powers*, New York, NY: Cambridge University Press.
- Qiang, S. & L. Xiaokun (2010), “Russia Quit Dollar”, *China Daily Updated*, 2010-11-24, 08:02.

## **Analysis of the Macroeconomic Indicators of the Countries with the MCDM Approach: The Case of D-8 Countries**

*Irfan ERTUGRUL* (<http://orcid.org/0000-0002-5283-191X>), Pamukkale University, Turkey; e-mail: [iertugrul@pau.edu.tr](mailto:iertugrul@pau.edu.tr)

*Gozde SARI* (<http://orcid.org/0000-0002-2824-1995>), Pamukkale University, Turkey; e-mail: [gozdes@pau.edu.tr](mailto:gozdes@pau.edu.tr)

*Abdullah OZCIL* (<http://orcid.org/0000-0001-6304-2986>), Pamukkale University, Turkey; e-mail: [aozcil@pau.edu.tr](mailto:aozcil@pau.edu.tr)

*Tayfun OZTAS* (<http://orcid.org/0000-0001-8224-5092>), Pamukkale University, Turkey; e-mail: [toztas@pau.edu.tr](mailto:toztas@pau.edu.tr)

**Keywords** : Macroeconomics Indicators, MCDM, D-8 Countries, SAW, CRITIC.

**JEL Classification Codes** : E60, P52, C44.

### **Introduction**

Countries, like people, come together for things that they cannot succeed themselves and establish various organizations. These established organizations offer countries the opportunity to cooperate on a variety of issues. Thanks to the cooperation provided, countries benefit from their strengths; they also have the chance to overcome their deficiencies caused by their weaknesses. For this purpose, countries with similar characteristics/aims come together to establish various organizations. Given the benefits of international organizations set up in this context, these organizations are contributing to global development.

Turkey is also a member of international organizations in line with its interests. Examples of such organizations include the Council of Europe, the United Nations World Tourism Organization (UNWTO), the World Health Organization (WHO), the World Trade Organization (WTO), the North Atlantic Treaty Organization (NATO), and the International Civil Aviation Organization (T.C. Dışişleri Bakanlığı). Developing eight countries (D-8) are also one of these organizations. D-8 was established on 15 June 1997 in Istanbul with the Summit of Heads of State/Government. Its members include Bangladesh, Egypt, Indonesia, Iran, Malaysia, Nigeria, Pakistan, and Turkey. The objectives of D-8 are to improve the economic conditions of member countries, raise living standards, diversify their relations by creating new opportunities in trade, and increase their participation in international decision-making processes (D-8 Organization for Economic Cooperation). D-8 countries have great importance in their positions due to their natural resources, population structure and potential markets (Karabulut, 2017: 424). The member states of the D-8 are making progress in various fields to develop the economy in an economic sense. For example, with the D-8 Preferential Trade Agreement, which entered into force in July 2016, it is planned to improve the position of member countries in the world economy (Ağır & Şahbaz, 2016: 73).

Multi-Criteria Decision Making (MCDM) methods are frequently used analysis techniques in the literature. With these methods, it is possible to analyse various decision-making units under different criteria in the selection, ranking, sorting, and description problems (Ishizaka & Nemery, 2013: 4). In this study, it is aimed to analyse the macroeconomic indicators of the member countries of the D-8,

which was established for the economic cooperation, with the MCDM and rank the member countries according to their scores. In the analysis, the weights of the criteria were determined by the CRiteria Importance Through Intercriteria Correlation (CRITIC) method. Decision-making units were ranked with the Simple Additive Weighting (SAW) method. The rest of this paper was organized as follows: Literature review, the theoretical background of the CRITIC and SAW methods, the application and results, and conclusion sections.

### Literature Review

Urfalıoğlu & Genç (2003), Kılıç (2005), Eren & Kaynak (2017), Genç & Masca (2013), Paksoy (2015), Nuuter et al. (2015) and Eyüboğlu (2016) used related MCDM methods for the performance analysis of countries in their studies. Also, Jafari et al. (2011), Nişancı et al. (2011a), Razaqi et al. (2011), Nişancı et al. (2011b), Doğan (2015), İnançlı et al. (2016), Bilişik (2015) and Ağır & Şahbaz (2016) have been examined as the studies that related to the D-8 countries and using different methods.

### The CRITIC Method

Real-world decision-making problems are usually complex and no structures are to be considered through the examination of a single criterion, or point of view that will provide to the optimum decision (Zavadskas & Turskis, 2011: 403). The CRITIC (CRiteria Importance Through Intercriteria Correlation) method aims at the determination of objective weights of relative importance in MCDM problems. The method developed is based on the analytical analysis of the evaluation matrix for gathering all information contained in the evaluation criteria. For a finite MCDM data set  $A$  of  $n$  alternatives and a given system of  $m$  evaluation criteria  $f_j$ , the multicriteria problem in its general form can be expressed as follows (Diakoulaki et al., 1995: 764-765):

$$\text{Max}\{f_1(a), f_2(a), \dots, f_m(a) / a \in A\} \quad (1)$$

For every criterion  $f_j$  of this multi-criteria problem is defined a membership function  $x_j$  mapping the values of  $f_j$  to the interval  $[0, 1]$ . For this normalization step is calculated by Equation (2). So that  $f_j^*$  is the best solution value and  $f_{j*}$  is the worst solution value for criterion  $j$ .

$$x_{aj} = \frac{f_j(a) - f_{j*}}{f_j^* - f_{j*}} \quad (2)$$

The comparison matrix is converted into a matrix of relative scores with generic element  $x_{ij}$ . By normalization of the  $j$ th criterion generated a vector  $x_j$  denoting the scores of all  $n$  alternatives considered.

$$x_j = (x_j(1), x_j(2), \dots, x_j(n)) \quad (3)$$

Each criterion  $x_j$  is defined by the standard deviation,  $\sigma_j$  which quantifies the contrast intensity of the similar criterion. In the next step, a symmetric matrix is calculated with dimension  $m \times m$  and a generic element  $r_{jk}$ , which denotes the linear correlation coefficient between the vectors  $x_i$  and  $x_k$ . As a result, the sum shown in Equation (4) indicates a measure of the conflict created by criterion  $j$  with respect to the decision situation defined by the other criteria.

$$\sum_{k=1}^m (1 - r_{jk}) \quad (4)$$

The amount of information  $C_j$ , emitted by the  $j$ th criterion can be calculated by composing the measures which quantify the two criteria through the Equation (5).

$$C_j = \sigma_j \sum_{k=1}^m (1 - r_{jk}) \quad (5)$$

The higher the value  $C_j$ , the larger the amount of information characterized by the correspondent criterion and the higher its relative importance for the decision-making process. Objective weights are resulted by normalizing these values to integrity according to the Equation (6).

$$w_j = \frac{C_j}{\sum_{k=1}^m C_k} \quad (6)$$

### The SAW Method

The SAW (Simple Additive Weighting) method, also known as the weighted sum method, is probably the best known and most widely used decision-making method (Chang & Yeh, 2001: 408). In the classical MCDM methods, SAW proposed by Churchman, Ackoff, and Amoff is a well-known method (Wang, 2015: 413). The aim of SAW method is to get a weighted sum of the performance ratings of each alternative under all criteria (Chou et al., 2008: 133). The advantage of this method is that it is a proportional linear transformation of comparison matrix which means that the relative order of magnitude of the standardized scores remains equal (Afshari et al., 2010: 512). Trade-offs between the different criteria are totally allowed, yet the rate of compensation based on the weights of the correspondent criteria for the SAW method. This method entails the existence of partial value functions for the criteria, although they are not explicitly stated (Polatidis et al., 2006: 187). The SAW method consists of two basic steps (1) scale the values of all criteria to make them comparable; (2) sum of the values of all criteria for each alternative (Chou et al., 2008: 133). The comparison matrix is normalized by Equation (7) (Ömürbek et al., 2016: 242).

$$r_{ij} = \begin{cases} \frac{x_{ij}}{\max x_j}, i = 1, 2, \dots, m; j = 1, 2, \dots, n \text{ Beneficial Criteria} \\ \frac{\min x_j}{x_{ij}}, i = 1, 2, \dots, m; j = 1, 2, \dots, n \text{ Cost Criteria} \end{cases} \quad (7)$$

Preference values of alternatives are calculated using Equation (8). The greater the value ( $V_i$ ), the more preferred the alternative ( $A_i$ ) (Yeh, 2002: 172).

$$V_i = \sum_{j=1}^n w_j r_{ij}, i = 1, 2, \dots, m; j = 1, 2, \dots, n \quad (8)$$

### Application and Results

Because of the literature review GDP (\$ and billion) (C1), Export (% GDP) (C2), GDP Growth (Annual %) (C3), Unemployment Rate (C4), Inflation Rate (C5), Imports (% GDP) (C6) and Total Public Debt (C7) were determined as comparison criteria. C1, C2, and C3 are beneficial criteria and others are cost criteria. The countries' data for the 2015 year is shown in Table 1.

**Table: 1**  
**Comparison Matrix**

Country	C1	C2	C3	C4	C5	C6	C7
Bangladesh	195.08	17.34	6.55	4.12	6.19	24.75	26.60
Indonesia	861.26	21.15	4.88	5.99	6.36	20.72	28.40
Iran	393.44	19.74	-1.50	11.06	13.71	19.27	11.40
Malaysia	296.28	70.90	4.97	3.10	2.08	63.25	54.50
Egypt	332.70	13.18	4.37	12.84	10.36	21.66	90.20
Nigeria	481.07	10.63	2.65	4.28	9.02	10.49	11.50
Pakistan	271.05	10.59	4.71	5.09	2.54	17.02	69.90
Turkey	859.38	23.33	6.06	10.24	7.67	25.96	34.70

Source: *The World Bank and Central Intelligence Agency*.

When Table 1 is examined, the following results are observed: Indonesia has the highest (861.26); Bangladesh (195.08) has the lowest GDP (C1). Besides, it should be said that the values of Turkey and Indonesia are very close in terms of GDP. When analysed in terms of exports (% GDP) (C2), the highest value is observed in Malaysia (70.90); the lowest value is observed in Pakistan (10.59). Bangladesh (6.55) has the highest GDP growth rate (C3); Iran has the lowest GDP growth rate (-1.50) because it has negative GDP growth. According to unemployment rates (C4), the highest unemployment rate is in Egypt (12.84); while the lowest rate is seen in Malaysia (3.10). The lowest rate for inflation rate (C5) is in Malaysia (2.08); while the highest rate is observed in Iran (13.71). According to the import (% GDP) (C6) values, Nigeria has the lowest import rate (10.49); Malaysia has the highest (63.25) percentage. Finally, when the total public debt (C7) values are examined, the highest debt is in Egypt (90.20); and the lowest debt is in Iran (11.40).

The CRITIC method has been used to objectively determine the criterion weights. The weights of the criteria are calculated by the CRITIC method and are shown in Table 2. The most important criteria according to the results are C6 and C1 criteria. Less important criteria than the other criteria are C3 and C5 criteria.

**Table: 2**  
**The Criteria Weights**

Criteria	C1	C2	C3	C4	C5	C6	C7
Weights	0.163	0.144	0.120	0.132	0.122	0.165	0.154

The SAW method was used to compare the performance values of the countries. Table 3 shows the ranking values of the countries according to the SAW method.

**Table: 3**  
**The Country Ranking Values**

Country	Bangladesh	Indonesia	Iran	Malaysia	Egypt	Nigeria	Pakistan	Turkey
Scores	0.468	0.549	0.386	0.605	0.326	0.603	0.466	0.511
Rankings	5	3	7	1	8	2	6	4

When the data in Table 1 and the criteria weights in Table 2 are examined, the results of Table 3 are obtained as follows. When the criteria are ranked according to importance ratings, from the most important criterion to the least important criterion ranking of the criteria is obtained as C6, C1, C7, C2, C4, C5 and C3. In this respect, countries that they have the best value in a criterion which has higher importance and according to its cost or benefit attribute will have an advantage in terms of ranking. For instance, Nigeria and Indonesia are expected to have better ranking according to their scores on the two most important criteria, C6 and C1. Indeed, they are in the top three according to the ranking

in Table 3. When the values of the countries in terms of the criteria are generalized according to the importance level, Malaysia has the best values according to the criteria of C2, C3, C5 and it is determined as the D-8 country that performs best in terms of macroeconomic indicators. The rankings of other countries have been obtained in a similar way.

### Conclusion

Countries come together to cooperate on various issues and establish organizations with international qualifications. Thanks to these organizations, the countries are expecting that an increase in their welfare levels. In this study, D-8 countries where Turkey is a member for similar purposes are considered. After the information on D-8 was presented, the macroeconomic indicators of member countries were analysed with the MCDM approach. The used macroeconomic indicators were determined because of the literature review. The CRITIC method was used to determine the significance of the criteria to be used in the analysis in an objective way. Because of these calculations, it is determined that the most important criterion is Imports (% GDP) (C6) and the lowest criterion is GDP Growth (Annual %) (C3). After the criterion weights were determined, the SAW method was used to rank the D-8 countries according to macroeconomic indicators. The ranking results were obtained as Malaysia, Nigeria, Indonesia, Turkey, Bangladesh, Pakistan, Iran, and Egypt. These results show the relative order of these 8 countries under similar conditions. Further studies can be prepared with different data and methods. For example, in more detailed analyses, where the ranking scores of these countries can be classified according to their similarity. In closing, this study is thought to be a reference to different studies that will compare countries under different criteria.

### References

- Afshari, A. & M. Mojahed & R.M. Yusuff (2010), "Simple Additive Weighting Approach to Personnel Selection Problem", *International Journal of Innovation, Management and Technology*, 1(5), 511-515.
- Ağır, H. & A. Şahbaz (2016), "D-8 Ülkelerinin Makroekonomik Performansı ve Türkiye'nin Dış Ticareti", *ICPESS 2016-İstanbul*, 24-26 August 2016, 71-85.
- Bilişik, M.T. (2015), "Gelişmekte Olan ve Hızlı Büyüyen Ülkelerin Tarım Sektörünün Malmquist Toplam Faktör Verimliliği ile Analizi", *Trakya Üniversitesi Sosyal Bilimler Dergisi*, 17(2), 77-97.
- Central Intelligence Agency, The World Factbook, <<https://www.cia.gov/library/publications/the-world-factbook/fields/2186.html>>, 07.08.2017.
- Chang, Y.H. & C.H. Yeh (2001), "Evaluating Airline Competitiveness Using Multiattribute Decision Making", *Omega*, 29(5), 405-415.
- Chou, S.Y. & Y.H. Chang & C.Y. Shen (2008), "A Fuzzy Simple Additive Weighting System Under Group Decision-Making for Facility Location Selection with Objective/Subjective Attributes", *European Journal of Operational Research*, 189(1), 132-145.
- D-8 Organization for Economic Cooperation, Brief History of D-8, <<http://www.developing8.org/About.aspx>>, 09.08.2017.
- Diakoulaki, D. & G. Mavrotas & L. Papayannakis (1995), "Determining Objective Weights in Multiple Criteria Problems: The CRITIC Method", *Computers & Operations Research*, 22(7), 763-770.
- Doğan, A. (2015), "Türkiye'nin D8 Ülkeleriyle Ticaretinin Yapısal Analizi", *Akademik Araştırmalar ve Çalışmalar Dergisi*, 7(13), 166-189.
- Eren, M. & S. Kaynak (2017), "An Evaluation of EU Member States According to Human Development and Global Competitiveness Dimensions Using the Multi-Period Grey Relational Analysis (MP-GRA) Technique", *Grey Systems: Theory and Application*, 7(1), 60-70.

- Eyüboğlu, K. (2016), "Comparison of Developing Countries' Macro Performances with AHP and TOPSIS Methods", *Çankırı Karatekin University Journal of the Faculty of Economics and Administrative Sciences*, 6(1), 131-146.
- Genç, T. & M. Masca (2013), "TOPSIS ve PROMETHEE Yöntemleri ile Elde Edilen Üstünlük Sıralamalarının Bir Uygulama Üzerinden Karşılaştırılması", *Afyon Kocatepe Üniversitesi İİBF Dergisi*, XV(II), 539-566.
- İnançlı, S. & N. Altıntaş & V. İnal (2016), "Finansal Gelişme ve Ekonomik Büyüme İlişkisi: D-8 Örneği", *Kastamonu Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 14(4), 36-49.
- Ishizaka, A. & P. Nemery (2013), *Multi-Criteria Decision Analysis: Methods and Software*, West Sussex: John Wiley & Sons, Ltd.
- Jafari, Y. & M.A. Ismail & M.S. Kouhestani (2011), "Determinants of Trade Flows Among D8 Countries: Evidence from the Gravity Model", *Journal of Economic Cooperation & Development*, 32(3), 21-38.
- Karabulut, R. (2017), "Günümüz Dünyasından D-8'e Yeniden Bir Bakış", *Turkish Studies International Periodical for the Languages, Literature and History of Turkish or Turkic*, 12(8), 417-434.
- Kılıç, S.B. (2005), "Avrupa Birliğine Üye ve Aday Ülkelerin Bazı Temel Makro Ekonomik Kriterlere Göre Sınıflandırılması: Çok Kriterli Karar Alma Analizine Dayalı Bir Modelin Tahmini", *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 14(2), 339-352.
- Nişancı, M. & İ. Karabıyık & M. Uçar (2011a), "Finansal Gelişme ve İktisadi Büyüme: Statik ve Dinamik Panel Veri Analizi", *Sosyal Ekonomik Araştırmalar Dergisi*, 22(2011), 107-118.
- Nişancı, M. & İ. Karabıyık & M. Uçar (2011b), "İktisadi Büyümede Finansal Gelişmenin Etkisi: D-8 Ülkelerinde Nedenellik İlişkisi", *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 25(2), 225-235.
- Nuuter, T. & I. Lill & L. Tupenaite (2015), "Comparison of Housing Market Sustainability in European Countries Based on Multiple Criteria Assessment", *Land Use Policy*, 42 (January 2015), 642-651.
- Ömürbek, N. & M. Karaatlı & H.F. Balcı (2016), "Entropi Temelli MAUT ve SAW Yöntemleri İle Otomotiv Firmalarının Performans Değerlemesi", *Dokuz Eylül Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 31(1), 227-255.
- Paksoy, S. (2015), "Ülke Göstergelerinin VIKOR Yöntemi ile Değerlendirilmesi", *AİBÜ-İİBF Ekonomik ve Sosyal Araştırmalar Dergisi*, 11(2), 153-169.
- Polatidis, H. & D.A. Haralambopoulos & G. Munda & R. Vreeker (2006), "Selecting an Appropriate Multi-Criteria Decision Analysis Technique for Renewable Energy Planning", *Energy Sources, Part B: Economics, Planning, and Policy*, 1(2), 181-193.
- Razzaqi, S. & F. Bilquees & S. Sherbaz (2011), "Dynamic Relationship Between Energy and Economic Growth: Evidence from D8 Countries", *The Pakistan Development Review*, 50(4), 437-458.
- T.C. Dışişleri Bakanlığı, Uluslararası Kuruluşlar ve İlişkilerimiz, <<http://www.mfa.gov.tr/sub.tr.mfa?23a3fc26-4f3b-47dd-943e-d8934cdad97e>>, 09.08.2017.
- The World Bank, World Bank Open Data, <<http://data.worldbank.org/>>, 08.08.2017.
- Urfaloğlu, F. & T. Genç (2013), "Çok Kriterli Karar Verme Teknikleri ile Türkiye'nin Ekonomik Performansının Avrupa Birliği Üye Ülkeleri ile Karşılaştırılması", *Marmara Üniversitesi İ.İ.B. Dergisi*, XXXV(II), 329-360.
- Wang, Y.J. (2015), "A Fuzzy Multi-Criteria Decision-Making Model Based on Simple Additive Weighting Method and Relative Preference Relation", *Applied Soft Computing*, 30(May 2015), 412-420.
- Yeh, C.H. (2002), "A Problem-based Selection of Multi-Attribute Decision-making Methods", *International Transactions in Operational Research*, 9(2), 169-181.
- Zavadskas, E.K. & Z. Turskis (2011), "Multiple Criteria Decision Making (MCDM) Methods in Economics: An Overview", *Technological and Economic Development of Economy*, 17(2), 397-427.

## Brazilian Debt and Its Correlation with Austerity

*Lucas CARVALHO* (<http://orcid.org/0000-0001-7283-5419>), São Paulo State University, Brazil; e-mail: [lucassiqueiradecarvalho@gmail.com](mailto:lucassiqueiradecarvalho@gmail.com)

**Keywords** : Fiscal Policy; Keynes; Consolidation; Public Debt.

**JEL Classification Codes** : E62.

### Introduction

This paper aims to investigate the relations between the monetary policies and the fiscal policies according to an overall perspective concerning government solvency. Gathering data about the Public Expenditure, National GDP, Public Debt, among others, we analyse periods of consolidation to contrast them with periods of expenditure, this method is based on the one that Victoria Chick and Ann Pettifor applied in their analysis of English fiscal policy along the 20th century (The economic consequences of Mr. Osborne), it is possible to analyse the available data given by Brazilian government during the years of 1991 and 2010, this period although short, includes two governments that uses the fiscal police in distinct ways. This is so we can discuss the rising relations between debt and GDP when there's use of actions to the benefit of fiscal consolidation.

### Methods

Victoria Chick and Ann Pettifor (2010) analyse the macroeconomic policies of the United Kingdom during the 20th century, with the intention of highlight the correspondence between the rise of public spending and the public debt based on GDP as an inverse correlation, that is, the higher the public spending the lower the debt-to-GDP ratio.

Based on that article I intend to analyse the actual reality of Brazilian economic. I will also try to understand why that relation is inverse than intuitively expected, using the Keynes literature and those who wrote about public finances in his view.

After the review of that topic I will approach the Brazilian data of the recent period, where we have two governments who deal whit the public spending in different ways and whit that highlight the relation exposed by Chick and Pettifor, making two distinct moments that are auspicious for this analyse.

With this essay, I intend to contribute for the discussion about the politics available in a scenario of recession. It's common for the governments to cut the spending looking to rise the primary surplus, I hope to discuss the relevance of this strategy, facing a growing debt, using the thoughts of Keynes in what is related to public debt when the economy is in recession.

### Results

Within the selected period there are two moments that shows us tendencies in regards of the movements of the public debt and the governmental spending. The first goes from the 1995 to 2002 and the second from 2003 to the beginning of 2009.

In the first we have a rise in the relation of debt and GDP of 30% to 60%, an explosive rise that is followed by the stabilization period that goes from 1998 until the half of 2001. That period is characterized by the financial stabilization of the Brazilian economy, based on the exchange anchor until 1999. The trade opening and its stabilization had as a tool the high interest rate, that made even with years of primary surplus that were rise in the public debt in relation of the GDP, that is because a primary surplus does not imply an operational surplus, that one being the one that accounts the costs of the debt (Carneiro, 2002).

The second period show us a clear down fall of the relation of the debt with the GDP, that goes out of the closes 60% to a close 40%, that movement is helped by the fall of the interest rates and by the growth of the GDP.

That analyses shows, in unison with what Chick and Pettifor (2016) showed in her paper, the tendency of a rise in the relation of public debt and GDP with the struggle to make primary surplus. For a proximity with the argument of the British authors, the 3th graphic bring us the relation of government spending (not accounting the spending with interests and loan amortizations) in relation with the GDP.

Although the tendency of growth in the two periods, we have a considerable bigger growth in the second period, more accurately, we have an average of final consumption of the federal government in relation with the GDP of 1.51% against an average of 2.85% in the second.

### **Discussion**

Hermann (2002) shows that using the relation public debt by GDP to measure the growth of indebtedness of the government it can be demonstrated that the austerity politics are not the most effective way of diminishing a public debt.

That is because to the primary surplus to do effect in the fall of the debt as a part of the GDP it must be bigger than the interest of the debt that already exists in face of the rise of the GDP, therefore it is necessary that the primary surplus compensate the costs of the interests and the fall of the GDP.

However, if we consider a government that is in a recessive moment and that it already has a debt, when it begins to make the fiscal adjustment the debt will continue to increase in the first moment? The magnitude of the effort to made the fiscal adjustment will depend on the composition of the past debt and how it is organized in the moment of the adjustment, the more the monetary policy has been restrictive the more the debt it will be composed by securities and more expansive these bonds will be, that is, the interest pay by this government will be bigger (Hermann, 2002).

### **Conclusions**

After the analysis of the data we can see that Brazil do not flows against the current showed by the British authors and explained by the Brazilian one. When there is a fall in the government spending in a recessive period the relation of public debt and GDP tends to rise. This tendency shows how the government should think in its anticyclical function not only by the possible return of the economic growth but for its budget.

In parallel with the historical view of the authors in her article we can understand that the context of the analysed economy would be very important for a better understating of its behaviour. In the analysed period, we can see that are mistaken economic decision taken because of the punctual political

movements like the elections, beyond the behaviour of the market agents in relation of a candidate to presidency that can cause economic riots.

We also have the limitations of the tools commonly used to overview the solvency of the governments, the relation of the debt and the GDP show a down fall in moments that the sale of securities by the government to finance fiscal policies that are expansionist in moments of economic growth, that is when the government are taken a pro cyclical policy, financed by a monetary policy that is chooses a rise in the government obligations with the financial system, the relation presents a fall back, as the scenario were trilling the right path.

In highlight with this moment we have other when the government is selling its actives to rise its liquid and the relation of debt and GDP continues to rise, regardless of the efforts of the government to shut it down.

Also, it is omitted from these analyses the impact of the interests in the public finances, an effort that only forces the primary surplus do not shows how much the government would benefices from a diminish in the interest rate and how much it suffers from a rise in that.

Another riot, mentioned above, it is the utilization of the fiscal surplus as the principal tool of the fiscal adjustment in relation of the public debt. The moments where we have the greatest efforts for it are the 2001 and 2002, when are approved measures that contain the public spending, but that moments shows a growth in the debt and in the following moment, when a government with a different propose in relation of the public spending assumes, the relation of the debt and the GDP gets better.

However even when this relation is true we cannot state that a rise in the government spending it is by itself a Keynesian position, the author claims the already explained social investment as an anticyclical measure, being reluctant as to the direct incentive of the government to the consumption in times of recession (Keynes, 1980, 345).

In this short study, we can see that the relation of the public debt is more complicated than it is commonly treated. We see that the tools used to analyse and diminish it are limited and has serious restrictions and, therefore it is necessarily altering the way of how it is study and discussed, creating new tools that are more precise and arguments that are more coherent about this relation.

## References

- Abreu, M.P. (2014), *A ordem do progresso: dois séculos de política econômica no Brasil*, 2<sup>a</sup> ed. Rio de Janeiro: Elsevier.
- Carneiro, R. (2002), *Desenvolvimento em crise*, São Paulo: Editora UNESP.
- Chick, V. & T.G.A. Pettifor (2016), "The economic consequences of Mr Osborne: Fiscal Consolidation: Lessons from a century of UK macroeconomic statistics", *Policy Research in Macroeconomics*, Londre: Prime.
- Collier, E.K.B. & B.E. Collier (1995), "What Keynes Really Said About Deficit Spending", *Journal of Post Keynesian Economics*, 3(17), Londres.
- Garcia, R.V. (2010), "Política Fiscal e Dívida Pública: uma abordagem teórica a partir de Keynes e Abba Lerner", *Problemas del Desarrollo*, v. 41. 59-79.
- Hermann, J. (2002), "A Macroeconomia da Dívida Pública: notas sobre o debate atual e a experiência brasileira recente (1999-2002)", *Cadernos Adenauer*, v. 4, Rio de Janeiro, 41-70.
- Hermann, J. (2006), "Ascensão e Queda da Política Fiscal: de Keynes ao 'autismo' fiscal dos anos 1990-2000", *Seminários IE/UFRJ*, Programa de Pós-Graduação em Economia, Rio de Janeiro, 1-24.

Ipeadata, <<http://www.ipeadata.gov.br/>>, 20.06.2016.

Keynes, J.M. (1980), *The Collected Writings of John Maynard Keynes*, v. 27, The Royal Economic Society, Londres.

Worlddatabank, <<http://databank.worldbank.org/data/reports.aspx?source=2&country=CHN>>, 11.05.2016.



**27 October 2017 Friday**

**Session: III-B / 14.00-15.30**

## **ENVIRONMENT & TECHNOLOGY & INDUSTRY 4.0**

Room: *Salon Imperial*

Chair: **Hasan Bulent KANTARCI**

- Environmental Policy and Issues in the United States  
**Itir OZER-IMER & Tugrul IMER**
- Influences of Industry 4.0 to Logistics Sector  
**Gul SENIR & Rabia EFEUGLU**
- Dispute Settlement in Outer Space  
**Sezercan BEKTAS**
- An Evaluation of Industry 4.0 and Its Effects on Social Security  
**Bilal GODE & Fatih AKCAY**
- Reconsidering the Relationship between the Internationalization of Capital and the Technology Case in the Industry 4.0 Period  
**Suat AKSOY**

## Environmental Policy and Issues in the United States

*İtir OZER-IMER* (<http://orcid.org/0000-0002-7779-1440>), Hacettepe University, Turkey; e-mail: [itirozer@gmail.com](mailto:itirozer@gmail.com)

*Tugrul IMER* (<http://orcid.org/0000-0003-1596-3048>), Gazi University, Turkey; e-mail: [turimer@gmail.com](mailto:turimer@gmail.com)

**Keywords** : Environmental Policy, Environmental Issues, Environmental Regulatory Framework, Government Policy, United States.

**JEL Classification Codes** : Q50, Q58.

### Extended Abstract

The aim of the environmental policy in the United States, as in most other countries, is to protect the environment and conserve the natural resources of the nation while balancing out the counter effects of environmental costs, liberty of citizens and commerce activities. The issue is related with keeping the environmental costs down and at the same time, creating as much benefits for the environment and the society as possible. It has therefore been always a difficult task to create and implement appropriate policies that could bring compromise on both sides of the environment issue. The political debates and public opinions on environment are diverse and at most of the times, contradictory.

The environmental regulatory framework in the United States is based on a tripartite system. The Congress (the House of Representatives and the Senate), representing the legislative branch, oversees passing the environmental laws and statutes that set overall goals for policy development. The Congress also directly influences the executive branch through a series of formal and informal controls. The executive branch is the governmental authority on environmental issues. Its role is to implement congressional policy. This branch is a broad range of departments with environmental competencies. The judicial branch is represented by the courts, with on top of them the United States Supreme Court. The ultimate arbiters of the meaning of a statute or constitutional provisions are the court. In a very real sense, what an agency can or must do is what the courts say it can or must do. The main comprehensive law in force is the National Environmental Policy Act (NEPA). Although the competencies on the environmental protection within the U.S. Government is fragmented, the main and the most comprehensive institution of the U.S. environmental system is the Environmental Protection Agency (EPA). NEPA was passed by the Congress in 1969 and EPA was established based on this act in 1970. While the purpose of NEPA is to declare a national policy, which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality, the mission of EPA is to protect human health and the environment. Besides, as a second goal, NEPA provides general policy guidelines for all governmental institutions across the United States. In short, it can be set forth that the main aim of the NEPA and EPA is to develop and enforce environmental regulations.

The environmental policy in the United States has evolved throughout the history as the problems have also changed over time. When the national environmental policy has become effective in the 1960s and the 1970s, the prominent issues and concerns were mostly limited with air and water pollutants. That is, back in early 1970s, the emphasis was on conventional air and water pollutants, both of which were quite easily measurable. As of the present day, though, the spectrum of the environmental issues has taken a much wider range because the scope of the environmental issues in the United States has changed since the environmental movement in the 1970s. Many factors have played a role such as population increase, change in life styles, technological advancement, industrialization, natural climate causes and the climate change. The current issues facing the U.S. nation are air pollution, water pollution, deforestation, endangered species policy, solid and hazardous waste, electronic waste and nuclear safety.

This paper scrutinizes the environmental issues in the United States and gives an overview of the policies, laws and regulations that have been implemented by the Government of the United States. The paper also provides some conceptual information about the existing problems, public policies and the related government and non-government agencies to present the reader a comprehensive perspective on the whole phenomenon. The environmental movements, the evolution of policies, public opinions and the political debates are also touched upon within a historical perspective. Within this respect, the first part of the study highlights the aim and the main features of the environmental protection structure in the United States by raising key points. Then, it elucidates crucial environmental laws and regulations from a historical viewpoint. It also gives brief information about the functions, duties and responsibilities of the principle federal organizations within the U.S. Government. The second section of the paper briefly overviews the current environmental issues and policies and gives related data and statistics. Finally, the last section examines the policy constitution and the affecting factors in addition to the public opinion of the American citizens, with emphasis on the priorities of the economy and the environment. Articles and documents, which are related with the theme of the paper, have been collected to conduct a literature survey, which comprises the methodology of this paper. Then, data have been compiled, extracted from various books, newspapers and reports in the related field and these data have been utilized to lay out the report format of the paper.

Based on the discussions in this paper, it can be put forward that effective environmental policy will require the governmental institutions to set the proper rules and enforce the implementations. Since United States has been a constitutional federal representative democracy, the policies should rather be generated by satisfying the interests of all parties. Therefore, accomplishing fairness and reaching a consensus is crucial. The constitution of the public opinion in today's modern world public sphere is another important issue. Political ideologies, the special interests of various groups, lobbies, international treaties, taxes, property rights, economic concerns, environmental concerns and jobs play a prominent role in the constitution of the policies as well. Above all, the national interest is the foremost important factor as it is the case for every other nation. Within this regard, the strength of environmental desires play an important role in developing efficient and effective environmental policies. The expectation is that these policies will result in rational progress, sustainable development and environmental awareness.

## References

Anonymous (2016), *The College American Government Textbook*, Chapter 2.5. Checks and Balances: Internal Constraints on Government Power.

- ballotpedia.org (2016a), *Environmental Policy in the United States*,  
<[https://ballotpedia.org/Environmental\\_policy\\_in\\_the\\_United\\_States#tab=Major\\_issues](https://ballotpedia.org/Environmental_policy_in_the_United_States#tab=Major_issues)>, 15.06.2017.
- Earth911.com (2016), *20 staggering e-waste facts*, <<http://earth911.com/eco-tech/20-e-waste-facts/>>, 12.06.2017.
- Earthday.org (2016a), *The History of Earth Day*, <[www.earthday.org/about/the-history-of-earth-day/](http://www.earthday.org/about/the-history-of-earth-day/)>,  
15.03.2017.
- Epa.gov (2016a), *United States Environmental Protection Agency*, <[www.epa.gov](http://www.epa.gov)>, 07.04.2017.
- European Parliament Directorate General for Internal Policies (2015), *The United States Environmental Policy*.
- fws.gov (2016a), *U.S. Fish & Wildlife Service*, <<https://www.fws.gov>>, 07.07.2017.
- Green Energy Ohio (2016a), *Governmental Environmental Organizations*, <<http://www.greenenergyoh.org>>,  
03.05.2017.
- Jones, J.M. (2015), *In U.S., Concern about Environmental Threats Eases*,  
<<http://www.gallup.com/poll/182105/concern-environmental-threats-eases.aspx>>, 06.12.2016.
- Lipset, S.M. (1997) *American Exceptionalism*, Fairfax, Virginia.
- Mclendon, R. (2011), “Infographic: United States of the Environment”, *Mother Nature Network*,  
<<http://www.mnn.com/lifestyle/responsible-living/stories/infographic-united-states-of-the-environment>>,  
23.05.2017.
- nepa.gov (2016a), *The NEPA Statute*, <[https://ceq.doe.gov/laws\\_and\\_executive\\_orders/the\\_nepa\\_statute.html](https://ceq.doe.gov/laws_and_executive_orders/the_nepa_statute.html)>,  
16.11.2016.
- rachelcarson.org (2016a), *The Life and Legacy of Rachel Carson*, <<http://www.rachelcarson.org>>, 15.11.2016.
- Time (2014), *Watch: NASA Says U.S. Air Pollution Has Plummeted*, <<http://time.com/2937884/nasa-air-pollution/>>,  
01.07.2017.
- Watts, C. (2010), *U.S. Environmental Policy, Part I: the past 50 years*,  
<[www.environmentalleader.com/2010/10/11/u-s-environmental-policy-part-i-the-past-50-years/](http://www.environmentalleader.com/2010/10/11/u-s-environmental-policy-part-i-the-past-50-years/)>,  
16.06.2017.

## Influences of Industry 4.0 to Logistics Sector

*Gul SENIR* (<http://orcid.org/0000-0001-5454-2321>), *Nigde Omer Halisdemir University, Turkey; e-mail: gul.senir@ohu.edu.tr*

*Rabia EFEUGLU* (<http://orcid.org/0000-0003-2515-1553>), *Nigde Omer Halisdemir University, Turkey; e-mail: rabia.efeoglu@ohu.edu.tr*

**Keywords** : Industry 4.0, Logistics, Digitization.

**JEL Classification Codes** : L23, L91, L86.

### Extended Abstract

Industrial revolutions globally influenced from past to present all the world's peoples. The first industrial revolution (Industry 1.0) covering the period between the years 1760 and 1830 has emerged with water and steam powered steam engines and mechanical production systems. With the use of steam power in mechanical production counter increased greatly production quantities, consequently decreased production costs. In addition, the use of steam railway vehicles for transporting goods has also created great advantages in terms of speed and cost. The second industrial revolution (Industry 2.0) covers the period between 1840 and 1870. Especially with Henry Ford's production band design to start mass production and use of electricity in mass production has led to the development of the production line. Electronic and digital technologies from the 1950s when were part of mass production the third industrial revolution (Industry 3.0) has been raised. With the use of electronics and the development of information technology production has become even more automated. Today the world no longer speaks Industry 4.0.

From first industrialization movement that began with the invention of the steam engine to present; the era of Industry 4.0 which is a reform of new industry via rapidly evolving technology opportunities has entered and thus a change that reshape of the production process have been taken a step. Industry 4.0 and smart phone sensors, digital platforms, radio frequency identification (RFID) systems, GPS (Global Positioning System) with cloud computing and cyber security our lives a long time ago, even though it is, as a concept the term of Industry 4.0 was used for the first time at Hannover Fair in 2001 and it gained a formal qualification thanks to the work of German Government. The Industry 4.0 stemmed from the idea which almost all the production process can be performed without the manpower and production should be re-localized relating to the reorganization of production because German Government has sought to enhance competitiveness versus the concept of labour-intensive production against Eastern countries. Thus, it will be possible to compete with the cheap labour and production capacity of the Eastern countries, to increase the productivity of the factories by intelligent business processes and internet (IoT) of the objects, to transform the technology developed by the new industrial revolution into the benefits of production and industry.

Industry 4.0 can be defined as the constitution of smart factories where tools and machines have production process that self-able to manage by means of sensor technologies and the internet in the other words decentralization of production. The structure of understanding of production and consumption will change and production system which can respond to the changing need of consumer instantly will be developed thanks to Industry 4.0. In addition, digital automation system that machines

communicating with each other and used robots instead of human power and digitalization to almost all production process rather than the process in which manpower is active will be on the agenda. With the expansion of this system, higher quality goods can be produced at some lower costs, while providing increased efficiency in production will accelerate growth in the industry and with it the workforce profiles will change. Thus, faster, more flexible, higher quality and more efficient industrial revolution can be mentioned.

In this context, Industry 4.0 is a process that will impact the production sector mainly, but also with this transformation, in the logistic sector, especially ways of doing business are expected to be revised. With becoming more efficient and cheaper production, more product the necessity of to be delivered to more consumers, in the logistics sector will increase the intensity of the workload. Industry 4.0, known as the 7 rights of logistics, steps of the right product, in the right quantity, in the right format, at the right time, from the right sources, in the right way, at the right price will affect. In this process, especially through the internet, while the communications of the machines, “just in time”, improving efficiency of logistics services, also making it possible to prevent machine failures. Therefore, the idle time in production will decrease and it will be provided for more efficient use of resource. In this sense, new vehicles, new types of fuel and especially renewable energy sources, improvements in infrastructure and new business areas will affect logistics of all kinds particularly transportation logistics. Nowadays, with the computer-aided process, many transportation systems can be controlled automatically, furthermore many process such as autonomic -so driverless- Trucks, ships with no captain, drones, deliveries are done with drones and cloud computing are rapidly transported to digital environments.

By Industry 4.0, sensors and cameras can identify incorrect storage and risky areas and calculate the chances of the fall of an object, thus fall pallets or products -frequent in freight transport- can be prevented. Productivity growth will accelerate by smart walkways that make it easier for staff to work and intelligent warehouse management systems. Especially use of “cellular transport systems” in storage is an important element of intralogistics operations of the future. These systems consist of vehicles fleets that can perceive the environment using laser scanners, sensors and RFID technology and can move independently. The central control system for non-transfer orders from these devices by using the sets the rules that regulate the right of way and share data about the location of each vehicle in the store. Since the information is processed non-central, the entire control system is spread over several virtual environments. If the interruption occurs, the driver of the vehicle reacts alone and corrects the problem. Acceptance of the goods used in the field of RFID technology, the RFID tag is affixed on incoming materials and the automation of the movement of material input is provided. Thus, a pallet entry process, which is performed in about three minutes by barcode reading, is completely removed. At the same time, with intelligent warehouse management systems which addition of heating and lighting sensors energy savings can be achieved and costs will be reduced. With the help of RFID technology, the movement of objects will be easier and there will be many improvements in fleet management whereby Industry 4.0. Through air and road transport vehicles can be tracked instantly and the frequency of usage of the vehicles will be able to monitor. The fuel savings which is provided owing to the use of technology in fleet management also will be an important factor in the increase of profitability.

In line with all these developments, the renewal of the process of doing business in the logistics sector, namely the introduction of logistics 4.0, its principles and methods of development, integration with the industrial policy is also mandatory parallel to industry 4.0.

In this study, the concept of Industry 4.0 accepted as a new industrial revolution, properties of automation systems which occur facilities of innovation and technology that brings with Industry 4.0 are discussed. Impact of Industry 4.0, especially on the logistics sector, constitute the essence of the study. Changes that live in possible to the sector and new formations of ways of doing business are exemplified in the study.

## References

- Alçın, S. (2016), "Üretim İçin Yeni Bir İzlek Sanayi 4.0", *Journal of Life Economics*, 3(2), 19-30.
- Banger, G. (2016), *Endüstri 4.0 ve Akıllı İşletme*, Dorlion Yayınevi, Ankara.
- Görçün, Ö.F. (2016), *Dördüncü Endüstri Devrimi Endüstri 4.0*, Beta Yayınevi, İstanbul.
- Kabaklarlı, E. (2016), *Endüstri 4.0 ve Dijital Ekonomi - Dünya ve Türkiye Ekonomisi İçin Fırsatlar, Etkiler ve Tehditler*, Nobel Bilimsel Eserler, Ankara.
- Özdoğan, O. (2017), *Endüstri 4.0 Dördüncü Sanayi Devrimi ve Endüstriyel Dönüşümün Anahtarları*, Pusula Yayıncılık, İstanbul.
- Schwab, K. (2016), *Dördüncü Sanayi Devrimi*, Optimist Yayınları, İstanbul.
- Ege Bölgesi Sanayi Odası (2015), *Sanayi 4.0 Uyum Sağlayamayan Kaybedecek*, Ekim.
- Kalkınmada Anahtar Verimlilik (2016), *Sanayide Dönüşüm*, Ekim, 28(334).
- .....*Dijital Sanayi Çağı: Endüstri 4.0*, <<http://www.moment-expo.com/dijital-sanayi-cagi-endustri-4-0/>>, 04.08.2017.
- .....*Sanayide Dijital Devrim Endüstri 4.0*, <<https://industrylog.com/dijital-sanayi-devrimi-endustri-4-0-lojistik/>>, 04.08.2017.
- .....*Sanayi 4.0'in Lojistiğe Etkileri*, <<http://www.lojistikhatti.com/haber/2017/01/sanayi-4-0in-lojistige-etkileri>>, 05.08.2017.
- .....*Endüstri 4.0 Lojistik Sektörünü Nasıl Etkileyecek*, <<http://www.utikad.org.tr/haberler/default.asp?id=14666>>, 06.08.2017).
- .....*Türkiye'nin Küresel Rekabetçiliği İçin Bir Gereklik Olarak Sanayi 4.0 Gelişmekte Olan Ekonomi Perspektifi*, <[http://tusiad.org/tr/tum/item/download/7491\\_853576e56b585a09c02f06fb22d22e46](http://tusiad.org/tr/tum/item/download/7491_853576e56b585a09c02f06fb22d22e46)>, 14.08.2017.
- .....*Internet of Things in Logistisc*, <[http://www.dhl.com/content/dam/Local/Images/g0/New\\_aboutus/innovation/DHLTrendReport\\_Internet\\_of\\_things.pdf](http://www.dhl.com/content/dam/Local/Images/g0/New_aboutus/innovation/DHLTrendReport_Internet_of_things.pdf)>, 14.08.2017.

## Dispute Settlement in Outer Space

*Sezercan BEKTAS* (<http://orcid.org/0000-0001-7395-5375>), *Gazi University, Turkey; e-mail: sezercanbektas@gazi.edu.tr*

**Keywords** : International law, Space Law, Dispute Settlement.

**JEL Classification Codes** : K33.

### Extended Abstract

The rapid development of the international space market, which includes space based activities such as telecommunication, military exercises, scientific researches, also causes increase in disputes with economic content. Due to the free market rules and the fact that the security concerns of the states, it is observed that the rules of international public law are also emerging especially in this technically developing area.

Although international law rules are drawn up to balance different interests and to prevent international disputes, disputes over the interpretation and implementation of international rules are almost inevitable. To be able to maintain international peace and harmony and to ensure the proper implementation of the rules, there are fundamental methods and practices for the settlement of international disputes in the international law, which is also called the dispute settlement mechanisms.

The importance of having reliable and effective international dispute settlement mechanisms has been increasing incrementally. It is the direct consequence of the increasing level of international cooperation in various sectors of the economy, the increase in the number of the involved subjects and the need for constituting a stabilized and predictable platform to conduct business activities. Consequently, various mechanisms have been established for the dispute settlement procedures of specific issues.

Despite having an international character and based on international cooperation, until recently, there was hardly any specific mechanism of dispute settlement in the outer space law for disputes on the outer space issues. The absence of this mechanism was since space activities were the exclusive field for the limited number of developed states and it was thought that implementing the traditional methods available under international law to settle disputes -a misconception particularly for the settlement of bilateral disputes- would be sufficient. For these reasons, establishing specialized dispute settlement mechanisms for the outer space was regarded as unnecessary.

In today's conditions, the conditions of development of the space industry have changed. Firstly, increase in the commercial uses of outer space in sectors such as satellite communications, launching services, and remote sensing is threatening the monopoly of the states. The second change is the increase in the number and type of the actors engaged in space activities, including states, inter-governmental organizations and private entities. For this reason, it is quite reasonable to assume that the disputes related to outer space will increase.

For the above-mentioned reasons, the current regulation regarding the settlement of disputes in the space sector poses a major problem. The lack of a compulsory dispute settlement mechanism opens to

all market actors operating in space shows the seriousness of this problem. The traditional methods used for dispute settlement in international law as well as the few regulations available within the scope of outer space law, which have limited individual and material coverage and are generally not accessible to private parties, cause unfair consequences and stain the safety of the law. Private operators have been left without a solution to the international disputes over space. This situation constitutes an environment of uncertainty potentially discouraging for private investors and companies seeking to participate in space activities.

Over the last few years, awareness of these problems has increased among the international community and several attempts have been made to establish a space regime with a modern and effective dispute settlement mechanism. In this context, the most important achievement is the adoption of Optional Rules for Arbitration of Disputes Relating to Space Activities by the Permanent Court of Arbitration (PCA) which is an intergovernmental organization established in 1989. Adoption of these rules is absolutely representing a major step forward.

In the first part of our paper, the dispute settlement in outer space law will be taken into consideration within the scope of the traditional regulations of the international law. In the second part, the 1998 ILA Taipei Draft Convention and the 2011 PCA Arbitration Rules for Outer Space Disputes will be evaluated and the proposals on effective dispute settlement will be submitted.

## An Evaluation of Industry 4.0 and Its Effects on Social Security

**Bilal GODE** (<http://orcid.org/0000-0001-7140-2750>), Pamukkale University,  
Turkey; e-mail: [godebilal@gmail.com](mailto:godebilal@gmail.com)

**Fatih AKCAY** (<http://orcid.org/0000-0001-8542-1127>), Pamukkale  
University, Turkey; e-mail: [akcyfth@gmail.com](mailto:akcyfth@gmail.com)

**Keywords** : Industry 4.0, Internet of Things, Dark Factories, Social Security.

**JEL Classification Codes** : H55, H83, J24, D24.

### Extended Abstract

The concept of Industry 4.0, which is also referred to as the Forth Industrial Revolution, occupies the agenda of developed economies in the recent period. The revolution concept is mainly used to describe sudden and radical changes. Giving the name of Forth Industrial Revolution to the concept of Industry 4.0 is the reason for bringing radical changes in production processes. With this revolution, technology is placed the focus of production and consumption processes. This revolution brings significant changes in the production and consumption processes. Deep changes affecting all sectors are emerging, definitions of new business models are made, and traditional residential establishments are undergoing deterioration. Production, consumption, transportation and shipping systems are being reshaped. A paradigm shift is on the agenda in our social front, in the way we work and communicate, and in the same way we express ourselves, inform and entertain. This revolution rises above the digital revolution and brings together a variety of technologies that lead to unprecedented paradigm shifts in the economy, business, society and individual. This revolution involves a holistic transformation of systems in and among countries, corporations, sectors, and society (Schwab, 2016: 9-11).

When we look at the history of Industry 4.0, the first industrial revolution is at stake. At the beginning of the 18th century, the use of steam by James Watt radically altered production methods. Transition from tooled used production to machine used production was accomplished. The 2nd Revolution is the production band technique applied by Henry Ford. In 1870, the first production line, which is electrically operated and mass-produced (assembly line) was used. This period is also called Fordism. 3. Revolution first occurred with the emergence of the programmable machines appeared in 1968. The flexibility of responding to consumer demands has been improved by the integration of these machines into production processes. The concept Industry 4.0 was first raised in 2006 in United States, but with a more comprehensive framework in the United States in 2011.

Industry 4.0 vision that rises above 5 bases (KPMG, 2015: 2):

- Cyber physical systems (CPS)
- Big Data
- Intelligent Robots
- Connectivity of machines, work components, systems and people
- Digital Industrialization as a Solution for Increasing Production

During the production process, the production tools will communicate with each other and produce. “Smart Factories” of Industry 4.0 include intelligent machines and systems that sense the business needs with sensors and communicate with other remote production tools via the internet and capture the production information they need in the cloud systems. The communication and interaction that the production tools establish with each other is provided via the internet. It is called the Internet of Things (IoT), where objects can communicate with each other. The whole of the structures including communication and coordination between the physical world and the cyber world is called Cyber-Physical Systems (CPS) (Alçın, 2016: 20). Information technology, wireless sensors and advanced control systems are becoming key elements of the new industry.

The digitalization in the production process and with the increase of production efficiency of the robots, working hour’s concept will undergo change. Through the communication of the tools of production among themselves, it will be possible to make production every hour of the day. With the benefits of this temporal flexibility in the production process, these new factories called as “Dark Factories”. This name has been given by the fact that objects do not need light for communication in the production process. This situation will also appear as a demand reduction factor to unskilled labour. The factories that emerged from this industrial revolution will work with fewer errors in the production process, which will have a total cost-cutting effect, while at the same time instantaneous transmission will allow to respond faster to the customer demands. This mode of production is more efficient than the one in which the human factor is more involved. According to a study by Özen (2017), The work done by 59% of Turkey’s 2015 employment is more than 70% likely to be substituted by computerized automation. For example, the share of bureaucrats engaged in numerical processing and keeping records in Turkey’s employment is 2.5%. The possibility of this kind of occupation being carried out by computerized automation is very high chance like 94%. Health professionals account for 1.4% of employment. The likelihood of healthcare professionals being replaced by computerized automation is 4%. This leads to the prominence in the provision of occupational safety in the increase in education level. It is an inevitable necessity for the society as well as for the state to train qualified workforce. The work force that is unable to meet the requirements of the changing production structure will be condemned to be driven out of the system. With Industry 4.0, people do not have the freedom to choose between two lines: “accept and live together” and “reject and live without it.” This process of change takes all the fields and encompasses every process. The employment of unqualified and unemployed labour, which may arise because of computerized automation, and the ability of these workers to survive will be a matter of test for the states. With automation, demand for labour can be reduced, and premium incomes will also decrease. If people lose their jobs, it is impossible for them to earn money and it will be impossible to collect income taxes. Unemployed individuals will reduce consumption expenditures, thus the possible reduction in expenditure taxation may arise as factors that compel the state’s public finances.

## References

- Acatech (2013), “Acatech: Recommendations for Implementing the Strategic Initiative Industrie 4.0”, *Final Report of the Industry 4.0 Working Group*.
- Alçın, S. (2016), “Üretim İçin Yeni Bir İzlek: Sanayi 4.0.”, *Journal of Life Economics*, 19-30.
- Alçın, S. (2016), “Endüstri 4.0 ve İnsan Kaynakları”, *Popüler Yönetim Dergisi*, 63, 47.
- KPMG (2015), “Dördüncü Sanayi Devrimi: Yarının Fabrikaları Neye Benziyor?”, *Sanayi 4.0*, Kasım, <<https://home.kpmg.com/content/dam/kpmg/tr/pdf/2016/08/tr-sanayi-4.PDF>> 25.05.2017.

- Lee, J. & B. Bagheri & H.A. Kao (2015), “A Cyber-Physical Systems Architecture for Industry 4.0 Based Manufacturing Systems”, *Manufacturing Letters*, 3, 18-23.
- Ramanathan, K. (2014), “Implications for the Adis Pasific Manufacturing Industry”, *Industry 4.0*, 24-29.
- Schwab, K. (2016), *The Fourth Industrial Revolution*, Crown Business.
- Tansan, B. & A. Gökbulut & Ç. Targotay & T. Eren (2016), *Türkiye'nin Küresel Rekabetçiliği İçin Bir Gereklilik Olarak Sanayi 4.0*, Tüsiad Yayınları, İstanbul.
- .....(2014),”Akıllı” Yeni Dünya: Dördüncü Sanayi Devrimi, Aralık, *EKO IQ Dergisi*, Sabancı Üniversitesi, <<http://ekoIQ.com/wp-content/uploads/2014/12/ekoIQ-ek-d.pdf>> 25.05.2017.
- .....*Endüstri 4.0 Yolunda*, Siemens Türkiye, <[http://Cdn.Endustri40.Com/File/Ab05aaa7695b45c5a6477b6fc06f3645/End%C3%Bcstr\\_4.0\\_Yolundaf](http://Cdn.Endustri40.Com/File/Ab05aaa7695b45c5a6477b6fc06f3645/End%C3%Bcstr_4.0_Yolundaf)>, 25.05.2017.

## Reconsidering the Relationship between the Internationalization of Capital and the Technology Case in the Industry 4.0 Period

*Suat AKSOY* (<http://orcid.org/0000-0002-6772-6768>), *Marmara University, Turkey*; e-mail: [suataksoy1611@gmail.com](mailto:suataksoy1611@gmail.com)

**Keywords** : Industry 4.0, Internationalization of Capital, Technology, International Trade, Vernon's Product Life Cycle Theory.

**JEL Classification Codes** : D24, E23, E24, F23, O14.

### Extended Abstract

The role and impact of the technology phenomenon on the growth and development of countries comes at the forefront of important debates in the discipline of economics. With the effect of the neo-liberal era that took place on a global scale after 1980, the capital rapidly transcending spatial boundaries has begun internationalization in all areas. Developments in the field of technology make this movement of the capital possible on the world scale. These developments have affected both the relations of countries and the capital to each other and affected the labour market. For example, there are some countries and some firms that cannot reach technology which is fast and constantly changing. This problem, technological deprivation, comes as one of the most challenging areas of late industrialized countries in the development phase. One of the most important reasons behind this difficulty is that most of the late industrialized countries cannot create the ground of technological development in their own countries. Because of this, the problem of technological dependency in these countries has become a continuity.

Technology creates new areas of division and specialization on the world scale. Each new division of labour and specialization has determined the international trade of the countries. In other words, each country specializes in an area according to its development level and then contributes to international trade with products which is belonging to this specialist area. For example, while underdeveloped countries are more specialized in less value-added areas, developed countries specialize in high value-added products and sell these products to the market.

This study will be examined that the relationships between technology, internationalization of capital and international trade phenomena within the framework of Industry 4.0: Intelligent Manufacturing. In this context, Vernon's "Product Life Cycle" approaches will be re-examined. The purpose of this work is that relationship of production place-production technology in the industry 4.0 period has evolved in a way that is different from Vernon's theory.

The leading country of Industry 4.0 is Germany. Today, many developed countries are making serious efforts to transform their production technology for Industry 4.0. Why are they doing this? The reason behind these efforts of developed countries comes from the fact that first time since the Industrial Revolution, developed countries face the threat of losing their global competitive power to

the BRIC and other Far East countries.<sup>1</sup> In other words, there is an obligation of capitalist competition in the background and countries or companies will have to be “smart”, otherwise they will fall back into competition.

This study claims that Vernon’s theory should be revisited in the production organization of the Industrial 4.0 era. Because the cheap labour force advantage, which is the most important reason for shifting the production from innovative countries to imitating countries, has begun to disappear with robots. Such a shift to global automation production in line with Industry 4.0 has two implications for the global market: First, developed countries will be able to produce at low cost soon. Therefore, production may return to developed countries, like Philips and Adidas did.<sup>2</sup> Second, with the widespread use of robotic technology in production, most workers in all over the world will be at risk of losing their jobs. For example, the report of International Labor Organization (ILO) claims that with the transition to the automation production of Industry 4.0, unemployment rates will increase in the world but more in Asian countries.<sup>3</sup>

Some international institutions which are mentioned in this study have prepared reports on the impact of Industry 4.0 on the current global competitiveness of the countries. The common feature of these reports is that developing countries’ current positions in the global economy will weaken. Especially having a cheap labour force market will not be an advantage.

Recalling Vernon’s model in Graph 1, there was a shift in production after the third phase. What should be known that the reason behind the shifting of the production place by the productive capital is not because the firms can no longer produce that product in the innovative country, the reason is the attractive high profit rates (because of cheap labour power) in underdeveloped countries. The fact that the production made with robots brings the marginal cost of production close to zero and this situation makes it necessary to rethink production shifts in Industry 4.0 era. Therefore, shifting production will not be as attractive as today for multinational companies (If governments do not apply new type of tax for robots in the future). As a matter of fact, BRIC countries and other developing countries like Turkey are aware that robots are the cheapest, most efficient and most productive workers in the world. Robots are the ideal workers of capitalism and the capitalist has been looking for them since the beginning of capitalism’s existence. Because robots never hungry, they do not want coffee breaks, they do not sleep, they do not have the health to protect, they do not need a social environment and most important one they do not demand salary rise.

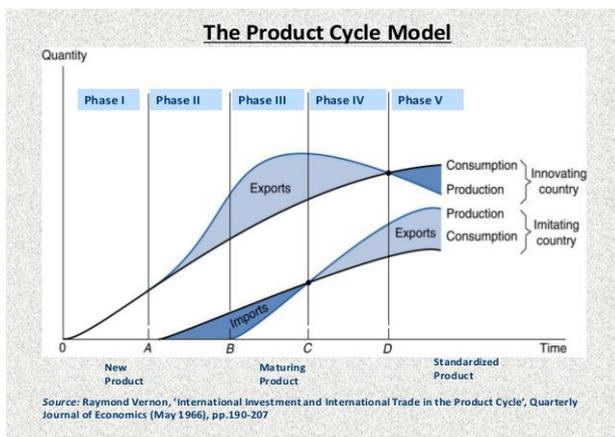
---

<sup>1</sup> UNIDO, *Industrial Development Report 2016: The Role of Technology and Innovation in Inclusive and Sustainable Industrial Development*; WTO, *World Trade Statistical Review 2017*.

<sup>2</sup> Markoff, J. (18.08.2012), “skilled work, without worker!” *NYtimes*; *Reboot: Adidas to make shoes in Germany again - but using robots* (25.05.2016), *The Guardian*.

<sup>3</sup> Santoso, Shirley (2017), “How can ASEAN nations unlock the benefits of the Fourth Industrial Revelation?”, *World Economic Forum*, <<https://www.weforum.org/agenda/2017/05/how-can-asean-nations-unlock-the-benefits-of-the-fourth-industrial-revolution/>>, 10.07.2017.

**Graph: 1**  
**Vernon's The Product Cycle Model**



Source: Joseph, T.J. (2015), *International Trade Theories*, 42,  
<<https://www.slideshare.net/aakkii1992/international-trade-theories-44863633>>, 01.07.2017.

Finally, two main outcomes have been achieved in this study. First, since the factors that determine the competitive power of firms / countries in international trade are product quality and cost of production, innovations in the production process will be determinant in the competitiveness of firms. Therefore, in the period of Industry 4.0, if manufacturers, firms or nation-states are not successful in transitioning to intelligent manufacturing technology, they will lose current positions in the global economy. Second, it will be necessary to re-evaluate Vernon's theory in Industry 4.0 era. As the use of robots in production increases (its conceptual name is the increase of capital intensive production), it will not be attractive for capital to remain in the developing countries, especially in the countries of Far East Asia. Moreover, as can be seen in the case of the Philips and Adidas, since the most important and major markets of MNCs are Europe and / or USA, they will also provide a significant cost reduction and time benefit for MNCs in logistics transport. So, we can see the return of production to innovative countries in the period of Industry 4.0.



**27 October 2017 Friday**

**Session: IV-A / 16.00-17.30**

## **MACROECONOMICS & STRATEGIC MANAGEMENT**

Room: *Festsaal Imperial*

Chair: **Aleksandra GÓRECKA**

- The Importance of the State Implication for Financial Stability in Islam Economy  
**Vedat CENGIZ & Hasan Bulent KANTARCI**
- The Effects of Organizational Citizenship Behaviours and Decision-Making Styles on Transformational Leadership Behaviour  
**Fetullah BATTAL & Ertugrul CINAR**
- The Emerging Trend of 'Expat-preneurs': A Headache for the Pre-Existing Ethnic Entrepreneur Theories  
**Richard Andrew GIRLING & Emilia BAMWENDER**
- New Evidence on Interest Rate Pass Through  
**Aysen SIVRIKAYA & Yasemin YALTA**
- Sustainable Growth and Its Finance: An Essay on Turkey  
**Nefise Tugba KART & Cihan Serhat KART**

# The Importance of the State Implication for Financial Stability in Islam Economy

*Hasan Bulent KANTARCI* (<http://orcid.org/0000-0002-7217-9367>), *Kocaeli University, Turkey*; e-mail: [hbkantar@kocaeli.edu.tr](mailto:hbkantar@kocaeli.edu.tr)

*Vedat CENGİZ* (<http://orcid.org/0000-0001-7010-4380>), *Kocaeli University, Turkey*; e-mail: [vcengiz@kocaeli.edu.tr](mailto:vcengiz@kocaeli.edu.tr)

**Keywords** : Financial Stability, Islamic Economy, Central Bank.

**JEL Classification Codes** : E44, E52, E58, E61.

## Introduction

According to Islamic economy, economy has different meaning than in capitalism. In Islamic economy, we can define economy as distributing Allah's gifts fair and equitable. Since there is no interest in Islam Economy, it is quite different than capitalism. Financial stability is quite important to the public policy. The financial systems do not have self-corrective mechanisms against financials shocks. Public policies have responsibility to establish financial stability, regulatory intervention and inspection. In this instance, the state is expected to intervene with its own devices. The State has responsibility with monetary policy intervention for the financial system. Monetary policies are established and exercised by the central banks. The intervention by the central bank has a crucial role in financial stability and monetary policy. If the economy falls into financial instability, central bank has the responsibility to restore it. This can be done with hard or flexible financial tools. Moreover, this article explains how the state can intervene to successfully establish major financial stability with finance policy and other financial institutions.

## Purpose of Work

After the end of the global financial crisis ensuring financial stability and maintaining stable economic growth and employment issues came to the fore. At the global and national levels, countries have been working on the application of growth enhancing measures in the financial system. In the global economy while there are developments regarding growth, there has been modest progress in growth prospects. Both the public and private sectors have important roles to play.

Efforts aimed at ensuring global financial stability have brought new ways and ideas to the forefront. Islamic finance that is the real productivity of an economic activity together with Islamic financial transactions has emerged as a needed doctrine. Islamic finance is based on the principle of shared risk. The basis of capital markets which is stock exchanges involves risk sharing. Islamic finance contracts also use the same risk sharing techniques. With the profit sharing and risk sharing inherent in Islamic economy there is confidence in debt securities. As a result, concerning the financial stability of financial systems there is balanced development.

Islamic finance's risk sharing characteristic has brought about new opportunities for financial management. The unique characteristic of Islamic financial transactions is risk and profit sharing. In this case it makes it mandatory for Islamic financial institutions to assume proportions of the risk

undertaken and profits. Because of risk sharing there has been major discipline and responsibility between financiers and customers regarding investment proposals or production risk profile. The strong stable incentive of risk equalisation, compensation and leverage pertaining to Islamic financial instruments have led to the emergence of new responsibilities for financial institutions. For investors, this has brought about real earnings and as sense of confidence.

### **Financial and Economic Adjustment**

In the academic literature, several definitions have been given concerning financial stability. To ensure financial stability, financial and economic adjustments interventions are needed. In sustaining financial stability, a strong case can be made for public policy. The definitions in this regard are described below:

Turner (2013) explains that there are three essential points for financial stability. First is debt, contracts and rigidities. The second is banks and private credit creation. And the third is secured lending, credit, and asset price cycles.

Alawode and Sadek (2008) explain that the Central Bank of Bahrain describes financial stability “as a situation where the financial system is able to function prudently, efficiently and uninterrupted, even in the face of shocks”.

Kantarci (2005) describes the concept of fiscal discipline as a balance between public expenditure and public revenue. As a brief definition, the balance which will occur between public expenditure and public revenue that is the balance of public sector finance which does not lead to negative impacts on key economic indicators is financial stability.

Financial Institutions should supervise commercial bank activities. Because of these new regulations must be addressed in this context. The bankruptcy of commercial banks will lead to the deterioration of fiscal discipline. Companies and individuals having money in banks faced with bankruptcy like a domino effect slam each other leading to a further deterioration in fiscal discipline. As a result, the state with its own tools must intervene in the financial system.

### **Monetary Policy in Islamic Economy**

Monetary policy that implemented by central banks is an important tool in the formation and orientation of economics. For Monetarists, the main factor is monetary policy to influence the economy. For optimal economic growth, monetary policy must regulate the necessary amount of money and must be consistent with the objective of price stability. Central banks use several tools to achieve their objectives. In a conventional financial system, generally the minimum reserve policy, open market operations and standing facilities are the three main tools used. Each of these tools always focuses on interest rates (Cengiz, 2011).

The operational framework for the application of the money market is based on the control of interest rates. However, due to the prohibition of interest rates in an Islamic economy, in the application of monetary policies there is an important difference as compared to the conventional system. The buying and selling of securities to provide liquidity to the market or to withdraw liquidity from the market possible in open market operations are performed at limited levels in Islamic economics. Because most of these securities, such as fixed interest rate debt securities are located within species that should not be treated according to Islam. Naturally the refinancing operations of the central bank

used to control market interest rates and liquidity cannot be applied in Islamic economics where there is an interest-free system. Due to the band on the interest rate, the standing facilities working process through the interest rate channel is not possible. Under the Islamic economic system, the most effective tool of monetary policy remains the minimum reserve policy. The lower the minimum reserve ratio, the higher banks can give out more loans and thus in this way the amount of money can be expanded. Therefore, according to Islam the minimum reserve policy is the most effective tool of monetary policy (Imran, 2008).

For Islamic banking industries to overcome the restrictions of Sharia the use of interest free policy instruments is required. This kind of difficulties in the regulation of monetary policy instruments, often leads to the direct control of the banking activities of monetary authorities and the effective execution of monetary policy is hampered. In response to the problem of the extent of the participation of the central bank in the capital of private banks the central bank has been using Musharaka certificates. These tools through open market operations as an objective to regulate the liquidity of the domestic banking sector have been implemented. In addition, in many Islamic countries Sukuk have been increasingly spread and used in monetary policy implementation. (Masciantonio et. al., 2013).

### **Conclusion**

Effective liquidity management is one of the most important topics of discussion included in Islamic finance. Operational framework for the application of the money market is based on the control of interest rates in a conventional financial system. In Islamic banks practising countries, the existing tools and process of monetary policy should be consistent with Islamic law. However, due to the prohibition of interest rates in an Islamic economy changing the interest rate is not an option. For Islamic banking industries, the use of interest free policy instruments is required. In response to the problem of the extent of the participation of the central bank in the capital of private banks the central bank has been using Musharaka certificates. These tools through open market operations to regulate the liquidity of the domestic banking sector have been implemented. In addition, Sukuk have been increasingly spread and used in many Islamic countries.

Standing facilities are not well developed in most of the Islamic countries. It is necessary to put in effort towards the repo market in compliance with sharia, to record enough improvement for standing facilities. The most effective tool of monetary policy remains the minimum reserve policy under the Islamic economic system. For most of Islamic countries the banks are obliged to keep a reserve account in the central bank. These reserve accounts are consistent with Sharia because it does not involve interest. The lower the minimum reserve ratio, the higher banks can give out more loans and thus in this way the amount of money can be expanded. The deficiencies in standing facilities, insufficient money market instruments have negative impact on the ability of Islamic banks to manage liquidity. In addition, the provision of flexible lender of last resort in Sharia is important in terms of structuring the Islamic finance system.

### **References**

- Alawode, A. & M. Sadek (2008), "What is Financial Stability", *Financial Stability Paper Series* No. 1/March.
- Cengiz, V. (2011), *Merkez Bankalarının Eurosystem'e Entegrasyonu*, 1. Baskı, İstanbul, Değişim Yayınları.
- Imran, H. (2008), *Das Islamische Wirtschaftssystem: Normen und Prinzipien einer Alternativen Ökonomie*, 2. Auflage, Salzwasser Verlag.

- Kantarıcı, H.B. (2005), “Yeni Türk Lirasının Mali Disiplin Bakımından Değerlendirilmesi”, *Finans Politik & Ekonomik Yorumlar Dergisi*, 42(490), 62-59.
- Masciantonio, S. & P. Caristi & S. Couderc & S. Ongena & S. Zaheer (2013), “Monetary Policy and Liquidity Management”, *Islamic Finance in Europe*, ECB Occasional Paper No: 146, June.
- Turner, A. (2013), “Debt, Money, and Mephistopheles: How Do We Get Out of This Mess?”, *Occasional Paper* No. 87, Washington, D.C.

## The Effects of Organizational Citizenship Behaviours and Decision-Making Styles on Transformational Leadership Behaviour

**Fetullah BATTAL** (<http://orcid.org/0000-0002-2895-0193>), Bayburt University, Turkey; e-mail: [fbattal@bayburt.edu.tr](mailto:fbattal@bayburt.edu.tr)

**Ertugrul CINAR** (<http://orcid.org/0000-0001-9947-0907>), Bayburt University, Turkey; e-mail: [ertugrulcinar@bayburt.edu.tr](mailto:ertugrulcinar@bayburt.edu.tr)

**Keywords** : Organizational Citizenship, Decision Making Styles, Transformational Leadership.

**JEL Classification Codes** : M540, M30, M20.

### Introduction

Organizational Citizenship, Decision-Making Styles and Transformational Leadership concepts are increasingly important paradigms in post-modern times in management science. The rapid progress of technology and information age makes it very necessary to plan and develop the reflexes in this way to determine what kind of position the Company and Institutional managers should determine in the hyper-competitive environment.

In our work, the organizational citizenship evaluated in accordance with Otherness, (benevolence), Conscientiousness, Courtesy, Gentility (Sportsmanship), Civil Virtue, and Spontaneous Decision Making, Rational Decision Making, Intuitive Decision Making, Dependent Decision Making, Shyly Decision Making were considered types of Decision-Making Styles. Finally, we tried to address the dimensions of the concept of Transformational Leadership, which we have examined as a dependent variable in our research model: "Mental Encouragement, Charisma - Behavior, Instinctive Leadership, Interest at Individual Level and Charisma - Attribution Dimensions".

The universe of our research consists of students of The Faculty of Economics and Administrative Sciences and the Business Administration Department of Vocational Schools which are in the provinces of Gümüşhane and Bayburt, which expected to have knowledge of the subject. Our research has been applied to a total of 221 students at Gumushane University (110) and Bayburt University (101). The sample of the research was formed in this way. The turnover rate of the questionnaires is 74%.

Many previous conceptual and latent (dimensional) studies on Organizational Citizenship, Decision-making Styles and Transformational Leadership have been conducted however in this study the effects of Organizational Citizenship Behavior and Decision-Making Styles on Transformer Leadership examined for the first time by using Structural Equation Modelling (SEM).

### Methodology

Three original scales were used in this study. The scales used in our study were, respectively, 1- Bass, B.M. & Avolio, B.J. (1990); 'Transformational leadership scale' (20) question, 2- Podsakoff, P.M., MacKenzie et al. (1990); 'The Questionnaire on Organizational Citizenship Behavior' (23)

question, and Scott, S. G., & Bruce, R. A. (1995); “Decision Making Styles” (25) questionnaires., these dimensions are given together with their explanations in the conceptual framework above.

In the survey conducted, the questionnaires were handed out and returned in the same way. Then a new model was created considering the studies and explanations made. Structural equilibrium path analyses were applied to the generated model with the help of Amos package program. In addition, our model was subjected to explanatory factor analysis and validity test with the help of SPSS 20.0 program. In this quantitative research study, the primary data collection method was used. Structural equilibrium modelling (SEM) analysis was done. Cronbach’s Alpha method was used to identify the validity and reliability of the scale.

The reason why SEM is used in this study is that the Structural Equation Modelling (SEM) can explain the cause and effect relationship of the variables in the integrated hypotheses related to models based on statistical dependence and allows the theoretical models to be tested as a whole. The SEM model allows the researchers to determine the direct and indirect effects between variables.

### **Validity and Reliability**

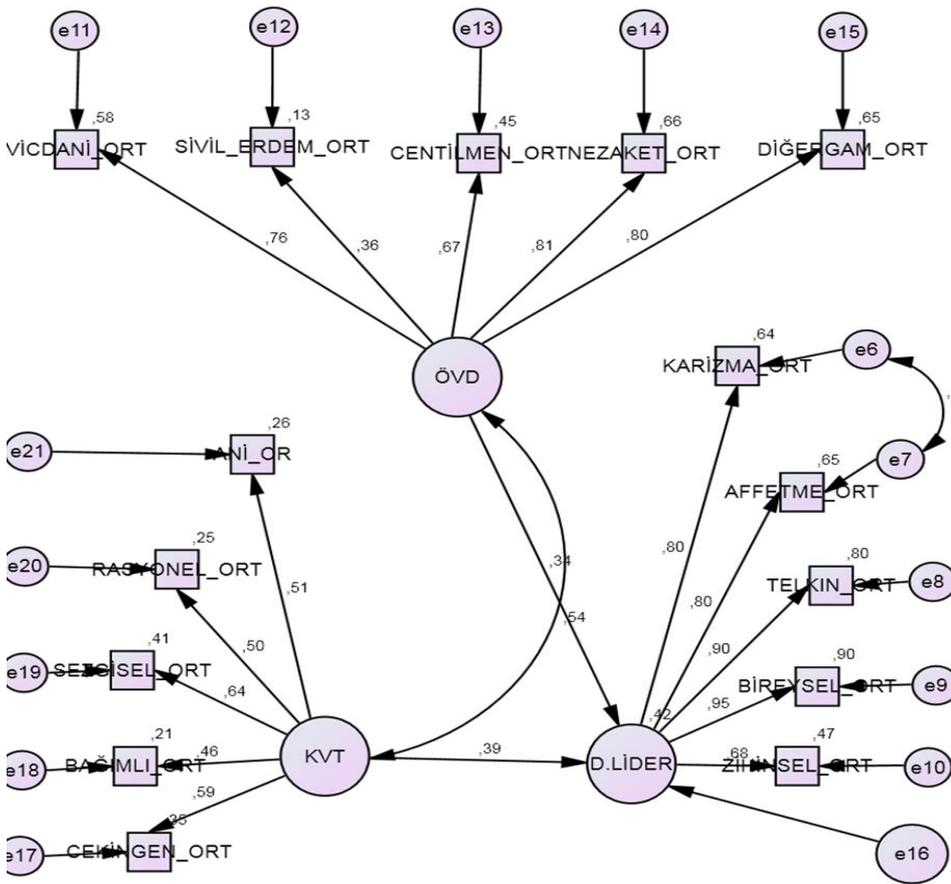
The calculated Cronbach’s Alpha value (0.931) for the general reliability of the scale indicates that the scale is reliable at a very good level. When the reliability of the individual factors is evaluated, it is seen that the reliability varies between 0,753 and 0,946. This indicates a good fit. Before doing the factor analysis, we also examined whether the items of the original scales carry global content and we have observed that items are highly consistent with the KMO value (0.904).

In addition to analyse the interactions between research variables in a collective way, the path analysis was performed with the help of structural equation modelling. Because of the analysis, the goodness of fit values are as follows:  $CMIN / DF = 2,047$ ,  $RMSEA = 0,071$ ,  $NFI = 0,96$ ,  $NNFI = 0,95$ ,  $GFI = .95$ ,  $CFI = .96$ ,  $GFI = 0,97$  and  $SRMR = 0,045$ . To accept a model in structural equation modelling, RMSEA value should be below 0.08 (Şimşek, 2007). However, RMSEA is also very sensitive to the number of samples as it is in other comparative compliance indices. In models that are defined as small samples (less than 250 samples), RMSEA seems to reject a model that should be accepted. In such a case, the SRMR index, which is more sensitive and therefore gives better results, has been shown to be more effective in determining the goodness of fit (Iacobucci, 2010, 96). When we consider that our model is made with 221 people, we can see that the S-RMR value demonstrates “Perfect Fit”.

### **Findings and Outcomes**

The figure below shows the general findings and outcomes:

**Figure: 1**  
**Finding and Outcomes**



As seen in Figure 3 above, as the basic concepts, KVT represents Decision Making Styles, ÖVD indicates Organizational Citizenship Behavior, D.LİDER specifies Transformational Leadership concepts. We also aimed to make the model more understandable by calculating the average of the sub-dimensions in the Spss.20.0 program. So, the sub-dimensions respectively are as follows:

- ANI\_ORT (averages of sudden decision-making styles), RASYONEL\_ORT (averages of rational decision-making styles), SEZGİSEL\_ORT (averages of intuitive decision-making

styles), BAGIMLI\_ORT (averages of dependent decision-making styles), ÇEKİNGEN\_ORT (averages of hesitant decision-making styles).

- KARİZMA\_ORT (averages of charismatic behaviour), AFFETME\_ORT (averages of forgiveness behaviour), TELKIN\_ORT (averages of inculcator behaviour), INDIVIDUAL\_ORT (averages of interest at individual Level), ZİHİNSEL\_ORT (averages of mental encouragement behaviour).
- VİCDANİ\_ORT (averages of conscientious behaviour), CIVIL ERDEM\_ORT (averages of civic virtue behaviour), CENTİLMEN\_ORT (averages of gentleman-ship behaviour), NEZAKET\_ORT (averages of courtesy behaviour), DIGERGAM\_ORT (averages of altruism behaviour).

First, when we look at the relationship model we have established in Figure 3, we can see a positive and significant relationship between KVT and ÖV (0.34). When we look at the relationship between ÖVD and D. LEVEL, we can see that there is also a positive and significant relationship (0.54). Finally, when we look at the relationship between KVT and D. LEVEL, we can see that their relationship is again positive and significant (0.39). It is possible to say; H1, H2, H3 hypotheses and sub-hypotheses have been confirmed in the model, and when examined, we have also found that all the t-values obtained for the structural coefficients are greater than the critical value of 1.96. which can be seen in (Table .1)

We also used the “modification” method which is frequently used in structural equation modelling. The modification process is called the process of linking dimensions or items together by combining the error shares of the nearest perceived question items instead of making a question from a model with a high level of underlying sub-structure and factor analysis reliability.

We also used the “modification” method which is frequently used in structural equation modelling. The modification process is called the process of linking dimensions or items together by combining the error shares of the nearest perceived question items instead of making a question from a model with a high level of underlying sub-structure and factor analysis reliability.

**Table: 1**  
**Research Hypotheses, t Values, R<sup>2</sup>**

Hypothesis	Interaction	Path Coefficient	t -Value	Result
H1	ÖVD→DL	0.54	7.87	Verified
H2	KVT→DL	0.39	5.79	Verified
H3	ÖVD→KVT	0.34	4.40	Verified

## References

- Bass, B.M. & B.J. Avolio (1990), *Transformational Leadership Development: Manual for the Multifactor Leadership Questionnaire*, Consulting Psychologists Press.
- Byrne, B.M. (2016), *Structural Equation Modelling With AMOS: Basic Concepts, Applications, and Programming*, Routledge.
- Iacobucci, D. (2010), “Structural Equations Modelling: Fit Indices, Sample Size, and Advanced Topics”, *Journal of Consumer Psychology*, 20, 90-98.
- Podsakoff, P.M. & S.B. Mackenzie & R.H. Moorman & R. Fetter (1990), “Transformational Leader Behaviours and Their Effects on Followers Trust in Leader, Satisfaction and Organizational Citizenship Behaviours”, *Leadership Quarterly*, 1, 107-142.

Scott, S.G. & R.A. Bruce (1995), "Decision-Making Style: The Development and Assessment of a New Measure", *Educational and Psychological Measurement*, 55(5), 818-831.

Şimşek, Ö.F. (2007), *Yapısal Eşitlik Modellemesine Giriş: Temel İlkeler ve Lisrel Uygulamaları*, Ankara: Ekinoks Yayıncılık.

## The Emerging Trend of ‘Expat-Preneurs’: A Headache for the Pre-Existing Ethnic Entrepreneur Theories

**Richard Andrew GIRLING** (<http://orcid.org/0000-0001-6698-1022>),  
University of Wrocław, Poland; e-mail: [richard.girling83@gmail.com](mailto:richard.girling83@gmail.com)

**Emilia BAMWENDER** (<http://orcid.org/0000-0002-9635-4334>), University  
of Wrocław, Poland; e-mail: [ebamwenda@gmail.com](mailto:ebamwenda@gmail.com)

**Keywords** : Expat-Preneurs, Ethnic Entrepreneurs, Ethnic Entrepreneurship, Migrant  
Entrepreneurs, Self-Initiated Expatriate Entrepreneurs.

**JEL Classification Codes** : 0310, Z130, F660.

### Introduction

In terms of migration, people are more likely to migrate to a more economically developed country than the country they leave behind. This is illustrated by the fact that global South - North migration in 2015 was 85.3 million, whereas North - South migration in the same year was only 13.6 million (UN DESA, 2015). It is no surprise, therefore, that in the context of entrepreneurship and migration, the overwhelming majority of studies have focused on migrants who have moved in this direction. This demographic is usually referred to in the literature as “ethnic entrepreneurs” (Waldinger et al., 1990) or “immigrant entrepreneurs” (Volery, 2007). A large amount of research has been conducted around this phenomenon, often with the goal of accounting for the high rates of ethnic entrepreneurship, or the success/failure rates of such enterprises. This has given rise to several theories, such as Disadvantage Theory (Aurand, 1983; Light & Rosenstein, 1995), Cultural Approach (Masurel, 2004), and Mixed-Embeddedness Theory (Kloosterman & Rath, 1999) among others. More recently, a new trend is emerging: A small (but potentially significant) number of people are emigrating away from developed economies and starting their own businesses abroad. These migrants have been labelled as “expat-preneurs” (Vance et al., 2016) or “Self-Initiated Expatriate entrepreneurs” (Andresen, 2014). The emerging trend of expat-preneurs poses several questions (and problems) for the existing models and theories surrounding ethnic entrepreneurs: Where do expat-preneurs fit into the theoretical landscape? Can the theories - created to account for ethnic entrepreneurs - also explain the behaviour of expat-preneurs? The objective of this paper is to answer these questions by reviewing eight of the existing ethnic entrepreneur theories against the context of expat-preneurs. Furthermore, it contributes to the gap in the literature surrounding Self-Initiated-Expatriate (SIE) entrepreneurs, which has been described as an under-researched phenomenon (Andresen et al., 2014).

### Definitions

The term “expat-preneur” (Solimine, 2015) has been defined as “an individual temporarily living abroad who initiates an international new venture (self-employment) opportunity in a host country” (Vance et al. 2015). Vance et al. differentiate them from ethnic entrepreneurs in two main ways: Firstly, expat-preneurs do not intend to permanently stay in the host country, whereas ethnic entrepreneurs do. Secondly, expat-preneurs are not “necessity entrepreneurs”. In other words, they become entrepreneurs out of volition, not necessity. For the purposes of this paper, the authors would like to add a third

qualification: The source country of expat-preneurs is usually - but not necessarily always - one with a developed economy. This third differentiation provides a useful structural backdrop which helps to explain the first two. Put simply, expat-preneurs are often coming from a position of privilege and, therefore, are not forced by circumstances to remain in the host country, nor forced to open their own business, but instead do so at their own free will.

Ethnic entrepreneurship, by contrast refers to the creation of business(es) by a minority group within a host country, whereby the minority group share a 'common national background or migration experiences' (Waldinger et al., 1990). Sometimes the term 'immigrant entrepreneurs' is also used, usually to denote those who have more recently immigrated or who are first generation immigrants (Volery, 2007).

### **Materials and Methods**

To evaluate if the existing ethnic entrepreneur theories can accommodate the emerging trend of expat-preneurs, the first step was to choose the theories in question. With a couple of exceptions, the authors decided to use the typology of theories assembled by Ishan-Nas et al. (2011). In their comprehensive review of international ethnic entrepreneurship, Ishan-Nas et al. provided a 'ready-made' list of all the major theories in this field, albeit missing "Middleman Minority Theory", which has been added to the list for the purposes of this paper.

Content analysis was determined to be the most appropriate way to analyse the theories. This form of analysis makes it possible to categorize the eight theories according to certain themes or qualities (Milne & Adler, 1999), enabling us to identify differences between the theories. The following four questions were asked of the eight theories:

- How does the theory account for the entrepreneurial success (or failure) of ethnic minorities?
- Is the theory set in the context of traditional migration moving from developing economies to developed economies?
- Does the theory assume that ethnic-entrepreneurs are at a disadvantage?
- Can the theory also account for the success of expat-preneurs?

These questions help to evaluate the universality of the theories. In other words, to what extent the current theories are too narrow - focusing exclusively on ethnic entrepreneurs - or if they are broad enough to also explain the phenomenon of expat-preneurs.

### **Findings**

The main finding was that all eight theories were created in the context of migration from developing economies to developed economies. Subsequently, most of the theories are not - in their current state - broad enough to also account for expat-preneurs. Five out of eight of the theories assume that ethnic entrepreneurs are disadvantaged, whereas expat-preneurs are not considered to be disadvantaged (they typically have high levels of education, (Marchant & Mottiar, 2011), plus have created their own business out of volition, not necessity (Vance et al., 2016)). One of the theories (Disadvantage Theory - which states that immigrants become entrepreneurs out of necessity) is so narrow that it is completely at odds with expat-preneurs, because - by definition - expat-preneurs do not become entrepreneurs out of necessity.

However, the other seven theories can potentially be adapted to accommodate expat-preneurs. Taking the Cultural Approach as an example, if it is found that expat-preneurs share certain characteristics (such as a willingness to take risks, or have a hard work ethic), then this theory may then be applicable to expat-preneurs. Likewise, it may be possible for Social Network Theory to be extended from a national to an international level (to account for expat-preneurs utilizing their social networks in their source countries). The other theories can similarly be adapted to broaden them, making 'room' for the existence of expat-preneurs.

### **Discussion**

The emerging trend of expat-preneurs presents a theoretical headache for the existing ethnic entrepreneur theories. The findings highlight how all eight theories selected were created to account for the presence of enterprise among ethnic minorities in developed Western economies, not for expat-preneurs leaving these economies. This is understandable, given that historically there has been significant immigration in Western economies and limited emigration. Most of the authors of the theories are from these Western economies and usually noticed this trend first-hand (for example, Kloosterman and Rath's Mixed Embeddedness Theory, developed in the context of Turkish and Moroccan entrepreneurs in their home city of Amsterdam). Nonetheless, the concept of expat-preneurs is provides a stern test to the universal applicability of these theories, with some faring better than others.

Expat-preneurs also raise the interesting question of transnationalism. Are expat-preneurs inherently more transnational? After all, by Vance et al.'s (2016) definition, they do not intend on staying in the host country, so does that mean they consequently maintain stronger ties to their source country? Furthermore, assuming expat-preneurs' source country is a developed economy, is their business more likely to make use of the social capital and social networks available there? If expat-preneurs are indeed more transnational than ethnic entrepreneurs, then this has major implications for several of the current theories. For example, both the Interactive Model refers to the opportunity structure of the host country. If expat-preneurs are more transnational (for example, selling products or services back to their source country), then the Interactive Model would have to be extended to include the international opportunity structure. Similarly, Mixed Embeddedness Theory - which extends the Interactive Model to include host country government action (and inaction) - would also have to be extended to include the government of the source country. But left in their current state, these theories are too narrow to accommodate expat-preneurs.

Although some recent progress has been made in terms of studies about expat-preneurs (Vance et al., 2016; Stone & Stubbs, 2007; and Marchant & Mottiar, 2011), as well as progress with transnational entrepreneurs (Portes et al., 1999; Saxenien, 2002; Light, 2007) there is still a lack of studies in this field, as noted by Andresen (2015). There seems to be a lack of theoretical context for the phenomenon of expat-preneurs. As seen in this paper, the existing theoretical landscape was created for ethnic entrepreneurs, not for expat-preneurs. The emerging trend of expat-preneurs brings with it a need to either adjust the current theories to accommodate this new phenomenon, or to create new theories, ideally which can universally explain the behaviour of all forms of immigrant entrepreneurialism, whether it be ethnic entrepreneurs or expat-preneurs.

## **Conclusions**

Ethnic entrepreneurs have been studied extensively and within the last few decades many theories have been formulated to explain this phenomenon. What has been studied far less is the emerging trend of expat-preneurs. The latter is differentiated from ethnic entrepreneurs based on three qualities: 1. Expat-preneurs choose to become entrepreneurs out of volition, not necessity (Vance et al., 2016); 2. Expat-preneurs do not intend to stay permanently in the host country (Vance et al., 2016); 3. Expat-preneurs' source country is usually a developed economy. This emerging trend has created a theoretical headache for the existing ethnic entrepreneur theories. This paper reviewed eight of the most prominent theories with the objective of exploring their applicability to expat-preneurs. It was found that all eight of the theories reviewed were created in the context of migration from developing economies to developed economies. Subsequently, most of the theories are not - in their current state - broad enough to also account for expat-preneurs. As a result, most of the existing ethnic entrepreneur theories now need to be broadened or adapted to accommodate expat-preneurs, or alternatively, new, more universal, theories need to be created.

## New Evidence on Interest Rate Pass Through

*Aysen SIVRIKAYA* (<http://orcid.org/0000-0003-2199-3593>), Hacettepe University, Turkey; e-mail: [aysens@hacettepe.edu.tr](mailto:aysens@hacettepe.edu.tr)

*Yasemin YALTA* (<http://orcid.org/0000-0002-9854-9813>), Hacettepe University, Turkey; e-mail: [yyalta@hacettepe.edu.tr](mailto:yyalta@hacettepe.edu.tr)

**Keywords** : Interest Rates, Monetary Policy, Cointegration.

**JEL Classification Codes** : E58, E52, C32.

### Background, Objectives and Goals

The monetary policy can affect real economy through several channels. Among these channels interest rate channel has received considerable attention since deposit and lending rates may affect real economy by influencing consumption, saving and investment decisions. Because a weak pass through from policy rates to deposit and lending rates would weaken the effectiveness of monetary policy, it is important to analyse how interest rates respond to changes in policy rates. Numerous studies have explored the relation between policy rates and deposit and lending rates for different country settings. Although they differ in terms of the sample periods chosen and the methodology adopted, most of them suggest that interest rate pass through is sluggish and shows asymmetries across countries (De Bondt, 2005). In this paper, we aim to contribute to the literature by evaluating interest rate pass through for Turkey. There are a few studies examining interest rate pass through in Turkey. Aydin (2007) evaluates the adjustment of lending rates to monetary policy rates using bank level panel data and finds evidence for monetary effectiveness. Ozdemir (2009) investigates the relation between money market rate and banks' retail rate employing an error correction mechanism and concludes that pass through of interest rates is complete in the long run. Yüksel and Özcan (2013) examine interest rate pass through of monetary policy to banking retail rates by using interbank overnight borrowing rate as policy rate. Employing the asymmetric threshold autoregressive (TAR) and momentum threshold autoregressive (MTAR) procedures they find that policy rate has significant short run impact on loan rates, whereas there is no significant relationship between policy rate and bank deposit rates.

Most of the above-mentioned studies consider interest rate channel in a conventional monetary policy setting and they use overnight borrowing rates as a policy variable. However, since 2010 the Central Bank of Republic of Turkey (CBRT) has adopted an unconventional monetary policy, in which it uses multiple policy rates to conduct monetary policy. The use of multiple rates provided the CBRT the flexibility against rapid and massive capital inflows (Avcı and Yüksel, 2016), however it also complicated monetary policy transmission mechanism. In this framework, the CBRT has been also using weighted average cost of the CBRT funding as a policy rate. Although the average funding rate of the central bank is not an officially published policy variable in the monthly policy statements, it is a potential candidate to represent the monetary policy stance because not only the interbank rates, but also the average central bank funding rate may matter for banks' loan and deposit pricing decisions (Binici et al, 2016). Therefore, we aim to reanalyse the monetary transmission mechanism using weighted average cost of the CBRT funding as a policy rate.

## The Method

Since the end of 2010, the CBRT has been using a multiple policy rate framework. Therefore, to assess the effects of different policy rates, we consider two policy rates. First, we use the interbank overnight borrowing interest rate, which is commonly used in the literature as a policy variable. Another indicator we use is the weighted average cost of the CBRT funding, which is calculated by the weighted average of overnight lending rate and weekly repo rate. This data is retrieved from the Electronic Data Delivery System of Central Bank of Turkey. As deposit rate, we consider the rate on three month deposits in national currency. This data is obtained from the IMF's International Financial Statistics database. The data used in the empirical analysis covers monthly data from 2011 to 2017.

To examine interest rate pass through, we apply a cointegration approach. We first check the stationarity of the series using Augmented Dickey Fuller (ADF) test. Then, we employ the Bounds Testing Approach of cointegration developed by Pesaran et al. (2001). The Bounds Testing Approach (BTA) is based on the following the ARDL model:

$$\Delta DEP_t = \alpha + \sum_{j=1}^{p1} \beta_j \Delta DEP_{t-j} + \sum_{j=0}^{p2} \gamma_j \Delta INT_{t-j} + \mu_1 DEP_{t-1} + \mu_2 INT_{t-1} + \epsilon_t$$

Here *DEP* represents deposit rate. We use two ARDL models by replacing  $\int$  by interbank overnight borrowing interest rate and the weighted average cost of the CBRT funding separately. According to the BTA, the null hypothesis of no cointegration is given by  $\mu_1 = \mu_2 = 0$  in Equation, which can be tested using Wald or F-statistics. Since the distribution of the test statistics is nonstandard, Pesaran et al. (2001) tabulated two sets of critical values as the lower bounds and upper bounds for given significance levels. If F statistic is below the lower bound, the null hypothesis cannot be rejected. If F statistic exceeds the critical value, then the null hypothesis is rejected, indicating that two series are cointegrated.

## Results and Conclusion

This study assesses interest rate pass through in Turkey over the period 2011 and 2017 applying ARDL approach. Our findings reveal that policy rates and deposit rates are cointegrated. These results suggest that monetary policy is effective in Turkey.

## References

- Avcı, B. & E. Yücel (2016), "Effectiveness of Monetary Policy: Evidence from Turkey", *MPRA Working Papers*, 70848, <<https://mpra.ub.uni-muenchen.de/70848/>>, 25.05.2017.
- Aydin, H.I. (2007), "Interest rate pass-through in Turkey", *CBRT Research and Monetary Policy Department Working Paper* No: 07/05.
- Binici, M. & H. Kara & P. Özbay (2016), "Unconventional interest rate corridor and the Monetary Transmission: Evidence from Turkey", *Working Paper*, CBRT, 16/08.
- De Bondt, G. (2005), "Interest rate pass-through: empirical results for the euro area", *German Economic Review*, 6, 37-78; <<http://dx.doi.org/10.1111/j.1465-6485.2005.00121.x>>, 25.05.2017.
- Pesaran, M.H. & Y. Shin & R.J. Smit (2001), "Bounds Testing Approaches to the Analysis of Level Relationships", *Journal of Applied Econometrics*, 16, 289-326.

- Ozdemir, B.K. (2009), "Retail bank interest rate pass-through: the Turkish experience", *International Research Journal of Finance and Economics*, 28, 7-15.
- Yüksel, E. & K.M. Özcan (2013), "Interest rate pass-through in Turkey and impact of global financial crisis: asymmetric threshold cointegration analysis", *Journal of Business Economics and Management*, 14(1), 98-113.

## Sustainable Growth and Its Finance: An Essay on Turkey

*Nefise Tugba KART* (<http://orcid.org/0000-0003-1086-9351>), Ankara University, Turkey; e-mail: [tugbaguvenir82@hotmail.com](mailto:tugbaguvenir82@hotmail.com)

*Cihan Serhat KART* (<http://orcid.org/0000-0003-1941-349X>), Ondokuz Mayıs University, Turkey; e-mail: [serhatcika@gmail.com](mailto:serhatcika@gmail.com)

**Keywords** : Sustainable Growth, Investment, Savings, Finance.

**JEL Classification Codes** : E22, O11, O16.

### Extended Abstract

Sustainability of growth, the concept which has an important place in macroeconomics has been common for last years. Even, growth in general refers to an increase in reel product, sustainable growth can be defined as continuity of growth that doesn't cause any instability. High inflation rates, a vulnerable and remaining open to crisis economics, uncertainty can block the sustainability of growth. As the relation between financial sector and reel sector is well-known today to sustain the productivity and so investments there is a need for finance. Even the internal or external resources can be used to finance growth, if external resources are portfolio investment or direct investments which do not cause an increase in production, finance cannot affect growth positively. On the other way, the portfolio investment tends to leave country, if an adverse situation emerges, so it creates a risk for sustainable growth. Because of this the internal resources should be used for finance. But in Turkey low rate of saving, the inefficacy of canalizing savings to investment or to financial sector and informality blocks the emergence of internal resources at sufficient levels. In this study, we analyse the sustainable growth and its finance so the current situation at Turkish economics.

The determinant of the labour, the first production factor which provide economic growth, is population structure. In that it is impossible to produce any good or service without labour independent from the production technique. Even the production technique is labour intensive or capital intensive or production technique uses labour at different rates during production process any production needs labour force. In Turkey, it is compulsory to growth to find job openings to increasing population. In other words, Turkey should increase production so the gross domestic product. To ensure sustainable growth it is important increase the production of sector which has the highest return.

To ensure the economic growth first it is compulsory to make law reforms for economic institutions; to eliminate the barriers to market entry for new firms; to make reforms for banking sector to encourage the relations with small and middle size enterprises. On the other hand, the entrance of foreign investment and foreign technology should be ensured.

The country needs finance to ensure the production and investments for this production which underpin the growth at today's economic conditions where markets cannot organize the relation between the real sector and finance sector. To finance country can uses internal sources (taxes, savings) or external sources (portfolio investments or direct foreign investments). For a sustainable growth, first it must be financed by internal sources. If these sources are inadequate than the external sources can be used. The internal savings belong to both private and public sector.

Although to use internal and external sources together to finance growth, if the foreign investments are portfolio investments or direct investments which do not increase the production they cannot affect growth positively. On the other hand, the portfolio investments are more sensitive to adverse events at country so they have tendency to leave country more quickly. This contains risk for sustainable growth. That is why the internal sources must be chosen to finance economic growth. In Turkey first the saving rates are low, also there are problems about canalizing savings to productive areas or to finance sector, finally informal economy is common. Because of all these reasons the internal sources cannot be actualized at desired levels.

Many conditions must be bearded in mind while making structural reforms to ensure sustainable growth and to decide how to finance this reforms in a developing country like Turkey. For example, to decide the currency for foreign trade; the value of domestic currency; the amount and composition of country's debt stock effect the decisions.

To ensure both the sustainable growth and its finance initially uncertainty must be eliminating. The economic variables and their relations with each other must be analysed very well and after estimations the implementations must take place. After achieving targets, the environment of trust will be provided by itself. In Turkey, there is a contrary situation. The policies against the current uncertainties and to compensate diversions from target are short-term. That is why they are needed to be revised. What is more the delay for implementation of policies combining with this problem increase the uncertainty?

Even Turkey's economy is growing, for greater rates of growth and to ensure the sustainability of growth there is a need for finance. In the current situation, there are problems about sustainability of finance for growth. Because of this, the relation between sustainable growth and finance must be analysed. We must underline the role of public deficit and the balance of payment deficit for Turkey's growth. It will be impossible by these two deficits to ensure the sustainable growth.

To ensure the sustainable growth, the sources of finance must be analysed and planned well and the risks which will occur if the finance of this growth will fail must be considered. First, the domestic savings must be increased and the current savings must be canalized through productive sectors. To achieve these two important goals the rate of interest must be determined correctly and informal economics must be challenged by government. Also, a tax reform must be made and measures against economic vulnerability must be taken.

The aim of this study is to define the concept of sustainable growth firstly. Then to analyse the case of Turkey. Turkey must use internal sources to finance the growth. Domestic savings must be increased to ensure the investments continuity. All-important macroeconomic variables will be analysed to clarify the possible ways for Turkey's sustainable growth.



**27 October 2017 Friday**

**Session: IV-B / 16.00-17.30**

## **INTERNATIONAL ECONOMICS & TRADE**

Room: *Salon Imperial*

Chair: **Basak CAKAR**

- The Importance of Competitive Intelligence for Success in Foreign Markets and Fields of Intelligence

**Cemalettin AKTEPE**

- Partnership versus Organising: Which has preferred by Turkish Trade Union Confederations?

**Sadik KILIC & Busra YUKSEL**

- The Sensitivity of Bilateral Trade to Exchange Rate: Markov Regime Switching Approach

**Aydanur GACENER-ATIS & Deniz ERER**

- The Bubbles in Turkish Liras/Dollar Exchange Rate and the Effects of Political and Country Risks: New Evidence from Sequential ADF Tests

**Elif ERER & Ozge KORKMAZ & Deniz ERER & Tuba BILGIN**

- Deconstruction of Anarchy in Theories of International Relations

**Seyda GUDEK**

## The Importance of Competitive Intelligence for Success in Foreign Markets and Fields of Intelligence

*Cemalettin AKTEPE* (<http://orcid.org/0000-0001-5426-2530>), Gazi University, Turkey; e-mail: [cemalettin.aktepe@gmail.com](mailto:cemalettin.aktepe@gmail.com)

**Keywords** : Competitive Intelligence, Marketing Information Systems.

**JEL Classification Codes** : M16.

### Extended Abstract

This study has been carried out to reveal the extent of awareness of obtaining information resources within a “competitive intelligence” understanding in the competitive relations of companies with each other in the internal market or in foreign markets, especially for the firms engaged in international trade through exports. Apart from this main objective, to determine the ways how intelligence is obtained is the other objective of this paper. For the sake of obtaining sustainable and systematic information other than “rumour” and “personal relations” for the company to reach its aims, whether specialist professionals have been employed and whether methods such as analysis of the information gathered, analysis of the sector and market analysis have been used comprise the sub-objectives of the study. In the present global competitive settings, insufficient information collection processes and the awareness of modern and comprehensive competitive intelligence for companies other than information systems are of great significance, which makes up the main motivation of this paper.

### Method and the Difference from Other Methods

In line with the objectives stated above, a qualitative research pattern “*to postulate a theory*” has been designed. To reveal the answers to the research questions and the subjects to be explored related to competitive intelligence entail a qualitative research pattern. In-depth interviews and discussions with managers have been systematically analysed. A qualitative research pattern has been designated as the best method that serves the objectives of this paper that allows for multi-layered interviews along with details.

Accordingly, the main problem of the paper has been determined that the awareness of the companies in competitive intelligence and methods related to competitive intelligence and the importance attached to intelligence activities are low. This problem makes up the source of the sub-problems that will be under discussion in the forthcoming parts.

Within the scope of “competitive intelligence” of exporter firms, the topics have been determined around the hypotheses related to such practices as industry analysis, market analysis, and desk research and mystery shoppers. Interview protocols have been formed by preparing open-end questions. In-depth interviews and documents were included in the analysis but observations and visual and audio materials were not analysed.

The population of the study is comprised of the exporter firms manufacturing in Ankara. Interviews have been conducted with six firms registered in Ankara Chamber of Industry and Central Anatolian

Exporters' Association. All the firms are engaged in manufacturing sector. Because of the interviews, a multi-stage sampling has been determined from firms with experience in foreign markets and information management. A research cluster has been determined in a simple random method.

The following table reports information on the firms covered in the study.

FIRMS	A	B	C	D	E	F
Firms' Scale*	Middle	Large	Middle	Large	Small	Middle
Total Exports (Annual, Million \$)	< 2 million	< 5 million	< 2 million	< 5 million	< 2 million	> 2 million
Sector	Machinery and Parts	Defence and Aviation	Informatics, Technology	Machinery and Parts	Air-conditioning	Furniture
Number of Markets Operated	>5	<10	>5	>10	>5	>5

\*based on the number of employee.

The table given above presents some characteristics of the firms in the study. The interviews focus on the four major themes.

- Industry Analysis
- Market Research
- Desk Research
- Mystery Shopper Practice

The starting point and base in an intelligence system is data (Dönmez, 2015). This study dwells on intelligence techniques under four different headings. Using these four different research techniques, the intelligence skills and awareness of the firms have been attempted to be revealed.

### Industrial Analysis

Industrial analysis requires intelligence in eight sub-topics (Hall C. and Bensoussan B. 2007). These can be listed as *present competitors, potential competitors, legal changes, social and demographic changes, outside threats and opportunities, new goods and services, new technologies in specific areas, and technology in general.*

Within the interview framework, the intelligence performances of the six firms have been analysed. Of the six firms, firm B and D performs *irregular intelligence activities* in the five areas of the eight study topics (present competitors, new goods and services, new technologies in specific areas, and social and demographic changes). They attempt to obtain intelligence related to the competitor firms through international fairs and trips. The other four firms do not have regular intelligence activities. It was only the firm C that has stated that they try to follow published and electronic publications abroad specific to the sector.

### Market Research

In the market research, which is important in terms of outlining the sector capacity, trends and the structure of the actors in the sector, the activities to obtain intelligence related to *general economic situation of the market, market share and strategies of competitors' basic capacities and skills of competitors, future plans of competitors, customers' expectations, possible threats and opportunities in the market* (Köseoğlu & Akdeve, 2013) have been revealed. Of the six firms, two firms (B,C)

perform regular activities (on customers' expectations and basic capacities and skills of competitors) of six intelligence factors listed above. It is significant that these firms are in defence and aviation and technology sector. Considering these firms have contract with high volume of orders, this should be no surprise. The other four establishments, on the other hand do not conduct and sustained intelligence activity and do not even have the need for it.

### **Desk Research on Competitor Analysis**

Firms can get a great deal of information thanks to the Internet. Especially, socially media accounts could be made use of not only for customer trends but for new areas of interest as well. Without any travel costs involved, valuable amount of information could be collected during the intelligence process. This intelligence technique aims to gather intelligence on *pricing policy, product designs, positioning, policies on communication activities, and the existence of the competitors in the market* (Graef, 1997), *production activities, distribution strategies, organizational structure, employment policies, merging/purchasing policies* (Murphy, 2005).

Intelligence activity on Web settings is the most important technique that offers regular flow information for firms. Although not on a regular basis, all the firms have stated that they perform competitor analysis on Web settings. Specifically, pricing policies, product designs, communication techniques are followed through desk research. However, when asked if *they have any employee just for such kind of intelligence*, they have stated that they have no worker specifically employed to perform these tasks. Two firms (B, D) have stated that their market research group regularly performs this task.

### **Mystery Shopper Practice**

Mystery shopper practice is a practice in which a specialist outside the firm is employed to buy the products for observing the product and service quality, personnel and operations of the firm from different angles. As a matter of fact, due to the ease of implementation and low-cost, this is also preferred by small firms, too (Köseoğlu & Akdeve, 2013). This intelligence technique is thought of as the one that yields good results in such service sectors as retail and hospitality. The information obtained is put into report for the top management and compared with other intelligence for cross-checking. This intelligence technique is important in that it offers an outsiders perspective and it can bring clarity to a variety of issues under the heading of "customer relations management" such as customer satisfaction, loyalty level, customer commitment. The firms under consideration in this paper have reported that they use no such intelligence technique. One of the reasons why they do not use this is that the sector they operate in does not necessitate such kind of intelligence. On the other hand, it is observed that they are not knowledgeable about this simple but effective intelligence technique. Five of the six firms covered in this study have expressed that they do not need such kind of intelligence.

### **Conclusion**

As a result, the experience in intelligence collection of the six exporter firms in manufacturing sector are not adequate in the global competitive settings. In the firms who carry out regular and large-scale export activities, there is more strategic intelligence systems like B and D firms but in some sectors (technology) information access can be in a more accessible way. It can be said that the smaller the scale of the firms get, the lower their budget is. In future studies, sector-based studies could yield more significant outcomes.

## Partnership versus Organising: Which has preferred by Turkish Trade Union Confederations?

**Sadik KILIC** (<http://orcid.org/0000-0002-5834-4602>), Bulent Ecevit University, Turkey; e-mail: [sadik.kilic@beun.edu.tr](mailto:sadik.kilic@beun.edu.tr)

**Busra YUKSEL** (<http://orcid.org/0000-0001-9102-2712>), Bulent Ecevit University, Turkey; e-mail: [busrayukse190@gmail.com](mailto:busrayukse190@gmail.com)

**Keywords** : Organising, Partnership, Union Revitalisation, Turkish Trade Unions.

**JEL Classification Codes** : J50, J51, J53.

### Introduction

The aim of this study is to reveal tendencies of Turkish trade union confederations about organising and partnership models. For this purpose, we made semi-structured interviews with organisers and managers in the trade unions. During the interviews, we have discovered that perspectives of *Türk-İş* and *DİSK* are close to organising model, however, practices of them are considerable inconsistent with the model. *Hak-İş*, on the other hand, has clearly adopted to the partnership model.

Union membership is not always available for many workers due to employer opposition to unionise (Bronfenbrenner, 2009; Gall & McKay, 2001; Kılıç & Yıldız, 2015, 2016; Turner & D'Art, 2012). This is called a 'representation gap' in the literature (Charlwood, 2002; Towers, 1997). Representation gap has led to beginning discussions of union revitalisation through organising the organised (Gall, 2009; Heery & Adler, 2004; Pollert, 2010). Because, if workers' demand for union is increasing, the first thing to be done on behalf of unions will be to organise them. Thus, union organising model has become dominant among most industrial relations scholars. Organising model venture a fighting with employers to recruit new union members (Badigannavar & Kelly, 2005). On the other hand, some authors claim that trade unions should prefer to survive through the exact opposite way which known as partnership, cooperation with employers (Avgar & Kuruvilla, 2011; Kochan et.al. 1995). Although this way has ever not been revived unions for now, it has still been engaged by some trade unions (Badigannavar, 2009; Badigannavar & Kelly, 2011; Kelly, 2004; Kılıç, 2016). This study aims to illustrate organising and partnership perspectives and practices of three big Turkish trade union confederations which have different traditions and reflections (*Türk-İş*: Pragmatic Union, *DİSK*: Revolutionist, *Hak-İş*: Religionist-Conservative, see Çelik, 2010; Işıklı, 2006; Mahiroğulları, 2013).

### Method

We made semi-structured interviews with some organisers and managers in the trade union confederations in Turkey. During the interviews, we tried to learn perspectives and practices of the confederations about organising and partnership models. To determine the perspectives, we asked them to define the nature of employment relations, HRM and employers. To collect information about the practices, we asked them to explain whether their unions built organising teams, education institutions for organisers, strategic and planned campaigns. Also, we tried to understand their recruitment methods, such as *externally led* or *dominant officers*, and their communication ways with workers and employers in the campaigns, such as with an agenda of *workplace injustices* or *service unionism*.

## Results

At the end of the interviews, we have discovered that *Türk-İş* and *DİSK* have got some perspectives in accord with organising model, however, in practice, these confederations have not given importance to organising. In perspective dimension, these confederations have embraced the thesis of plural and radical schools. For example, according to the both confederations, conflict of interest is a nature outcome of capitalist employment relations, the main purpose of employers is to create surplus value, HRM is *a wolf in sheep's clothing*, and one of the primary objectives of the unions should be organising the unorganised. However, these confederations have not built organising teams, departments, education institutions for organisers, and planned and effective campaigns. Moreover, these have unintentionally engaged in partnership and service unionism. *Hak-İş*, on the other hand, has intendedly adopted partnership strategy in both dimensions. This confederation has believed unitary of interests between employers and workers, has formed interaction with employers rather than workers in organising efforts, has tried to organise already organised workers in the other unions, and has designated organising practices accord with cooperation and partnership.

## Conclusion

Union revitalisation depend on workers' beliefs about union power and union instrumentality (Charlwood, 2003), and effects of counter-mobilization of employers and government policies (Kelly, 1998). Thus, main reason of union decline is employer opposition to unionise and there is no way for to revive beyond organising strategy based on struggle with employers. We have found that perspectives of *Türk-İş* and *DİSK* are close to organising model, however, practices of them are considerable inconsistent with the model. On the other hand, perspectives and practices of *Hak-İş* are clearly in accord with partnership.

## References

- Avgar, A. & S. Kuruvilla (2011), "Dual Alignment of Industrial Relations Activity: From Strategic Choice to Mutual Gains", *Advances in Industrial and Labor Relations*, 18, 1-39.
- Badigannavar, V. (2009), "Does Labor-Management Partnership Deliver Mutual Gains: Evidence From the UK Public Services", *Advances in Industrial and Labor Relations*, 16, 75-108.
- Badigannavar, V. & J. Kelly (2005), "Why Are Some Union Organizing Campaigns More Successful Than Others?", *British Journal of Industrial Relations*, 43(3), 515-535.
- Badigannavar, V. & J. Kelly (2011), "Partnership and Organizing: An Empirical Assessment of Two Contrasting Approaches to union revitalization in the UK", *Economic and Industrial Democracy*, 32(1), 5-27.
- Bronfenbrenner, K. (2009), *No Holds Barred: The Intensification of Employer Opposition to Organizing*. Washington: Economic Policy Institute.
- Charlwood, A. (2002), "Why Do Non-Union Employees Want to Unionize? Evidence from Britain", *British Journal of Industrial Relations*, 40(3), 463-491.
- Çelik, A. (2010), *Vesayetden Siyasete Türkiye'de Sendikacılık (1946-1967)*. İstanbul: İletişim Yayınları.
- Gall, G. (2009), "What is to be Done with Union Organising?", G. Gall (ed.), *Union Revitalisation in Advanced Economies: Assessing the Contribution of Union Organising*. London: Palgrave Macmillan, 1-16.
- Gall, G. & S. McKay (2001), "Facing Fairness at Work: Union Perception of Employer Opposition and Response to Union Recognition", *Industrial Relations Journal*, 32(2), 94-113.
- Heery, E. & L. Adler (2004), "Organizing the Unorganized", C. Frege, & J. Kelly (ed.), *Varieties of Unionism: Strategies for Union Revitalization in a Globalizing Economy*, New York: Oxford University Press, 45-69.

- Işıklı, A. (2006), *Sendikacılık ve Siyaset*, Ankara: İmge.
- Kelly, J. (1998), *Rethinking Industrial Relations: Mobilization, Collectivism and Long Waves*, London: Routledge.
- Kılıç, S. (2016), "Sendikaların Yeniden Canlanması İçin İki Rakip Strateji: Paydaşlık ve Örgütlenme", *Çalışma ve Toplum*, 50(3), 1203-1230.
- Kılıç, S. & K. Yıldız (2015), "İş Arayanların Sendika Talebi ve Sendika Algısı: Türkiye'deki Temsil Boşluğu Hakkında Bazı İşaretler", *Siyaset, Ekonomi ve Yönetim Araştırmaları Dergisi*, 16. *Çalışma Ekonomisi ve Endüstri İlişkileri Kongresi Özel Sayısı*, 191-204.
- Kılıç, S. & K. Yıldız (2016), "İkame Etkisi, Baskı Etkisi ve Bu Etkiler İle Sendikalaşma Eğilimi Arasındaki İlişki", *Sosyoekonomi*, 24(28), 255-267.
- Kochan, T. & H.C. Katz & R. McKersie (1995), *Transformation of American Industrial Relations*, New York: Basic Books.
- Mahiroğulları, A. (2013), *Dünyada ve Türkiye'de Sendikacılık*, Bursa: Ekin.
- Pollert, A. (2010), "Spheres of Collectivism: Group Action and Perspectives on Trade Union among the Low-Paid Unorganized with Problems at Work", *Capital & Class*, 34(1), 115-125.
- Towers, B. (1997), *The Representation Gap: Change and Reform in the British and American Workplace*, Oxford: Oxford University Press.
- Turner, T. & D. D'Art (2012), "Public Perceptions of Trade Unions in Countries of the European Union: A Casual Analysis", *Labor Studies Journal*, 37(1), 33-55.

## The Sensitivity of Bilateral Trade to Exchange Rate: Markov Regime Switching Approach

*Aydanur GACENER-ATIS* (<http://orcid.org/0000-0002-4165-9683>), Ege University, Turkey; e-mail: [aydanur.gacener@ege.edu.tr](mailto:aydanur.gacener@ege.edu.tr)

*Deniz ERER* (<http://orcid.org/0000-0001-9977-9592>), Ege University, Turkey; e-mail: [denizerer@hotmail.com](mailto:denizerer@hotmail.com)

**Keywords** : Bilateral Trade, Exchange Rate, Regime Switching.

**JEL Classification Codes** : F31, F41, C22.

### Introduction

A country can overcome trade deficits by implementing either contractionary fiscal or monetary policy or currency devaluation or depreciation. The studies in the literature applied various approaches to evaluate the effect of currency depreciation on trade flows (Bahmani-Oskooee & Ratha, 2004: 130). Most know approach which explains directly the relation between exchange rate and trade flows is J-curve. J-curve, which is also called as elasticity approach or traditional approach, states that appreciation in exchange rate negatively affects foreign trade balance in short run whereas recovering foreign trade balance in the long run (Bickerdike, 1920; Robinson, 1949; Metzler, 1949). As examined the literature, some of researchers is seen to investigate the connection between exchange rate and trade flows by estimating import and export demand elasticity to exhibit whether Marshall-Lerner condition is valid in long run. According to Marshall-Lerner, as long as the sum of import and export demand elasticities exceed unity, devaluation impacts trade balance (Kreinin, 1967; Khan, 1974, 1975; Wilson & Takacs, 1979; Warner & Kreinin, 1983, Bahmani-Oskooee, 1986). However, this approach has aggregation bias problem. Aggregation bias states trade flow approach exhibits exceptive results in case that the response of trade between two countries to exchange rates is different for countries in question. To eliminate aggregation bias problem, most of the studies in recent years consider estimating trade elasticities with regards to bilateral relations (Marquez, 1990; Bahmani-Oskooee & Brooks, 1999; Bahmani-Oskooee & Goswami, 2004; Hatemi-J & Irandoust, 2003; Bahmani-Oskooee & Rathe, 2004, 2007).

According to another approach reflecting Keynesian view, appreciation in exchange rate enhances domestic demand, and thus domestic income through multiplier mechanism. This situation means that devaluation increases import and provides foreign trade balance. In terms of monetarism, devaluation decreases real monetary supply, but increases general level of prices in the economy because of increase in prices of tradable. (Dornbusch, 1973; Frenkel & Rodriguez, 1975). Inflation lead to increase nominal money supply because it diminishes real value of money. This situation accelerates inflow of foreign currency. According to monetarism, the balancing effect of devaluation on foreign trade occurs through not only decrease in import or increase in export, but also capital movements (Harberger, 1950; Alexander, 1959).

The aim of the study is to examine how the effect of exchange rate volatility on bilateral trade between Turkey and five European countries (Germany, France, Italy, Spain, United Kingdom)

changes across different regimes over the period of 2002M1-2017M3. The study contributes to literature in terms of using Markov switching regression.

Markov regime switching model proposed by Hamilton (1989) is one of the nonlinear time series models. In this model, it is allowed that an economy changes from one regime to another or in other words, behaviour of time series becomes distinct in different regimes. The switching mechanism is controlled by an unobservable state variable that follows a first-order Markov chain (Kuan, 2012; Smith, 2002).

In two - regime Markov switching model it is assumed that the state variable  $S_t$  is unobserved and change based on a first - order Markov chain with transition probabilities:

$$P(S_t = i | S_{t-1} = j, z_t) = P_{ij}(z_t)$$

The transition probabilities are influenced by a (qx1) vector of covariance-stationary exogenous or predetermined variables  $z_t$ , where  $z_t$  may include elements of  $x_t$ . The Markov chain is assumed to be stationary and to change independently of all those elements of  $x_t$  not included in  $z_t^2$  (Kim & Peger & Startz, 2008).

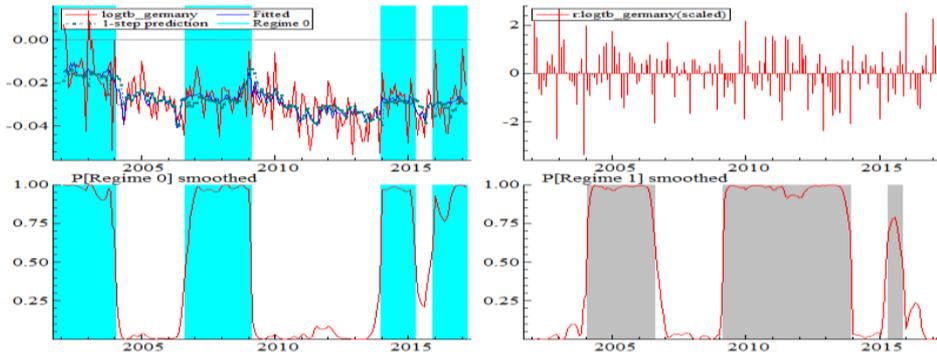
We used Markov switching dynamic regression. This model allows states to evolve based on a Markov process and for quick adjustments after a change of state. We stated regimes as expansion period and depreciation period. The model we estimated is as follows:

$$y_t = \mu_s + x_t \alpha + z_t \beta_s + \epsilon_{s,t}$$

where;  $y_t$  is TB which is logarithm of the ratio of Turkey's export to partner country to Turkey's import from to partner country,  $\mu_s$  is state-dependent intercept,  $x_t$  is vector of exogenous variable, which is policy rate, with state invariant coefficients  $\alpha$ ,  $z_t$  is vector of exogenous variables, which are IP and RER, which are respectively indicate logarithm of industrial production index of partner country and logarithm of real effective exchange rate for Turkey., with state-dependent coefficients  $\beta_s$  and  $\epsilon_{s,t} \sim iid N(0, \sigma_s^2)$ .

We generated MS(2) dynamic regression to investigate so-called relationship across different regimes. The smoothed regime probabilities related to MS(2) model are shown in Figure 1.

**Figure: 1**  
**Smoothed Regime Probabilities**



Shaded areas in Figure 1 correspond to low volatility regime and other areas are relating to high volatility regime. High volatility occurs especially in the crisis periods, for example in 2007 global financial crisis which started in United States and 2008 sovereign debt crisis in the European area. Therefore, we can define high volatility regime as recessions and low volatility regime as expansions. According to Figure 1, regime 0 and regime 1 respectively reflect recession and expansion regimes. The results of MS(2) model are shown in Table 1.

**Table: 1**  
**The Results of MS(2) Model**

	Germany	France	UK	Italy	Spain
Constant(0)	0.248270*** (0.05861)	-1.83916* (0.9530)	1.4382*** (0.1869)	-0.886281*** (0.1471)	-0.215234*** (0.04583)
Constant(1)	0.168937** (0.06653)	-0.158205*** (0.05404)	0.792939*** (0.09880)	-0.198447*** (0.07050)	-0.234618*** (0.05878)
IP(0)	0.0585654*** (0.1265)	0.387165* (0.2022)	0.297621*** (0.03989)	0.184416** (0.03152)	0.0443932*** (0.009807)
IP(1)	0.0434758** (0.01447)	0.0275506** (0.01162)	0.164478*** (0.02122)	0.0361551** (0.01495)	0.0439979** (0.01274)
ΔRER(0)	-0.0317735 (0.03447)	0.0275586 (0.05628)	-0.00441838 (0.05595)	0.00845647 (0.04661)	0.0169743 (0.03621)
ΔRER(1)	0.104320*** (0.03305)	0.0502284** (0.02463)	0.000847999 (0.03194)	0.0416123 (0.02560)	0.0568606* (0.03403)
Sigma(0)	0.0102986** (0.001054)	0.0128364*** (0.001908)	0.0103506*** (0.001208)	0.0118704*** (0.002239)	0.0114370*** (0.0008633)
Sigma(1)	0.00773949** (0.0008518)	0.00869440** (0.0005038)	0.0109529** (0.0006927)	0.00758685** (0.001558)	0.00835220** (0.0007878)
p{0 0}	0.954919*** (0.03146)	0.960047*** (0.03918)	0.912609*** (0.04808)	0.941014*** (0.06142)	0.938144*** (0.02667)
p{1 1}	0.959748*** (0.02645)	0.999997*** (0.004578)	0.971267*** (0.01680)	0.967358*** (0.06815)	0.905408*** (0.03822)
Diagnostic Tests					
Log-likelihood	586.357625	588.841095	541.927709	592.818246	542.666832
AIC	-6.3336028	-6.3960342	-5.87765424	-6.43998062	-5.88582134
SC	-6.5755596	-6.21932166	-5.70009417	-6.26326808	-5.7091088
Linearity LR test	28.239***	41.429***	65.359***	33.937***	64.071***

For Turkey's trade by Germany, the change of real effective exchange rate affects positively and significantly so-called trade in Regime 1(expansion regime) while it doesn't have any effect on the trade in Regime 0 (depreciation regime). Similarly, the change in question have positive and significant

effect on Turkey's trade by France in only Regime 1. However, the change of Turkey's real effective exchange rate doesn't have significant effect of Turkey's trade by UK, Italy and Spain.

In this study, we analysed the effect of real effective exchange rate on Turkey's bilateral trade by Germany, France, UK, Italy and Spain by using Markov switching dynamic regression to obtain behaviour in different regimes which reflects expansion period and depreciation period. We used monthly data covering the period 2002M1-2017M3.

It inferred from results of the study that real effective exchange rate affects only positively and significantly Turkey's bilateral trade by Germany and France in expansion period. However, the change of real effective exchange rate doesn't have any effect on Turkey's bilateral trade by UK, Italy and Spain.

### References

- Alexander, S. (1959), "Effects of Devaluation: A Simplified Synthesis of Elasticities and Absorption Approaches", *American Economic Review*, 49(1), 21-42.
- Bahmani-Oskooee, M. & A. Ratha (2007), "Exchange Rate Sensitivity of US Bilateral Trade Flows", *Economic Systems*, 32, 129-14
- Bahmani-Oskooee, M. (1986), "Determinants of International Trade Flows: The Case of Developing Countries", *J.Dev.Econ.*, 20, 107-123.
- Bahmani-Oskooee, M. & T.J. Brooks (1999), "Cointegration Approach to Estimating Bilateral Trade Elasticities between U.S. and Her Trading Partners", *Int.Econ.J.*, 13, 119-128.
- Bahmani-Oskooee, M. & G.G. Goswami (2004), "Exchange Rate Sensitivity of Japan's Bilateral Trade Flows", *Jpn.World Econ.*, 16, 1-15.
- Bahmani-Oskooee, M. & A. Ratha (2004), "The J-curve: A Literature Review", *Appl.Econ.*, 36, 1377-1398.
- Bickerdike, C.F. (1920), "The Instability of Foreign Exchange", *The Economic Journal*, 30(117), 118-122.
- Dornbusch, R. (1973), "Devaluation, Money and Non-Traded Goods", *American Economic Review*, 63(5), 871-880.
- Frenkel, J.A. & C.A. Rodriguez (1975), "Portfolio Equilibrium and the Balance of Payments: A Monetary Approach", *American Economic Review*, 65(4), 674-688.
- Harberger, A.C. (1950), "Currency Depreciation, Income, and the Balance of Trade", *Journal of Political Economy*, 58(1), 47-60.
- Hatemi-J, A. & M. Irandoust (2003), "Exchange Rates and the Marshall-Lerner Condition: Evidence from Trade Flows Between Sweden and Germany", *Appl.Econ.Q.*, (Konjunkturpolitik) 49, 65-73.
- Khan, M.S. (1974), "Import and Export Demand in Developing Countries", *IMF Staff Papers*, 21, 678-693.
- Khan, M.S. (1975), "The Structure and Behavior of Imports of Venezuela", *The Review of Economics and Statistics*, 57, 221-224.
- Kreinin, M.E. (1967), "Price Elasticities in the International Trade", *The Review of Economics and Statistics*, 49, 510-516.
- Marquez, J. (1990), "Bilateral Trade Elasticities", *Rev.Econ.Stat.*, 72, 70-77.
- Metzler, L.A. (1949), "The Theory of International Trade", in: H.S. Ellis & L.A. Metzler (eds.), *Readings in the Theory of International Trade*, USA: Philadelphia Blackiston, 210-254.
- Robinson, J. (1949), "The Foreign Exchanges", in: H.S. Ellis & L.A. Metzler (eds.), *Readings in the Theory of International Trade*, USA: Philadelphia Blackiston, 83-103.

Warner, D. & M.E. Kreinin (1983), "Determinants of International Trade Flows", *Review of Economics and Statistics*, 65, 96-104.

Wilson, J.F. & W.E. Takacs (1979), "Differential Responses to Price and Exchange Rate Influences in the Foreign Trade of Selected Industrial Countries", *Review of Economics and Statistics*, 61, 267-279.

## The Bubbles in Turkish Liras/Dollar Exchange Rate and the Effects of Political and Country Risks: New Evidence from Sequential ADF Tests

**Elif ERER** (<http://orcid.org/0000-0002-2238-4602>), Ege University, Turkey;  
e-mail: [elif\\_erer@hotmail.com](mailto:elif_erer@hotmail.com)

**Ozge KORKMAZ** (<http://orcid.org/0000-0001-9275-1271>), Bayburt University, Turkey; e-mail: [ozgekorkmaz@gmail.com](mailto:ozgekorkmaz@gmail.com)

**Deniz ERER** (<http://orcid.org/0000-0001-9977-9592>), Ege University, Turkey; e-mail: [denizerer@hotmail.com](mailto:denizerer@hotmail.com)

**Tuba BILGIN** (<http://orcid.org/0000-0002-5960-8657>), Karadeniz Technical University, Turkey; e-mail: [tuba.gunay@ktu.edu.tr](mailto:tuba.gunay@ktu.edu.tr)

**Keywords** : Rational Bubbles, Exchange Rates, Political and Country Risks.

**JEL Classification Codes** : C1, F3, B22.

### Extended Abstract

Rational bubbles in financial markets are of great importance in terms of whether investors give the right decision and accordingly take a position towards risk as well as its effect on financial crises. Bubbles are excessive increases in asset prices. Brunneimeier (2009) states that bubbles relate to abrupt asset price increases followed by a collapse. He also expresses that so-called bubbles can occur if financial market participants hold the asset since they expect to sell this asset at a higher price than the others although the asset's price exceeds its fundamental value.

Fluctuations in asset prices impact seriously economy in terms of real allocation. One of the financial assets is exchange rate. This means that it is identified by current and expected values of Fundamentals. Therefore, academicians and policy makers try to generate models which predict exchange rate behaviour (Obstfeld & Rogoff, 1996).

Purpose of this study is to detect bubbles in Turkish liras/USD exchange rate through right-tailed unit root tests and to indicate the effects of political risk and country risk indices on the exchange rate bubbles over the period of 1999:M1-2016:M12. We contribute to the literature in two ways. Firstly, we applied a new method developed by Phillips, Shi and Yu (2011) to show presence of bubbles in Turkish liras/USD exchange rate. Secondly, we analysed the effects of both political and country risks on bubbles in Turkish liras/USD exchange rate. Therefore, we aim to fulfil that gap in the literature.

We used Turkish Lira/US dollar exchange rate, political risk index and country risk index obtained from DataStream. We also used consumer price index (CPI) and producer price index (PPI) drawn from IMF International Financial Statistics database.

As indicated by Bettendorf and Chen (2013) and Jiang et. al. (2015), economic fundamental relating to nominal exchange rate is considered as the price differential ( $f_t$ ).

$$f_t = p_t - p_t^*$$

where  $p_t$  and  $p_t^*$  respectively exhibit the domestic and foreign price indices in logarithm. Engel (1999) distinguishes goods as traded and non-traded to demonstrate the domestic price index.

$$p_t = (1 - \alpha)p_t^T + \alpha p_t^N$$

where  $p_t^T$ ,  $p_t^N$  and  $\alpha$  respectively exhibit the traded and non-traded goods in logarithm and the share of non-traded goods component. Similarly, the price differential ( $f_t$ ) can be rewritten as the combination of traded goods and nontraded goods.

$$(p_t - p_t^*) = (p_t^T - p_t^{T*}) + \alpha(p_t^N - p_t^{N*}) - \beta(p_t^{N*} - p_t^{T*})$$

where first term on the right side of this equation represents the traded goods component ( $f_t^T$ ) and second term is the non-traded goods component ( $f_t^N$ ).

PPI and CPI are frequently used as the price level of traded goods and the price level of non-traded goods, respectively.

$$f_t^T = \ln(PPI_t) - \ln(PPI_t^*)$$

$$f_t^N = \ln(CPI_t) - \ln(PPI_t) - (\ln(CPI_t^*) - \ln(PPI_t^*))$$

In this study, we used recursive right-tailed unit root tests to determine bubbles in nominal Turkish Lira/USD exchange rate  $s_t$  and the ratio of the exchange rate to the two types of economic fundamentals.

Right-tailed unit root test including RADF, SADP and GSADF was developed by Phillips, Shi and Yu (2011). Right-tailed unit root tests are especially used in determining exploding series or slightly exploding series (Phillips & Shi & Yu, 2014a).

For each  $x_t$  time series, ADF test is sensitive to the alternative of exploded root. The following autoregressive specification is estimated with least squared:

$$x_t = \mu_x + \delta x_{t-1} + \sum_{j=1}^J \phi_j \Delta x_{t-j} + \varepsilon_{x,t}, \varepsilon_{x,t} \sim NID(0, \sigma_x^2)$$

For given some values of lag parameter J, NID is independent and has normal distribution. In unit root tests, null hypothesis is  $H_0 = \delta = 1$  and right-tailed alternative hypothesis is  $H_0 = \delta > 1$ . In recursive regressions, above model repeatedly is estimated increasing one observation at each try.

$$ADF_r \rightarrow \frac{\int_0^r \widetilde{W} dW}{(\int_0^r \widetilde{W}^2)^{1/2}}$$

$$sup_{r \in [r_0, 1]} ADF_r \rightarrow sup_{r \in [r_0, 1]} \frac{\int_0^r \widetilde{W} dW}{(\int_0^r \widetilde{W}^2)^{1/2}}$$

Here, W is Standard Browian motion (Phillips & Wu & Yu, 2011: 206-207).

GSADF test based on the idea of recursively running ADF test on sub-samples as well. Sub-samples are more extensive in comparison with SADF. GSADF test allows the initial point  $r_1$  to vary within a feasible sequence because switching the end of point of the regression  $r_2$  from  $r_0$  to 1 (Phillips & Shi & Yu, 2013b: 10).

$$GSADF(r_0) = \sup_{\substack{r_2 \in [r_0, 1] \\ r_1 \in [0, r_2 - r_1]}} \{ADF_{r_1}^{r_2}\}$$

Firstly, we focus on indicating the bubbles in Turkish liras/USD exchange rate. We applied right-tailed unit root tests. In the study, exchange rate was embraced in three ways and thus, nominal exchange rate, the ratio of exchange rate to the traded goods and the ratio of exchange rate to non-traded goods were used. The results for so-called exchange rates are exhibited in Table 1.

**Table: 1**  
**The Results of RADF, SADF and GSADF Tests for Bubbles in Turkish Liras/USD Exchange Rate**

Variable	Sample: 1999 M1-2016 M12		
	RADF	SADF	GSADF
$s_t$	0.852718**	-0.263644	0.852718
$s_t - f_t^N$	0.899056**	-0.445028	0.899056
$s_t - f_t^T$	0.804161*	-0.977495	0.804161
CV 1%	-0.162387	0.870903	1.657709
CV 5%	-0.815928	0.463835	1.233683
CV 10%	-1.143328	0.263722	1.020339

Note:  $s_t, s_t - f_t^N$  and  $s_t - f_t^T$  state respectively nominal exchange rate, the ratio of the exchange rate to non-traded goods and the ratio of the exchange rate to traded goods. The initial window size is 29 observations for RADF, SADF and GSADF tests. \*\*\*, \*\*, \* show respectively significance at 0.01, 0.05 and 0.1 levels.

As examined Table 1, RADF (Rolling ADF) test statistic rejected null hypothesis that there is no explosive behaviour at significant level 5%. According to SADF and GSADF test statistics, there is no explosive behaviour in nominal Turkish Lira/USD exchange rate in the mentioned period. However, there is explosive behaviour for the ratio of the exchange rate to the non-traded goods fundamental  $s_t - f_t^N$ . However, we don't find an evidence about explosiveness for  $s_t - f_t^N$ . Similarly, the ratio of the exchange rate to the traded goods fundamental  $s_t - f_t^T$  don't show explosive behaviour.

We utilized from logit model to execute the effects of political and country risk on the ratio of exchange rate to both non-traded and traded goods. For this purpose, we generated dummy variables representing the bubble dates. Logit model estimation results are reported in Table 2.

**Table: 2**  
**Logit Model Estimation Results**

Variable	Sample: 1999 M1-2016 M12			
	$s_t - f_t^N$		$s_t - f_t^T$	
	Coefficients	Marginal Effects	Coefficients	Marginal Effects
Constant	-26.33901*** (4.52976)		-2.632285*** (2.697115)	
Political Risk	0.2247459*** (.06318)	1.252005 (.0791016)	0.0152754*** (.053384)	1.015393 (0.0542057)
Country Risk	0.2456646*** (.0690919)	1.278471 (.088332)	0.3847405 (0.0760321)	1.469233*** (0.1117089)
Log-likelihood	-81.775707	-74.939289	-68.445981	-85.150678
LR	31.09**	44.76**	33.49**	33.49**

Note:  $s_t - f_t^N$  and  $s_t - f_t^T$  state respectively the ratio of the exchange rate to non-traded goods and the ratio of the exchange rate to traded goods. \*\*\*, \*\*, \* show respectively significance at 0.01, 0.05 and 0.1 levels. The values in parenthesis indicate standard errors.

Increases in both political and country risks lead to rise the ratio of exchange rate to non-traded goods. However, country risk enhances the ratio of exchange rate to traded goods while political risk diminishes the mentioned ratio.

Although we found evidence related to explosive behaviour in ratios of exchange rate to both non-traded and traded goods, we didn't encounter explosiveness in nominal exchange rate. Our results show that prices of non-traded and traded goods have important effect exchange rate movements. We also investigated how political and country risk impact exchange rate bubbles. The results show that probability of appearance of bubbles in exchange rate rise as political and country risks increase.

## References

- Bettendorf, T. & W. Chen (2013), "Are There Bubbles in the Sterling-Dollar Exchange Rate? New Evidence from Sequential ADF Tests", *Economics Letters*, 120, 350-353.
- Brunnermeier, M.K. (2009), *Bubbles*, Lawrence Blume & Durlauf, Steven, Print, <[http://scholar.princeton.edu/sites/default/files/bubbles\\_survey\\_0.pdf](http://scholar.princeton.edu/sites/default/files/bubbles_survey_0.pdf)>, 21.0.2017.
- Engel, C. (1999), "Accounting for US Real Exchange Rate Changes", *Journal of Political Economics*, 107, 507-538.
- Jiang, C. et al. (2015), "Are There Bubbles in Chinese RMB-Dollar Exchange Rate? Evidence from Generalized Sup ADF Tests", *Applied Economics*, 47(56), 6120-6135.
- Obstfeld, M. & K. Rogoff (1996), *Foundations of International Macroeconomics*, MIT Press, Cambridge, MA, 529.
- Philips, P.C. & Shu-Ping Shi & Jun Yu (2013b), "Testing for Multiple Bubbles: Historical Episodes of Exuberance and Collapse in the S&P 500", *Cowles Foundation Discussion Paper*, (No.1914).
- Philips, P.C. & Shu-Ping Shi & Jun Yu (2014a), "Specification Sensitivity in Right-Tailed Unit Root Testing for Explosive Behavior", *Oxford Bulletin of Economics and Statistics*, 76(3).
- Philips, P.C. & Shu-Ping Shi & Jun Yu (2011c), "Explosive Behavior in the 1990s NASDAQ: When Did Exuberance Escalate Asset Values?", *International Economic Review*, 52(1).

## Deconstruction of Anarchy in Theories of International Relations

*Seyda GUDEK* (<http://orcid.org/0000-0001-8753-2998>), *Nigde Omer Halisdemir University, Turkey; e-mail: seydagudek@gmail.com*

**Keywords** : Anarchy, Traditional Theories, Critical Theories.  
**JEL Classification Codes** : F50, F59, Y80.

### Extended Abstract

As one of the most misunderstood terms in political theory, anarchy seems to be under siege by a confusion of the meaning. The term of anarchy -from the Greek word- are formed from the combination of prefix of -an (or -a) that gives meaning to without, the absence of -in or the lack of -in and the world of archos which means the sovereign, the chief, the person in charge, the authority. While the Greek words anarchos and anarchia are generally used in the sense of not the government or without a government, the real meaning of anarchism is not simply not the government. Anarchy means that is without rulers or, with a more general statement, the authority does not exist.

But anarchy recalls the often-violent actions such as destroy, harm or ruin. Indeed, sometimes, anarchy is kept equivalent to terrorism or nihilism. This negative perception against anarchism because of popular socio-political use but still in this way, a consensus has not been achieved in the use. According to widespread belief, in its most general form, anarchy, is perceived as a concept that defends the lack of the government or do not substitute any order instead of battered. However according to Pierre Joseph Proudhon, William Godwin, Henry David Thoreau and Peter Kropotkin who are representatives of anarchism as a movement of thought, the term of anarchy does not imply the absence of the order, as is generally assumed, but it means the absence of command. Anarchism, acting on the assumption that human nature is good, is an approach that believe in possibility to free and moral life in society -is not under an authority, in the other words, is in natural condition- with principles from within the community. In this context, to anarchism, it is possible for the regulation of society without the need for any administrator.

In terms of the discipline of International Relations, the importance of anarchy originates from seeing as one of the basic principles of the international system, especially for traditional approaches. Anarchy refers to the political problems arising from the existence of sovereign states in the international system that does not have a centralized authority. Anarchy, which uses in the way that refers to the absence of a state or authority on the states, is accepted as an ahistorical and important reality by traditional theories. Anarchy is one of the most fundamental concepts that uses to description of both international relations history and international system structure for these theories. Anarchy is a feature of international relations that is indispensable but should be dealt with for this positivist theories of International Relations. For example, while according to realist and neo-realist anarchy is an invariant structural feature of the state's system, liberal and neo-liberal theorists accept anarchy as a real and therefore they are looking for possibilities of cooperation in anarchy. In a similar way, The English School which is accepted as a middle path between traditional theories and critical theory sees an anarchic society in international system. Finally, according to the traditional approach anarchy is

an important and inevitable phenomenon that refer to the basic characteristics of the field of international.

But in recent years has experienced significant changes in the discourse of anarchy in International Relations theory. With post-positivism which are starting to be effective especially in the 1980s, the focal point of the International Relations theory is directed at examining the interaction processes of different social relations rather than competition and conflict in anarchy or state systems. Historical sociological approaches, having adopted a critical attitude, point out that traditional theories of international relations distinguish the internal society from the external societies, and thus the anarchic international system analyses ignore the connection with social internal structures. According to these theories, the study of the international anarchy, contrary to the assumptions of ahistorical, requires anarchy to be studied historically. Moreover, just as the historical roots of the modern international system are built on a 1648 Westphalia Miti, the legitimacy of the existence of states can be ensured through anarchy. For this reason, to reveal the myth structure, an approach based on social relations of sovereignty is needed instead of anarchy as the systemic structure principle of international order.

On the other hand, post-structuralist and post-colonial thought emphasizes the western-centred nature of the concept of anarchy and distinguishes the distinction that mainstream theories have made between anarchy / order and inward / outward. Through this approach, domestic political dominance is an area which realized sovereignty and anarchic environment is presented as an area where it is questioned and constantly threatened. For this reason, the out-of-state area is being constructed as a threat to the internal society, and if the internal society is protected from anarchic danger, a security problem arises that protects the state's existence. According to these approaches, traditional approaches, by distinguish the two fields from one another, stabilize it and prevent it from being understood and therefore changing. When this assumption is examined, it turns out that anarchy is based on a paradigm of sovereignty which is never questioned.

As is seen, anarchism is not an indispensable phenomenon on the international scene for international relations approaches fed from a critical tradition. On the contrary, they claim that anarchy is an assumption put forward to bring continuity to the existing system, and thus the state, which is the main actor of the system. Moreover, since these approaches attach importance to historical and social context in terms of international relations, it is not possible to see universalism and history in any traditional phenomenon such as anarchy. Critical approaches therefore erode institutions and concepts that cannot be questioned for traditional approaches. Because these approaches sometimes addressed whether anarchy worked.

These issues, which they emphasize on critical approaches, reveal that traditional approaches are lacking in explaining social and political changes. To understand the dynamics of international relations in a precise and accurate way, it is necessary to make a multidimensional and comprehensive evaluation considering subordinate groups' demands, as emphasized by historical sociological approaches as well as internal social processes and postcolonial thought. Otherwise, trying to theorize the existence of an independent international space alone will transform the discipline of International Relations into a problem-solving theory in which technical rationality prevails.

It is mentioned that the concept of anarchy and what anarchism means as an idea in working from all these points expressed. Nevertheless, the position of anarchy in the discipline of International Relations was first tried to be mentioned separately from traditional theories and then from critical theories.



**28 October 2017 Saturday**

**Session: V-A / 09.30-11.00**

## **STUDIES FOR TURKISH ECONOMY**

Room: *Festsaal Imperial*

Chair: **Doga Basar SARIPEK**

- Analysis of Incentives for Electricity Generation from Solar Energy in Turkey  
**Tugba BERCINTURK & Fatih AKBAYIR & Ahmet Burcin YERELI**
- Impacts of the Tax Policies Implemented in the OECD Countries Following the Global Financial Crises on Tax Burden: The 2008 Financial Crisis and the Case of Turkey  
**Hakan AY & Mehmet Latif HAYDANLI**
- Determinants of Tax Capacity and Tax Effort in Turkey for the Period of 1984-2012  
**Emre ATSAN**
- The Impacts of Defence, Health and Education Expenditures on Economic Growth in Turkey  
**Ali Eren ALPER**
- Relationship between Inflation and Unemployment: The ARDL Bound Testing Approach for Turkey  
**Findik Ozlem ALPER**

## Analysis of Incentives for Electricity Generation from Solar Energy in Turkey

**Tugba BERCINTURK** (<http://orcid.org/0000-0001-9667-1244>), Hacettepe University, Turkey; e-mail: [tugba.bercinturk@gmail.com](mailto:tugba.bercinturk@gmail.com)

**Fatih AKBAYIR** (<http://orcid.org/0000-0003-2831-619X>), Hacettepe University, Turkey; e-mail: [akbayirfatih@yahoo.com](mailto:akbayirfatih@yahoo.com)

**Ahmet Burçin YERELI** (<http://orcid.org/0000-0002-8746-6756>), Hacettepe University, Turkey; e-mail: [aby@hacettepe.edu.tr](mailto:aby@hacettepe.edu.tr)

**Keywords** : Renewable Energy, Solar Power, Electricity, Incentives, Feed-in-Tariffs.

**JEL Classification Codes** : Q20, Q42, Q48, Q50.

### Extended Abstract

The increasingly use of energy have triggered need for energy resources. Traditional sources used to product energy have rapidly depleted in the whole world. Also, some of these resources due to emission of harmful gases have caused great harm to the environment. Thus, countries have sought alternative energy sources. Renewable energy sources have become preferred because they are both renewable and friendly with the environment (Yenneti, 2015: 994). Worldwide, widely used renewable energy resources are wind, water, sun, geothermal, biomass and so on (Herche, 2017: 592). Since almost every country has at least one of these sources, the increasing use of these resources will also contribute significantly to the countries' energy supply security. Studies are being carried out to make renewable energy sources available in daily life all over the world. The costs of the technology in this area are being tried to reduce to the commercially viable levels. Therefore, various supports (for example, feed-in-tariffs, shares with commercialization of certificates, capital subsidies, auctions, and net metering etc. (Aquila et. al., 2016: 1090)) are being provided to producers and consumers that use renewable energy sources, to reduce costs and to promote use (Alizamir et al., 2016: 52). Various incentives are also given in Turkey to benefit from the advantages provided using renewable energy resources. One of these incentives is feed-in-tariffs which are price-based policies. They are combined with a purchase obligation on utilities. And, these policies affect the cost of renewable energy per kWh generated (Rio & Gual, 2006: 995). Thus, a variety of facilities are being provided to expand the use of renewable resources, also both to manufacture domestically equipment needed for energy production from these sources and to increase the share of renewable resources in consumption. For this purpose, it is required not only feed-in-tariffs but also administrative procedure, grid connection, etc (Rio & Gual, 2006: 1000).

The aim of the study is to determine whether the incentives for electricity production from solar energy, one of the renewable energy sources, are adequate in Turkey. Electricity generation from solar energy is widely seen in countries such as China (Zhao et. al., 2016), Germany, Spain (Rio & Gual, 2006) and Italy. Incentives in those countries are compared with Turkey's incentive mechanism, and it is investigated by using the calculations related to the cost of solar panel installation, its lifespan and payback period in Turkey. And, it is examined whether incentives provided to increase this technology deployment have reached the desired level. Therefore, it seems that incentives provided in the field of

solar energy have not yet reached the sufficient level in terms of both producers and consumers in Turkey. In the short run, they should be increased to reduce costs which it is necessary for the implementation of the projects. Because the incentives compensate for the cost disadvantages (Tamas et. al., 2010: 4043). In the long run, the high level of incentives may be reduced thanks to cost advantage of solar power technology deployment.

### References

- Alizamir, S. & F. Vericourt & P. Sun (2016), "Efficient Feed-In-Tariff Policies for Renewable Energy Technologies", *Operations Research*, 64(1), 52-66.
- Aquila, G. & E.O. Pamplona & A.R. Queiroz & P.R. Junior & M.N. Fonseca (2016), "An overview of incentive policies for the expansion of renewable energy generation in electricity power systems and the Brazilian experience", *Renewable and Sustainable Energy Reviews*, 70, 1090-1098.
- Herche, W. (2017), "Solar Energy Strategies in the US Utility Market", *Renewable and Sustainable Energy Reviews*, 77, 590-595.
- Rio, P. & M.A. Qual (2006), "An Integrated Assessment of the Feed-in Tariff System in Spain", *Energy Policy*, 35, 994-1012.
- Tamas, M.M. & S.O.B. Shrestha & H. Zhou (2010), "Feed-in Tariff and Tradable Green Certificate in Oligopoly", *Energy Policy*, 38, 4040-4047.
- Yenneti, K. (2015), "Industry Perceptions on Feed in Tariff (FiT) Based Solar Power Policies - A Case of Gujarat, India", *Renewable and Sustainable Energy Reviews*, 57, 988-998.
- Zhao, Z. & Y. Chen & R. Chang (2016), "How to Stimulate Renewable Energy Power Generation Effectively? - China's Incentive Approaches and Lessons", *Renewable Energy*, 92, 147-156.

## Impacts of the Tax Policies Implemented in the OECD Countries Following the Global Financial Crises on Tax Burden: The 2008 Financial Crisis and the Case of Turkey

*Hakan AY* (<http://orcid.org/0000-0001-7140-2750>), Dokuz Eylul University, Turkey; e-mail: [hakan.ay@deu.edu.tr](mailto:hakan.ay@deu.edu.tr)

*Mehmet Latif HAYDANLI* (<http://orcid.org/0000-0002-0332-6802>), Izmir Cadastre Directorate, Turkey; e-mail: [erbain.latif@gmail.com](mailto:erbain.latif@gmail.com)

**Keywords** : Economic Crises, IMF Policies, Fiscal Policies, Tax Policies, Tax Burden.

**JEL Classification Codes** : H2, H20.

### Extended Abstract

The focus of our study is the tax policies implemented in the OECD countries following the global financial crises and how effective these policies are to overcome the crisis. It has been tried to explain how far the fiscal policies implemented in developing countries, including Turkey, which suffer the greatest damages from the crisis policies, are important instruments for tax burden and income distribution of these countries.

In the first part of this study; the concept of financial crisis is focused on; the reasons for the 2008 crisis and the financial policies implemented in the process of its spreading to the world, the process of overcoming the crisis are evaluated. Furthermore, the effectiveness of the fiscal policies implemented is emphasized. The relationship between Keynesian policies, tax systems and savings, which undertake a saver role, is explained functionally in terms of the tax burden. In the second part; the tax policy implemented in the OECD member countries following the 2008 financial crisis within the framework of the tax policies implemented against financial crises is evaluated on macro basis and the tax burden, which is the most important indicator of income distribution in developing countries, the most affected countries by the crises, is tried to be analysed. In the third part of the study; the effectiveness of tax policies, which are implemented as a part of the precautions taken against the crisis in Turkey and the problems encountered in the implementation of these policies, are explained. In addition, as the method of this study; the effectiveness of tax policies, one of the instruments of fiscal policy implemented in crises, has been subject to the analysis by using comparative tax burden indices in the OECD member countries.

Economic crises in classical economics are not much considered importance since they are regarded as temporary fluctuation in conjuncture; the idea suggesting the general equalization will automatically be provided by the invisible hand of the market is adopted. It has been foreseen that even in case of a blockage in any cycle of the conjuncture, price mechanism will eventually restore equilibrium through production and consumption.

In neo-classical approach, on the other hand, it has been argued that it would not be possible for the market economy to experience imbalance or economic crisis at the equalization price under normal circumstances, if the total demand is equal to the sum total and that the Pareto Optimum is valid. Neo-classic economists, just like classical economists, consider economic crises as rationally impossible or

temporary, short-term fluctuations under the assumption of automatic general equalization. Long-standing crises have been considered as coincidental phenomena that occur only through external factors, independently of the functions of the markets.

The desperation of the classic assumptions of the classics encountering the severe depression and unemployment after the greatest crisis of the history of the economy in 1929 increased the popularity of the demanding Keynesian policies. Crises occur in case investors are uncertain about the decision-making and/or account owners are uncertain about their future expectations. Therefore, the saving-investment balance plays an effective role in determining the interest rates in the economy. Keynes emphasized the importance of using particularly tax and expenditure policies as instruments to increase the effective demand and reach full employment equalization arguing that the economy could come to a balance even in incomplete employment and that therefore the importance of fiscal policies should be emphasized in the revitalization of effective demand.

In the Rational Expectations Hypothesis within the economic conjuncture of the 1970s, on the other hand, the prevailing opinion suggests that the confidence in policy makers should be complete, otherwise, the individuals who act rational against the implemented stability programs will disable the policies that are put into practice by means of their opposing movement and this situation can also cause crisis. In addition, they also argue that increasing the tax burdens of the expanding fiscal policies, economic units in the short and long term will cause the multiplier effect, an important assumption of Keynesian policies, to become dysfunctional.

In the monetarist approach that came to the fore in the early 1980's, economic crises are considered the fluctuations caused by the mostly unnecessary increase in the supply of money. This approach emphasized that fiscal policies cannot play an effective role and the understanding of equal budget should not be abandoned. Monetarists, who argue that economic instability originates from inadequate supply and production, assert that if the policy of tax reduction, which increases production and employment, is implemented, instability can be reduced and it can be possible to overcome crises caused by the excessive increase in public expenditures, tax rates and total demand by means of implementing policies which increase total supply.

The reduction of taxes with the purpose of increasing total demand by the 1970s has been implemented by many countries in improper ways and eventually has led to crises in developing countries. High levels of public spending have resulted in very high tax rates and tax burdens. Heavy tax burdens have also interrupted the working efforts by adversely affecting the total savings and investments. As a result, deceleration in economic growth, rising unemployment rates and excessive increases in tax burden have led to tax evasion. The understanding of the social welfare state, supported by Keynesian policies, has been accompanied by high budget deficits, a heavy debt burden caused by public expenditures and a heavy tax burden.

The financial crisis that began in the USA in 2007 and spread throughout the world in the first quarter of 2008, first emerged as a mortgage crisis and later caused the liquidity crisis in following periods and finally turned into a debt crisis in Eurozone countries in 2010, when the crisis jumped into the Eurozone. The activation of fiscal policies has been an important factor for the rapid meeting of the crisis in the financial markets with the real-sector. Since the crisis started in the financial markets and countries were affected by the crises in various forms and at times as the crisis moved to the different economic conjuncture periods of the countries, a series of differences were found in fiscal policies implemented and some regulations were made on taxes collected from the expenditures in these countries to revive total demand.

For tax policies to be able to take an effective role in ensuring stability during crisis periods, the reasons for the emergence of the crisis must be well analysed, it should not be overlooked that the changes in tax rates reduce debt and prevent fragility in financial markets. As in the 2008 crisis, fiscal policy practitioners should encourage consumption by reducing tax rates due to recession and at the same time an effective monetary policy should also be implemented for price stability.

The fact that the state consciously reduces the interest rates through monetary policy in developing countries causes the tax burden to increase against the savings. It should be usual for the state to expand the public sector by increasing the tax burden, and the market to respond by reducing the savings in this case. In addition, tax burden decreases employment and growth rate. Increasing the tax burden and double taxation of savings also reveal the democracy understanding of a developing country as well as who allocates resources in the country. Democratic votes of the voters determine the volume of public revenues and therefore the tax burden, the tax payment capacity of the country in short term.

Countries have needed additional funding sources, in other words taxes, for the large spending programs they implemented after the crisis. The OECD member countries have always argued that the financial facilities provided by tax heavens have challenged the countries that suffered the loss of income to prevent and /or overcome the crisis. Since the 1990s, attempts to take these tax heavens under closer control by G7, IMF and OECD are necessary steps that should be taken to prevent crises that may arise thereafter.

It is argued that Tobin Tax, which has yet to find sufficient support at the global level, can largely prevent financial crises, knows that investors' gains will be partly seized, and that short-term speculations may slow capital inflows and therefore reduce the risk of financial fragility. While globalization is expected to affect investment and production growth positively, crises that frequently occur in financial markets because of the liberalization of capital have led to a further deterioration of income distribution in developing countries. A rate of one (0.1%) to be applied to the volume of the world currency market, which is now approaching US \$ 2 trillion, will provide a serious income and contribute to the solution of many global problems including poverty.

IMF policies, which provide financial support for emerging crises in the establishment of macroeconomic balances and especially during periods of high inflation have been implemented in financial crises in Turkey. Regarding these implementations, it is generally desired to reduce the borrowing requirements of the public by giving weight to indirect taxes, which causes the tax burden to remain on the low-income sections of the society resulting in the breakdown of the income distribution against the wage and labour-intensive individuals.

The removal of the barriers put for international property, capital and money flows on a global scale will be a positive contribution to the world trade volume as well as growth rates. This situation is also important in preventing the deficits in the balance of payments of the countries and the developments which may cause financial markets to suffer.

In conclusion, the crises have shaken the faith in discretionary fiscal policies and fiscal rules such as the equivalent budget, spending, income and debt laws have been implemented by many countries in recent years to prevent political interests. Financial rules have been largely successful in achieving fiscal discipline in the countries where they were applied. Rules consistent with the facts of the countries should be legally determined and the sanctions should be deterring. This situation will help the entrepreneurs to see the future, as well as enable foreign countries to have a more positive attitude towards Turkey.

## References

- Boratav, K. (2001), "2000-2001 Krizinde Sermaye Hareketleri", *İktisat, İşletme, Finans Dergisi*, Eylül (186), 7-18.
- Çakır, Ç. (2010), "Finansal Krizler -II- Finansal Liberalizasyon ve Finansal Krizler", *Vergi Dünyası*, Ekim (350), 69-74.
- Eğilmez, M. (2013), *Küresel Finans Krizi*, Remzi Kitabevi, 9. Basım, İstanbul.
- I.M.F. (2002), "Eye of the Storm: New Style Crises Prompt Rethink About Prevention and Regulation Measures", *Finance and Development*, IMF, December 4-7, <<http://www.imf.org/external/pubs/ft/wp/2002/wp02138.pdf>>, 25.07.2017.
- I.M.F. (2015), *Fiscal Monitor: Now Is the Time Fiscal Policies for Sustainable Growth*, April, <<http://www.imf.org/external/pubs/ft/fm/2015/01/pdf/fm1501>>, 26.07.2017.
- Kibritleoğlu, A. (2011), "Current Sovereign Debt Crisis in Eurozone Countries", *İktisat ve Toplum Dergisi*, Ağustos (10), 30-41.
- Kireyev, A. (2002), "Liberalization of Trade in Financial Services and Financial Sector Stability (Analytical Approach)", *IMF Working Paper*, No. 02/138.
- Mishkin, F.S. (2001), "Financial Policies and the Prevention of Financial Crises in Emerging Market Countries", *NBER Working Paper Series*, 8087, January.
- Parasız, İ. & M. Bildirici (2003), *Finansal Makro Ekonomi: Ekonomik Dalgalanmalar ve Krizler*, Ezgi Kitabevi, Bursa.
- Yereli, A.B. (1997), "Tasarruf Politikalarının Oluşumunda Vergi Sistemini Rolü", *Maliye Yazıları*, Nisan-Haziran (55), 64-89.

## **Determinants of Tax Capacity and Tax Effort in Turkey for the Period of 1984-2012**

*Emre ATSAN* (<http://orcid.org/0000-0003-1682-1682>), *Nigde Omer Halisdemir University, Turkey; e-mail: eatsan@ohu.edu.tr*

**Keywords** : Tax, Tax Capacity, Tax Effort, Public Expenses.

**JEL Classification Codes** : H20, H21, H50.

### **Introduction**

Tax revenues, which constitute the largest portion of public revenues, cannot be unlimitedly collected. Hence, it has been clearly seen that the efforts to collect the taxes unlimitedly have caused social problems and crises. The tax capacity, which is one of the ratios used for determining the taxable portion of income level of a country, is one of the generally accepted ratios. This limit varies depending on the countries and period.

In our study, by determining the methods that are used for calculating the tax capacity in our literature review, we aimed to specify the determinant of tax capacity thereby calculate the tax burden and Turkey's tax capacity level between the years 1984 and 2012. As the dependent variables in our study, Tax Revenues / GDP was used and, as independent variables, Value Added of Agriculture (% of GDP), income per capita, population growth ratio, foreign trade percentage, annual GDP growth rates (%), corruption index, and the Bureaucracy Efficiency Index, annual GDP growth rate (%) data were used, and it was concluded that foreign trade influenced the tax capacity positively, while the agricultural value added had negative effect.

In our study, even though a generally balanced course is seen between actual tax burden and tax capacity from 1984 to 2012, it can be easily seen that the tax collection was generally lower than the tax capacity.

Governments have fundamental economic and social objectives they want to achieve. These objectives are economic development, effective distribution of sources, fair income distribution, and economic stability. For the general economy to reach the balance, governments make effort via public expenses and public revenues.

One of the most important reasons for the deterioration of economic balance is the public finance deficits. This can be clearly seen in this manuscript. The healthiest method for closing the public finance deficits is the taxes.

But there is a limit for increasing the taxes. When the increased taxes deteriorate the production, investment and saving balance of the society, then the balance for achieving the necessary economic and social objectives will also be deteriorated. This deviation from the balance creates the excess burden of taxes. While being used as a tool for achieving the fundamental economic and social objectives, the taxes shall not alter the basic economic macro balances.

### Tax Burden, Tax Capacity and Tax Effort

The ratio of tax revenues to GDP, which has been used to measure the tax capacity and tax effort, is one of the most suitable methods that are used in monitoring the tax trends in literature (Le et al., 2012: 7). The tax burden or ratio can be simply defined as the portion of tax revenues within a period to the GDP of that period. In addition to the definition including the taxes and funds collected by the central and local administrations, the tax burden can also be calculated by including the parafiscal revenues, namely the payments and premiums of social security institutions (Özyürek, 2000). Tax burden ratio (1) is an income-dependent variable; even if the proportional increases have been seen in recent years, the tax burden is at lower levels in low-income countries (Le et al., 2012: 4).

$$T/Y = f(Tp/Y, E) \quad (1)$$

Tax capacity ( $\hat{T}$ ) is the limit that is used in defining the maximum limit of the tax revenues that can be collected in a country within a certain period. In other words, tax capacity (2) indicates the taxable economic potential in a country within a certain period. Main factor determining the tax capacity is national income indicators, and it can also vary depending on the countries and development level (Öncel, 2001: 19).

$$\hat{T} = Tp/Y \quad (2)$$

Tax effort (E) defines the proportional relationship (3) between the estimated tax capacity of a country and the actual tax collection (Bahl, 1971: 582). The efficiency of tax authority, fiscal legislation and fiscal jurisdiction, attitudes of taxpayers towards the tax and the education level affect the tax effort (Akdoğan, 2002: 174).

$$E = (T/Y) / (Tp/Y) \quad (3)$$

Underdeveloped countries need capital for realizing their development projects. Besides the development efforts, also the factors such as changes in government's functions and in customer behaviours may also increase the need for public finance. But the public cannot be that efficient in increasing the revenues because of economic and politic reasons. Since the indirect taxes minimize the reactions of taxpayers towards the tax, the economic authorities see no harm in giving weight to indirect taxes (Ay & Talaşlı, 2008: 152). The economic and fiscal policies leading to the growth of government in Turkey have been implemented by the political authorities with the perspective of unlimited authority. Especially the borrowing policy has become an alternative to the taxing, and the fiscal policy and tax burden concepts have not been sufficiently examined from the aspects of eliminating the social unfairness (Yereli, 2003: 112).

### Results

In this study, we attempted to calculate the tax capacity and tax effort levels between the years 1984 and 2012 in Turkey. As dependent variable, Tax Revenues/GDP was used in our study in calculating the tax capacity and tax effort, and Added-Value of Agriculture (% of GDP), income per capita, Corruption Index, and Bureaucratic Efficiency, Population Growth Rate, Foreign Trade Percentage, and Annual GDP Growth Rate were used as independent variables; it was found that foreign trade affected the tax capacity positively, while the added-value of agriculture affected negatively. According to study the actual tax burden, the estimated tax burden and the tax effort levels are presented. From the aspect of years even though the actual tax burden followed closely, it coursed slightly lower than the estimated tax burden.

The level of tax effort in a country, which is lower or higher than 1, indicates the problems in tax policies of that country. While the taxed are used as a tool for funding the public deficits, they shall never lead to divert the main economic balances. Tax collection below the capacity indicates the problems in collection or supervision of taxes in that country. The tax revenues are generally lower than the tax capacity in Turkey. But, it can also be seen that, in some years, the tax collections were very close to the tax capacity limit. In year 1993 and between 1999 and 2001, the tax burdens that were closest to the capacity were observed. The economic crises and fluctuations in country in those years have affected the tax policies. The high inflation rates in year 1994 and the precautions made under the name “April Regulations” aimed to increase the tax revenues. For this reason, the government has announced that tax audits would be made frequently and widely.

Moreover, various additional taxes have been placed in this period. The stability program of government, which was established in year 1999, lasted to the year 2001, and an increase was observed in tax collections by means of precautions taken and decisions made. With this program, the penalties and interest rates for tax delaying have been made compliant with inflation and it has been aimed to increase the tax collection. With law Nr. 4369 in July 1998, certain tax policies have been adopted and it has been aimed to prevent the reflections of potential crises on tax collections. Hence, even if the tight fiscal policies have been adopted in period after 1999, the monetary expansion has been kept limited. It has been seen that tax collection higher than the economic capacity has not been attempted, and it has been limited with the economic recovery.

## References

- Akdoğan, A. (2002), *Kamu Maliyesi*, Ankara: Gazi Kitabevi, 8. Baskı.
- Alm, J. & J. Martinez-Vazquez & F. Schneider (2004), “Sizing the problem of the hard-to-tax”, *Working Paper*, Georgia State University: USA.
- Bahl, R.W. (1971), “A Regression Approach to Tax Effort and Tax Ratio Analysis (Analyse de l’effort et de la pression fiscale par la méthode de régression) (Un estudio del esfuerzo tributario y de la presión fiscal mediante el análisis de regresión)”, *Staff Papers-International Monetary Fund*, 570-612.
- Bird, R.M. & J. Martinez-Vazquez & B. Torgler (2004), “Societal institutions and tax effort in developing countries”, Toronto: University of Toronto, *International Tax Program Paper*, 4011.
- Büyükoztürk, Ş. (2007), *Sosyal Bilimler için Veri Analizi El Kitabı*, Ankara: Pegem A Yayıncılık.
- Dursun, G.D. (2008), “1990-2006 Yılları Arası Türkiye’nin Vergi Kapasitesinin Hesaplanmasına Ait Bir Araştırma”, *Maliye Finans Yazıları*, 79, 45-60.
- Hakkı, M. & E. Talaşlı (2008), “Ülkelerin Ekonomik Gelişmişlik Seviyeleri ve Vergi Yapıları Arasındaki İlişki (II)”, *Maliye Dergisi*, 154, 135-155.
- Kargı, V. & H.Y. Özügurlu (2007), “Türkiye’de Küreselleşmenin Vergi Politikaları Üzerine Etkileri: 1980-2005 Dönemi”, *Yönetim ve Ekonomi*, 14(1), 275-289.
- Le, T.M. & B. Moreno-Dodson & N. Bayraktar (2012), “Tax Capacity and Tax Effort: Extended Cross-country Analysis from 1994 to 2009”, *World Bank Policy Research Working Paper*, (6252).
- Leuthold, J.H. (1991), “Tax Shares in Developing Economies a Panel Study”, *Journal of Development Economics*, 35(1), 173-185.
- Lotz, J.R. & E.R. Morss (1967), “Measuring “tax effort” in developing countries”, *IMF Staff Papers*, 14(3), 478-499.
- Özyürek, M. (2000), “Türkiye’de Vergi Yüğü Ağır Mı?”, *Milliyet Gazetesi*, 17.11.2000.

- Öncel, T. (2012), “Vergilendirme Sınırının Makro Ekonomik Değişkenleri”, *Maliye Araştırma Merkezi Konferansları*, (39).
- Piancastelli, M. (2001), *Measuring the Tax Effort of Developed and Developing Countries: Cross Country Panel Data Analysis*, 1985/95.
- Stotsky, J.G. & A. Wolde Mariam (1997), *Tax Effort in Sub-Saharan Africa*, International Monetary Fund.
- Shin, K. (1969), “International Difference in Tax Ratio”, *The Review of Economics and Statistics*, 51(2), 213-220.
- Tanzi, V. (1992), “12 Structural factors and tax revenue in developing countries: a decade of evidence”, *Open Economies: Structural Adjustment and Agriculture*, 267.
- Teera, J.M. & J. Hudson (2004), “Tax Performance: A Comparative Study”, *Journal of International Development*, 16(6), 785-802.
- World Bank Doing Business Database (2013).
- Yereli, A.B. (2003), *Ekonomik Özgürlükler ve Türkiye’de Devlet-Birey İlişkisi*, Gazi Kitabevi, Ankara.

## The Impacts of Defence, Health and Education Expenditures on Economic Growth in Turkey

*Ali Eren ALPER* (<http://orcid.org/0000-0003-0008-1202>), *Nigde Omer Halisdemir University, Turkey; e-mail: aalper@ohu.edu.tr*

**Keywords** : Public Expenditure, Fourier KPSS, ARDL.

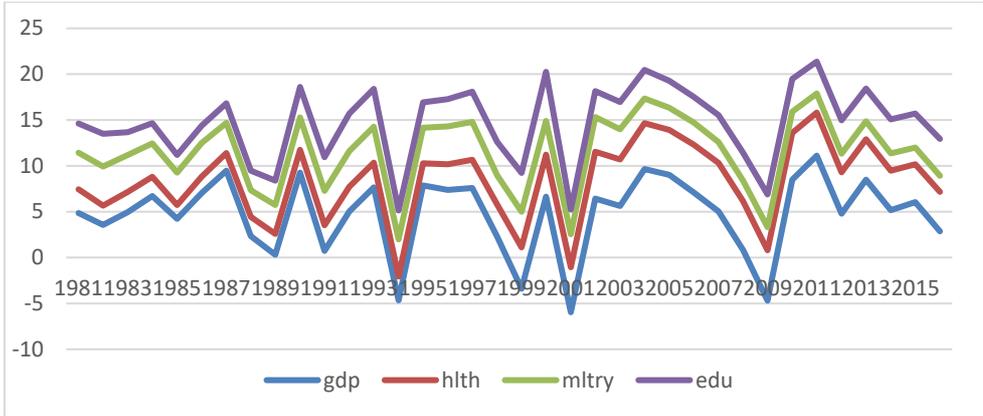
**JEL Classification Codes** : H50, C20, O10.

### Introduction

The controversial relationship between public expenditures and economic growth has become one of the famous matters of interest, especially following the Great Depression that began in the US in 1929. As well as other economic variables, an increase in the public expenditure of the countries is expected to have significant impacts on those countries' economic growth performance. Therefore, an annual data set covering the period between the years 1981-2016 is used to determine the relationship of defence, health and education expenditures in the Turkish economy with economic growth. The estimation results of ARDL bound test, which is conducted to detect the long-term relationships, indicate that defence, health, and education expenditures are positively related to economic growth at the values of 0.33, 0.17 and 1.33, respectively. In other words, it is determined that economic growth be mostly affected by education expenditures followed by defence and health expenditures, respectively.

The economic theory contains different notions about the share of government in the economy. This controversial relationship between public expenditures and economic growth has become an intriguing matter, especially after the Great Depression that began in 1929 in the United States. The main reason for the transition from Classical to Keynesian thought because of the depression is the fact that the crisis could not be explained by the basic principles of the Classical economics and the economic problems could not be resolved. The Keynesian (or the demand-side economic thought) emphasized that the views of Classical economics should be criticized in many ways and the state should play an active role in the economy.

**Figure: 1**  
**Economic Growth - Public Expenditure Relationship (1981-2016)**



The existence of a positive relationship of economic growth with health, education and defence expenditures in Turkey between the periods of 1981-2016 can be seen in Figure 1. Public expenditures appear to increase during the periods of flourishing economic growth, and vice versa.

Therefore, it is aimed to determine the relationship of economic growth with defence, health and education expenditures in Turkey. Following the second part includes the recent developments in the related literature. The third part provides information about the dataset, econometric methodology and the obtained findings, and the study is completed with conclusions.

### Literature Review

The recent studies examining the relationship between public expenditures and economic growth are summarized in Table 1.

**Table: 1**  
**Selected Literature Review**

Author(s) (Year)	Country Sample	Period	Methodology	Results
Aytaç and Güran (2010)	Turkey	1987-2005	VAR	An increase in economic growth results in a rise in public expenditure.
Kanca (2011)	Turkey	1980-2008	Engle-Granger Cointegration	A causality from public expenditures to GNP in the short-run; and a reverse causality in the long-run.
Aksoğan and Elveren (2012)	Turkey	1970-2008	Johansen Cointegration	Growth and social transfers have impacts on income inequality.
Pamuk and Pektaş (2014)	Turkey	1998:01- 2013:02	ARDL	No significant long-term relationship between education expenditures and economic growth.
Tülümce and Zeren (2017)	Turkey	1975-2014	Hacker and Hatemi-J Asymmetric Causality Test	A bilateral causality exists between total public expenditure, transfer payments and economic growth regarding positive shocks.
Topal et al. (2017)	Turkish Republics	2002-2015	Panel SUR	Size of the public sector has a positive impact on growth in Turkish Republics except for Turkey.

### Data Set, Methodology and Empirical Results

The annual data sets utilized in this study which aims to detect the relationship of economic growth with defence, health and education expenditures in Turkey are obtained for the period 1981-2016 regarding the ratio to GDP as follows:

Defence expenditures (MLTRY) and economic growth (GDP) data from the World Bank database, health expenditure (HLTH) data from the OECD data base, education expenditures (EDU) data from the World Bank and the General Directorate of Budget and Financial Control (BUMKO) databases. The model to be used for the analysis is given as follows:

$$GDP_t = \alpha_0 + \alpha_1 MLTRY_t + \alpha_2 HLTH_t + \alpha_3 EDU_t + \varepsilon_t \quad (1)$$

In the first phase of the econometric analysis, the Fourier KPSS (FKPSS) unit root test which allows structural breaks to be performed to determine the orders of integration of the series. The Fourier unit root test results in level for the variables are shown in Table 2.

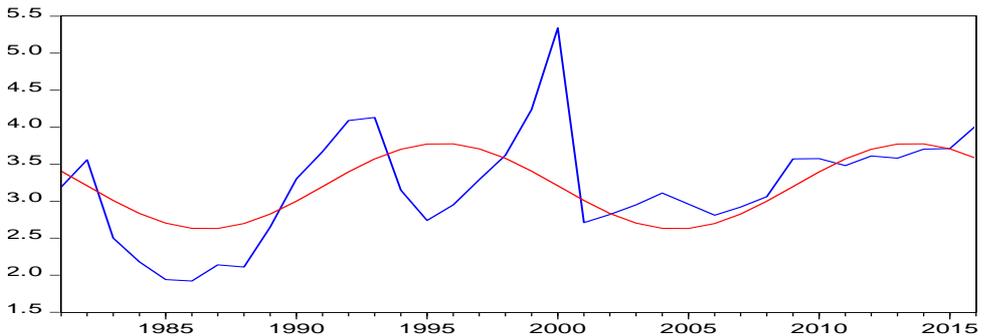
**Table: 2**  
**The Fourier Unit Root Test Results in Level**

Variables	Freq. Value	F(k)	FKPSS
GDP	4	5.7308	0.1275*
MLTRY	1	23.8204	0.3059
HLTH	1	16.6025	0.2373
EDU	2	8.2640	0.2802*

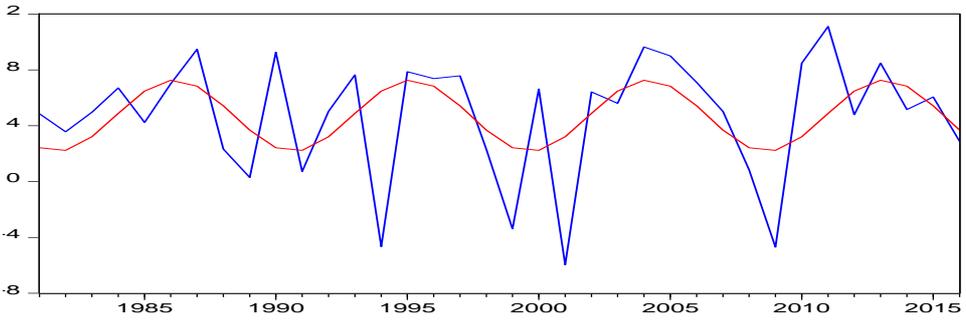
\* indicates stationarity at 10% significance level.

The “frequency value” column in Table 2 denotes the number of frequencies selected based on the sum of squared residuals (SSR); “F(k)” is the value of the F- statistic value calculated for the significance of the trigonometric terms; and “FKPSS” represents the unit root test statistic value.

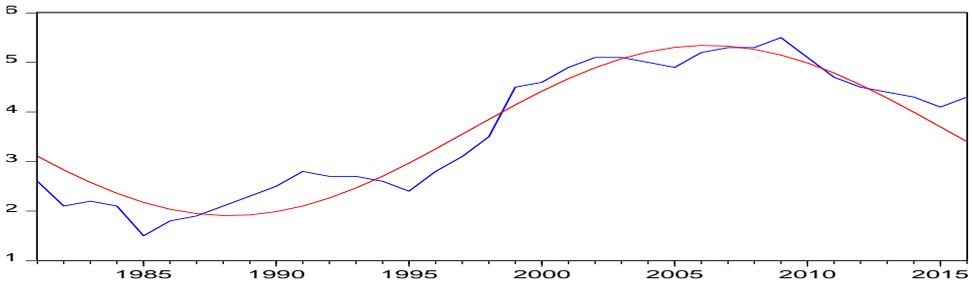
**Figure: 2**  
**Fourier Function of EDU**



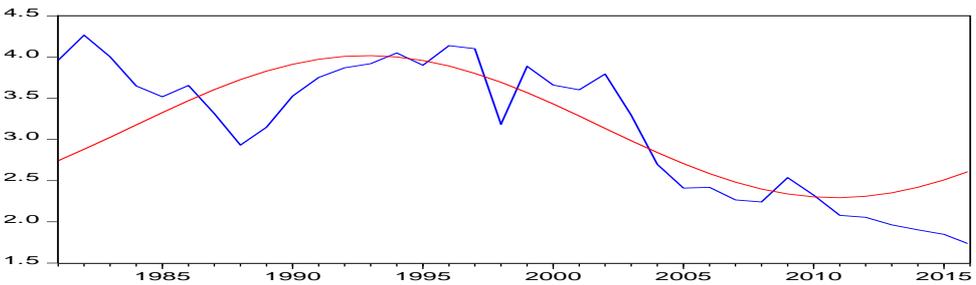
**Figure: 3**  
**Fourier Function of GDP**



**Figure: 4**  
**Fourier Function of HLTH**



**Figure: 5**  
**Fourier Function of MLTRY**



The Fourier functions of the variables included in the analysis are shown in Figures 2, 3, 4 and 5. The Fourier function of each variable is characterized by corresponding the breaks.

Accordingly, the FKPSS value for all variables in the analysis can be calculated, since the analytical GDP and EDU variables are stationary at 10% significance level and the F-test values are statistically significant. Since MLTRY and HLTH variables are found to have unit roots in level by a significance level of 10%, FKPSS unit root test is performed on the 1<sup>st</sup> differences and the obtained values are shown in Table 3.

**Table: 3**  
**The 1<sup>st</sup> Difference FKPSS Unit Root Test Results**

Variables	Freq. Value	F(k)	FKPSS
MLTRY	4	11.9375	0.1459*
HLTH	1	15.6442	0.0543*

\* indicates stationarity at 10% significance level.

According to the FKPSS test results, the GDP and EDU variables are stationary at the level [I (0)]; while the MLTRY and HLTH variables are found to be stationary at the 1<sup>st</sup> difference [I (1)].

ARDL (Autoregressive Distributed Lag) method developed by Pesaran *et al.* (2001) is utilized to examine the relationship of economic growth with defence, health, and education in Turkey.

**Table: 4**  
**ARDL Bound Test Results**

Estimated Equation	GDP = f (MLTRY, HLTH, EDU)	
F-statistics	4.77	
Optimal Lag Length	[4, 3, 4, 4]	
Asymptotic Critical Values	Lower Bound, I(0)	Upper Bound, I(1)
1%	3.65	4.66
5%	2.79	3.67
10%	2.37	3.20
Diagnostic Tests		
$R^2$	0.879	
Adjusted $R^2$	0.779	
F-statistics	226.552 (0.000)	
Breusch-Godfrey Test	2.720 (0.4215)	
ARCH LM Test	0.154 (0.545)	
Jarque-Bera Normality Test	1.031 (0.124)	
Ramsey Reset Test	1.104 (0.146)	

Note: Lag length is determined in accordance with the AIC. The critical values for bounds testing are abstracted from Narayan (2005, p. 1987, Case II). The numbers in parenthesis show the probability values.

Since F-test value is above the upper bound at the 10% significance level, the existence of a long-run relationship among the variables included in the analysis is determined. After determining the long-term relationship, the long-run coefficients are given in Table 5.

**Table: 5**  
**The Long-term Coefficients**

Variables	Dependent Variable: GDP	
	Coefficient	p- value
MLTRY	0.3314	0.0057
HLTH	0.1717	0.0077
EDU	1.3314	0.0028
C	-1.8098	0.0075

The results of Error Correction Model are shown in Table 6. ECM (-1) coefficient is found negative and statistically significant in the analysis. This proves the existence of a long-term relationship

between the variables from another aspect. Since the error correction coefficient is between -1 and -2, the model is oscillatory convergent towards the long-term equilibrium in the error correction process (Alam & Quazi, 2003: 97).

**Table: 6**  
**Error Correction Model**

Variables	Coefficient	P- Value
$\Delta$ GDP(-1)	1.2113	0.0065
$\Delta$ GDP(-2)	0.7077	0.0268
$\Delta$ GDP(-3)	0.3559	0.0617
$\Delta$ EDU	5.7980	0.0021
$\Delta$ EDU(-1)	1.6714	0.2373
$\Delta$ EDU(-2)	2.5925	0.0588
$\Delta$ HLTH	6.4949	0.0523
$\Delta$ HLTH(-1)	3.4183	0.2923
$\Delta$ HLTH(-2)	1.3040	0.0067
$\Delta$ HLTH(-3)	1.2353	0.0087
$\Delta$ MLTRY	0.5226	0.0872
$\Delta$ MLTRY(-1)	0.6737	0.0073
$\Delta$ MLTRY(-2)	2.0155	0.1439
$\Delta$ MLTRY(-3)	1.7468	0.0125
ECM(-1)	-1.5089	0.0001

### Conclusion

In this study, the relationships of economic growth with defence, health, and education expenditures are examined within the framework of cointegration methodology which has an important place in the time series analysis. For this purpose, data sets with 36 observations which consist of annual data obtained for the Turkish economy covering the period 1981-2016 are prepared. The model is estimated using the bound testing approach known as the ARDL method. Since the calculated F-statistics value is higher than the upper critical bound value, the existence of a long-term equilibrium relationship among the variables included in the analysis is determined.

Estimation results of the ARDL model indicate a positive correlation between defence, health and education expenditures and economic growth with values of 0.33, 0.17 and 1.33, respectively. In other words, it is determined that education expenditures have the most impact on economic growth followed by defence and health expenditures, respectively.

### References

- Aksoğan, G. & A.Y. Elveren (2012), "Türkiye'de Savunma, Sağlık ve Eğitim Harcamaları ve Gelir Eşitsizliği (1970-2008): Ekonometrik Bir İnceleme", *Sosyoekonomi*, 17(17), 263-280.
- Alam, I. & R. Quazi (2003), "Determinants of capital flight: An econometric case study of Bangladesh", *International Review of Applied Economics*, 17(1), 85-103.
- Aytaç, D. & M.C. Güran (2010), "Kamu Harcamalarının Bileşimi Ekonomik Büyüme Etkiler Mi? Türkiye Ekonomisi İçin Bir Analiz", *Sosyoekonomi*, (2), 129-152.
- Kanca, O.C. (2011), "Kamu Harcamalarının Ekonomik Büyüme Üzerine Etkisi 1980-2008 (ampirik bir çalışma)", *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 25(1), 75-92.
- Narayan, P.K. (2005). "The Saving and Investment Nexus for China: Evidence from Cointegration Tests", *Applied Economics*, 37(17), 1979-1990.
- Pamuk, M. & H. Bektaş (2014), "Türkiye'de Eğitim Harcamaları ve Ekonomik Büyüme Arasındaki İlişki: ARDL Sınır Testi Yaklaşımı", *Siyaset, Ekonomi ve Yönetim Araştırmaları Dergisi*, 2(2), 77-90.

- Pesaran, M.H. & Y. Shin & R.J. Smith (2001), “Bounds Testing Approaches to the Analysis of Level Relationships”, *Journal of Applied Econometrics*, 16(3), 289-326.
- Tang, T.C. (2010). “Wagner’s Law versus Keynesian Hypothesis in Malaysia: An Impressionistic View”, *International Journal of Business and Society*, 11(2), 87.
- Topal, M.H. & M. Ünver & S. Türedi (2017), “The Impact of Government Quality and Public Sector Size on Economic Growth in Turkic Republics: An Empirical Analysis”, *Eurasian Business & Economic Journal*, 8, 113-133.
- Yaraşır Tülümce, S. & F. Zeren (2017), “Türkiye’de Kamu Harcamaları ve Ekonomik Büyüme Arasındaki İlişkinin Asimetrik Nedensellik Testi ile Analizi”, *Uluslararası Yönetim İktisat ve İşletme Dergisi*, 13(2), 299-310.

## Relationship between Inflation and Unemployment: The ARDL Bound Testing Approach for Turkey

*Findik Ozlem ALPER* (<http://orcid.org/0000-0002-7829-8551>), *Nigde Omer Halisdemir University, Turkey; e-mail: ozknozlem@gmail.com*

**Keywords** : Inflation, Unemployment, Phillips Curve, Cointegration Test.

**JEL Classification Codes** : E31, E24, C22.

### Extended Abstract

The relationship between inflation and unemployment is examined by the Phillips Curve approach in macroeconomics literature. This study aims to test the validity of the Phillips Curve throughout the years 1987-2016 by the ARDL approach regarding the Turkish economy. In the analysis, the stability of the series is examined first, and then the cointegration test is utilized to investigate whether or not a long-term relationship exists between the series. Because of the cointegration analysis, it is concluded that there is no long-term relationship between the variables in the model where the inflation is considered as the dependent variable. The unemployment rate is taken as the dependent variable, the existence of a long-run relationship among the variables included in the analysis would be determined.

### Introduction

The relationship of price changes with unemployment and production has been in dispute for many years. However, the relationship between inflation and unemployment has become synonymous with A.W. Phillips' (1958) study which attracted intense attention (Büyükkakin, 2008: 134-136). The Phillips Curve has been changed many times since 1958, and finally, the results of the approach have been concluded as being meaningful and valid in the short-term.

In his work conducted for the UK economy between 1861 and 1957, A.W. Phillips (1958) investigated whether or not there was a relationship between the rate of change in monetary wages and the rate of unemployment and he found a nonlinear, inverse and stable relationship between the rate of change in monetary wages and the rate of unemployment (Phillips, 1958: 283-299).

The original Phillips Curve, which depicts this inverse relationship between the rate of change in monetary wages and the unemployment rate, has been transformed by Samuelson and Solow into a graph demonstrating the relationship between the inflation rate and the unemployment rate (Samuelson & Solow, 1960: 177-194).

### Literature Review

Several studies have been conducted using different countries, periods and methods related to the Phillips Curve, which claims an inverse relationship between the inflation rate and the unemployment rate. Many of these empirical studies confirmed an inverse relationship between the inflation rate and the unemployment rate, while others found positive or meaningless relationships. Some of these studies are summarized in Table 1.

**Table: 1**  
**Selected Literature Review**

Author(s) (Year)	Country Sample	Period	Variables	Method	Findings
Kuştepe (2005)	Turkey	1980-2003	Inflation rate, unemployment rate	Regression analysis	Phillips Curve hypothesis is rejected.
Çatık, Martin, and Önder (2008)	Turkey	1996-2007	Inflation rate, output gap	ARDL	It is determined that the Phillips Curve not be valid for Turkey between the period of 1996-2007.
Hepsağ (2009)	Turkey	2000-2007	Unemployment rate, inflation rate	ARDL	Past inflation rates, rather than unemployment rates, are effective on inflation in the short-run; however, a trade-off appears in the long-run.
Bayrak and Kanca (2013)	Turkey	1970-2010	Unemployment rate, inflation rate	Cointegration	The Phillips Curve is not valid in Turkey in the long-run, while an inverse relationship is detected between unemployment and inflation in the short-run.
Yılancı and Aydın (2016)	Turkey	2005-2015	Unemployment rate, inflation rate	Cointegration	A long-term relationship is detected between the variables in Turkey when the unemployment is considered as the dependent variable.

### Data, Econometric Methodology, and Empirical Results

The annual data used in this study which aims to determine the relationship between inflation (INF) and unemployment (UE) for the period 1987-2016 in Turkey are obtained from the World Bank database. The models to be used for the analysis are as follows:

$$INF_t = \beta_0 + \beta_1 UE_t + \varepsilon_T \quad (1)$$

$$UE_t = \beta_2 + \beta_3 INF_t + \varepsilon_T \quad (2)$$

According to Öztürk and Acaravcı (2013), if one of the variables' unit root degree is higher than I(1), the critical values obtained by Pesaran et al. (2001) and Narayan (2005) cannot be used in the Autoregressive Distributed Lag (ARDL) approach. These critical values are based on I(0) and I(1). Therefore, it is necessary to determine whether or not the variables abide by the assumptions of the ARDL bound testing approach by performing the unit root test at the first stage of the analysis. In the first phase of the econometric analysis in this framework, the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) unit root tests are to be performed to determine the degrees of integration of the series. The ADF and PP unit root test results are shown in Table 2.

**Table: 2**  
**The ADF and PP Unit Root Test Results**

At Level	ADF		PP	
	Intercept	Intercept and Trend	Intercept	Intercept and Trend
INF	-5.8353	-4.2634	-6.8534	-5.8185
UE	-2.0517	-3.2220	-1.9505	-2.3003
1 <sup>st</sup> Differences	ADF		PP	
	Intercept	Intercept and Trend	Intercept	Intercept and Trend
UE	-4.7308	-4.6409	-4.8713	-4.7423

As noted in Table 2, INF variable is stationary in level [I(0)], while UE variable is stationary in the 1<sup>st</sup> difference [I(1)].

After the degrees of integration of the series are determined, the ARDL method developed by Pesaran et al. (2001) is used. Table 3 indicates the ARDL test results for Equations 1 and 2.

**Table: 3**  
**The ARDL Bound Test Results**

Estimated Equation	INF=f(UE)	UE=f(INF)
F-statistics	1.11	5.82
Optimal Lag Length	[1, 0]	[2, 0]
Asymptotic Critical Values		
	6.027	6.760
	4.090	4.663
	3.303	3.797
Diagnostic Tests		
$R^2$		
Adjusted $R^2$		
F-statistics		
Breusch-Godfrey Test		
ARCH LM Test		
Jarque-Bera Normality Test		
Ramsey Reset Test		

*Note: The lag length is determined in accordance with the AIC. The critical values for bounds testing are abstracted from Narayan (2005, p. 1987, Case II). The numbers in parenthesis show the probability values.*

Since the F test value of Equation 1 is below the lower bound at 10% significance level, no long-run relationship between the variables involved in the analysis is found. Since the F-test value of Equation 2 is above the upper bound at 10% significance level, a long-run relationship is found between the variables.

Based on the results of the ARDL bound testing, the short-term coefficients are estimated by applying the Ordinary Least Squares (OLS) method for Equation 1 and the long-term coefficients are found by using Fully Modified OLS (FMOLS) and Dynamic OLS (DOLS) methods for Equation 2. The obtained results are given in Tables 4, 5 and 6, respectively.

**Table: 4**  
**The OLS Estimation Results**

Variables	Coefficient	Probability
UE	-0.3207	0.0060
C	-2.3302	0.2834

**Table: 5**  
**The Error Correction Model (Equation 2)**

Variables	Coefficient	P - Value
$\Delta UE(-1)$	0.4523	0.0169
ECM(-1)	-0.8276	0.0002

The results of the Error Correction Model are shown in Table 5. To comprehend the short-term adaptation process, the sign and the magnitude of the error correction coefficient [ECM (-1)] should be considered. Since the ECM (-1) coefficient is between 0 and -1, the adaptation process may be monotonic towards the long-term equilibrium value.

**Table: 6**  
**The FMOLS and DOLS Estimation Results**

Variables	FMOLS	DOLS
INF	-0.032 (0.0000)	-0.033 (0.0009)

*Note: The numbers in parenthesis indicate the probability values.*

## Conclusion

In this study, the validity of the Phillips Curve in Turkey is investigated by using annual data from 1987 to 2016, and it is examined whether or not a relationship exists between inflation and unemployment for the designed models. The unit root results of the series show that both series are stationary in the 1<sup>st</sup> difference [I(1)]. The ARDL bound testing approach is used to analyse the long-run relationship between these variables which are found to be stationary in the 1<sup>st</sup> difference.

According to the estimation results of the ARDL model in which the inflation variable is considered as the dependent variable, there is no long-run relationship between the variables. The model in which inflation is considered as a dependent variable, and there is no long-term relationship between variables, suggests a 1% increase in the unemployment rate reduces the inflation rate by 0.32%. This result indicates that the Phillips Curve is valid for Turkey at that time.

When the unemployment rate is considered as a dependent variable, the existence of a long-run relationship among the variables included in the analysis would be determined.

Because of estimating the coefficients of the long-run relationship between the variables with the FMOLS and DOLS methods, a 1% increase in the inflation rate appears to reduce the unemployment rate by 0.03%. Based on this result, economic policies can be created in the long run by using the relationship between inflation and unemployment rate for fulfilling price stability as the goal of monetary policy.

## References

- Bayrak, M. & O.C. Kanca (2013), "Türkiye'de Phillips Eğrisi Üzerine Bir Uygulama", *Eskişehir Osmangazi Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 8(3), 7-29.
- Büyükkakin, T. (2008), "Phillips Eğrisi: Yarım Yüzyıldır Bitmeyen Tartışma", *İstanbul Üniversitesi Siyasal Bilgiler Fakültesi Dergisi*, (39), 133-159.
- Çatik, N. & C. Martin & Ö. Önder (2008), "Relative Price Variability and the Phillips Curve: Evidence from Turkey", *Ege University Working Paper*, 08/07.
- Hepsağ, A.G.A. (2009), "Türkiye'de Enflasyon ile İşsizlik Arasındaki İlişkinin Analizi: Sınır Testi Yaklaşımı", *İktisat Fakültesi Mecmuası*, 59(1), 169.
- Kuştepe, Y. (2005), "A Comprehensive Short-Run Analysis of A (Possible) Turkish Phillips Curve", *Applied Economics*, 37(5), 581-591.
- Narayan, P.K. (2005), "The Saving and Investment Nexus for China: Evidence from Cointegration Tests", *Applied Economics*, 37(17), 1979-1990.
- Öztürk, I. & A. Acaravci (2013), "The Long-Run and Causal Analysis of Energy, Growth, Openness and Financial Development on Carbon Emissions in Turkey", *Energy Economics*, 36, 262-267.
- Pesaran, M.H. & Y. Shin & R.J. Smith (2001), "Bounds Testing Approaches to the Analysis of Level Relationships", *Journal of Applied Econometrics*, 16(3), 289-326.
- Phillips, A.W. (1958), "The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957", *Economica*, 25(100), 283-299.
- Samuelson, P.A. & R.M. Solow (1960), "Analytical Aspects of Anti-Inflation Policy", *The American Economic Review*, 50(2), 177-194.
- Yılancı, V. & M. Aydın (2016), "Enflasyon ile İşsizlik Arasındaki İlişkinin Varlığının Sınanması", *International Congress on European Union's Relations, Economics, Finance and Econometrics (EUREFE'16) Bildiri Kitabı*, 1454-1464.

**28 October 2017 Saturday**

**Session: V-B / 09.30-11.00**

## **PUBLIC ECONOMICS & PUBLIC FINANCE**

Room: *Salon Imperial*

Chair: **Altug Murat KOKTAS**

- Globalization and the Changing in Tax Policies: Situation of Turkey After 1980  
**Ahmet INNECI & Sahin KARABULUT**
- Budgeting for Equality: The Turkey's Experience  
**Gokhan COBANOGULLARI & Ahmet Burcin YERELI**
- Development and Analysis of the Primary Income Account of Turkey  
**Fatih Hakan DIKMEN & Affan Hakan CERMIKLI & Erol BULUT**
- Is the Implementation of First Personal Income Tax in England a Coincidence?  
**Ibrahim ORGAN & Ali Gokhan GOLCEK**
- Renewable Energy and Public-Private Partnerships: A Wave Energy Case Study for Turkey  
**Sevda AKAR**

## Globalization and the Changing in Tax Policies: Situation of Turkey After 1980

*Ahmet INNECI* (<http://orcid.org/0000-0003-1229-7182>), Dokuz Eylul University, Turkey; e-mail: [ahmet.inneci@deu.edu.tr](mailto:ahmet.inneci@deu.edu.tr)

*Sahin KARABULUT* (<http://orcid.org/0000-0001-7955-6404>), Dokuz Eylul University, Turkey; e-mail: [sahin.karabulut@deu.edu.tr](mailto:sahin.karabulut@deu.edu.tr)

**Keywords** : Globalization, Tax Policies, Tax Revenues.

**JEL Classification Codes** : H20, K34, F65.

### Extended Abstract

The concept of “globalization”, which is a concept used in many sciences from economics to management and social science, is a process which has intensive technological breakthroughs and communication on its basis and which has a great effect on socio-economic structure. Consequently, global market, global strategy, global company, global product, global manager, global labour force, global competition, global culture, etc. are seen quite frequently in the literature.

Since the capitalist system is an intricate structure, countries’ adaptation to the developing, changing and globalizing world and revising their economic systems ensures that the system is not blocked. Countries serve this purpose because of various reasons. In this direction, when countries liberalize their economies with the liberalization process, reducing of customs taxes, reducing of tax burden of foreign capital, increasing of tax expenditures such as discount, exception, exemption, increasing of tax incentives are applied and they provide various tax advantages. However, the reduction of this public resource, which has a significant share in the tax revenues, makes the financing of public expenditures difficult and the requirement for additional resources arises due to the budget deficit problem. This causes the composition of the taxes to change.

Turkish economy adopted the free market economy and statist policies applied to that date were abandoned with the stabilization measures taken on January 24, 1980. It was aimed to provide the integration of the country’s economy with the international markets and the process of globalization in Turkey started with these decisions. After 1980, globalization has been influential on the country’s economy, with the transformation in Turkey, as in the rest of the World. The transformation in the country’s economy with the decisions has been the beginning of the transformation in the tax system. The general tendency in this period was to reduce the tax burden and increase the share of indirect taxes. One of the most radical regimes in the tax system with globalization has been the implementation of the Value Added Tax Law in 1985. When it came to 1996, Turkey became a member of the Customs Union, causing the import tariff to be gradually reduced to European Union standards. It was aimed to reintroduce about 30 billion dollars estimated to have gone abroad with the Law No 4444, which was enacted in August 1999. As of June 2002, the Excise Duty Law was enacted for the purposes of collecting several tax, funds and shares under a single roof, which are being implemented in a disruptive manner in our legislation, and for harmonizing with the acquis.

The mobility of the capital has increased and the capital has easily moved from one country to another with the development of technology with globalization. Countries that want to attract global capital to their countries have gone to provide financial incentives to investors. Since the investors could shift their activities to the countries where the tax is no or very low, it has become difficult to levy a tax on capital, which has high mobility. For this reason, there was a decrease in the tax revenues of the countries that allowed to tax reduction to attract the circulating capital. In parallel with this, the rates of Income and Corporate Tax in our country have been gradually reduced and not been indifferent to the tax changes that occurred in the international markets. In addition, various tax incentives have been put into effect to attract foreign capital to the country, especially in terms of institutions.

The change in tax policies with globalization has also caused a change in tax revenues. While indirect taxes accounted for about 36 % of total tax revenues in 1985, this rate was 42 % in 2000, 48 % in 2007 and 64 % in 2016. As we have seen, the share of indirect taxes in total tax revenues has increased over the years. The most important factor in this is the implementation of the Value Added Tax Law and the Excise Duty Law and the including of a wide range of goods and services. However, the decrease in the share of direct taxes in total tax revenues is due to the reduction of income and corporate tax rates to attract global capital.

In this study, it will be tried to reveal how tax policies and tax revenues are affected in the face of radical changes in economic structure in the globalization process. In this context, the main themes of the study are how globalization influences the current tax policies, which regulations our country is making to achieve international integration, and which direction of change in tax revenues.

## References

- Balkanlı, A.O. (2002), "Küresel Ekonominin Belirleyici Faktörleri Üzerinde", *Uludağ Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 21(1), 13-26.
- Balseven, H. (2013), "Küreselleşme ve Kamu Maliyesi", *Uluslararası Kamu Maliyesi* (eds. F. Tekin & M.O. Arslan), T.C. Anadolu Üniversitesi Yayını, No: 2919, Eskişehir, 2-26.
- Bayar, F. (2008), "Küreselleşme Kavramı ve Küreselleşme Sürecinde Türkiye", *Uluslararası Ekonomik Sorunlar Dergisi*, 32, 25-34.
- Cebeci, İ. (2011), "Küreselleşme Yaklaşımları Kapsamında Küreselleşme Sürecinin Tarihsel Değerlendirmesi", *İstanbul Sosyoloji Konferansları Dergisi*, 359-385.
- Central Bank of the Republic of Turkey (2002), *Küreselleşmenin Türkiye Ekonomisine Etkileri*, Banknot Matbaası Genel Müdürlüğü, Ankara.
- Dulupçu, M.A. (2001), *Küresel Rekabet Gücü: Türkiye Üzerine Bir Değerlendirme*, Nobel Yayın Dağıtım, Ankara.
- Gökdere, A. (2001), "Küreselleşmeye Genel Bir Bakış", *Ankara Avrupa Çalışmaları Dergisi*, 1(1), 71-101.
- Güngör, G. & A. Aydın (2011), "Küreselleşmenin Türk Vergi Sistemi Üzerine Etkisinin 1980 Sonrası Analizi", *Ekonomi Bilimleri Dergisi*, 3(2), 69-78.
- İncekara, A. (1995), *Globalleşme ve Bölgeselleşme Sürecinde NAFTA ve Etkileri*, İTO Yayınları, İstanbul.
- Kaçmazoğlu, H.B. (2002), "Doğu-Batı Çatışması Açısından Globalleşme", *Avrasya Eğitim Araştırmaları Dergisi*, 6, 44-55.
- Karabulut, A.N. (2004), "Küreselleşmenin Ticari Hayat Üzerindeki Etkileri", *Mevzuat Dergisi*, 76.
- Kılıçbay, A. (1997), *Türkiye'nin Ekonomi Politikaları (1930-1996 ve Sonrası)*, Der Yayınları, İstanbul, 137-138.
- Kurtulmuş, N. (2001), *Sanayi Ötesi Dönüşüm*, İz Yayıncılık, İstanbul.

- Saraç, Ö. (2006), *Küresel Vergi Rekabeti ve Ulusal Vergi Politikaları Türkiye Değerlendirmesi*, Maliye ve Hukuk Yayınları, Ankara.
- Thurow, L.C. (1997). *Kapitalizmin Geleceği*, 1. Edition, Sabah Yayınları, İstanbul.
- Yıldız, H. (2000), “2000’li Yıllarda Türkiye’de Uygulanan Maliye Politikalarının Değerlendirilmesi”, *Afyon Kocatepe Üniversitesi İİBF Dergisi*, 7(2), 85-102.
- Yurdabakan, İ. (2002), “Küreselleşme Konusundaki Yaklaşımlar ve Eğitim”, *Avrasya Eğitim Araştırmaları Dergisi*, 6, 61-64.

## Budgeting for Equality: The Turkey's Experience

**Gokhan COBANOGULLARI** (<http://orcid.org/0000-0001-6634-1375>),  
Erciyes University, Turkey; e-mail: [gokhanc@erciyes.edu.tr](mailto:gokhanc@erciyes.edu.tr)

**Ahmet Burçin YERELI** (<http://orcid.org/0000-0002-8746-6756>), Hacettepe  
University, Turkey; e-mail: [aby@hacettepe.edu.tr](mailto:aby@hacettepe.edu.tr)

**Keywords** : Gender Equality, Gender Responsive Budgeting, Turkey.

**JEL Classification Codes** : H60, H61, J18.

### Extended Abstract

Women are disadvantaged with reference to men, about in major economic, social, and political indicators of equality, but in several areas, such as education, differences are diminishing. The government budget is very important to eliminate this disadvantage between men and women. Today, many countries are working on this issue. The history of gender responsive budgeting is quite new. Gender responsive budgeting (GRB) approach, firstly began to applied in Australia in the mid-1980, is a practice to raise the statuses of women in the society. Gender budgeting has been defined as follows (Council of Europe, 2005: 10):

*“Gender budgeting is an application of gender mainstreaming in the budgetary process. It means a gender-based assessment of budgets, incorporating a gender perspective at all levels of the budgetary process and restructuring revenues and expenditures to promote gender equality.”*

The gender responsive budgeting approach does not mean that budget policies differ according to gender. Gender responsive budgeting is an approach to budgeting that uses fiscal policy and administration to encourage gender equality and girls and women's development. The rationale for gender budgeting arises from recognition of the fact that government budgets affect men and women differently by way of the pattern of resource allocation. Gender responsive budgeting is an effective tool for achieving gender mainstreaming, to ensure that the benefits of development reach women as much as men. Gender mainstreaming is the (re)organization, growth, development and evaluation of policy processes, so that a gender equality perspective is incorporated in the planning, making and application processes of all mainstream policies, by the actors normally involved in policy-making.

The needs, preferences and priorities of women and men are different, but this fact is not considered in the design or implementation of macro policies. Therefore, these differences are not considered in the budget that covers the financial implications of macro policies. For this reason, the budget sometimes causes gender inequality (Şenesen, 2008: 2). Nowadays, this situation causes some problems in many countries, such as not being able to benefit from public services especially, not being able to participate in decision-making processes, and exposure to inequalities in various fields for women (Tepekule et al., 2016: 2319). To remove this inequality, policies for gender equality and empowerment of women should be implemented as the budget is being prepared. In addition, tariff structure, exemption and exception, etc., which are included in tax systems, applications in favour of women, and this problem will reduce. On the other hand, Gender responsive budgeting perspective on

taxation does not load taxes 50% on women and men. On the contrary, women and men are treated as individuals with certain rights in a tax system that is consistent with this understanding (Tüğen & Özen, 2008: 3).

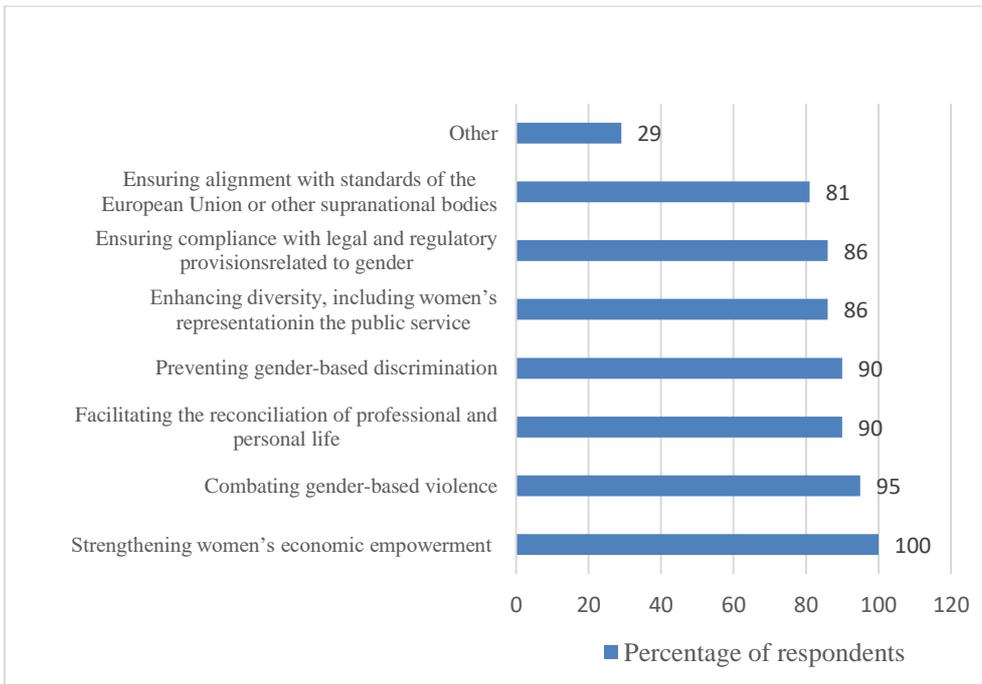
Achieving gender equality, and, so, empowering both women and men to the full contribute to society for more comprehensive and sustainable growth, demand a clear and inclusive vision of a gender-equal society braced by a sound strategic plan to realize specific goals and objectives. A vision expression on gender equality can activate the redefinition of more equitable social, political and economic roles for both genders to assure that every woman and man can maximize their potential. Such a vision can set new anticipations for the manner and behaviour of both men and women. In line with this vision, a strategic plan can be drawn up that ensures national gender equality.

Most OECD countries have enhanced strategies for gender equality. In accordance with the 2011 OECD Survey on National Gender Frameworks, Gender Public Policies and Leadership, these strategies mainly focus on (see Figure 1) (OECD, 2011):

- Strengthening women's economic empowerment;
- Combatting gender-based violence;
- Facilitating the reconciliation of professional and personal life;
- Preventing gender-based discrimination; and
- Enhancing diversity and compliance with gender equality laws and policies.

As shown in Figure 1, countries should begin to implement a policy that will strengthen women's economic empowerment. First, the budget should be an equitable budget. To achieve this, it is necessary to have strong institutionalized institutions.

**Figure: 1**  
**Thematic Focus of Gender Equality Strategies (2012) (%)**

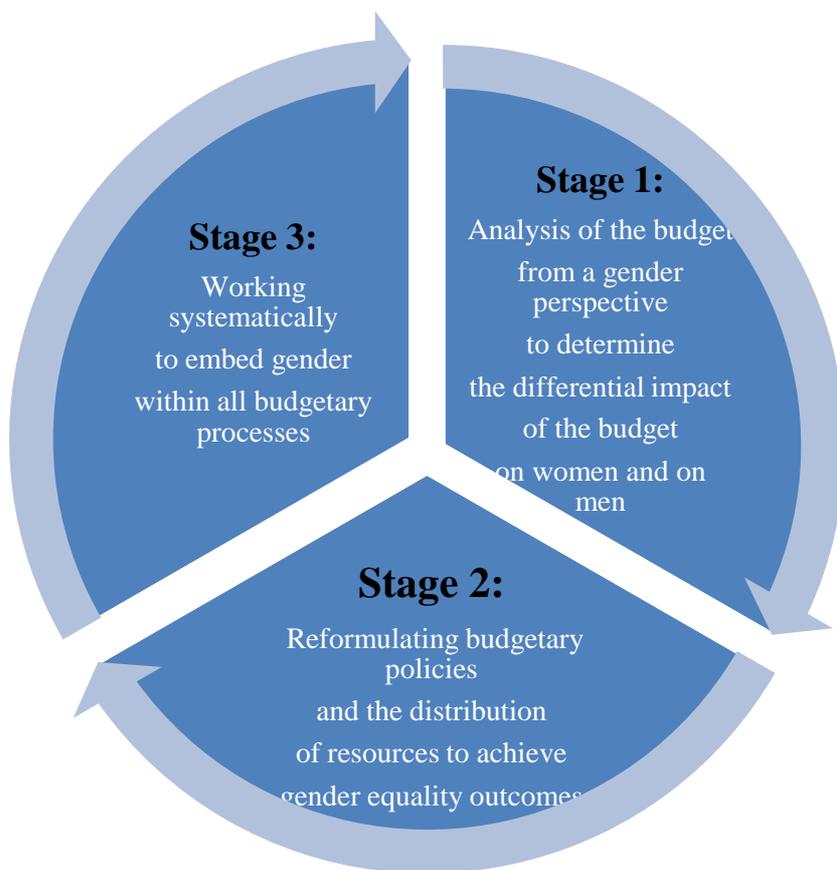


Source: OECD, 2011, *Survey on National Gender Frameworks, Gender Public Policies and Leadership*.

The economic and social position of women and men in society is different, and therefore the economic activities of the state or the municipality affect women and men in different ways. For this reason, gender budget analysis is not just an issue of interest to the budget; the budget is used as a starting point to understand the effects of broader policies. Therefore, GRB has many benefits. We can list these benefits as follows;

- Assure of gender equality
- Accomplish the objectives of women's rights
- More effective reduction of poverty
- Increase of accountability and transparency
- Increase of economic efficiency
- Providing good and democratic governance

**Figure: 2**  
**Stages of Gender Responsive Budgeting Process**



Source: *Quinn, 2009: 17.*

The Gender responsive budgeting approach does not foresee a separate budget for women and aims to gain a gender equality perspective for the current budget priorities and the budget process. The question that needs to be asked is how much Turkey attaches importance to gender equality in the budgeting process. Turkey has put in place several institutional and legislative regulations on gender responsive budgeting. The issue of gender responsive budgeting was addressed in the Eighth Five-Year Development Plan “Women’s Participation in Society” Specialization Commission Report. However, it is not possible to see the gender responsive budgeting approach within the budget system of our country. On the other hand, it is possible to observe gender responsive budgeting implementations by both in the central and local governments in the services implemented and in the

projects put into practice. In accordance with the law numbered 6111, many regulations related to gender responsive budgeting have been made. These arrangements are as follows (Örücü & Bakırtaş, 2012: 472-475);

- Right of leave of female worker who gave birth early
- Arrangements for the night duty of a female officer who will give birth or giving birth to
- Female officer-breast-feeding permission
- Being insured for women who are doing business that is continuous and profitable
- Incentive for Employers who employing women workers

As a result, some applications and legal arrangements have been started to eliminate gender inequality in terms of workload and wages in Turkey. Regulations are in place to ensure that women pass to from informal economy to formal economy. In addition, tax incentives are being implemented in Turkey to ensure women's participation in the workforce. It has been seen that the expansion of the Public Financial Management and Control Law No. 5018, which was enacted within the scope of the legal regulations in the EU harmonization process in Turkey, is very important in the budgeting process. It can be said that thanks to these developments, there is a possibility of gender responsive budgeting in Turkey and favourable conditions in this meaning.

In this study, an undertake has been made to examine the existing literature on Gender responsive budgeting, survey some experiences worldwide with gender responsive budgeting and make suggestion for the success of gender responsive budgeting. Besides, it will provide information about the current situation in Turkey regarding gender budgeting and will focus on the level of implementation of this understanding in Turkey.

### References

- Council of Europe (2005), *Directorate General of Human Rights, 'Gender Budgeting'* (Strasbourg).
- OECD (2011), *Survey on National Gender Frameworks*, Gender Public Policies and Leadership.
- Örücü, A.İ. & D. Bakırtaş (2012), "6111 Sayılı Kanunun Cinsiyete Duyarlı Bütçeleme Perspektifinden Değerlendirilmesi", *Maliye Dergisi*, 162, 467-477.
- Quinn, S. (2009), *Gender Budgeting: Practical Implementation Handbook*, Council of Europe, <<https://rm.coe.int/1680599885>>, 10.08.2017.
- Şenesen, G. (2008), "Toplumsal Cinsiyete Duyarlı Bütçeleme: Türkiye İçin Bir Değerlendirme", *Bütçe Sürecinde Parlatonun Değişen Rolü Sempozyumu*, Afyonkarahisar.
- Tepekule et al. (2016), "Cinsiyete Duyarlı Bütçeleme: Türkiye Örneği", *İnsan ve Toplum Bilimleri Araştırmaları Dergisi*, 5(7), 2316-2331.
- Tügen, K. & A. Özen (2008), "Cinsiyete Duyarlı Bütçeleme Anlayışı", *Maliye Dergisi*, 154, 1-11.

## Development and Analysis of the Primary Income Account of Turkey

*Fatih Hakan DIKMEN* (<http://orcid.org/0000-0001-6390-2501>), Gazi University, Turkey; e-mail: [dikmen@gazi.edu.tr](mailto:dikmen@gazi.edu.tr)

*Affan Hakan CERMIKLI* (<http://orcid.org/0000-0002-4919-5473>), Gazi University, Turkey; e-mail: [cermikli@gazi.edu.tr](mailto:cermikli@gazi.edu.tr)

*Erol BULUT* (<http://orcid.org/0000-0002-9293-9052>), Gazi University, Turkey; e-mail: [bulut@gazi.edu.tr](mailto:bulut@gazi.edu.tr)

**Keywords** : Balance of Payments, Current Deficit, Primary Income Account, Capital Movements.

**JEL Classification Codes** : F30, F32, F21, F41.

### Extended Abstract

The balance of payments is a statistical statement that summarizes economic transactions (General Government, Central Bank, Banks, and Other Sectors) between residents and non-residents during a period. The unit of account for compiling these statistics may be the domestic currency or other foreign currencies which are convertible in international markets. However, it is preferable that the unit of account be a stable currency (CBRT, 2015; 4). Transactions in the balance of payments are flow variable, on the other hand, the records in the International Investment Position are stock variable. Basically, the balance of payments statistics consists of 4 main account items. These are the current account, the capital account, the financial account and net errors and omissions. The current account and the financial account are more important than the other accounts in the balance of payments for our study. Therefore, we primarily focused on these two accounts. The current account also consists of four sub-accounts; the balance of goods, the balance of services, the primary income account and the secondary income account. In addition to this, the financial account consists of three sub-accounts; foreign direct investment, portfolio investment and the other investments comprising deposits and loans.

The primary income account, which is the sub-account of the current account balances and which is the subject of our work covers amounts payable and receivable in return for providing labour, financial or natural resources. It includes compensation of employees and receipts and payments on investment income, namely foreign direct investment, portfolio investment and the other investments. Foreign direct investment income includes income on equity and investment fund shares (dividends and reinvested earnings) and interest on intercompany transactions about the other investments. Portfolio investment income refers to income on equity securities (dividends) and income on debt securities (interest). Finally, the other investments income refers to interest receipts and payments on all other resident claims on and liabilities to non-residents, respectively (CBRT, 2015; 8).

As is known, Turkey has been in trouble with the current account deficits since the 1980s, especially after 2000. The purpose of the study is to determine the tools for financing the current account deficit of Turkey and reveals the effects of these tools (foreign direct investment, Government debt securities, bonds and short term external debts) on balance of payments.

The primary income account is very important indicator for analysing balance of payments because income and payments (such as interest payments, dividends and reinvested earnings) of the items which is in the financial account are recorded. In fact, the primary income balance provides an important perspective when analysing both the balance of payments and the International Investment Position. Because, the primary income account shows that the country is the net capital exporter or importer, as well as it shows the ways for the countries which have the current account deficit, how to finance their deficit. In other words, the primary income account clearly shows whether the current account deficit is sustainable and the quality of its financing.

While the development of Turkey's primary income balance was examined in the study, it was taken as basis after 1990, when capital movements were released. Furthermore, it has been examined in more detail after the years 2000's in which volume of the capital movement has increased. The International Investment Position is also mentioned since the study is linked to the primary income balance. In the last part of the study, the development of the primary income balance of the selected countries was included to make comparisons. While these analyses were carried out, descriptive method was followed mostly and the countries' balance of payments statistics were examined in detail. The data set used in this study was taken from CRBT (the Central Bank of the Republic of Turkey) and IFS (International Financial Statistics). Beside this, in the study, Balance of Payments Manual Sixth (BPM6), which is a guideline for the record of the balance of payments made by the IMF in 2009, was used.

If we look at the results of the study, we have seen that Turkey is facing a chronic current account deficit problem over the years. Turkey needs foreign capital to finance its current account deficit. Turkey has met its needs for capital from mostly portfolio investment (such as borrowing and hot money) especially after the years 2000's. There is also a significant increase in the foreign direct investments during this period. While Turkey's deficit on the primary income account was about \$4 billion in 2000, this deficit rose to \$9 billion in 2016. This represents about 28% of the current account deficit in 2016. This rate is relatively low compared to emerging countries such as Mexico and Brazil. However, the deficit on the balance of goods and services of these countries is much lower than in Turkey. Therefore, Turkey's import dependency (especially intermediate goods) level is higher. Turkey's primary income deficit has been increasing steadily since 2010. So, over the next decades, there is a risk that the primary income balance becomes a chronic problem for the Turkish economy. To minimize this risk, it is necessary to return to the industrial policy that will reduce the current account deficit of the country. As is known, import of intermediate goods is the main reason of the current deficit. Therefore, it's crucial to reduce the imports of intermediate goods. For this purpose, firstly it is necessary to export high value-added products and along with R&D and technological development, education policies must be planned in such a way as to adapt to today's conditions. University and industry cooperation will make it easier to achieve this purpose. When the current account deficit reduces, the needs for when the current account deficit declines, the need for foreign financing will also decrease and Turkey may become a country with a primary income balance surplus.

## References

- I.M.F. (2009), *Balance of Payments and International Investment Position Manual (Sixth Edition-BPM6)*, Washington.
- Salvatore, D. (2004), *International Economics*, Wiley International Edition, USA.
- T.C.M.B. (2014), *Türkiye'nin Ödemeler Dengesi ve Uluslararası Yatırım Pozisyonu Altıncı El Kitabı'na Geçiş Süreci Hakkında Açıklama*, İstatistik Genel Müdürlüğü Ödemeler Dengesi Müdürlüğü, Ankara.

T.C.M.B. (2015), *Ödemeler Dengesi İstatistiklerine İlişkin Yöntemsel Açıklama*, İstatistik Genel Müdürlüğü  
Ödemeler Dengesi Müdürlüğü, Ankara.

## Is the Implementation of First Personal Income Tax in England a Coincidence?

**Ibrahim ORGAN** (<http://orcid.org/0000-0003-4986-0805>), Pamukkale University, Turkey; e-mail: [iorgan@pau.edu.tr](mailto:iorgan@pau.edu.tr)

**Ali Gokhan GOLCEK** (<http://orcid.org/0000-0002-7948-7688>), Nigde Omer Halisdemir University, Turkey; e-mail: [aligokhangolcek@gmail.com](mailto:aligokhangolcek@gmail.com)

**Keywords** : History of Taxation, Income Tax, British Taxation History.

**JEL Classification Codes** : N43, H24, H29, K34.

### Extended Abstract

The necessity of the concept of the state and the transition to social life has emerged simultaneously. The emergence of States is the result of the embodying of security, justice and diplomacy needs. In this context, the provision of services by the governments has caused some financial and economic needs. Especially at the financing of public expenditures, states have also imposed several compulsory financial obligations to the public under the management of the sovereign power. Thus, since the emergence of the concept of state finance, individuals have faced taxation on themselves for financing public expenditures. Therefore, tax is a monetary financial obligation that is compulsive, final and unrequited for meeting public expenditures from individuals. As known, taxes are shown as the most important of the contemporary state incomes.

The development of the tax has been accelerated by the development of parliamentary institutions in England. In history, first with Magna Carta, which restricted the powers of the king in 1215, the opinion of “*there is no tax without representation*” emerged. Adam Smith, one of the forerunners of classical economics, has also found several definitions of taxation in his book *The Enrichment of the Nations*, published in 1776. Tax evasion and collection, a field witnessed by state-individual conflict throughout history, has been discussed many times. Serious rebellions, rebellions and even wars have emerged, especially at the point of its subject, addressee and ratio. From the first ages till today, the fairness of tax has been also another discussed issue. The subjects such as who is party liable to tax and on whom it should be reflected are discussed in the 18<sup>th</sup> century as well as today. Economist Anne Robert Jaques Turgot, who was France’s Finance Minister 1774-1776, said that the question of who should pay tax was not a simple question at the core; and that prices, profits, consumption and income are influencing the tax rate. Along with that, Turgot has initiated a reform of the tax system in France, keeping the rich landowners taxed. The English moralist Adam Smith, who lived in a similar period, also found evidence of taxation. The principles of economics, justice, certainty and suitability known as Adam Smith’s taxation principles are generally accepted in the literature. In line with these principles, Adam Smith analysed the period he lived and made suggestions in the context of the United Kingdom.

The 18<sup>th</sup> century is generally known as the period in Europe where political battles have prevailed, especially between Britain, France and Austria. In the wars known as the Seven Year Wars, the struggle of colonial and maritime superiority of Britain and France is the most remarkable. Britain has prevailed over these wars, conquered the French territories of Africa and America, and became the sole dominant

new trade channel in economic terms. But the most remarkable battle was the Seven Years War between 1758 and 1763. To meet the expenses of the Seven Years' War, Britain has had to put a new set of taxes on its colonies, with the intention of alleviating the burden of taxpayers in its own country. This situation pushed the current 13 colonies to unrest and resistance. In this context, the period of Adam Smith's life coincides with the last period of his economic wealth. Nevertheless, there have been profound strains in economic sense with the fight against colonies in America not going well and ultimately, the recognition of the independence of the United States in 1782. In this context, the introduction of new taxation in the UK has begun to be discussed.

Neumark defines income tax as a piece of advanced capitalism. Because before income tax received as simple and primitive, the true form of capitalism has gained with the internalization all over the world. The greatest reason for this was the fact that the detection, supervision and collection of an income tax in a modern sense required a more professional infrastructure than its predecessor. For example, it is possible to talk about modern income tax in the context of certain responsibilities, such as the ability to calculate income accurately, the accounting audit can be carried out, and the bookkeeping can be kept on a regular basis. As a matter of fact, in the UK, where the Industrial Revolution started first and developed faster than other countries, the income tax of the conjunctural movements tried to be spoken modern sense. Especially at the point of financing the 1799-1802 war against Britain by the United Kingdom, the income tax imposed during the year of the war began to be discussed and put into practice as a war.

In this context, the personal income tax imposed in England was adopted by William Pitt, the youngest prime minister of the UK history, in 1799. The impact of the war undertaken with Napoleon and the severe financial strains are significant in the background of tax imposition. Some historians have recorded this development as "the tax that beat Napoleon". Hence, it is possible to see the British income tax as a direct result of the huge fight against France. This tax, also known as the "*Aid and Contribution Tax*", has been provisionally set as legal status and used for short-term financing.

Just as in many European countries, the 18th-century British income system was almost exclusively in the fields of customs and trade. The Medieval taxation system of property and production that much was apparent that taxes on real estate and land, was tied to certain standards during the period in question, and became an ossified structure. The legal regulations for land and real estate taxes that have been implemented have opened the way for personal income tax. For example, to make the real estate tax more convenient and efficient, the members of the commission have separated the country territory and created small areas. A clerk and tax officer was assigned to each area to collect the tax. As seen, an accounting and a bookkeeping habit were formed spontaneously with this system. In addition to the land tax, in the Middle Ages, firstly the exportation and then the mercantilist discourse as well as the customs tax on the importation, thus financing the public expenditures.

The fact that we can say the paradigm shift has emerged exactly at the beginning of the American war, since there was a condition that the introduction of new taxation for the financing of very large expenditures. First, Adam Smith, one of the leading economists of the time, offered a Dutch example and proposed taxing on rented property. However, in the period terms, those who made the most lease transactions were wealthy (propertied), and they were imposed a tax on their luxury consumption. In 1785, Prime Minister William Pitt actualised some reforms on taxation and went on to group taxation. However, during the same period the battles with France were lost and therefore the reforms made were insufficient. The financial structure of the UK failed despite all the reforms. Although various

financial plans were put into practice till 1796, there was no increase in tax revenues. With new taxes added, existing taxes were increased, but income tax remained as an untaxed area. It is precisely from this date that the idea of taxing the wealth of individuals has begun to be seriously debated. But this has not become as sharp and easy as it is today.

Many those were claiming that a new property-based tax - preferring luxury goods- rather than an income tax should be taxed for the most suitable goods for taxation during wartime. The seriousness of the situation was understood with the new fiscal plan prepared by William Pitt during the 1797 budget meeting and necessary ground for income tax has been established. Ultimately, in 1799, the first modern income tax was introduced in England. However, this tax, temporarily imposed because the state of war, was abolished in 1802 from the end of the war with France. When the financial situation worsened due to war again the following year, the Prime Minister Henry Addington had to accept the one-off income tax in 1803.

The reason why the personal income tax, which is a modern first meaning in the study, entered into force in the United Kingdom has been evaluated considering the conditions of the period. The focus of the work was constituted by the historical dimensions of the personal income tax, a fruit of capitalism, and the modernization process. As a result, we have focused on the idea that the application of income tax in the UK is not a coincidence, but rather a result of a more conscious strategy.

## References

- Atkinson, A.B. (2004), "Income Tax and Top Incomes over the Twentieth Century", *Hacienda Publica Espanola / Revista de Economia Publica*, 168(1), 123-141.
- Çağan, N. (1982), *Vergilendirme Yetkisi*, İstanbul: Kazancı Hukuk Yayınları.
- Güneş, G. (2011), *Verginin Yasallığı İlkesi*, İstanbul: 12 Levha Yayıncılık.
- Kayan, A. (2000), "Verginin Tarihsel Gelişimi ve Sebep Olduğu Bazı Önemli Olaylar", *Maliye Dergisi*, 135, 80-87.
- Nadaroğlu, H. (2000), *Kamu Maliyesi Teorisi*, İstanbul: Beta Yayınevi.
- Neumark, F. (1940), *Maliye İlmine Dair Ekonomik ve Sosyolojik Tetkikle.*, (Translated by Sabri Ülgener), İstanbul: Güven Basımevi.
- Öncel, M. & A. Kumrulu & N. Çağan (2012), *Vergi Hukuku*, Ankara: Turhan Yayınevi.
- Sander, O. (2009), *Siyasi Tarih: İlkçağlardan 1918'e*, Ankara: İmge Kitabevi.
- Sayar, N.S. (1970), *Kamu Maliyesi*, İstanbul: Sermet Matbaası.
- Schölders, G. (1976), *Genel Vergi Teorisi*, (Translated by Salih Turhan), İstanbul: İstanbul Üniversitesi İktisat Fakültesi, Fakülteler Matbaası.
- Seligman, E.R.A. (1921), *The Income Tax: A Study of The History, Theory, and Practice of Income Taxation at Home and Abroad*, New York: The Macmillan Company.
- Thompson, E.P. (2015), *İngiliz İşçi Sınıfının Oluşumu*, İstanbul: Birikim Kitapları.
- Tosuner, M. & Z. Arıkan (2014), *Vergi Hukuku*, İzmir: Kanyılmaz Matbaası.
- Turhan, S. (1987), *Vergi Teorisi ve Politikası*, İstanbul: Der Yayınları.
- Türk, İ. (2002), *Kamu Maliyesi*, Ankara: Turhan Yayınevi.
- Uluatam, Ö. (2009), *Kamu Maliyesi*, Ankara: İmaj Yayınevi.

## Renewable Energy and Public-Private Partnerships: A Wave Energy Case Study for Turkey

*Sevda AKAR* (<http://orcid.org/0000-0003-1208-0258>), *Bandirma Onyedi Eylul University, Turkey*; e-mail: [sevdamutluakar@gmail.com](mailto:sevdamutluakar@gmail.com)

**Keywords** : Public-Private Partnerships, Renewable Energy, Wave Energy, Turkey.

**JEL Classification Codes** : L32, Q25, Q28.

### Extended Abstract

The primary aim of this study is to examine the effects of wave-energy project cooperation in a public-private partnership in Turkey. Currently, countries and multinational institutions have begun to implement various measures related to global climate change. The first goal of these approaches is to reduce the use of fossil fuels that trigger global warming and greenhouse gas emissions. The alternative to reducing fossil fuels is development of renewable energies. The environmental challenges caused by the energy consumption of fossil fuels has increased interest in renewable energy sources and has thus facilitated an interest in sustainable economic growth. To this end, countries have implemented various fiscal policies to stimulate the renewable energy sector.

Governments have initiated public-private partnerships (PPP) to have the private sector take over the responsibility for building and operating infrastructure. Public-private partnership projects are gaining momentum globally as a means of delivering infrastructure, healthcare, and energy.

The partnerships that focus on renewable energy generation are relatively different (Bouma & Berkhout, 2015: 22). The diffusion of renewable energy can be explained by a less obvious policy of stimulating investments by means of public-private partnerships. Public-private partnership has garnered investor confidence and public-private partnership policy has provided to an investment culture whereby partnership investments dominate.

Public-private partnerships are legal partnerships between public actors and private actors, for common equity investments in wave/renewable energy technologies projects (Dinica, 2008: 3563). Many renewable technologies need subsidy support, but this is not different from many other infrastructure projects that are implemented as public-private partnerships. Such hybrid financing schemes are more common as projects become more complex and which are not viable based purely on private financing structures (The World Bank, 2013: 2). Thus, this type of partnership can be a mutual added value, since the private partner secures a profit and the public partner reduces the costs of obtaining renewable energy power (Martins, et al. 2011: 95).

One of the sources of renewable energy is the wave energy which is a new industry. So, it has required the risk sharing between the private and the public sector. The coordination of policies to promote the wave energy sector is essential to let investments to be made, even at this early stage of development, by incentivizing private/ public partnerships (The European Ocean Energy Association, 2010: 18-19).

The National Boron Research Institute (BOREN) and the General Directorate of Turkish Electromechanics Industry (TEMSAN) initiated the Electricity Generation from Wave Energy Project in 2008. This project performed the design of a grid that transforms electrical energy to the movement of sea waves. Wave energy generation system field test studies were applied in Karasu-Sakarya. The project had successfully engaged about 20 days and generated 5 kWh electricity production per day. If the industrial production of wave energy systems is carried out, electricity demand in the residential area of Turkey's coast can be met by this energy source. Currently, there are no licensed operations in Turkey that generate electricity from wave energy (Akar & Akbaş & Akdoğan, 2016: 300). This type of energy which has high initial installation costs can be realized by the public and private partnerships. Thus, the dependence on fossil fuels can be reduced by turning to renewable energy sources.



**28 October 2017 Saturday**

**Session: VI-A / 11.30-13.00**

## **ECONOMICS & LAW**

Room: *Festsaal Imperial*

Chair: **Isil Sirin SELCUK**

- Customs Duties Disputes and the Administrative Solution Methods  
**Ahmet INNECI & Mehmet TOSUNER**
- Burden of Proof in German and Turkish Tax Law: A Comparative Analysis  
**Eda OZDILER-KUCUK**
- A Novelty in Turkish Commercial Law: Execution of QR-Code on Cheques  
**Ebru TUZEMEN-ATIK**
- The Importance of the Principle of Legality in Terms of Fundamental Rights and Freedoms  
**Recep KAHRAMAN**
- The System of Transfer of the Development Rights and A Model Proposal for Turkey  
**Mehmet Ali AKSOY & Kursat YALCINER & Emine Ebru AKSOY & Murat CETINKAYA**

## Customs Duties Disputes and the Administrative Solution Methods

*Ahmet INNECI* (<http://orcid.org/0000-0003-1229-7182>), Dokuz Eylul University, Turkey; e-mail: [ahmet.inneci@deu.edu.tr](mailto:ahmet.inneci@deu.edu.tr)

*Mehmet TOSUNER* (<http://orcid.org/0000-0003-2503-3506>), Dokuz Eylul University, Turkey; e-mail: [mehmet.tosuner@deu.edu.tr](mailto:mehmet.tosuner@deu.edu.tr)

**Keywords** : Customs Disputes, Objection, Reconciliation.

**JEL Classification Codes** : K34, K39, K40.

### Extended Abstract

In our country, there may be some disputes between the customs administration and the taxpayers related to customs procedures. Customs disputes can be in the form of disputes arising from customs duties and disputes arising from other customs procedures other than customs duties. Many solution methods have been regulated in the Customs Law to ensure that customs disputes are resolved and taxes are collected. Taxpayers can use administrative solution methods against administrative decisions, customs duties and penalties emerged in implementation process of the customs procedures. Customs disputes can be resolved in two processes, administrative and judicial. First, the administrative process, which is considered as a peaceful way between the taxpayer and the administration, is operated and the judicial process can be started if the administrative process does not produce results.

Administrative solution methods are included in Articles 242-244 entitled “Objections” of Customs Law numbered 4458. It is understood from these articles that customs disputes can be resolved in three ways: “objection,” “objection to analysis, second analysis” and “reconciliation”. According to Article 242 of the Customs Law, the taxpayers may object to the customs duties, penalties and administrative decisions notified to them by a petition to be given by an upper office within fifteen days from the date of notification. The Objections coming to the administration are decided within thirty days and the results are notified to the concerned.

It is also possible to challenge the results of chemical analysis based on the calculation of customs duties by writing to the directorate general of customs and enforcement. This form of objection derives from the characteristics of customs duties. The chemical assay is performed to determine the tariff position and it may be objected to the directorate general of customs and enforcement within fifteen days after the notification of the analysis results against the chemical analysis results.

The last solution method in customs disputes is reconciliation. Reconciliation has been added to Article 244 of the Customs Law with the regulation made by Law numbered 6111. The procedures and principles concerning reconciliation, which is a new administrative solution, are regulated in the Customs Reconciliation Regulation. According to Article 244/1 of the Law, customs duties and the penalties stipulated in this law and other related laws are in the scope of reconciliation. Taxes and similar financial burdens that included in the customs duties base but are not followed and collected by the customs authorities are not within the scope of reconciliation.

Administrative solution methods, also called peaceful solution methods for customs disputes, will be examined in detail in the study. In this study, it will be examined why the taxpayers apply for the administrative solution methods, which solution will be more beneficial, whether there is a priority option among the administrative solution methods, similar and different aspects of reconciliation in customs duties and the general tax law.

### References

- Bozkurt, C. (2011), "Gümrük Vergileri ve Para Cezaları İçin Uzlaşma Müessesesi", *Mali Çözüm*, November-December, 99-110.
- Derdiyok, T. (2013), *Dış Ticarete Vergi ve Mali Yükümlülükler*, Seçkin Yayınları, Ankara.
- Candan, T. (1997), "Gümrük Vergisinde İdari Dava Açılmasından Önce Tahakkuka İtirazın Önemi", *Yaklaşım*, Mart (51).
- Cimilli, E. (1977), "Gümrük Cezaları ve Uygulama Halleri", *Anadolu Üniversitesi İTİA Dergisi*, 3, 1977.
- Çelik, B. (1999), *Dış Ticaretten Alınan Vergilerden Gümrük Vergisi Hukuku*, İmaj Yayınları, Ankara.
- Çelik, C. (2016), "Gümrük Uzlaşma Müessesesi Uygulamasında Yasallık Sorunu", *Mali Çözüm*, July-August, 131-142.
- Coşkun Karadağ, N. & İ. Organ (2014), "Gümrük Uzlaşması ve Vergi Usul Kanunu'ndaki Uzlaşma Kurumu ile Karşılaştırılmalı Olarak Değerlendirilmesi", *Niğde Üniversitesi İİBF Dergisi*, 7(1), 370-396.
- Ercan, T. (2012), *Gümrük Uyuşmazlıkları ve Çözüm Yolları*, Adalet Yayınevi, Ankara.
- Ertuğ, M. (1987), "Gümrük Vergisi Uygulamasında İtiraz Mercileri", *Danıştay Dergisi*, 66-67.
- Gümüş, M. (2005), "Gümrük Vergilerinin Geri Verilmesi veya Kaldırılması", *e-Yaklaşım*, November (28).
- Kılıç, K. (2009), *Gümrük Uyuşmazlıkları ve Çözüm Yolları*, Gümrük Müşavirleri Dernekleri İcra Kurulu.
- Kılınc, S. & H. Yurtsever (2015), "Gümrük Vergisi Uyuşmazlıklarının İdari Aşama da Çözüm Yolları", *Uluslararası Hakemli Beşeri ve Akademik Bilimler Dergisi*, 4(12), 1-26.
- Tosuner, M. & Z. Arıkan (2017), *Vergi Usul Hukuku*, Kanyılmaz Matbaası, İzmir.
- Tosuner, M. & Z. Arıkan (2017), *Türk Vergi Sistemi*, Kanyılmaz Matbaası, İzmir.
- Tuncer, S. (2001), *Gümrükler ve Gümrük Vergileri*, Yaklaşım Yayınları, Ankara.
- Yüce, M. & A. Çelikkaya (2016), *Gümrük Uyuşmazlıkları ve Çözüm Yolları*, Dora Yayıncılık, Bursa.

## Burden of Proof in German and Turkish Tax Law: A Comparative Analysis

*Eda OZDILER-KUCUK* (<http://orcid.org/0000-0003-1787-7610>), Ankara University, Turkey; e-mail: [edaozdiler@gmail.com](mailto:edaozdiler@gmail.com)

**Keywords** : Tax Law, Litigation Process, Comparative Law.

**JEL Classification Codes** : K34, K41, N40.

### Extended Abstract

Turkish Tax Procedure Code No. 213 is in operation since 1961, first version of which was mostly adapted from the Reich Fiscal Code. In line with the original legislation, Article 3 represents economic perspective and despite the additions made in the legislation such as proof of burden in 1980, it needs to be amended according to the developments of law and global necessities.

The Reich Fiscal Code was changed with the Sec. 6 of the Fiscal Adjustment Act in 1934 which also changed the understanding of economic perspective. After the Second World War, in Germany there was a major tax reform in 1977 which changed the Sec. 5 into Sec. 42 of German General Tax Code and the economic perspective approach was readapted. The Section was then enlarged by Sec. 42 (2) in 2008, describing the two steps of proof system which includes the economic substance test. This new formulation has caused discussions in the academy for addressing the burden of proof on the taxpayer and not bringing a clear description of the “abuse” causing the tax avoidance.

Burden of proof refers to the duty on a party in a case to submit sufficient evidence on an issue to avoid dismissal of the claim and the burden of proof is separated as objective burden of proof (burden of persuasion) and subjective burden of proof (burden of production) in German literature. The problem in implementation is generally about the subjective burden of proof.

The implementation of burden of proof in German tax law arises mostly of theory and jurisdiction. The general burden of proof rule in German law is based on the Rosenberg’s norm theory (Normenbegünstigungstheorie), in which each party must prove the facts underlying a rule favourable to its position. This basic rule has been completed by a sphere theory (sphärenorientierte Beweisrisikoverteilung) placing the burden of proof according to the income-side and cost-side facts:

- Where the lack of evidence is caused by a lack of cooperation of the taxpayer and the tax assessment is possible on a reduced level on the income side relevant facts, risk of evidence is on the taxpayer.
- Where the lack of evidence is not caused by a lack of cooperation of the taxpayer the tax assessment prerequisites a convincing evidence of the income-side relevant facts, risk of evidence must be taken by the tax authority.
- Where the lack of evidence is caused by a lack of cooperation of the taxpayer, the tax assessment prerequisites a convincing evidence of the cost-side relevant facts, risk of evidence must be taken by the taxpayer.

- Where the lack of evidence is not caused by a lack of cooperation of the taxpayer, the tax assessment is possible on a reduced level of mere likelihood of the cost-side relevant facts, risk of evidence should be taken by the tax authority.

As a common manner, in German tax law, the tax administration must prove the taxable income and the taxpayer must prove the deductible expense. This principle, is based on the thought that the burden of proof should rest on the party who easiest can obtain information of a certain fact. While the rule of burden of proof in Germany is based on case law, in Turkey it is based on statutory law, regulated in the Art. 3 of the Turkish Tax Procedure Code as “burden of proof is on the party who claims it when object at issue is not suitable to economical, commercial or technical requirements or when it is not normal or common.” This rule is in line with the rule of splitting the burden of proof between tax payers and tax administration in German General Tax Code.

Turkish Tax Procedure Code Art. 3, regulates many important tax law subjects within, which are interpretation, a general anti abuse clause, proof in tax law and burden of proof. Combining different law institutions in the same Section is not an appropriate law technique. This Article can be criticised for still using the “usual legal form” test and be inefficient for the necessities of the global law. A Reform Draft about Turkish Tax Procedure Code is actual and being discussed by academicians and non-governmental organizations. In the Sec. 5 of the Draft, the rules about general anti abuse and burden of proof are redesigned. The “usual legal form” test - which puts the burden of proof on the party that has the claim of unusually- is changed into a presumption of correctness of the tax assessment. In the previous rule, the burden of proof could be on the taxpayer or the tax administration according to the claim of the party; whereas in the Draft, the burden of proof is fixed on the taxpayer. This provision on the Draft Code violates the EU Law; remembering the ECJ emphasizing on “transactions having the primary aim of tax avoidance or tax evasion have to be proven by the tax administration on a case-by-case basis” in *Leur-Bloem* case (ECJ 17 July 1997, case C-28/95) based on the Art. 11 of the Merger Directive.

In this paper, the burden of proof in German and Turkish tax legislations is going to be analysed in a comparative study. Firstly, the historical backgrounds of the related legislations are going to be presented, then the theoretical and jurisdicitive approaches in both systems are going to be compared and lastly the current legislations and the rule of burden of proof in the Turkish Tax Procedure Draft Code are going to be discussed in means of taxpayer rights such as presumption of innocence and right to object and basic principles of tax law.

As a conclusion, it is going to be emphasized that the true concept of economic approach is much related with the burden of proof in tax law. Placing the burden of proof on the taxpayer without considering the presumption of innocence is far from taxing the “real” concept of tax base and economic approach. Violating presumption of innocence is a breach of the principles of legality and legal safety. That is why burden of proof is not only a rule of procedure, it is also related with taxpayer’s rights and basic principles of tax law.

## A Novelty in Turkish Commercial Law: Execution of QR-Code on Cheques

**Ebru TUZEMEN-ATIK** (<http://orcid.org/0000-0003-4463-3806>),  
*Karamanoglu Mehmetbey University, Turkey; e-mail: eatik@kmu.edu.tr*

**Keywords** : Cheque, QR-Code, Cheque leaf, Chequebook, Turkish Commercial Code, Turkish Commercial Law, Negotiable Instruments Law.

**JEL Classification Codes** : K22.

### Extended Abstract

Cheque is an important payment instrument in business life. Regulations on cheques, which have a very common application in Turkish law, are included in Articles between 780 and 823 of the Turkish Commercial Code no. 6102 and in the Cheque Law no. 5941. Law No. 6728 dated 15.07.2016 have introduced significant changes and novelties in the regulations related to the cheques in both laws. In the preamble of the law, it has stated that these changes were the result of the necessity of introducing new regulations for the purposes of a) the speed and security requirements that cheques necessitate, b) widespread payment by cheque, c) the foundation of cheque holders' protection due to the increase in bounced cheque.

Among the most important of these changes is that the QR code and serial number are accepted as a compulsory form requirement for the validity of cheques. In this study, the detection of novelties related to the QR code application expected to give functionality to the cheques and the effects of these regulations are discussed. The QR code application is a convenient method to ensure the tracing of the cheques and applicability of statutory regulations on cheques.

According to the general acceptance in Turkish law, bills of exchange are bills, notes and cheques. These bills of exchange have the ability of negotiability and public security in the case of the qualification of the promissory notes or bearer cheques. Furthermore, the introduction of the QR code application on the one hand and the criminal arrangements envisaged in the case of bounced cheques on the other hand have led to reaching its final point of the security in terms of cheques.

Although cheques are a payment instrument by its qualification, it is also used as a credit instrument due to the possibility of arranging the future-dated cheque in Turkish trade practice. Making special arrangements to ensure protection for the cheque and attractiveness of the cheque have become inevitable in this situation. The risk of bounced cheques in practice is significantly reduced with the aim of protecting the cheque holders prescribed by the amendments. However, it makes also possible to prevent circulation of cheques in the case of taking from the owners without their consent.

## The Importance of the Principle of Legality in Terms of Fundamental Rights and Freedoms

**Recep KAHRAMAN** (<http://orcid.org/0000-0001-9148-8483>), Nigde Omer Halisdemir University, Turkey; e-mail: [recepkahraman@ohu.edu.tr](mailto:recepkahraman@ohu.edu.tr)

**Keywords** : Crime, Code, Freedom.

**JEL Classification Codes** : K10, K14, K19.

### Extended Abstract

The Principle of Legality, which is expressed in Latin as “*nullum crimen nulla poena sine lege*” (no crime, no punishment without a previous penal law), has been one of the most prestigious principles of modern criminal law together with the age of enlightenment. Thanks to this principle, which is regulated in almost all legal systems as an assurance of fundamental rights and freedoms, the right to freedom from the most sacred values of the individual is secured against the State authority and the individual is protected from arbitrary practices (İçel, 2016: 95).

The individual knows what his non-criminal acts are and has the freedom to move freely within these boundaries. If the individual who has the freedom to act freely can control his movements in this vigilance, if he does not do so, the offending border is overcome (Hakeri, 2012: 12). In other words, it can be condemned by the society because of its action that it has transcended this previously known and criminal boundary with free will. Since the individual could organize their own movements in this way, the basic characteristic of the primacy emerges, which is the assurance of individual freedom. This situation is accepted as the security function of the principle of legality. When assessed in this respect, there are some major consequences that are linked to the principle of legality (İçel, 2016: 97);

- Crime and punishment must be clearly in the law.
- Crime and punishment cannot be created by the regulatory processes of the state administration.
- Crime and punishment cannot be created by customary law.
- By comparison, crime and punishment cannot be created.
- Criminal laws cannot be accepted as effective in the past.

The principle may be subject to a dual separation, including formal (form) legality and substance (material) legality. Establishing this distinction makes it clear which violations are criminal. Crimes can only be found at the end of this distinction, whether it is an act that is expressly expressed in its law, or just anti-social acts. According to the principle of formal legality, only actions in the jurisdiction are considered criminal. Whether these actions are contrary to the values of society is not seen. However, according to the principle of substantive legality, every act that is dangerous in terms of society, although not written in the law, is regarded as a crime. The Constitution numbered 1982 and Criminal Code numbered 5237 adopt the formal legal principle. According to Article 38 of the Constitution numbered 1982; “*No one shall be punished for an offense for which the law in force at*

*the time it is committed does not constitute a criminal offense; when he commits a crime to anyone, he cannot be given a heavier punishment than the penalty for that crime.*” This rule constitutes the main source of principal of legality in crime and punishment. There is a similar regulation in this frame on Article 2 of the Turkish Criminal Code numbered 5237. According to this, *“No punishment shall be imposed on any person who does not expressly criminalize the law and security measures cannot be applied. No punishment or security measures other than the written penalties and the security measures shall be applied in the law* (Artuk & Gökçen & Yenidünya, 2015: 97).

According to the Criminal Code numbered 5237, only the legislative assembly is authorized to create, remove or change crime and punishment. It is not possible for the state administration to decide on this issue or to make similar arrangements by comparison of the judiciary. (Koca & Üzülmöz, 2015: 57). This indicates that the state administration and the judiciary do not have the power to appreciate crime and punishment and they are prevented from arbitrarily acting on this count. (Özgenç, 2012: 103). About the issue, the Constitutional Court made a similar decision. According to this, *“The principles of legality obliges the legislator to rule on what kind of sanctions to be imposed, the limits to be imposed, and the extent of mitigating or aggravating reasons. The act of prohibiting the import and export of a commodity by the Council of Ministers constitutes a crime. Thus, the crime cannot be detected in the rule of appeal, the nature of the crime is left to the decision of the council of ministers. This is contrary to the “principles of legality” enshrined in Article 38 of the Constitution. For these reasons, it is necessary to cancel the word “import” contrary to Article 38 of the Constitution”* (AYM, 06.07.1993, E. 1193/5, K. 1993/25).

It will not be enough to ensure that the state administration cannot create crime and punishment. Provisions concerning crime and punishment must be clear for this security to be fully attained. This is referred to as the determination of the crime and punishment (Lex Certa). Otherwise, there is the possibility of the creation of crime and punishment through interpretation, which in turn affects the freedom and security of the individual.

Criminal and sanction penalties affect the individual’s social life negatively. For this reason, the boundary is sharp and rigidly drawn by the legislator. It cannot go beyond the rigid boundaries in this way and there is no authority to penalize the individual by comparison. The main reason for the prohibition of comparison by the judge is to prevent his or her legal preferences from leading to the main purpose of the law. However, comparison and interpretation should not be confused. By comparison, while trying to reach the true will of the governing law-maker through interpretation, it goes beyond the will of the legislator (Özgenç, 2012: 114). Turkish criminal law allows interpretation but prohibits comparison. Accordingly, *“it is not possible to make comparisons in the application of the criminal and penal provisions of the Laws, Provisions containing crime and punishment cannot be widely interpreted to lead to comparisons.”* Note that there is no obstacle to the broad interpretation by the judge. But the broad interpretation that can be made here is also drawn by the grammatical interpretation. The interpretation made by going beyond the literal of the law and above the will of the lawmaker leads to forbidden comparison (Koca & Üzülmöz, 2015: 57).

It is called to make a comparison to punishment by being likened to other crimes in the blood of an act which is not explicitly criminalized in its code. For example, according to article 86 in criminal code, if the intentional injury is committed with a gun, the penalty increases. The perpetrator hits the victim’s face with slippers. Slippers are weapons. In this way, interpretation is made in accordance with the literal of law. Here, the judge is investigating the true will of the lawmaker by making an interpretation. There cannot be an interpretation that the gun is mechanic in the law. For this reason, it

is not comparison that the judge accepts slippers as weapons by making extensive interpretation. However, the perpetrator injures the individual by hitting his head on the wall. There is no doubt that the crime of injury has been committed against the victim. In this case, if the wall is considered as a weapon, it is comparison. Because there cannot be an interpretation on the law of accepting a fixed mass as a weapon (İçel, 2016: 106).

The principle of legality is based on a democratic understanding of administration that has adopted universal legal bases. It is one of the basic principles to be applied. The sanctions to be imposed on the crimes are determined in advance and their boundaries are drawn to prevent arbitrary punishment. (Özgenç, 2012: 103). The judge remains within this thick frame drawn from the beginning by the legislator. However, this can be interpreted within the thick limits.

As a result, it can be said that the legislative assembly, which is elected freely by individuals, is more careful about the freedom of those who choose them. They provide a fair balance between individual freedom and public order in accordance with the rule of law. Crime and punishment by law is given to the legislative assembly as a guarantee for the individual. The principle also prevents individuals from being accused and punished arbitrarily.

### References

- Artuk, M.E. & A. Gökçen & C. Yenidünya (2015), *Ceza Hukuku Genel Hükümler*, Ankara.
- Hakeri, H. (2012), *Ceza Hukuku Genel Hükümler*, Ankara.
- İçel, K. (2016), *Ceza Hukuku Genel Hükümler*, İstanbul.
- Koca, M. & İ. Üzülmöz (2015), *Türk Ceza Hukuku Genel Hükümler*, Ankara.
- Özgenç, İ. (2012), *Türk Ceza Hukuku Genel Hükümler*, Ankara.

## The System of Transfer of the Development Rights and A Model Proposal for Turkey

**Mehmet Ali AKSOY** (<http://orcid.org/0000-0003-0494-2962>), Gazi University, Turkey; e-mail: [aliaksoy@gazi.edu.tr](mailto:aliaksoy@gazi.edu.tr)

**Kursat YALCINER** (<http://orcid.org/0000-0002-5878-3760>), Gazi University, Turkey; e-mail: [yalciner@gazi.edu.tr](mailto:yalciner@gazi.edu.tr)

**Emine Ebru AKSOY** (<http://orcid.org/0000-0001-7205-0283>), Gazi University, Turkey; e-mail: [eeakin@gazi.edu.tr](mailto:eeakin@gazi.edu.tr)

**Murat CETINKAYA** (<http://orcid.org/0000-0002-1698-4222>), Gazi University, Turkey; e-mail: [mcetinkaya@gazi.edu.tr](mailto:mcetinkaya@gazi.edu.tr)

**Keywords** : Real Estate, Development Right, Transfer of Development Right, Transfer of Development Right Certificate.

**JEL Classification Codes** : K22, K25, O21, P26.

### Extended Abstract

The right to property is a real right that can be used on the property by the owner and which provides the widest authority that he or she may bring against a third party, as it is limited to the legal order and the rights of third parties. According to this, the owner may file a lawsuit against anyone who has unlawfully possessed the goods, or may sue for the prevention of any illegal confiscation (Turkish Civil Code Art. 683/2). The State is authorized to expropriate immovable property in private property for public use and to establish administrative easements on them, if they pay the proceeds in advance. The prolonged period of expropriation permits and construction ban break the balance between social benefit and individual interest. For this reason, zoning restrictions are also seen as unjustified confiscating. However, the services of the municipalities are limited by their budgets and the relevant administration cannot be forced to expropriation through lawsuits.

Restrictions on the use of property rights belonging to real estate due to various reasons cause various difficulties in terms of their rights. One of the systems developed to eliminate these troubles is the issuance of Transferable Development Right (TDR). Transferable development right also provides the owner to sell the right to another in the presence of conditions that hamper the use of the right to development. It is accepted that development rights can be transferred by setting it apart from property right through the system of transfer of the development rights. Transferable Development Rights Certificate (TDRC) is defined as securities issued to represent the development rights cannot be used by seller.

The restrictions of development right with various reasons causes also some serious problems and social disruption results in Turkey. Although some legal regulations were made, these regulations didn't address the overall system that was intended to solve a problem. Because, in our legal system, the transfer of development right has been arranged in a variety of legislations in a disorganized manner and as a barter method. For this reason, there is a serious gap in the Turkish system. TDR be a solution to this gap. For this purpose, it is necessary to be developed a new model by considering the structural

characteristics of Turkey rather than taking other countries' practices. In this study, it is aimed to introduce TDR system in generally and to propose a new model for Turkey.

In the related study, the establishment of the development right transfer fund provided by the municipalities as a model proposal for the system of transfer of the development rights. Firstly, the transfer of the right of development will be allowed to be used as a means of barter in this system. By this means, the relevant person may use or transfer the development rights elsewhere without securitization. Establishment of a fund is envisaged for the municipalities to fulfil their obligations related to persons whose development rights are limited but not willing to barter. A receivable account should be established by pledging the revenue as security, which is to be obtained from the transfer of the development rights to the fund (revenue to be obtained from the sale of development rights to be provided for the region to be dispatched). The security should be issued by pledging the receivables in this account as a warrant and the obligations on expropriated price related to the zone, where the right of development is restricted, and the obligations on zoning restrictions should be fulfilled. Therefore, in the system envisaged in the related study, it will be the revenue of the fund, which is bonded to security, instead of the transferred development rights as the debt instruments will be issued by the municipalities. The additional issue limit, which will be determined as approximately 10% initially, will constitute the income of the investors of the fund. Later, the increase of the value of the development rights in the transferred region will generate the income of the fund. The price to be paid for the zoning restrictions is basically an obligation that must be fulfilled by the administration. For this reason, costs for development rights that cannot be sold in the future must be undertaken by the administration.

In this context, it is required to entitle the fund to acquire a special status and to separate it from the property of the relevant municipality. Within this scope, the fund which is included in the budget of the related municipality and performs tracking and collecting transactions should be tracked on a private account and separate accounting of the fund should be kept. It is also necessary for the municipalities to secure the legal status of the fund to prevent them from saving their funds for different purposes, distraint and hypothec.



**28 October 2017 Saturday**

**Session: VI-B / 11.30-13.00**

## **SOCIOECONOMIC ISSUES**

Room: *Salon Imperial*

Chair: **Aysen SIVRIKAYA**

- Migrant Workers' Situation in the United Arab Emirates  
**Basak OZORAL**
- Evaluation of Human Development Scores of Turkic States  
**Nurbanu BURSA & Huseyin TATLIDIL**
- Socio-Economic Projection of Violence Against Women: A Semiotics Analysis on Yeşim Ustaoglu's Film: "Tereddüt / Clair-Obscure"  
**Merih TASKAYA**
- Well-Being Differences among the Employed: Evidence from Life Satisfaction Gap between the Public and Private Sector Employees in Turkey  
**Zehra Bilgen SUSANLI**
- Effectiveness of Education Expenditures in the Context of the Pisa Survey: A Review with Examples from Selected Countries  
**Murat ALP & Altug Murat KOKTAS & Ali Gokhan GOLCEK**

## Migrant Workers' Situation in the United Arab Emirates

*Başak OZORAL* (<http://orcid.org/0000-0003-4620-9275>), *Istanbul Gelisim University, Turkey; e-mail: bozor@gelisim.edu.tr*

**Keywords** : Political Economy, Labour Problems in the Gulf Countries, Development of Dubai, Work Safety and Migrant Workers.

**JEL Classification Codes** : J01, J08, J15, J8, J80, J81, J82, J83, K31.

### Introduction

This study analyses the problems of the migrant workers in the United Arab Emirates (UAE), particularly in Dubai and explores the new government policies to solve them.

Over the past twenty years, Dubai, the popular city of the United Arab Emirates, has turned from a dusty town to an international modern city and its unexpected success story has become an interesting title for academic discussions. Today it is almost impossible not to be aware of Dubai's courage; the city has the tallest tower, biggest airport, most expensive hotels, best man-made beaches and most luxury shopping malls. Aside from its more eye-catching projects seen by many, Dubai developed health services, universities, sports facilities and model urban communities. Recently Dubai has become the center of the truism, trade and finance of the Middle East and millions are visiting this exciting city to shop, enjoy the beaches, see the local culture and witness its amazing development. What makes Dubai is unique in the Middle East is not only about the city's changing appearance and physical evaluation but more importantly its diversity and tolerance. It is the tolerance and sense of freedom and openness that underpins the lifestyle choice of many expatriates who came to Dubai, while maintaining a respect for local and regional cultures. Interestingly much of respect was providing by both the local and the foreign population by naturally. Although this emirate is ruled by Sharia law, it is easy to feel the spirit of tolerance in the entire population. In that point Dubai and the UAE is different from the other conservative Gulf countries such as Saudi Arabia or Qatar. This friendly and peaceful social environment has influenced the economic climate of Dubai by providing many opportunities for foreign investors, businessmen, experts, teachers, students and travellers. Business environment in Dubai shows the real picture of the diversity of the people who live there. Some wear traditional clothes, though most are in Western business or casual attire. While English and Arabic are the main languages, numerous other languages can be heard in the streets, shops, hotels and companies.

One can count many reasons behind of the dramatic transformation of the city such as oil wealth, visionary leadership of Sheikh Mohammad or low population. Sheikh Mohammed bin Rashid Al Maktoum is the Vice President and Prime Minister of the United Arab Emirates and Emir of Dubai rules the Emirate as a CEO of a company and always says "what is good for business is good for Dubai." In 2010, he launched the UAE vision 2021 with the aim of making UAE one of the best countries in the world. He is responsible for the growth of Dubai into a global city. His leadership is visionary, inspirational for other Gulf leaders and embraces risks that is demanding but supportive, thus builds confidence. Although Dubai didn't have considerable oil wealth in the first place like it's neighbour Abu Dhabi, one can still can say that oil wealth provides the necessary financial resources for rapid development of Dubai, however while oil still plays an important part of the country's wealth,

Dubai has made large efforts to diversify. Tourism and financial services are two of the most well-known. Emirates are a world leading airline operating out of the region. However, it should not be forgotten that all the skyscrapers, high rise hotels, modern highways, shiny shopping malls and huge ports of the city were built by migrant workers.

The reality is Dubai had money, but did not have modern technology, educated men and skilled labour. So, the Sheikh invited men and companies from all over the world to build a modern city, work and do business there. He also wisely shared the prosperity of Dubai with all those who migrated there. A big chunk of Dubai's population is made up of expatriates. Majority of them are low income employees from countries like Bangladesh, China, Egypt, India, Iran, Nepal, Pakistan and the Philippines. A lesser but significant number of workers known as 'western' are professionals from countries like Australia, Canada, France, South Africa, UK and USA. Most of them who are coming from South Asian countries work in constrictions and factories as workers. Many of them also work as maid, baby sitter, gardener or driver. However, migrant workers who came from different backgrounds frequently have faced serious problems such as extremely long working hours, poor living conditions, unpaid salaries and lack of job safety. Like many other Gulf governments, the UAE bans migrant workers from forming unions to collectively bargain with their employers. Also, it is not a secret that the employment laws of the Gulf countries are very problematic, for example "sponsorship" systems that tie workers to their employer and in some countries, such as the UAE, require employer approval to obtain an exit visa to leave the country. International Human Rights and Works Organizations have been watching and criticizing the working conditions in many Gulf countries and asking urgent solutions from these countries' governments. Human rights groups say governments need to abolish the sponsorship system to allow workers to switch employers, introduce minimum wages, improve workers' living conditions and allow unions and peaceful protests. The lack of workers' rights coupled with low wage growth is now starting to make the Gulf less attractive to workers from South Asia and elsewhere. The Gulf Countries have discussed a potential region-wide standard employment contract for domestic workers. Recent media reports suggest that the Gulf Countries are also considering establishing a body to coordinate policies on hiring domestic workers that would consist of recruitment agency and government representatives. The first round of the Abu Dhabi Dialogue was hosted by the United Arab Emirates in 2008 and the second meeting was held in Manila in 2012. The group has decided to set up new rules to provide better working conditions for migrant workers.

### **Methods**

Field work and semi structured interviews are used as the methodology of this study.

### **Advantages and Disadvantages of the selected Methods**

In semi-structured interviews, I could provide some structure based on my research interests and interview guide but works flexibly with the guide and allows room for the respondent's more spontaneous descriptions and narratives. Individual face-to-face in-depth interview, help to understand individual experiences and perspectives on the labour issue. However, because of language barrier reaching and talking to interviewers was not easy in Dubai. I had many help from my students and local friends to convince them to have an interview.

### **Results, Main Findings**

This article demonstrates that government in Dubai has attempted to solve migrant worker's problems by applying new policies recently but there is still a long way to go. Awareness about the problem was an important step for the local people and the government and new attempts to solve the problem give hopes for better labours' rights and conditions in the region.

## Evaluation of Human Development Scores of Turkic States

*Nurbanu BURSA* (<http://orcid.org/0000-0003-3747-5870>), Hacettepe University, Turkey; e-mail: [nurbanubursa@gmail.com](mailto:nurbanubursa@gmail.com)

*Huseyin TATLIDIL* (<http://orcid.org/0000-0002-0877-0304>), Hacettepe University, Turkey; e-mail: [htatlidil@yahoo.com](mailto:htatlidil@yahoo.com)

**Keywords** : Multidimensional Scaling, Panel Data Analysis, Turkic States.

**JEL Classification Codes** : C1, J1, O0.

### Extended Abstract

Turkish states include autonomous republic, independent republic, empire and dynasties founded by Turkish peoples throughout history. Contemporary Turkish Republics; Republic of Turkey, Turkish Republic of Northern Cyprus, Azerbaijan, Kazakhstan, Kyrgyzstan, Uzbekistan and Turkmenistan. From time to time, it was stated that Turkey should try to establish Union of Turkish Republics instead of trying to become a member of European Union by politicians and academics. The idea behind this is this geography where the Turkic Republics are located is rich in terms of young people, educated human power, important minerals, production, food, agriculture, oil, natural gas, water resources, boron and thorium.

Moving from this perspective in this study, human development index values located in the United Nations Development Programme between 2000 and 2015 are examined for six countries which are Turkey, Kazakhstan, Kyrgyzstan, Azerbaijan and Turkmenistan formed, briefly called the Turkic Republics. (Turkish Republic of Northern Cyprus could not be included in the study because the variables related to this country could not be found.)

Development status of countries is demonstrated by Multidimensional Scaling and Panel Data Analysis using life expectancy at birth, mean years of schooling for adults, gross national income per capita, health index, labour force participation rate (female-male ratio) and human development index variables.

Multidimensional Scaling is a multivariate data analysis technique that uses proximities between objects, subjects or stimuli to produce a spatial representation of these items. The proximities are defined as any set of numbers that express the amount of similarity or dissimilarity between pairs of objects, subjects or stimuli. In contrast to the other multivariate techniques, Multidimensional Scaling does not start from the raw multivariate data matrix, but from dissimilarity or distance matrix. Hence, the underlying dimensionality of the data under investigation is in general not known. Multidimensional Scaling is a data reduction technique because it is concerned with the problem of finding a set of points in low dimension that represents the “configuration” of data in high dimension. The “configuration” in high dimension is represented by the distance or dissimilarity matrix. These distances are easily obtained by Euclidian approach.

Multidimensional Scaling technique is often used to understand how people perceive and evaluate certain signals and information. For example, political scientists use this technique to understand why political candidates are perceived by voters as being similar or dissimilar. Psychologists use this

technique to understand the perceptions and evaluations of speech, colours and personality traits, among other things. Marketing researchers use this technique to shed light on the way consumers evaluate brands and to assess the relationship between product attributes. In short, the primary purpose of Multidimensional Scaling technique is to uncover structural relations or patterns in the data and to represent it in a simple geometrical model or picture. One of the aims is to determine the dimension of the model by finding the d-dimensional space in which there is maximum correspondence between the observed proximities and the distances between points measured on a metric scale.

Panel data analysis is regression analysis with panel data. The data obtained by combining the time series and the cross-sectional data is called the data panel data. The interest in working with this data is increasing day by day, as panel items are composed of both time series and horizontal section data. One of the main reasons for this increase is the desire to control individual, unobservable special effects that may be associated with other variables within the model when an economic relationship is identified.

Other reasons for working with the panel data are as follows:

- There is no inadequacy of the number of observations in the time series and horizontal section analyses in panel data studies. As the panel contains both time and section size, the number of observations increases.
- More variability and knowledge contribute.
- Allows the generation of data to be processed in two different scopes (horizontal section and time series), providing a sufficient period for the current data.

Panel data analysis examine cross-sectional (group) and/or time-series (time) effects. These effects may be fixed and/or random. Fixed effects assume that individual group/time have different intercept in the regression equation, while random effects hypothesize individual group/time have different disturbance. When the type of effects (group versus time) and property of effects (fixed versus random) combined, there are several specific models: fixed group effect model (one-way), fixed time effect model (one-way), fixed group and time effect model (two-way), random group effect model (one-way), random time effect (one-way), and random group and time effect model (two-way). To determine the best model Hausmann test is used.

When all the variables considered together with the analysis Multidimensional Scaling, it was seen that only Turkey had positive developments in terms of life expectancy at birth, average time spent in school, health index and labour force participation rate of women compared to men. Uzbekistan and Kyrgyzstan showed favourable developments in terms of human development index and gross national income per capita. No change has been observed in other countries.

According to Panel Data Analysis (fixed effect model) results, per capita gross national income and health index variables were statistically significant in terms of explaining the human development index. In the model, Kazakhstan and Turkmenistan have the highest fixed coefficient, which is a sign that countries are in a positive development.

## **Socio-Economic Projection of Violence Against Women: A Semiotics Analysis on Yeşim Ustaoglu's Film: "Tereddüt / Clair-Obscure"**

**Merih TASKAYA** (<http://orcid.org/0000-0002-1907-9340>), Akdeniz University, Turkey; e-mail: [meriht@akdeniz.edu.tr](mailto:meriht@akdeniz.edu.tr)

**Keywords** : Violence against Women, Women's Freedom, Media Content.

**JEL Classification Codes** : J16, J12, Z13.

### **Introduction**

Because of division of labour based on gender roles in the home, the area where gender inequality is produced, the labour that the woman puts on continues to make it invisible. It is obvious that the rights such as election-selection, work in the public sphere, breastfeeding rights obtained in the historical process do not generally make a radical change in the position of women in the domestic work section. These gains, of course, are important, but not enough, on the way to the liberation and subjectivity of women. When we look at the scope of the rights already earned, we realize that many of them are gains that contribute to the vital areas of capitalism. They construct contexts that will continuously reproduce patriarchal capitalism.

It is necessary to investigate the link between male domination and capital as the reason for the fact that the paid work situation in public sphere has not created the necessary transformation in women's social roles. While the industry produces commodities, the family produces the necessary workforce for the industry, and it adequate the everyday needs of the workforce. Both production also been a matter of exploitation. First, capitalist exploitation and, second, patriarchal exploitation. Patriarchs and capitalism, which mutually repair each other's dilemmas with the possibilities of the claims and hegemony, make the definition of women's freedom within their own interests. At this point it is useful to emphasize a point that should be expressed without diminishing the importance of women's economic liberalization: freedom is only the indexation of the economy.

Economic liberation cannot always afford to escape from tradition or religion-referenced captivity. The belief that access to economic freedom is mere real emancipation supports the interests of structures integrated with the system of capitalist production and distribution. The mental starting point of the freedom struggle in a structure where the desire to be part of the wealth system is escalated and the individual is free to the extent that it contributes to the consumption economy must be the point where the right questions are asked. "Is it because we think that we will feel free when we have economic independence alone, are we delivering our spiritual will to the monotony of our daily routines and social rules?" ... May asks, "the only meaning of freedom is to race your fortune with your neighbour?" It seems as if asking the question that should be asked (May, 1997: 150)<sup>1</sup>.

---

<sup>1</sup> Rollo May, 1997, *Kendini Arayan İnsan, Çev. Ayşen Karpat, Kuraldışı Yayıncılık, İstanbul.*

The crucial part of the matter is that even though women take part in paid work, the male domination, which falsifies the self-perceptions and self-esteem of women, normalizes this situation. In this case, the woman who works and does not work is equalized at the point of “freedom lost”.

The aim of this study is to read the fact that economic liberation cannot represent the whole of women’s freedom, by means of “Tereddüt / Clair-Obscure”, which is a film directed by Yeşim Ustaoglu who deals with women’s issues.

### **Materials and Methods**

Within the context of women’s issues, media content is a suitable research area within representation systems where we can find reflections of everyday life. Although the fictional structure in media content is caused by arguments over representation power, selected content within the framework of proximity to reality as a sample can reduce the weight of these arguments. On the other hand, even if they have fictional content, media content is not completely detached from real life. Especially in films, the perception of reality is a point of interest. In Turkey, in the *New Cinema*, it is possible to see cinema works that reveal the essence of the subject and the facts of the country without hesitating from political discourse.

Yeşim Ustaoglu, one of the founding directors of the new cinema, tells about the violence against women in different dimensions in her films. The theme of “seeking for oneself” is obvious in her films. In the works of the identity issue, which are also presented through the identity of women, there are predictions about the dimensions that women’s problems can reach. In this sense, Ustaoglu, who keeps her faith with her films, presents the bond of film’s story with life, from the social plane. For this reason, the presentation of economic freedom as genuine freedom will be considered in the case of the film “Tereddüt / Clair-Obscure”, which focuses on the problems of women, the concepts of freedom and individuality, and will be evaluated from the perspective of feminist literature in this study.

In this work, a semiotic analysis of the scenes in which the loss of freedom is presented, rather than the semantic analysis of the film in its holistic sense. Through these analyses, it is argued that economic freedom is not the last point in the women’s struggle.

### **Results or Findings**

The film, which was made in 2016, passes through a small town and presents the dimensions of violence against women in two different female characters. The physical, psychological, and even economic dimensions of violence are framed by stories of two women with two different lives in the film. The desires for freedom of both characters are given in the search for self. The lack of self-confidence of both women is on many stages, showing the reflection of the social plane. Self-esteem, individuality and freedom that are usurped by male domination correspond to the feeling of “closure” in female characters. At this point, the emotional position of the woman who does not work and the woman who works at the public sphere are equalized.

### **Discussion**

Findings obtained by the semiotic analysis of the relevant scenes of the film indicate that the fact that the woman is economically liberated is not capable of being liberated in other dimensions of the individual plane.

A woman's loss of self cannot be a matter that can only be read from an individual level after this point. A woman's being a subject is possible with her freedom to take her own vital decisions in the direction of her will. At this point, the film "Tereddüt / Clair-Obscure" reminds us that women's loss of liberty must be read through many contexts other than economic dependence.

### **Conclusions**

The director's film "Tereddüt / Clair-Obscure", which focuses on physical and psychological violence against women, often encountered in Turkey, points to the system itself as a source of violence through the evidence it contains. The true content of the story of film's story emphasizes the importance of self and identity dimensions for the emancipation of women. This emphasis underlines the fact that violence is widespread not only from one spot but from many areas.

Multi-centred violence shows that women are targeting not only their bodies, but their emotional spaces, and therefore their identities, their selves. The findings obtained through semiotic analysis reveal that the violence patterns in the film reflect the codes of real life and through the strong links that the reality of woman liberation is indeed the inexorability of indexing purely economic adjustment.

# Well-Being Differences among the Employed: Evidence from Life Satisfaction Gap between the Public and Private Sector Employees in Turkey

*Zehra Bilgen SUSANLI* (<http://orcid.org/0000-0001-8933-6667>), *Isik University, Turkey*; e-mail: [bilgen.susanli@isikun.edu.tr](mailto:bilgen.susanli@isikun.edu.tr)

**Keywords** : Job Satisfaction, Well-Being, Public-Private, Turkey.

**JEL Classification Codes** : J28, J40, I31.

## Introduction

This study aims to contribute to the existing literature by providing an empirical analysis of the effect of the interaction effect between the job security and well-being in Turkey. Using individual level data from the Life Satisfaction Surveys 2004-2013, two questions will be explored. First, the difference in well-being will be examined across individuals working in the public and private sectors for the period 2004-2013. Second, by using the data from the 2013 sample, the differential impact of unemployment at the province level on the well-being of public and private sector employees will be examined. Preliminary results suggest that the reported life satisfaction of private sector employees is indeed more sensitive to aggregate unemployment than that of public sector employees.

It has been widely recognized that the unemployed, on average, report lower levels of well-being. This result was first established by Clark and Oswald (1994) for the UK and has been confirmed for many developed and developing countries. The fall in well-being due to unemployment interacts with job security. Recent studies underscore the role of (perceived) job security regarding the impact of unemployment on the well-being of both employed and unemployed. Job insecurity implies anticipation of economic distress as the employed faces a heightened probability of job loss. At the sectoral level, Luechinger, Meier and Stutzer (2010) show that the negative externality of aggregate unemployment depends on the perceived economic security of individuals. Their findings suggest that private sector employees are more strongly affected by regional unemployment rates than public sector employees. Hence, they conclude that a substantial part of loss of well-being due to aggregate unemployment operates through heightened feelings of economic insecurity. Many studies also report a negative association between job security and self-reported health (Laszlo et al. 2010; Caroli & Goddard, 2014).

## Methods

This study draws on individual level data from the Life Satisfaction Surveys (LSS) for the period between 2004 and 2013. The LSS are conducted by Turkish Statistical Institute (TUIK)<sup>1</sup>. These surveys are repeated cross-sections that are designed to be representative of the population. The LSS interview individuals 18 years old or older to collect information about their evaluation of happiness

---

<sup>1</sup> See Susanli (2017) for a detailed description of the datasets.

as well as satisfaction level with several aspects of their lives such as health, social security, education, work life, income and the justice system. The following question measures life satisfaction: “All things considered, how happy are you with your life these days?”. The respondents choose from five choices “1: Very happy, 2: Happy, 3: Average, 4: Unhappy and 5: Very unhappy”. A similar question is asked employed individuals to measure their job satisfaction. The responses serve as the two dependent variables in this study (The order will be reversed hereafter; from 1 (Very unhappy) to 5 (Very happy)). Of interest to this study is the labour market status of individuals. Individuals are asked if they have worked with or without pay in the previous week and the reasons for not having worked. Individuals are considered employed if they report having worked with or without pay in the reference week. Those that have not worked but that are connected to their jobs are also considered in employment. Respondents also report whether they work in the public or the private sector. As of 2013, the surveys collect information on the residence of participants at the province level. This information will be merged with province level unemployment rates obtained from TUIK. The survey also includes questions on individuals’ expectations about their own labour market prospects. Respondents report whether they expect their job prospects to be the same, better, or worse in the next year. Those that report “Don’t know” are excluded from the sample.

The working sample in this study includes currently employed individuals that are aged between 18 and 65. This yields a sample of 76,819 observations with a complete set of covariates. The share of public sector employees in the sample is 22 percent. The self-assessed job prospects of private sector employees are more pessimistic than that of the public-sector employees over the sample years. This is more pronounced in 2008 and 2009 when the effects of the global recession were felt strongly. In 2008, while 23 percent of private sector employees reported that they expect their job prospects to be worse next year, this is only 10 percent among the public-sector employees.

### **Findings**

Initial descriptive analyses suggest that public sector employees report, on average, higher levels of life satisfaction. Figure 1 displays the differential in life satisfaction and job satisfaction between public and private sector employees together with the aggregate unemployment rate (on the right axis). The aggregate unemployment rate fluctuates between 9.4 percent and 14.3 percent over the sample years. In line with the findings in the literature, the gap between the reported life satisfaction of public and private workers increase as the unemployment rate rises. The job satisfaction gap also moves together with the unemployment rate until 2011. While the unemployment rate stabilized after 2011, the gap between the reported life satisfaction of public and private workers displays a declining trend.

**Figure: 1**  
**Unemployment and Life Satisfaction and Job Satisfaction Differential across the Public and Private Sectors**



Source: Author's calculations using LSS 2004- 2013.

In the remainder of the analyses, the insights from the descriptive analysis will be explored further following Luechinger et al. (2010). The following equation will be estimated using Ordinary Least Squares (OLS):

$$Y_{is} = \beta_1 \text{Sector}_{is} + \beta_2 \text{UR}_{is} + \beta_3 \text{Sector}_{is} \times \text{UR}_{is} + \beta_4 X_{is} + \varepsilon_{is} \quad (1)$$

where  $Y_{is}$  is the outcome variable for individual  $i$  in sector  $s$ ,  $\text{Sector}_{is}$  is a dummy variable that equals 1 if individual  $i$  is employed in the public sector, and  $\text{UR}_{is}$  is the aggregate unemployment rate.  $X_{is}$  is a vector of personal characteristics that are expected to influence the outcome variables. These characteristics include age, gender, marital status, educational attainment, and public-private status of the jobs as well as job prospects. Finally,  $\varepsilon_{is}$  is the error term. In separate regressions using the 2013 sample, province unemployment rates will be controlled for in place of the aggregate unemployment rate.

## References

- Caroli, E. & M. Goddard (2014), "Does job insecurity deteriorate health?", *Health Economics*, 25, 131-147.
- Clark, A.E. & A.J. Oswald (1994), "Unhappiness and unemployment", *Economic Journal*, 104(424), 648-659.
- Laszlo, K.D. & H. Pikhart & M.S. Kopp & M. Bobak & A. Pajak & S. Malyutina & G. Salavec & M. Marmot (2010), "Job insecurity and health: A study of 16 European Countries", *Social Science & Medicine*, 70, 867-874.

- Luechinger, S. & S. Meier & A. Stutzer (2010), “Why does unemployment hurt the employed? Evidence from the life satisfaction gap between the public and the private sector”, *Journal of Human Resources*, 45(4), 998-1045.
- Susanli, Z.B. (2017), “Life satisfaction & unemployment in Turkey: Evidence from Life Satisfaction Surveys 2004-2013”, *Quality Quantity*, <<https://doi.org/10.1007/s11135-017-0479-6>>, 23.07.2017.

## Effectiveness of Education Expenditures in the Context of the Pisa Survey: A Review with Examples from Selected Countries

**Murat ALP** (<http://orcid.org/0000-0002-9252-7090>), Nigde Omer Halisdemir University, Turkey; e-mail: [muratalp@ohu.edu.tr](mailto:muratalp@ohu.edu.tr)

**Altug Murat KOKTAS** (<http://orcid.org/0000-0002-0911-2143>), Nigde Omer Halisdemir University, Turkey; e-mail: [altugmuratkoktas@ohu.edu.tr](mailto:altugmuratkoktas@ohu.edu.tr)

**Ali Gokhan GOLCEK** (<http://orcid.org/0000-0002-7948-7688>), Nigde Omer Halisdemir University, Turkey; e-mail: [aligokhangolcek@ohu.edu.tr](mailto:aligokhangolcek@ohu.edu.tr)

**Keywords** : PISA, Education, Education Expenditures, Turkey.

**JEL Classification Codes** : H52, I21, I22.

### Extended Abstract

Programme for International Student Assessment (PISA) PISA is a comprehensive educational research conducted by the OECD for the first time in 2000 and held every three years. To what degree students aged 15 years, who have completed the compulsory education phase, are ready to social and community life and their knowledge and skills are measured within the framework of several tests and surveys. The program differs from other educational researches at the point of measurement of the effects of learning to life rather than what young people learned in education. In addition, PISA focuses on determining the status of the country of the quality and policy of the education rather than individual measurements. Turkey was included for the first time in 2003 this program, which was first implemented in 2000 in 32 different countries -including 28 OECD members- and reaching 265,000 students. Lastly, the PISA survey that was conducted in 2015 has found application in 72 countries by reaching approximately 540,000 students. In general, there are questions in the questionnaires about fields of science which are based on reading, mathematics and business integration and focused on problem-solving. Tests and questionnaires in the field are implemented on a computer-based and each student is given two hours in total. Applied tests are asked in two different types, multiple choice and open ended.

In this application, which is held three years, brings a different area to the foreground every year, and this field covers a majority of 2/3 of the questions of that year. For example, reading skills in the year 2000 when was first applied, mathematics in 2003, science in 2006, reading skills in 2009, mathematics in 2012 and science in the latest PISA in 2015 has been the weight of questions. This case provides a considerable advantage, over the years, for the course of development in the fields. Besides the annual change of sample types paves the way for a general analysis. In 2015, it is understood from the OECD's PISA data that it is gotten information about roughly 29 million students by means of the test made by 540.000 students, aged 15, in 72 different countries. In the PISA questionnaires, where is made in 2015 and science has come to the forefront, Singapore ranks first in the field of science, leaving behind the performance of other participating countries. Also, Japan, Estonia, Finland and Canada constitute the first five rankings in the performance rankings as the next four countries. In the ranking, Singapore, which managed to be in the first place in all of science, reading skills and mathematics fields, the first country example which will be examined in the study. Furthermore,

according to PISA data in 2015, Turkey ranks 52nd in science and 50th in areas of mathematics and reading skills among 70 countries. Another country to be investigated in the study is Mexico. The reason for the use of the country is that it is in the same order as Turkey in the PISA ranking, but also remaining close to the data of the two countries in many economic data attractive the countries elected. Moreover, Finland, renowned for its quality of education system, constitutes the fourth and final country to be examined in the study.

The effectiveness of training spending, which is the focal point of the study, has been examined in the context of the 2015 PISA results, considering the OECD, World Bank and selected country data. In this context, it has been tried to show whether or not there is a harmonization with the PISA results using data such as the amount of education expenditures made by the countries, the amounts allocated to education in the budget, the education expenditures per capita and national income (GDP) ratio of education expenditures.

### References

- Agasisti, T. & S. Longobardi & A. Regoli (2014), "Does Public Spending Improve Educational Resilience? A Longitudinal Analysis of OECD-PISA Data", *SIEP (Societa Italiana di Economia Pubblica), Working Paper 669*, <[http://www.siepweb.it/siep/images/jooml/1406809666Agasisti\\_et\\_al\\_WP\\_SIEP\\_669.pdf](http://www.siepweb.it/siep/images/jooml/1406809666Agasisti_et_al_WP_SIEP_669.pdf)>, 23.08.2017.
- Ayrangel, Z. & M. Tekdere (2014), "Türkiye ve OECD Ülkelerinde Yapılan Eğitim Harcamalarının Karşılaştırmalı Analizi", *EUL Journal of Social Sciences*, 1-30.
- Egeli, H. & B. Hayrullahoğlu (2014), "Türkiye ve OECD Ülkelerinde Eğitim Harcamalarının Analizi", *Finans Politik & Ekonomik Yorumlar*, 51, 93-108.
- French, J. & A. French & W. Li (2015), "The relationship among cultural dimensions, education expenditure, and PISA performance", *International Journal of Educational Development*, 42, 25-34.
- M.E.B. (2016), *PISA 2015 Ulusal Raporu*, (Pre: U. Taş & Ö. Arıcı & H. Ozarkan & B. Özgürlük), T.C. Milli Eğitim Bakanlığı Ölçme, Değerlendirme ve Sınav Hizmetleri Genel Müdürlüğü, <[http://pisa.meb.gov.tr/wp-content/uploads/2016/12/PISA2015\\_Ulusal\\_Rapor1.pdf](http://pisa.meb.gov.tr/wp-content/uploads/2016/12/PISA2015_Ulusal_Rapor1.pdf)>, 23.08.2017.
- O.E.C.D. (2013), *Education at a Glance: Finland*, OECD Publishing, <[https://www.oecd.org/edu/Finland\\_EAG2013%20Country%20Note.pdf](https://www.oecd.org/edu/Finland_EAG2013%20Country%20Note.pdf)>, 28.08.2017.
- O.E.C.D. (2014), *Education at a Glance: Mexico*, OECD Publishing, <<https://www.oecd.org/edu/Mexico-EAG2014-Country-Note.pdf>>, 28.08.2017.
- O.E.C.D. (2015), *Programme for International Student Assessment (PISA) Results from PISA 2015: Mexico*, OECD Publishing, <<http://www.oecd.org/pisa/pisa-2015-Mexico.pdf>>, 28.08.2017.
- O.E.C.D. (2016a), *PISA 2015 Results in Focus*, OECD Publishing.
- O.E.C.D. (2016b), *The PISA 2015 Assessment of Reading, Mathematical and Scientific Literacy*, OECD Publishing.
- O.E.C.D. (2016c), *Education at a Glance 2016: OECD Indicators*, OECD Publishing.
- Singapore Budget (2016), *Analysis of Revenue and Expenditure: Financial Year 2016*, <[http://www.singaporebudget.gov.sg/data/budget\\_2016/download/FY2016\\_Analysis\\_of\\_Revenue\\_and\\_Expenditure.pdf](http://www.singaporebudget.gov.sg/data/budget_2016/download/FY2016_Analysis_of_Revenue_and_Expenditure.pdf)>, 28.08.2017.
- T.U.I.K. (2015), *Eğitim Harcamaları İstatistikleri*, <<http://www.tuik.gov.tr/PreHaberBultenleri.do?id=21548>>, 23.08.2017.
- Word Bank (2017), *Government Expenditure on Education Data*.



**28 October 2017 Saturday**

**Session: VII-A / 14.00-15.30**

## **PUBLIC FINANCE & PUBLIC POLICY**

Room: *Festsaal Imperial*

Chair: **Hakan AY**

- The Institutional Framework of Macprudential Policies and the Changing Role of Central Banks

**Ali ILHAN & Metin OZDEMIR**

- Energy Consumption, Economic Growth and Current Deficit Relations in Turkey

**Rabia EFEOGLU & Gul SENIR**

- Understanding Sovereign Wealth Funds: Investment Activities and the Political Dimension

**Ilker YAMAN & Ahmet Burcin YERELI**

- Impact of Taxes on Architectural Structures: A Historical Analysis

**Ali Gokhan GOLCEK & Emre ATSAN & Altug Murat KOKTAS**

- Beyond Twin Deficit Hypothesis: Sectoral Financial Balances Approach

**Serdal BAHCE & Deniz ABUKAN & Asli Ceren SARAL**

## The Institutional Framework of Macroprudential Policies and the Changing Role of Central Banks

*Ali ILHAN* (<http://orcid.org/0000-0001-6201-5353>), *Uludag University, Turkey; e-mail: alilhan@uludag.edu.tr*

*Metin OZDEMIR* (<http://orcid.org/0000-0002-3944-4018>), *Uludag University, Turkey; e-mail: mozdemir@uludag.edu.tr*

**Keywords** : Financial Stability, Macroprudential Policy, Institutional Framework, Central Banking.

**JEL Classification Codes** : G28, E44, E58, E61.

### Introduction

One of the key lessons from the global financial crisis is the fact that price stability by itself is not enough for financial stability. The existence of financial cycles beyond the experienced business cycles, has required an understanding of the effects of the behaviour of financial variables on potential output and real interest rates. However, the fact that the risk-taking channel of monetary policy may increase the macro-financial imbalances even during the periods of low inflation. Indeed, the fact that monetary policies implemented under inflation targeting in the pre-crisis period could not fight against shocks originated from financial instability and has led the central banks to adopt financial stability as a goal. In this direction, to reduce the systemic risks which are the main threat of financial stability and to increase the resistance of the financial system, macroprudential policies have been defined.

When it comes to financial stability and macro-prudential policy framework, central banks are faced with a problem of designing and conducting an optimal macroprudential policy. While policy interest rate is the main instrument of monetary policy, communication with the public has a supporting role. However, it is not possible to define a basic instrument for macro-prudential policy. In addition to this, the existence of a wide range of macro-prudential policy instruments, has led to a lack of standard for classifying an instrument set (Galati & Moessler, 2013: 848). Another important issue is the understanding of how the transmission mechanism between the policy instrument (e.g. countercyclical capital requirements) and the goal (financial stability) is understood and the proper modelling of the relationship between instrument and goal. However, the different views on financial stability cause problems in terms of the multiplicity of different instruments and intermediate target-indicator variables, the operational nature of the macro-prudential policy, and the modelling and understanding of the relationship between objectives and instruments.

In addition to these problems with the design of optimal macroprudential activity, it is necessary to note that macroprudential policies are more open to political pressures than monetary policy and they require coordination with micro prudential policy authority. Both operational and political economy constraints point to the difficulties in conducting macroprudential policy and the importance of the institutional framework of prudential policies. However, in the pre-crisis period, any responsibility was not assigned to any institutions regarding providing general oversight and supervision of financial system, identifying factors that may cause systemic risk or reducing them.

An appropriate institutional framework is expected to help macroprudential authority to manage systemic risk. For this reason, to identify the systemic risks effectively, institutional arrangements should enable access to information and relevant expertise. It should provide incentives for the relevant authority to use policy instruments effectively. Also, it should eliminate political pressures and policies -even if not desired- should be implemented for financial stability. It should enable efficient cooperation with these policies without harming the autonomies of other policies related to financial stability (Kohn, 2014).

On the other hand, it is necessary to define effective governance, accountability and transparency mechanisms for the institutional framework of macroprudential policy. Macroprudential authorities should have ex-ante clarity about their authorities, responsibilities and roles. Their activities should gain legitimate grounds. Also, authorities need full access to information of market and full control over the instruments (Caruana & Cohen, 2014: 21).

There is also need for mechanisms to provide accountability and transparency as well as explicit power, to avoid “inaction bias” that may arise because of political pressures (Agur & Sharma, 2013: 11; Bennani et. al., 2014: 13). It is possible to enhance accountability via regular communication with the public through the publication of financial reports, submission minutes to parliamentary and the announcement of the reasons for the important decisions taken. Authorities should explain the anticipations regarding the ability of policies to prevent crises and to increase resistance of the system and the reaction functions in case of adverse circumstances (Caruana & Cohen, 2014: 21). Since the accountability of policies cannot be linked to the observable results in the short term, it is necessary to focus on the whole process.

Interaction of macroprudential policies with other policies which aims to ensure financial stability requires mechanisms to provide consistency among these policy areas. In case of conflicts between policies, information exchange on analysis and expected policy and “comply or explain” procedures can help ensuring a consistent policy mix by resolving trade-offs (Houben et.al., 2012: 21). While effective coordination is achieved, deteriorating implementations on the credibility of the primary goal of each policy should be avoided (Brockmeijer, 2014: 171).

**Table: 1**  
**Stylized Models for Institutional Setting of Macroprudential Policy**

Model / Features of the Model	Model 1 (Separation)	Model 2 (Partial Integration)	Model 3 (Full Integration)
1.Ownership of macroprudential policy mandate	Independent committee	Committee “related” to central bank	Central bank
2.Degree of institutional integration of central bank and supervisory agencies	Partial	Partial	Full in principle
3.Role of Government / Treasury / Finance Ministry	Active	Passive	No (or passive)
4.Separation of policy decisions and control over instruments	Yes	In some areas	No (or in some areas)
5.Existence of coordination mechanism across policies	Yes, other policy bodies represented in committees	Yes, other policy bodies represented in committees	No
Examples of specific model countries	Turkey, United States, France, Germany, Korea, Mexico, Chile	United Kingdom, Romania, Thailand, Malaysia	New Zealand, Czech Republic, Ireland, Serbia

Source: Brockmeijer, 2014: 176.

It has been observed that the debate over the institutional framework of macroprudential policies have come about two main axes based on the roles of the central bank. The first axis addresses monetary policy and macroprudential policy as two separate areas of responsibility. As it can be seen

in Table 1, in both the separation and the partial integration models, monetary policy has no responsibility in terms of financial stability. And the second axis imposes a direct responsibility on the central bank for both policies. In this study, it is aimed to deal with macroprudential policies and addressing the responsibility areas of central banks through alternative institutional models.

It is not possible to talk about the existence of an institutional framework that can be used and/or macroeconomic policies that can be effectively implemented by every country. Country-specific factors such as the sophistication and size of the financial system, exchange rate regime, and the characteristics of the central bank, political factors and the legal frameworks have differentiated the solutions to the issues of institutional framework (Egawa et al., 2015). Moreover, macroprudential policies can implement effectively by providing the relevant authorities with a clear mandate that sets out well-defined objectives as well as adequate powers, matched with strong accountability. All in all, experiences of both international institutions and countries suggest that there is a consensus on that the central bank should have a leading role in the creation of institutional framework of macroprudential policy.

### References

- Agur, I. & S. Sharma (2013), "Rules, Discretion and Macro-Prudential Policy", *DSF Policy Paper Series*, 36, March.
- Bennani, T. & M. Després & M. Dujardin & T. Dupreu & A. Kelber (2014), "Macroprudential Framework: Key Questions Applied to the French Case", *Banque de France Occasional Papers*, 9, February.
- Brockmeijer, J. (2014), "The Institutional Setting of Macro-Prudential Policy", in: A. Houben & R. Nijskens & M. Teunissen (eds.), *Putting Macroprudential Policy to Work*, DeNederlandscheBank Occasional Studies, 12(7), 165-177.
- Caruana, J. & B. Cohen (2014), "Five questions and six answers about macroprudential policy", *Banque de France Financial Stability Review*, 18, April.
- Egawa, Eri. & A. Otani & T. Sakiyama (2015), "What Determines Institutional Arrangements for Macroprudential Policy?", *IMES Discussion Paper Series*, 2015-E-3.
- Galati, G. & R. Moessner (2013), "Macroprudential Policy - A Literature Review", *Journal of Economic Surveys*, 27(5), 846-878.
- Houben, A. & R. van der Molen & P. Wierts (2012), "Making Macroprudential Policy Operational", *Banque Centrale de Luxembourg Revue de Stabilité Financière*, 13-25.
- Kohn, D. (2014), *Institutions for Macroprudential Regulation: The UK and the U.S.*, <<http://www.bankofengland.co.uk/publications/Documents/speeches/2014/speech726.pdf>>, 26.05.2017.
- Nier, E.W. & J. Osinski & L.I. Jacome & P. Madrid (2011), "Institutional Models for Macroprudential Policy", *IMF Staff Discussion Note*, 18, November.
- Nier, E.W. (2011), "Macroprudential Policy - Taxonomy and Challenges", *National Institute Economic Review*, 216, April.

## Energy Consumption, Economic Growth and Current Deficit Relations in Turkey

**Rabia EFEUGLU** (<http://orcid.org/0000-0003-2515-1553>), Nigde Omer Halisdemir University, Turkey; e-mail: [rabia.efeoglu@ohu.edu.tr](mailto:rabia.efeoglu@ohu.edu.tr)

**Gul SENIR** (<http://orcid.org/0000-0001-5454-2321>), Nigde Omer Halisdemir University, Turkey; e-mail: [gul.senir@ohu.edu.tr](mailto:gul.senir@ohu.edu.tr)

**Keywords** : Energy Consumption, Economic Growth, Current Account Deficit.

**JEL Classification Codes** : Q43, F43, F32.

### Introduction

Energy, which has become one of the most important needs of human history, has an important place in the development of country economies and country economies. Energy consumption, one of the indicators of socio-economic development, has increased rapidly in the last 20-30 years in parallel with the economic development of countries. Energy consumption, economic growth and the current account deficit are very important variables in the formation of energy policies in Turkey.

The relationship between energy consumption, economic growth and the current account deficit is based on the 1970 oil crisis. With the 1970 oil crisis, energy prices increased and energy consumption increased the oil prices and the current deficit had an increasing effect. Economic growth is achieved through increased production. This requires the formation of the capital. As Turkey imports capital goods, the situation leads to an increase in current account deficit. Turkey is dependent on energy which has become one of the most critical inputs for ensuring production at a rate of 70%. Since energy consumption in Turkey differs from sector to sector, these consumptions also cause economic growth and current account deficit.

According to the Ministry of Energy and Natural Resources in Turkey in this sense, energy consumption has generally increased since 1987, and the energy consumption of 38695 btep in 1987 has increased to 98973 btep in 2015. According to the Central Bank of the Republic of Turkey, our current account deficit, which was -806 million USD in 1987, has been -32,136 million USD as of 2015. When we look at the GDP figures, from 1987 to 1987, it was \$ 87172 million, but it increased to \$ 717879 million in 2015. In short, our energy consumption is showing an increase and we are seeing a negative trend in our current environment. At the same time, the increase in the current account deficit before the crisis period was also mentioned.

Turkey's external dependency in the 2014 Report of the World Energy Council Turkish National Committee is estimated to be 71% as of 2009, while it is estimated that 68% in 2015 and 70% in 2020 will meet energy demands.

The Heinrich Böll Stiftung Association notes that Turkey's annual energy consumption increases by 4-5% and annual electricity consumption by 7-8%. They also emphasize that these ratios correspond to two or three times the world energy requirement.

Increases in energy imports arise due to increased energy consumption in Turkey. The increase in energy consumption causes growth, which causes the current deficit.

When the trend of energy consumption in the world is examined, “Industrial Revolution” and “II. World War II”. These two important developments are the turning points where energy quantities have started to increase gradually in parallel with the increase in production.

According to Key World Energy Statistics 2016 Report, the amount of primary energy supply worldwide has risen from 6101 mtep to 13699 mtep in the period from the post-oil crisis era of the early 1970s to 2014, nearly doubling. In 2014, 31.3% of the primary energy supplied worldwide is made up of petroleum, 28.6% is coal and 21.2% is natural gas. In primary energy supply, fossil fuels have a share of about 82%. In 1973, the share of fossil fuels in the primary energy supply was 86%. 46.2% of this share is composed of petroleum, 24.5% is coal and 16% is natural gas. Between 1973 and 2014, the factor that contributed to the reduction of the share of fossil fuels in the primary energy supply is the increased share of nuclear and hydroelectricity. While 38.4% of the world’s primary energy supply is provided by OECD countries in 2014, 22.4% of total supply is provided by China. In 1973, these shares were 61.3% for OECD countries and 7% for China.

When the consumption of Turkey’s energy consumption in world energy consumption is examined, the final energy consumption, which was 4661 mtep in 1973 according to the Key World Energy Statistics 2016 Report, rose to 9425 mtep level in 2014. In 2014, 39.9% of final energy consumption was obtained from petroleum, while the share of natural gas was 15.1% and the share of coke was 11.4%. In 1973, 48.3% is composed of oil, 14% is natural gas and 13.5% is coal. As of 1973, the share of petroleum in final energy consumption decreased by 8.4% and the share of coking coal decreased by 2.1%, while the share of natural gas increased by 1.1%. Moreover, the share of fossil fuels in final energy consumption is 66.4% in 2014. In 1973, it was seen that this share was 75.8%. While the share of OECD countries in final energy consumption in 1973 was 60.3%, it decreased to 38.4% in 2014. It is a big influence that China’s share of total energy consumption in 1973, which was 7.8%, rose to 21.2% by the year 2014.

According to the data of the Turkish National Committee of the World Energy Council 2014 Report, the total energy supply of Turkey, which was 18872 btep (equivalent to one thousand tons of oil) in 1970, rose to 120290 btep by 2013. The final energy consumption, which was 16841 btep in 1970, reached 89424 btep in 2013. In 2014, the total energy supply is 123937 btep while the final energy consumption is 87131 btep. In 2015, total energy supply and final energy consumption are 129138 btep and 99594 btep respectively.

In 1970, Turkey’s energy supply and final energy consumption levels were close to each other, but in the following periods the difference between total energy supply and final energy consumption increased. A large part of the difference between the total energy supply in one year and the final energy consumption figures indicates the amount of energy converted to electricity energy in the conversion plants. The increase in this difference over the years can be explained by the increase in the level of electricity generated in Turkey.

According to the World Energy Council Turkish National Committee 2014 Report, in 2013, the primary energy supply in Turkey is 29% share of petroleum, 29% share of petroleum, 31.2% share of natural gas and 5% share of hydrogen in Turkey. The remainder is shared with wood, plant and animal wastes, geothermal, biofuels, solar and wind. In 1990-2013 period, while the share of consumed coke and petroleum in the industrial sector in Turkey decreased, natural gas and electricity consumption

increased. While the share of coal and oil consumed in the industrial sector in 1990 was 41.7 and 36.4 respectively, these rates decreased to 35.3 and 9.8 respectively in 2013.

Today, there are many studies trying to reveal the relationship between energy consumption and economic growth. This relationship is handled based on studies in only a part of the country while, in the other part is applied for making the comparison by taking in more than one country. However, in the literature review, there are not many studies including the current account deficit, although many academic studies have been found that examine the relationship between energy consumption and economic growth in Turkey.

The main purpose of the study is to determine the relationship between final energy consumption, economic growth and current account deficit in Turkey. In this context, the relationship between energy consumption and economic growth is mentioned; Energy consumption, economic growth and current account deficit in Turkey and the energy outlook of Turkey are examined. Then, econometric analyses were performed using these data. At the end of the study, results were presented with the research findings.

Variables used in the study include 1987-2015 period. Augmented Dickey Fuller (ADF) and Phillips-Perron Unit Root Test, VAR model delay length analysis, Johansen Cointegration Test, Error Correction Model and Granger Causality Test were performed using energy consumption, economic growth and current account deficit data. According to the results of the ADF and Phillips-Perron unit root tests, the variables are at the first difference level. According to the length of the VAR model, the GDP, current account deficit and energy consumption variables in the Turkish economy were found to be related to the values of the previous period. The Johansen Cointegration Test showed that there was no long-run relationship between the variables. Error Correction Model was made and it was concluded that there is a short cyclical relationship between the variables. With the Granger Causality Test, the current account deficit of GDP has shown that energy consumption affects both GDP and current account deficit.

## References

- Apergis, N. & J.E. Payne (2010), "Energy consumption and growth in South America: Evidence from a panel error correction model", *Energy Economics*, (32), 1421-1426.
- Demirbaş, M. & H. Türkay & M. Türkoğlu (2009), "Petrol Fiyatlarındaki Değişmelerin Türkiye'nin Cari Açığı Üzerine Etkisinin Analizi", *Süleyman Demirel Üniversitesi İ.İ.B.F Dergisi*, 14(3), 289-299.
- Esmer, O. (1996) "Enerji Politikaları", *TMMOB Türkiye Enerji Sempozyumu*, TMMOB Yayınları, 12-24 Kasım, Ankara.
- Güvenek, B & V. Alptekin (2010), "Enerji Tüketimi ve Büyüme İlişkisi: OECD Ülkelerine İlişkin Bir Panel Veri Analizi", *Enerji, Piyasa ve Düzenleme*, 1(2), 172-193.
- Heinrich Böll Stiftung (2008), *Enerji Verimliliği Teknik Kitapçığı*, İstanbul, Birinci Baskı.
- Hondroyannis, G. & S. Lolos & E. Papapetrou (2002), "Energy consumption and economic growth: assessing the evidence from Greece", *Energy Economics*, 24(4), 319-336.
- International Energy Agency (2016), *Key World Energy Statistics*.
- Kar, M. & E. Kınık (2008), "Türkiye'de Elektrik Tüketimi Çeşitleri ve Ekonomik Büyüme Ekonometrik Bir Analizi", *Afyon Kocatepe Üniversitesi İ.İ.B.F Dergisi*, 10(2), 333-353.
- Lise, W. & K. van Montfort (2007), "Energy Consumption and GDP in Turkey: Is There a Cointegration Relationship?", *Energy Economics*, (29), 1166-1178.

- Mucuk, M. & D. Uysal (2009), "Türkiye Ekonomisinde Enerji Tüketimi ve Ekonomik Büyüme", *Maliye Dergisi*, (157), 105-115.
- Özçağ, M. (2015), "Türkiye'de Enerji Tüketimi, Ekonomik Büyüme ve Dışa Açıklık İlişkisi: ARDL Modeli", *Finans, Politik & Ekonomik Yorumlar*, 52(605), 7-17.
- Paul, S. & R.N. Bhattacharya (2004), "Causality between energy consumption and economic growth in India: a note on conflicting results", *Energy Economics*, (26), 977-983.
- Soytaş, U. & R. Sari (2003), "Energy consumption and GDP: causality relationship in G-7 countries and emerging markets", *Energy Economics*, (25), 33-37.
- Yanar, R. & G. Kerimoğlu (2011), "Türkiye'de Enerji Tüketimi, Ekonomik Büyüme ve Cari Açık İlişkisi", *Ekonomi Bilimleri Dergisi*, 3(2), 191-201.
- Yapraklı, S. & Z.Ç. Yurttançıkılmaz (2012), "Elektrik Tüketimi İle Ekonomik Büyüme Arasındaki Nedensellik: Türkiye Üzerine Ekonometrik Bir Analiz", *C.Ü. İktisadi ve İdari Bilimler Dergisi*, 13(2), 195-215.

## Understanding Sovereign Wealth Funds: Investment Activities and the Political Dimension

*Ilker YAMAN* (<http://orcid.org/0000-0002-3724-7467>), *Recep Tayyip Erdogan University, Turkey; e-mail: ilker.yaman@erdogan.edu.tr*

*Ahmet Burçin YERELI* (<http://orcid.org/0000-0002-8746-6756>), *Hacettepe University, Turkey; e-mail: aby@hacettepe.edu.tr*

**Keywords** : Sovereign Wealth Funds, Political Implications, Investment Activities, Regulatory Issues.

**JEL Classification Codes** : G15, G38, G23, O50, F30.

### Extended Abstract

This study aims to extensively examine the investment activities of sovereign wealth funds, whether the driving forces of these activities are economic or political, whether sovereign wealth funds threaten countries' economies and what are the reactions shown by the countries receiving sovereign wealth fund investments. This study contributes to a better understanding of sovereign wealth funds by contextualizing both the investment activities of these funds and the political reactions shown to their investments.

Sovereign wealth funds mostly with a long-term investment perspective are qualified as state owned investments funds. Sovereign wealth funds, which have become one of the important financial actors of 21<sup>st</sup> century and are in a search for commercial returns to protect and enhance asset accumulation of governments, are among the fast-growing financial investors, leaving behind many financial institutions such as hedge and private equity funds in terms of asset volume they manage.

The risks borne by sovereign wealth funds attract more attention than the benefits they provide. The fact that sovereign wealth funds, which have adopted economic objectives such as alleviating domestic economic fluctuations, supporting domestic socio-economic policies, diversifying national reserves, reducing dependence on single source income and saving for future generations, are largely belonging to non-democratic countries and countries where human right are not well developed, cause the activities of such funds to be sceptical. Also, the thought non-democratic governments may be seeking to use sovereign wealth funds as a political tool to weaken developed countries by buying strategically significant assets such as ports or by investing in strategic sectors such as defence and telecommunications, causes concerns about these funds. In addition, during the 2007-08 global financial crisis, investments made by sovereign wealth funds to financial distressed companies brought along both interrogating the activities of these funds and developing the belief that their activities may be related to political factors.

Concerns about sovereign wealth funds can be examined in three groups: political concerns, economic concerns and transparency concerns. Main political concern is the fact that sovereign wealth funds can serve the national interests of the home country and thus damage the national security of the host country. Main economic concerns for the sovereign wealth funds are investments made by such funds could cause fluctuations in financial markets and could create price bubbles. Finally, there are

concerns that the sovereign wealth funds exposed to political interference by the governments of their countries may harm the management and performance of the companies they invest in.

The prudent act of clearly articulating the activities and institutional structure of sovereign wealth funds has brought with it the adoption of regulatory and protective measures for the transparency and investments of such funds. The United States, France, Italy and Germany are among the countries that react most to sovereign wealth funds and bring regulations for such funds. Current regulations are shaped by the fact that sovereign wealth funds are more transparent, corporate governance principles are explicitly stated, existing regulations on such funds are re-audited and effects of sovereign wealth fund investments should be better measured.

As a result, there is little evidence that sovereign wealth funds follow non-commercial or strategic objectives. Firstly, our research shows that sovereign wealth funds do not act for political purposes but act to increase their own financial performance. However, even in a small number of cases, there is evidence that some sovereign wealth funds are exposed to political influence. In addition, sovereign wealth funds are cautious when investing in sensitive or strategic sectors and use voting rights only to achieve specified economic objectives. Moreover, there are expressed opinions that the investments made by the sovereign wealth funds contribute to the stability of the financial markets and the global economy. Finally, the results show that sovereign wealth funds are found to affect the performance of the companies they invest in both negative and positive.

## Impact of Taxes on Architectural Structures: A Historical Analysis

*Ali Gokhan GOLCEK* (<http://orcid.org/0000-0002-7948-7688>), *Nigde Omer Halisdemir University, Turkey; e-mail: aligokhangolcek@ohu.edu.tr*

*Emre ATSAN* (<http://orcid.org/0000-0003-1682-1682>), *Nigde Omer Halisdemir University, Turkey; e-mail: eatsan@ohu.edu.tr*

*Altug Murat KOKTAS* (<http://orcid.org/0000-0002-0911-2143>), *Nigde Omer Halisdemir University, Turkey; e-mail: altugmuratkoktas@ohu.edu.tr*

**Keywords** : Architecture, Tax, Real Estate.

**JEL Classification Codes** : H20, H24, Z11, N90.

### Extended Abstract

Today, taxes have an essential importance in financing goods and services provided by the governments. There have been many regulations to enable a fair tax collection and it has recently been offered as a solution to collect taxes based on the individuals' ability to pay. In this regard, it has been accepted that it is an indicator of financial status to collect taxes based on income, wealth and expenditures of individuals. Taxation of individuals' wealth has always been criticized about fairness of tax collection. Especially some taxes and legal liabilities collected for real estates have caused people to avoid those financial liabilities. To brief it within a historical perspective; taxation for such specific subjects as window tax, fireplace tax, balcony tax, chimney tax, brick tax, pavement tax has caused individuals to avoid paying those kinds of taxes. As it is known, people may avoid paying some taxes within legal boundaries. Taxation theory puts forward that it is not possible to accrue taxes if there is not a specific subject for that tax. Thus; individuals, the taxpayers, started to have different points of view and it led to some changes in those taxes applicable to architectural structures. These taxations were influential generally in the 18th and 19th centuries and it affected architectural structure in Europe.

The "window tax", which is going to be analysed in this study, envisaged taxation by number of window in the house which influenced the architecture and the silhouette of the city, applied in England and for a certain period in France from the 17th century until the beginning of the 19th century. At the beginning individuals in the name of escaping from taxation found remedy in closing windows with bricks and building walls. Nowadays, it is possible to see closed with wall window structures especially in England. In addition, with that taxation individuals started building houses without window and tried to lighten the burden of the tax by enlarging the window size. Because the foundation of the window tax contained the number of windows a house has and therefore less tax collected from houses with fewer windows. The tax which placed on 1696 was essentially premise of modern real estate tax. Despite the damaging health and aesthetic effects and widespread protests, the tax continued for more than a century. However, it is said that "window tax" has a premise in history: "hearth tax".

The hearth tax imposed by King of England II. Charles in 1662 deemed suitable to collect one tax per furnace and stove from every house in England and Wales. Although the tax was not widely accepted because of the interventionist nature of the identification process, the evaluators who evaluate furnaces in houses and tax collectors had to enter the houses without seeking approval of the hosts.

There has been a great reaction and anger in the society against the invasion of the sanctity of the house. However, there was no need to enter houses to collect “window tax” which mentioned and tax collectors can count the windows from outside and with this evaluation procedure become simpler. Some exceptions to aforesaid window tax has seen in practice. Especially various factories and some buildings such as public offices, farmhouses with less annual income than the specified amount, dairy farms, cheese rooms, malt houses and grain warehouses are held exempted from taxation. Nevertheless, it has also been observing that structures without windows or few windows have some negative consequences for society. Particularly the absence of windows was found to tend to create dark and humid tenants with a source of disease and health problems and eventually the law about window tax dismantled in 1851.

Another interesting tax which to be analysed is brick tax set by Prime Minister William Pitt for financing wars in American colonies in 1784 under III. George or George William Frederick. In this taxation, subject of taxation composed number of bricks used and it is decided to collect tax per brick used. With the brick tax, taxpayers began to build larger bricks and search ways to avoid taxation. Aforesaid tax had two different effects on individuals; first was avoiding the bricks in architectural structures and place importance on wooden covering, the other one paved way to reduction of transportation costs. Because of the expansion of the size of the bricks necessitated the construction of the bricks on the construction site and that reduced the transportation expenses. However, it can be said that the afore-mentioned tax delayed the Industrial Revolution in England. Nonetheless, the aforesaid tax was not included in church constructions, repairs and restoration works, these areas were exempted from the taxation. The brick tax was abolished in 1850 because of the responses and to allow development of different types of bricks. Similarly; there were some similar examples in France. Taxpayers who wanted to pay fewer taxes started to prefer houses without balconies and it radically changed the architectural structure of the cities.

Today, there are taxes still in practice and affect architecture. For example, “tube houses” have emerged in Hanoi because of the state of facades of houses. The reason for this taxation comes from the Hanoi government’s years of struggle to make property-based taxes. Because the collected tax included the taxation of the house’s width of the front-facing facade. So, in Hanoi larger houses means the more taxes to be paid. For this reason, the interlocutors of the taxes, interestingly, begun building buildings in the narrowness of where two people can stand next to each other.

This study aims at examining the impact of financial liabilities applied for real estates in the past and present on architectural structure. It also analyses whether or not taxes have an impact on the essence of transformation in architecture by using examples from different countries.

## References

- D’Angelo, J.B. & R.C. Fellmeth (1993), “A Perspective on California’s Regulation of Tax Preparers, Certified Public Accountants, Architects, and Landscape Architects”, *California Regulatory Law Reporter*, 13(4).
- Glantz, A.E. (2008), “A Tax on Light and Air: Impact of the Window Duty on Tax Administration and Architecture, 1696-1851”, *Penn History Review*, 15(2), 18-40.
- Lucas, R. (1997), “The Tax on Bricks and Tiles, 1784-1850: Its Application to the Country at large and, in particular, to the Country of Norfolk”, *Construction History*, 13, 29-55.
- Oates, E.W. & R.M. Schwarb (2015), “The Windows Tax: A Case Study in Excess Burden”, *The Journal of Economic Perspectives*, 29(1), 163-179.

- Seligman, E.R.A. (1911), *The Income Tax: A Study of The History, Theory, and Practice of Income Taxation at Home and Abroad*, New York: The Macmillan Company.
- Smee, W.R. (1846), *The Income Tax: Ist Extension at The Present Rate Proposed to All Classes; Abolishing the Malt Tax, Window Tax, and Other Taxes, With Some Observations on The Tea Duties*, London: Pelham Richardson.
- Stebbins, C. (2010), "Public Health Imperatives and Taxation Policy: An Early Paradigm in English Law", *Cambridge History of Tax Law Conference*, <1-5, <https://ore.exeter.ac.uk/repository/bitstream/handle/10871/9982/Window%20Tax%20Conf%20Abstract-1%20-%20Stebbins.pdf?sequence=2>>, 22.08.2017.

## Beyond Twin Deficit Hypothesis: Sectoral Financial Balances Approach

*Serdal BAHCE* (<http://orcid.org/0000-0001-8213-4763>), Ankara University, Turkey; e-mail: sbahce@politics.ankara.edu.tr

*Deniz ABUGAN* (<http://orcid.org/0000-0001-9387-1873>), Ankara University, Turkey; e-mail: abukand@ankara.edu.tr

*Asli Ceren SARAL* (<http://orcid.org/0000-0003-2752-3154>), Ankara University, Turkey; e-mail: saral@politics.ankara.edu.tr

**Keywords** : Twin Deficit Hypothesis, Sectoral Financial Balances, Ricardian Equivalence, Structuralist External Gap.

**JEL Classification Codes** : E21, E60, F32.

### Extended Abstract

The Twin deficit hypothesis, related with the works of IMF economist Jacques Polak and New Cambridge School, came into prominence in 1980s when the raising US current account deficits were accompanied with government deficits.

In monetary approach to balance of payments proponent and IMF economist Polak's (1957) approach, an increase in government deficits would induce a credit expansion (unless private sector would reduce its savings equivalently) which in turn would bring about an increase in imports and reduction of reserves. Polak's view depends on tacit assumptions of full employment ((Barbosa-Filho et al., 2006: 2) and explicit assumption of a constant velocity of circulation (Polak 1957: 9).

The other protagonists of sibling deficits were from New Cambridge School, namely "a work group of the Department of Applied Economics (in the University of Cambridge) led by Wynne Godley" (Dos Santos & Macedo e Silva, 2010: 22.). Although their conclusions about the sibling deficits were same, their approach were essentially different from Polak's.

To understand their proceeding, we shall review the three sectoral financial balances approach, mostly attributed to them: In an open economy, aggregate demand (D) equals to sum of domestic consumption (C), investment (I), government expenditures (G) and export demands (X); and supply (Q) equals to sum of domestic supply (Y) and imports (M). With the assumption that supply and demand equilibrate in an adequately short time we can write the "budget constraint" below (Shaikh, 2012: 128);

$$D=Q$$

$$C + I + G + X = Y + M$$

With adding taxes (T) to equation and arrainging it we obtain;

$$(Y_d - C - I) + (T - G) = (X - M)$$

Where private disposable income ( $Y_d$ ) equals to  $Y-T$ . And as private sector either spends its disposable income for consumption and investment or saves it, the equation can be written as;

$$(S-I) + (T-G) = (X - M)$$

In another saying;

$$\text{Private Financial Balance} + \text{Government Financial Balance} = \text{Current Account Balance}$$

The underlying explicit hypothesis that made New Cambridge to reach a similar conclusion with Polak from this three-financial approach is that “virtually all the disposable income of the private sector will be spent on goods and services with a fairly short lag.” (Godley & Fetherston, 1978: 34) This hypothesis was basically based on their observation that “private Financial Balance of British economy had been relatively small and stable for many years”, which they later have estimated for the years 1954-1972 as a functional relation (Dos Santos & Macedo e Silva, 2010: 22, 23). With this explicit hypothesis (that is  $Y_d = C+I$  or by the same token  $S-I = 0$ ) the equation or constraint can be written as follow;

$$(T-G) = (X - M)$$

In terms of which an increase/decrease in government financial balance would induce a similar increase/decrease in current account balance.

New Cambridge economists also provided a theoretical framework for their empirical results on private sector. In their macroeconomics book Godley and Cripps (1983: 60) assumed that for private sector there is “a unique, average money/income norm for both individual households and businesses” in another saying, there is some normal relationship between their “stocks of financial assets and income flows”. While their findings on constant stock-flow ratios have been highly controversial, their works paved the way to a voluminous literature on stock-flow analysis.

The identity or “budget constraint” above that shows three sectoral balances would need a structure that shows causality relation to be a useful analytical tool (Chinn, 2013: 70). In the both forms of twin deficit hypothesis, causality is from government deficits to current account deficits.

There are two more hypothesis that suggest causality for the relation between three financial balances (Barbosa-Filho et al., 2006: 2-4; Dos Santos & Macedo e Silva, 2010: 11) namely, Ricardian rational expectations approach (Ricardian equivalence) attributed to especially Barro (1974) and the structuralist external gap approach.

In Ricardian rational expectations approach, the external balance is mainly independent from government and private sector balances. Barro (1974) suggests that (in accordance with permanent income and life cycle hypothesis) there would be no marginal net-wealth effect of government bonds, hence a decrease in government financial balances would be offset by an increase in private sector financial balance as a respond to perception that government would need to increase taxes in the future to stay solvent. Therefore, the financing of an increase of government expenditures through borrowing or tax raise would have equivalent effect on private sector.

The final approach that suggests causality for the relation between three financial balances is structuralist external gap approach. In this approach, the causality is from external gap to government and/or private sector gap. Their approach is like Ricardian equivalence with regards to external balance independence, but this has little to do with intertemporal consumption smoothing and a lot to do with

the view that external balance depends on structural factors and government and private financial balances would adjust to external imbalances (Dos Santos & Macedo e Silva, 2010: 11, 12). As external balance imposes a supply constraint on the national economy, to avoid demand fluctuations, the government and private sector financial balances would adjust to offset the shifts in one another (Barbosa-Filho et al., 2006: 3).

In the paper, we review different approaches to sectoral financial balances with analysing the data of US sectoral financial balances for 1960-2016. We conclude that structuralist external gap approach suggests a relatively useful analytical framework.

### References

- Barbosa-Filho, N. & C. Rada & L. Taylor & L. Zamparelli (2006), "Fiscal, Foreign, and Private Net Borrowing: Widely Accepted Theories Don't Closely Fit the Facts", in *Proceedings of the 34th Brazilian Economics Meeting*, ANPEC.
- Barro, R.J. (1974), "Are Government Bonds Net Worth?", *Journal of Political Economy*, 82, 1095-1117.
- Chinn, M.D. (2013), "Global Imbalances", in Gerard Caprio (ed.), *The Evidence and Impact of Financial Globalization*, Vol. 3, (67-79), Oxford: Elsevier Inc.
- Dos Santos, C.H. & A.C. Macedo e Silva (2010), "Revisiting 'New Cambridge': The Three Financial Balances in a General Stock-flow Consistent Applied Modelling Strategy", *Working Paper*, No: 594, Levy Economics Institute of Bard College, May.
- Godley, W. & F. Cripps (1983), *Macroeconomics*, Oxford University Press, New York.
- Godley, W. & M. Fetherston (1978), "'New Cambridge' Macroeconomics and Global Monetarism: some issues in the conduct of U.K. monetary policy", *Carnegie Rochester Conference Series on Public Policy*, Vol. 9, 33-65.
- Polak, J.J. (1957), "Monetary Analysis of Income Formation and Payments Problems", *International Monetary Fund Staff Papers*, 6, 1-50.
- Shaikh, A. (2012), "Three Balances and Twin Deficits: Godley versus Ruggles and Ruggles", in D.B. Papadimitriou & G. Zezza (eds.), *Contributions in Stock-flow Modelling, Essays in Honor of Wynne Godley*, (125-136), Palgrave Macmillan.

**28 October 2017 Saturday**

**Session: VII-B / 14.00-15.30**

## **SOCIOECONOMIC STUDIES**

Room: *Salon Imperial*

Chair: **Ahmet Burcin YERELI**

- The Evaluation of the Effective Use Power of the Purse in Turkey from the point of Accuracy Principle

**Vuslat GUNES**

- Fatality Fire of the Unemployment Hills

**Kamil ORHAN**

- Traces of English Poor Laws in Sherlock Holmes Novels: A Socioeconomic Review

**Altug Murat KOKTAS & Ali Gokhan GOLCEK & Ahmet Burcin YERELI & Isil Sirin SELCUK**

- University Students in Working Life: Example of Denizli Pamukkale University

**Nagihan DURUSOY-OZTEPE**

- The Idea of Trade Protectionism and its Influence on the Ottoman Economic Thought in the Nineteenth Century

**Anil BASARAN**

## The Evaluation of the Effective Use Power of the Purse in Turkey from the point of Accuracy Principle

*Vuslat GUNES* (<http://orcid.org/0000-0001-8201-6847>), *Uludag University, Turkey*; e-mail: [vuslatgunes@uludag.edu.tr](mailto:vuslatgunes@uludag.edu.tr)

**Keywords** : Power of the Purse, Parliament, Forecast Error.

**JEL Classification Codes** : H61, H68.

### Extended Abstract

Today, a parliamentary system based on representative democracy is implemented in most of the world. Representative democracy is based on the principle that people should transfer their powers to parliamentarians who represent them and parliamentarians should use these powers on behalf of the people. However, it is increasingly questioned how effective and correct democracy is. Similarly, the effectiveness of representative democracy is questioned as well as how effectively parliamentarians are using the budget appropriation. As a matter of fact, it is stated that there are great differences between the countries regarding the effective use of the budgetary right. Therefore, it has become one of the important debates in the literature about how effectively parliamentary use the budget right.

The right to a budget can be defined as the authority to decide on the nature and amount of public services and the collection of public revenues to cover these services. Developments in the right to the budget first emerged in England, then to continental Europe and the United States and spread to the whole world. The development of the right to budget in various countries followed a course parallel to the political struggles that existed in those societies. Especially in Western Europe, the revolts in the result of autocratic governments' collective heavy taxation on people have influenced the emergence of budgetary right. On the other side, the emergence and settlement of the budgetary right in Turkey is not the result of popular movements like the ones in England and France, but the reforms made by top managers are the result.

To use the right to full use of the parliament on behalf of the people, it is necessary to comply with certain budgetary principles such as generality, unity and accuracy. In this study, it has been assumed that governments' compliance with the principle of accuracy on the budget will increase the effectiveness of the budgetary right. The principle of accuracy states that income and expenditure estimates of government budgets need to be made sincerely and accurately. The aim of this principle is to ensure that estimates of income and expenditure to be made are estimated in accordance with the conditions of the year to be implemented. In other words, the truth principle basically wants the estimators of the budget to make predictions with an accuracy that they believe is best suited to the conditions of the year without being overly optimistic, unnecessary pessimism.

As it is known, since it is estimated based on the budget quality, it is understood that after applying it, the consistency is realized. While estimates of the degree of consistency of budgets for developed countries are estimated to be 2-3%, this rate is assumed to be around 4-5% in developing countries such as Turkey. Therefore, the deviation of up to 5% is considered reasonable in this study. The study was carried out on a time scale covering the years 1996-2016. The level of deviation between forecasts

and realizations of budget revenues and expenditures for 1996-2016 period, i.e. budget estimation success; it is aimed to measure how closely you are doing with accuracy when budgeting is being prepared.

The “Calculation of Forecasting Error” method was used to evaluate the success of budget estimates in the study. According to the “Calculation of Forecasting Error” method;

Interpretations vary depending on whether the obtained prediction error is positive or negative. If the sign of the forecast error is positive, it means that a low forecast has been made; if it is negative, it means that a high forecast has been made. If the error is 0, it means that a successful prediction has been made. Looking at the general trend of forecast errors for the period 1996-2016, both revenue estimates and expenditure estimates are generally underestimated. In other words, when the period 1996-2016 is examined, it is seen that income and expenditure realizations are generally above estimates except for a few years. However, when the period 1996-2016 is examined in general, it is seen that expenditure estimates have more significant deviations than income estimates. For example, the biggest deviation in the income forecast between 1996 and 2016 is around 13.3% in 2009, while the figure in the expenditure estimate is up to + 66.6% in 2001. For the whole of the said period, the average of the income forecast error at 5.3 level and the average of expenditure forecast error at 8.3 level were calculated.

The probability that the rate of deviation in the income estimate is close to the ideal estimate deviation rate, but the deviation rate in the cost estimate is above the ideal estimate deviation. A high level of deviation in expenditure estimates is a significant effect of governments’ spending on oversight. In Turkey, overpaid expenditures are submitted to the approval of the legislature through the “Final Account Act” under the name of “supplementary allowance” and are enacted without discussion. As a result, allowance is made for expenditure above the allowance, and budgets that are not prepared sincerely are given validity in practice. Therefore, the fact that the budget is not prepared in accordance with the principle of correctness in such a way that expenditure on the appropriation is needed, inevitably invalidates the use of the budgetary right.

As a result, applications that cause inefficiency about the budget, such as overpaid expenditure, should be removed. Example budget practices of countries that have succeeded in using the right of the budget should be utilized.

## References

- Canbay, T. & G. Güneş (2012), “Batı’da Bütçe Hakkının Gelişiminin Toplumsal Yapının Değişimi Üzerindeki Etkileri”, in: *Mali Sosyoloji Üzerine Denemeler*, (ed. Kemal Çelebi), Maliye Bakanlığı Strateji Geliştirme Başkanlığı Yayını, Ankara.
- Feyzioğlu, B.N. “Modern Anayasalarda Bütçe Hakkı”, *İstanbul Üniversitesi Maliye Araştırma Merkezi Konferansları*, 29. Seri, Yıl: 1983-1984.
- Özcan, S. (2012), “Genel Bütçe Gelir ve Harcama Tahminlerinin Analizi: Türkiye Üzerine Ekonometrik Bir İnceleme”, Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü, *Yayınlanmamış Yüksek Lisans Tezi*, Ankara.
- Parlak, M. (2005), “Bütçede Gider Tahminlerinin Aşılması ve Ekonomik Etkileri”, *Sayıştay Dergisi*, 59, 73-87.

## Fatality Fire of the Unemployment Hills

*Kamil ORHAN* (<http://orcid.org/0000-0002-0232-5306>), Pamukkale University, Turkey; e-mail: [korhan@pau.edu.tr](mailto:korhan@pau.edu.tr)

**Keywords** : Unemployment, Psychological Effects of Unemployment, Fatalism Tendency Scale, Fatality.

**JEL Classification Codes** : E24, J64.

### Introduction

One of the most important issues of working life is employment. Employment creates significant consequences both individually and socially. For this reason, one of the most emphasized issues of national or transnational corporations and organizations that guide the labour market is unemployment. Its social psychological consequences as well as the structure of the unemployment, effects of the economy and society are being searched. The most important social damage that the unemployment cause on the individual is the psychological health. In the short term, unhealthy deviations can be experienced in the minds of unemployed individuals. Many studies confirm this reality. According to Murphy and Athanasou (1999) meta-analysis study, the results of 14 researchers confirm this scientific fact. It is also pointed out that the way to find a job and to find a solution to the unemployment is also important. It is important for the Turkish societies' fatalistic thinking in the perception of unemployment, and its deepening, and size of the effects it creates. In this work, the fatalistic tendency on unemployment, employment and job search processes have been inquired. It was searched whether there was any interaction between job search and fatalistic tendency, especially at support and job search processes. In this study, the previously developed (Orhan, 2017) Fatalism Tendency Scale and the special designed demographic analysis form were used. 236 women and 210 men participated in the study.

The work occupies a central place in the life cycle for an individual. For an individual, the sources of financial and social possession determined largely by the "job" to which his/her is working. In modern life, one of the most basic time-building tool of the individual is the working life. A daily life plan is created based on the time schedule of the job. In this sense, "job" is the basic means of structuring our time. The "job" that is worked determines current and potential financial opportunities. In its concise definition, unemployment is referring to the deprivation from the ability to construct life. It is inevitable that, when the "job" is defined as demonstrated occupation and effort, the unemployment is perceived as lack of endeavour and engagement (Tinar, 2013).

### Unemployment Fact

The experience of unemployment leads to the lack of financial and social resources as well as impossibilities of structuring them. For this reason, the experience of unemployment has been researched many times in the literature, and its effects have been highly emphasized. According to TURKSTAT;

“Within the reference period, at least one of the job search channels has been used within the last three months to seek employment from persons who are not employed (profit-making, casual, paid or unpaid work). All the people in the era of non-institutional work that can-do business is unemployed.” (TUIK, 2017).

According to the ILO, we can define individuals who are unable to find such an opportunity, but who are able to work or who are able to employ themselves in the reference period, but are unemployed (OECD, 2017). “The unemployed comprise all persons of working age who were: a) without work during the reference period, i.e. were not in paid employment or self-employment; b) currently available for work, i.e. were available for paid employment or self-employment during the reference period; and c) seeking work, i.e. had taken specific steps in a specified recent period to seek paid employment or self-employment (ILO, 2017). For these institutions, showing the job search behaviour and using at least one of the job search channels is an important parameter.

In general, in the literature the destructive and negative effects of the experience of individual and social unemployment are discussed. However, it is also stated that the level of the effect of the unemployment experience differs among the individuals. The role of the individuals in the working life, the economic and social distress experienced in unemployment, and whether finding financial and social support, seems important in the emergence of individual differences. Especially, the existence and quality of social support is more important.

Because of its nature, inertia is destroyer and destructive. The fact that there is no work that an individual can work and is productive leads to poverty and injustice on the social side, but it also creates psychological problems from the individual point of view (Kırcı, 2017). On this basis, there are major psychosocial problems that pose serious risks to society. There is a wide negative impact involving both employees and their families. Uncertainty and job insecurity have a direct negative impact on employee health, triggering psychosomatic health problems and suicidal tendencies (European Commission, 2010) or indirectly affecting suicidal tendencies (Platt, 1984).

Surveys show that the unemployed individuals have an increased likelihood of experiencing depression and stress-related syndromes (Kokko & Pulkkinen, 1998), a decrease in the sense of well-being (Andersen, 2009), self-esteem (Kokko & Pulkkinen, 1998), tendency to leave the workplace. Along with such psychological problems, physical health deteriorates and marriages become worse. Even it is found that having economic problems have been found to lead directly to divorce (Broman, Hamilton, & Hoffman, 1997), separation in cohabiting couples (Roy, 2011), with the consequences of job losses. It also increases the use of drugs and alcohol (European Commission, 2010; Perreault & Touré & Perreault & Caron, 2017).

In long term studies, the effects of unemployment are more clearly defined. Having a satisfactory job has been found to have higher self-esteem, lower depressive effect, less externality, and lower negative emotional state than unemployment (Winfield & Winfield & Tiggemann & Goldney, 1991). A similar study found that employees who were unemployed or who did not have a satisfactory job had poorer performances (Winfield & Tiggemann, & Winfield, 1991).

In general, while findings support this, Young (1985) found no link between self-esteem and the duration of unemployment, unemployment and the length of the anomaly. In times of high unemployment rates, the destructive effect is even greater. Mental and physical health of women is more exposed to adverse effects of unemployment (Drydakis, 2015). Unemployed men tend to blame themselves and others and they show catastrophic behaviour (Extremera & Rey, 2014). It has also been

determined that the lifelong unemployment experience may have a long-term effect in the 50's (Daly & Delaney, 2013).

### **Coping with Unemployment**

At the strategies applied to cope with unemployment, for an individual to take action, to act or to learn the helplessness seems to be an important factor. However, the existence or the lack of financial and social support is important. After the loss of work, family and financial support was found to have a positive effect on the psychological health of men (Shams, 1993). Low financial support increases a low sense of well-being and psychosocial problems 6-7 times. When high stress is experienced, finding high financial and social support reduces the likelihood of being in good health to 2-3 times, and the increase in psychosomatic syndromes to 3-4 times (Åslund & Larm & Starrin & Nilsson, 2014: 230).

Welfare stigmata are influential on the individual's analytical behaviour in the face of unemployment. There is an inverted U shape. Foreseeing low employability, the individual puts off prosperity and intensive job search for a long time (deterrent effect). On the other end, once the aid is received, those entering the welfare level increasingly reduce their job seeking efforts by facing low employability (Contini & Richiardi, 2012). When the working men face unemployment, they have difficulty in entering perspectives, planning, positive refocusing and taking perspective (Extremera & Rey, 2014: 6-7). The situation becomes more serious with the information that employees can access more hidden or open job opportunities (Gnambs & Stiglbauer & Selenko, 2015) than the unemployed, and the effect of unemployment deepens. In this aspect of our work, we are trying to explain the extent to which the fatalistic tendency is effective in the job search process of the individual.

### **Fatalism and the Fatalistic Tendency**

The fatalistic tendency is, briefly, "a world view that the events and actions are determined by an external force and that the root cause is not in the man's capability" (Orhan, 2017). Fatalistic people believe that they do not have control over their own lives. Fatalism and locus of control concepts are closely related and has the potential to become a general informal institution that explains many areas of human behaviour (Kouba, 2016). With a fatalistic approach, people tend to explain events that they live with external agents. Unemployment is also a difficult event for the individual to cope with and is difficult to explain to himself. The length of unemployment increases the focus on external control (Young, 1985). From this point of view, it seems that on the perceiving and coping with unemployment experiences, fatalistic approaches are likely to be effective.

### **Materials and Methods**

Participants. A total of 462 persons (236 women, 210 men) participated in the study at the age range between 17-58 years ( $M. = 29,33$ ,  $S. D. = 8,19$ ). The sample is mostly graduated from university (42.0%) or high school (20.1%); they see themselves in the middle-income group (79%). The singles were (64.5%); who are not currently working were (89.6%), and job seekers were (72.3%). Have been searching for jobs for 6 months on average (ranj, 1-60 months,  $S.D.= 8,18$ ). In this period, the proportion of those receiving partly or completely financial support from the social environment is 61.7% and the proportion of social support is 73.5%. The rate of rejecting a job offer made in this period is about half (49.7%).

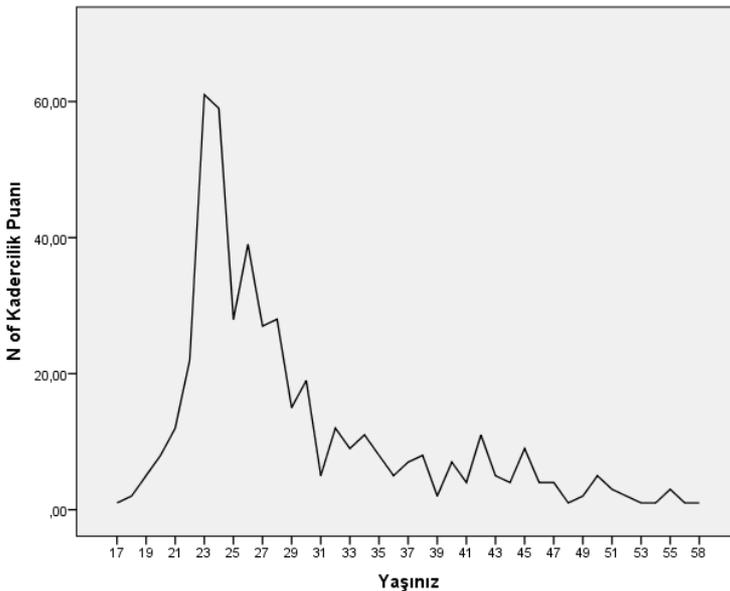
Materials. In our study, the fatalistic tendency was measured by the Fatalism Tendency Scale developed by Orhan (2017), while the demographic characteristics were determined by using a questionnaire developed specifically for this study. Considering easy accessibility, it is mainly applied to unemployed individuals. The Fatalism Tendency Scale is a form consisting of 15 questions to be evaluated in a 5-point Likert style. All the questions are straight and there is no opposite expression. Points are obtained from 4 subscales of Fatalism Tendency Scale (Control Poverty Incorporation [KYI], Importance / Predefined Income [AOB], Taliban Approach [TAI], Irrational Cause Result Relation [ISSI]). Demographic questions include personal information such as gender, age, employment status, as well as information on which job search channels employ to unemployed individuals and how effective they are.

### Results or Findings

The Fatalism Tendency Scale total points, significantly differ for education ( $F_{(4, 456)} = 24,03$   $p = ,000$ ), age ( $F_{(7, 453)} = 3,30$   $p = ,002$ ), socioeconomic status of the family ( $F_{(2, 459)} = 23,79$   $p = ,000$ ) while gender did not significantly differ between sexes ( $t_{(444)} = -1,190$ ,  $p = ,235$ ). In terms of age, the fatalistic tendency is lower in the 41-45 age group ( $M. = 2.80$ ), 21-25 years ( $M. = 3.29$ ) and 26-30 years ( $M. = 3.23$ ).

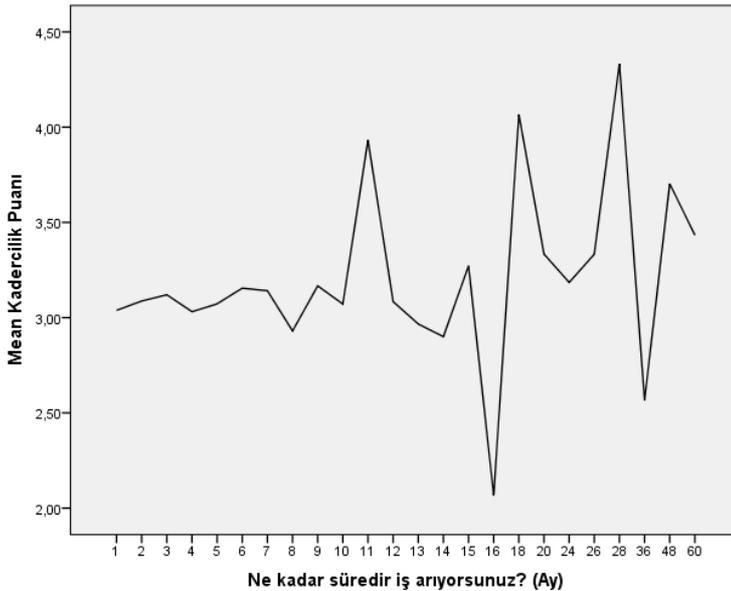
In the subscales, ISSI for the age groups ( $F_{(7, 453)} = 2,07$   $p = ,045$ ), KYI for the gender (Women:  $M. = 3,57$ ; Men:  $M. = 3,79$ ) groups ( $t_{(438,76)} = -2,121$ ,  $p = ,034$ ), significantly differentiated.

**Figure: 1**  
**Age and Fatalism Distribution**



Education has made a significant difference in all sub-dimensions (AOB ( $F(4,456) = 12,70$   $p = ,000$ ), KYI ( $F(4,456) = 9,41$   $p = ,000$ ), TYA ( $F(4,455) = 8,42$   $p = ,000$ )). Posthoc analysis using Tukey's HSD indicated that the difference is especially between university graduates and other groups. University graduates have higher fatalism scores. The socioeconomic status of the family is statistically different in terms of subscales of KYI ( $F(2, 459)=24,71$   $p=,000$ ), AOB ( $F(2, 459)=6,19$   $p=,002$ ), TYA ( $F(2, 458)=10,20$   $p=,000$ ) and ISSI ( $F(2, 459)=10,14$   $p=,000$ ). Differentiation was found in all groups except middle income group and high-income group. The higher the level of income, the greater the fatalistic tendency is. The difference between the current and unemployed groups fatalism tendencies did not make a statistically significant difference ( $t_{(451)}= -0,161$ ,  $p = ,872$ ). Although there is no correlation between the duration of job search and the tendency to fatalism, the fatalistic tendency seems to increase as time passes.

**Figure: 2**  
**Job Search Process and Fatalism Tendency Score**



When the relationship between the finding of financial support from the social environment and the tendency of fatalism is analysed, it is understood that individuals who receive financial support are more fatalistic than those who do not ( $F(2, 431)=5,87$   $p=,003$ ). The difference is among those who have no financial support and who have sufficient financial support. ( $M. = 3,31$ ). Partially supported are among these two groups ( $M. = 3,13$ ). The subscales also differ significantly in terms of KYI ( $F(2, 431) = 9,42$   $p = ,000$ ). When it is considered in terms of spiritual support, the overall score also differs significantly in terms of KYI ( $F(2, 432)=15,73$   $p=,000$ ) and TYI ( $F(2, 431)=4,03$   $p=,014$ ) subdimensions.

In general, three different fatalism levels were formed from the mean ( $M. = 3,16$ ) and standard deviation ( $S. D. = 0,74$ ) of fatalism scores: Low ( $n = 76$ ), Medium ( $n = 311$ ) and High ( $n = 75$ ) Fatalism Tendency Groups.

In the analyses made on these groups, the number of job application vehicles used by the average individual was determined (Low F. T. G.:  $M = 3,93$ , Medium F. T. G.:  $M = 4,22$ , High F. T. G.:  $M = 3,44$ ).

### **Discussion**

The fatalistic tendency does not differ in terms of men and women. The tendency to fatalism appears to be a more fundamental factor in the society. However, in terms of age, the tendency of fatalism, which is quite high at the beginning of 20's, falls with time. Especially in the age period of 41-45 years it is quite fall. As it is known, it is a period in which the individual has peaked professionally and socially. During this summit, it seems that fatalists have devoted themselves to success by moving away from the trends.

The fact that seems to be contrary to general beliefs is that university graduates have higher relative tendency scores than other education groups. However, it seems consistent with the explanation made for the age variable. During this age, young people who have completed university are living in uncertainty. By externalizing control over uncertainty, it shows fatalistic tendencies. Over the time, as the ambiguities about the profession and social life are reduced and become clearer, the tendency of fatalism decreases by internalizing the audit focus.

There is no expectation about any difference between fatalism trends of those who are currently employed and those who are unemployed. It will be explained by more detailed studies that will be carried out on the data. The graphical analysis between job search duration and fatalism tendency shows that there is a tendency to increase the tendency of fatalism as the time passes.

It seems that having or accessing financial resources also increases fatalistic tendencies. It can be said that the tendency of "şükretme" (thanksgiving) in Turkish society is effective at this.

The average number of vehicles used by the Three Fatalism Tendency Levels is reversed according to the literature. High-fate individuals tend to leave their jobs to destiny by using fewer tools. Individuals with moderate and low fate use more tools.

### **Concluding Remarks**

The fatalistic tendency emerges as a common reality of individuals as a social reality. Although gender as a biological feature does not make any difference, the experiences of social life influence the fatalistic tendencies. The degree of fatalism also affects the quality and quantity of the efforts of the job searchers. This poses a threat to the future of the individual as well as to the effectiveness of public social policies.

It is important that the education system, especially the universities, must be structured in such a way that it must save the individual from the fatalism, to develop analytical thinking and cognitive development. Fatalism fire as a social phenomenon shows us the mountain of unemployment as a huge social reality.

## References

- Andersen, S.H. (2009), "Unemployment and Subjective Well-Being", *Work and Occupations*, 36(1), 3-25.
- Åslund, C. & P. Larm & B. Starrin & K.W. Nilsson (2014), "The buffering effect of tangible social support on financial stress: influence on psychological well-being and psychosomatic symptoms in a large sample of the adult general population", *International Journal for Equity in Health*, 13(1), 85.
- Broman, C.L. & V.L. Hamilton & W.S. Hoffman (1997), "The impact of unemployment on families", *Michigan Family Review*, Winter 1996, 83-91.
- Contini, D. & M.G. Richiardi (2012), "Reconsidering the effect of welfare stigma on unemployment", *Journal of Economic Behavior & Organization*, 84(1), 229-244.
- Daly, M. & L. Delaney (2013), "The scarring effect of unemployment throughout adulthood on psychological distress at age 50: Estimates controlling for early adulthood distress and childhood psychological factors", *Social Science & Medicine*, 80, 19-23.
- Drydakis, N. (2015), "The effect of unemployment on self-reported health and mental health in Greece from 2008 to 2013: a longitudinal study before and during the financial crisis", *Social Science & Medicine*, 128, 43-51.
- European Commission (2010), *Investing in well-being at work: Addressing psychosocial risks in times of change*, Directorate-General for Employment, Social Affairs and Equal Opportunities, Belgium: European Commission.
- Extremera, N. & L. Rey (2014), "Health-related quality of life and cognitive emotion regulation strategies in the unemployed: a cross-sectional survey", *Health and Quality of Life Outcomes*, 12(1), 172.
- Gnambs, T. & B. Stiglbauer & E. Selenko (2015), "Psychological effects of (non)employment: A cross-national comparison of the United States and Japan", *Scandinavian Journal of Psychology*, 56, 659-669.
- Kıcı, B. (2017), "Eğitilmiş Genç İşsizliği Üzerinden İşsizlik Kaygısına Bir Bakış", *Çalışma ve Toplum*, 3, 1369-1396.
- Kokko, K. & L. Pulkkinen (1998), "Unemployment and Psychological Distress: Mediator Effects", *Journal of Adult Development*, 5(4), 205-217.
- Kouba, L. (2016), "A Survey: Theory of Control and Welfare State Attitudes", *Procedia-Social and Behavioral Sciences*, tudes. Procedia-Social and Behavioral Sciences, 220, 210-216.
- Meer, P. (2014), "Gender, Unemployment and Subjective Well-Being: Why Being Unemployed Is Worse for Men than for Women", *Social Indicators Research*, 115(1), 23-44.
- OECD (2017), *International Labour Organization (ILO) Resolutions Concerning Economically Active Population, Employment, Unemployment and Underemployment*, <<https://stats.oecd.org/glossary/detail.asp?ID=2791>>, 23.08.2017.
- Orhan, K. (2017), "Kadercilik Eğilimi Ölçeği'nin Geçerlik ve Güvenirlik Çalışması", *Uluslararası Medeniyet Çalışmaları Dergisi*, Yayın Aşamasında.
- Perreault, M. & E.H. Touré & N. Perreault & J. Caron (2017), "Employment Status and Mental Health: Mediating Roles of Social Support and Coping Strategies", *Psychiatric Quarterly*, September 88(3), 501-514.
- Platt, S. (1984), "Unemployment and suicidal behaviour: a review of the literature", *Social Science & Medicine*, 19(2), 93-115.
- Roy, S. (2011), "Unemployment Rate and Divorce", *Economic Record*, September 87, 56-79.
- Shamir, B. (1984), "Self-Esteem and the Psychological Impact of Unemployment", *Social Psychology Quarterly*, 49(1), 61-72.
- Shams, M. (1993), "Social support and psychological well-being among unemployed British Asian men", *Social Behavior and Personality: An International Journal*, 21(3), 175-186.

- Tınar, M.Y. (2013), “İş Çalışma Yaşamı ve İş Analizi”, L. Bilgin (ed.) içinde, *Çalışma Psikolojisi*, Eskişehir: Anadolu Üniversitesi Yayınları No: 2756.
- TUIK (2017), *Hanehalkı İşgücü Araştırması Mikro Veri Seti*, <[http://www.tuik.gov.tr/MicroVeri/Hia\\_2011/turkce/metaveri/tanim/index.html](http://www.tuik.gov.tr/MicroVeri/Hia_2011/turkce/metaveri/tanim/index.html)>, 23.08.2017.
- Winefield, A.H. & M. Tiggemann & H.R. Winefield (1991), “The psychological impact of unemployment and unsatisfactory employment in young men and women: Longitudinal and cross-sectional data”, *British Journal of Psychology*, 82(4), 473-486.
- Winefield, A.H. & H.R. Winefield & M. Tiggemann & R.D. Goldney (1991), “A longitudinal study of the psychological effects of unemployment and unsatisfactory employment on young adults”, *Journal of Applied Psychology*, 76(3), 424.
- Young, W.D. (1985), “The Effect of Length of Unemployment on Self-Esteem, Locus of Control, and Anomy”, The University of Tulsa, *Dissertations*.

## Traces of English Poor Laws in Sherlock Holmes Novels: A Socioeconomic Review

*Altug Murat KOKTAS* (<http://orcid.org/0000-0002-0911-2143>), Nigde Omer Halisdemir University, Turkey; e-mail: [altugmuratkoktas@ohu.edu.tr](mailto:altugmuratkoktas@ohu.edu.tr)

*Ali Gokhan GOLCEK* (<http://orcid.org/0000-0002-7948-7688>), Nigde Omer Halisdemir University, Turkey; e-mail: [aligokhangolcek@ohu.edu.tr](mailto:aligokhangolcek@ohu.edu.tr)

*Ahmet Burcin YERELI* (<http://orcid.org/0000-0002-8746-6756>), Hacettepe University, Turkey; e-mail: [aby@hacettepe.edu.tr](mailto:aby@hacettepe.edu.tr)

*Isil Sirin SELCUK* (<http://orcid.org/0000-0001-9559-1349>), Abant Izzet Baysal University, Turkey; e-mail: [isilselcuk@gmail.com](mailto:isilselcuk@gmail.com)

**Keywords** : England, Sherlock Holmes, Poor Laws, Victorian Period.

**JEL Classification Codes** : Z11, Z13, Y92, N33.

### Extended Abstract

In the mercantilist period known as merchant capitalism, the English nobles described the people who had no income enough to live as poor. In other words, poor expression is used to mean “joe public”. In British society, no religious superiority is provided. In the society, the care of the elderly, the disabled and the homeless have been undertaken primarily by themselves, while the begging and the hooliganism have been tried to prevent with extremely severe punishment. Because, especially in the Protestant morality helping the poor’s is not a personal help but a social task. Therefore, helping the poor, during the period of I. Elizabeth (1533-1603), the teaching of pure morality was abandoned and accepted as a public obligation. In this context, it can be said that with the development of the liberal thought in England, the debate about poverty and poverty benefits are intertwined in a sense.

In 1576, 1589 and 1601, “Poor Laws” were issued and legal regulations for the poor were enacted. These laws have centralized the church as an important institution and have given them vital tasks. For example, the church has been tasked with providing services such as running the property for those who are unemployed and able to work at their own jurisdiction, running a poor house, training apprentices for orphaned and underprivileged children, and providing care for the elderly and disabled. These services and expenditures are made by the church and financed by local and mandatory taxes. In the literature, this law is called “Old Poor Laws”. However, it should not be forgotten that these laws are pre-capitalist era regulations.

The breakdown of the second paradigm in poverty in the United Kingdom occurred in the 1830s and the differences between “independent laborers” and “poor’s” began to differentiate. The last break occurred during the Victorian period, in the form of a struggle for charity and the vision of the social state. The formation of early liberal governmental framework of poverty and the inclusion and comprehension of the social problem in capitalist social relations has occurred in the mid-19th century in England.

The Victoria period, which is the focus of the work is separated from other periods in economic, political, and social events. The writers, poets and artists living in the period in question have used the events they have witnessed and the social sciences in their works.

The Victorian period began with Queen Victoria's ascension in 1837 and ended in 1901 when the queen died at the age of 82. Stability, progress and social reforms are common in the period, but major problems such as poverty, injustice and social unrest have also been among the realities of the period. So much so that the new approaches and views of social events, science and technology, as well as religion, literature, and artistry, which took place during the Victorian era, have led to the emergence of many ideas. Charles Darwin, Sigmund Freud, Karl Marx, Charles Dickens and Arthur Conan Doyle...

The period of Victoria was accelerated by the recognition of poverty as a problem in Britain, the control of misery and the emergence of the prejudice of labour. However, the reason for the importance of Victoria Period is that it reflects the tradition, customs, values of the British nation and its colonial identity, the ideology of those years. As is known, 19th century was a period that for European States, colonialist activities are regarded as a systematic state policy. For England, however, colonialism is not state ideology but identity politics. In this period, led by Queen Victoria, colonialism is at the root of the social, cultural and economic identity of the British Empire. In this context, various propaganda has been made especially in visual and discursive ways to ensure the legitimacy of colonialism. However, criticisms of the period about difficult working conditions and poverty were frequently found in novels, stories and poems of the period.

Art shows a mirror quality reflected in every period. The art of novel is not only aesthetic but also a kind of reality which is best reflected in the reality. Especially in the 19th century and the following centuries, "Industrial Revolution" has changed the social life and restructured. Technological inventions and ideas that emerged after the Industrial Revolution have opened the way for thinking and rationality. In this respect, more rational facts and forms in the novels and in the stories, have begun to be spoken and created. In this way, Arthur Conan Doyle created a detective named "Sherlock Holmes" in his novel "A Study in Scarlet" by putting thought and intelligence in the foreground as required by his era.

Arthur Conan Doyle's birth year 1859 was a period when the British Empire was experiencing tremendous growth and optimism, coinciding with the 22nd anniversary of Queen Victoria's 64-year rule. The resources and labour obtained by the colonialist policies make Britain a more successful and stronger structure. Rapid population growth has become inevitable as technology has improved and welfare has increased. When the negative developments of the period are examined; Poverty, homelessness, widespread use of drugs, increased crime rates, overcrowding of cities. However, London during the Victorian period is a cosmopolitan city, and it is known that this situation causes the spread of epidemics. At the same time, due to the impact of crowded population, today's famous Thames River disrupts the silhouette of the city due to wastes and threatens its health. Along with the growth of the city, there has also been a significant increase in the number of buildings. The wastes of horses pulling cars, and the smoke rising from the soft coal burned to warm up, the city's air became dirty like city's water. Under these circumstances, Conan Doyle, who wrote his novels, didn't remained indifferent to the Victorian period.

When Arthur Conan Doyle uncovered the character of "Sherlock Holmes" in 1887, the readers believed he was a very professional detective and not a fiction. At its core, Mr. Holmes is an amateur and a detective who is not affiliated with the London Police Department. The author, Conan Doyle,

has created a character in the first “Sherlock Holmes” novel, “A Study in Scarlet,” that uses the power of observation and reflects logic principles to the resolution of events. In its most basic form, Sherlock is the person who organizes events in the novels, but at the same time he is a character who conducts research with him and who carries out his research through logic filtering. These features distinguish him from other detective novel characters. Conan Doyle therefore successfully applied the scientific thinking of the period to the character creation process. Doyle is a medical doctor who, as a writer, reads the period quite analytically, and at the same time scientific knowledge, education and observation are necessary at the top. In this work of observations and observations, the sentiments of the Victorian period attempt to keep away from family conflicts and class conflicts, but they have not succeeded so much.

In Sherlock novels, where science and literature are synthesized and curiosity is the forefront, the crime and especially the murder element, which will arise due to the development in the city culture that is likely to be experienced in an industrializing society, is the main subject. However, the political ideas of the period are also seen in Doyle’s novels. As mentioned earlier, it is known that in the period of Victoria, there are a lot of rhetoric that Britain produces in the direction of colonial politics. In this context, in the first part of the novel “A Study in Scarlet”, there is Watson’s short story of life, which led the profession of medicine to the war. Doctor Watson, who was injured in the war that Britain made in Afghanistan, reflects the British colonialist mindset. Likewise, Charles Darwin who is one of the most important names of the period, mostly mentioned “war of existence”, also shows itself in romance. Britain is basically a “struggle for existence” in the opinion that “it is necessary to fight to spread and multiply”.

From 1887 to 1927, Sherlock Holmes stories, written for forty years, represented the good, the bad and the ugliness of the Victoria community. Without making an anachronism to touch the spirit of the period, it is the subject of this work to examine Detective Sherlock and his close friend Dr. Watson, with the dynamics of the Victorian period. In the study, 56 stories of four Sherlock Holmes books written by Arthur Conan Doyle were examined and tried to explain the socioeconomic status of the period. As a last word, as Sherlock Holmes said: “this is insignificant detail Watson; but there is nothing more important in the world than the details.”

## References

- Adams, J.E. (2009), *A History of Victorian Literature*, Singapore: Wiley Blackwell.
- Doyle, A.C. (1993), *The Valley of Fear*, Oxford: Oxford University Press.
- Doyle, A.C. (2005), *A Study in Scarlet & The Sign of the Four*, Great Britain: Wordsworth.
- Frank, L. (2003), *Victorian Detective Fiction and the Nature of Evidence, The Scientific Investigations of Poe, Dickens, and Doyle*, London: Macmillian.
- Hobsbawm, E.J. (1999), *İmparatorluk Çağı: 1875-1914*, (translated: Vedat Aslan), Ankara: Dost Kitabevi.
- Jones, K. (1994), *The Making of Social Policy in Britain: 1830-1990*, London: The Athlone Press.
- Kutzer, M.D. (2000), *Empire’s Children: Empire and Imperialism in Classic British Children’s Books*, Garland Publishing.
- Polanyi, K. (2007), *Büyük Dönüşüm*, (translated: Ayşe Buğra), İstanbul: İletişim Yayınları.
- Sanders, A. (2000), *The Short Oxford History of English Literature*, New York: Oxford University Press.

## University Students in Working Life: Example of Denizli Pamukkale University

*Nagihan DURUSOY-OZTEPE* (<http://orcid.org/0000-0001-5963-8592>),  
Pamukkale University, Turkey; e-mail: [ndurusoy@pau.edu.tr](mailto:ndurusoy@pau.edu.tr)

**Keywords** : Higher Education, Student Employment, Student Supply and Demand, Work and School Life Balance.

**JEL Classification Codes** : J21, J81.

### Extended Abstract

Employment of the student is increasing all over the world. The country which has the highest student employment is Australia with 71% (James et al., 2007). However, countries with a liberal welfare state tradition, such as the United States and the United Kingdom, also have high student employment rates (King & Bannon, 2002). In such countries, the state has limited intervention and support in welfare state services such as education and this directs the students to the labour market to meet their education costs. In Europe however, the average level of student employment is 47% (Beerkens et al., 2011).

Surveys reveal that there are many reasons behind the increase in student employment originated from demand and supply of labour force. Student employment can be because of economic reasons such as inadequacy of resources, high education fees, limited spending of the government on education (Lucas & Lammont 1998; Brennan et al., 2005; King 2003; Roshchin & Rudakov, 2017), and it can be because of institutional factors such as flexible structure of university education system (Beerkens et al., 2011), and it can also be because of non-traditional forms of employment such as Part-time work, on-call work (Lucas & Lammont, 1998). Besides this, student employment is preferred by employers as they are willing to work with low wages and uninsured, or they can adapt to flexible working hours. Especially with the rise of precarious employment, young people constitute one of the important groups of these precarious employment areas as a growing grey area of the labour market.

Most of the researches reveal that students who receive a high level of financial support from their families or earn some income from the state are less willing to work. There are also studies that show that students are entering the working life to maintain high standards of living and consumption (Beerkens et al., 2011). Some studies have concluded that students prefer to work during their student years to provide a competitive advantage in the labour market after graduation. Roshchin and Rudakov (2017) claim that this is because of the differences between the quality of education and the quality of universities. According to this, students who graduate from well-known universities are more likely to enter good jobs on the labour market. However, students who do not graduate from a good college need additional equipment such as “work experience” to compete with the good college graduates in the labour market and to close the gap. However, there is also a competition among students who study at good universities in entering the labour market. The reason is that good universities are usually located in large cities and offer more and more developed labour market opportunities for students. In this sense, young people who goes to good universities prefers to work during their student time to differentiate themselves from other good students at the same level as themselves, and to assess the

labour market opportunities that big cities offer themselves (Roshchin & Rudakov, 2017). For employers today, especially in blue-collar jobs, being a graduate of higher education or academic success is not the sole and determining criterion, increases the importance of work experience among young people in university. Having any work experience is a more favourable situation for employers as it demonstrates that graduates have basic skills in business communication and can take responsibility for fulfilling certain tasks (Roshchin & Rudakov, 2017).

Studies of the effect of paid work on the academic achievement of a student have shown that the effect of the study on the success of the school depends on the intensity of employment, in other words, on hours of work. According to this, it was found that, when low and medium intensity employment levels did not cause adverse effect on the school performance, working more than 24 hours a week adversely affected academic performance (Brennan et al., 2005; Kalenkoski & Pabilonia 2010, Beerkens et al., 2011).

While the literature analysing the situation of young people in the labour market is quite widespread in Turkey, an important part of these studies focuses on unemployment problem of the youths and career education fields. Studies that analyse young people's educational life, student identities and their employment experiences are rarely seen in Turkey. This study aims to examine in detail the reasons behind student employment both in terms of labour supply and labour demand. Within this work, employment experience of the students that continues university education, their working conditions, how they harmonize work and school life and how their working in the job effect their academic success are all tried to explain by using qualitative analysis.

The analytical unit of the study is the university students who both continue to work in a job and continue education in Denizli. For the determination of the analysis unit, the purpose oriented objective sampling technique is used. In this sample, 30 students who both educate at the Faculty of Economics and Administrative Sciences at Pamukkale University and work in different jobs in labour market will be deeply interviewed. It is planned to interview with the employers who employ university students in Denizli to be able to look at from the view of labour force demands. Qualitative research methodology will be used in the study to for the purpose to compile data that can serve as a basis for analysing the research questions. As the research aims to reveal the subjective experiences of working university students in the labour market, semi-structured face-to-face interview technique will be used as a qualitative data collection technique. In addition to local findings on Denizli, the study also plans to analyse quantitative data on the economic, social and demographic characteristics of university students entering the working life in Turkey. In Turkey, data about the university students in employment is planned to be analysed by the data which are obtained from the Turkish Statistical Institute Household Labor Force Survey, Budget Survey, Income and Living Conditions Survey. In the analysis of the data, it is planned to use descriptive statistics, cross tables, relationship analysis.

## References

- Beerkens, M. & E. Mägi & L. Lill (2011), "University Studies as a Side Job: Causes and Consequences of Massive Student Employment in Estonia", *Higher Education*, 61(6), 679-692.
- Brennan, J. & A. Duaso & B. Little & C. Callender & R. Van Dyke (2005), *Survey of Higher Education Students' Attitudes to Debt and Term-time Working and their Impact on Attainment*, Centre of Higher Education Research and Information and London South Bank University, <<http://www.universitiesuk.ac.uk/highereducation/Documents/2005/TermTimeWork.pdf>>, 23.07.2017.

- James, R. & E. Bexley & M. Devlin & S. Marginson (2007), "Australian University Student Finances 2006: Final Report of a National Survey of Students in Public Universities", *Doctoral Diss.*, Australian Vice-Chancellors' Committee.
- Kalenkoski, C.M. & S.W. Pabilonia (2010), "Parental Transfers, Student Achievement, and the Labor Supply of College Students", *Journal of Population Economics*, 23(2), 469-496.
- King, J.E. (2003), "Nontraditional Attendance and Persistence: The Cost of Students' Choices", *New Directions for Higher Education*, 2003(121), 69-83.
- King, T. & E. Bannon (2002), *At What Cost? The Price that Working Students Pay for a College Education*, Washington, DC: United States Public Interest Research Group.
- Lucas, R. & N. Lammont (1998), "Combining Work and Study: An Empirical Study of Full-time Students in School, College and University", *Journal of Education and Work*, 11(1), 41-56.
- Roshchin, S. & V. Rudakov (2017), "Patterns of Student Employment in Russia", *Journal of Education and Work*, 30(3), 314-338.

## The Idea of Trade Protectionism and its Influence on the Ottoman Economic Thought in the Nineteenth Century

*Anil BASARAN* (<http://orcid.org/0000-0003-4117-7008>), *Gazi University, Turkey*; e-mail: [anbasaran@gmail.com](mailto:anbasaran@gmail.com)

**Keywords** : Trade Protectionism, Mercantilism, Economic Nationalism, Friedrich List, Ottoman Economic Thought.

**JEL Classification Codes** : B11, B15, B17, N73.

### Extended Abstract

The origins of protectionist trade policy can be traced back to mercantilist thought which dominated over Europe between 1500 and 1750. Mercantilist thinkers claimed that the source of economic power was precious metals and states should accumulate gold and silver to increase their economic power. States therefore had to take measures to preserve the metals they owned. Naturally, these measures focused on increasing exports and decreasing imports. Because mercantilist economic thought was a pre-industrial doctrine, protectionist policy in mercantilist era was not related to develop manufacture or industry. For mercantilist thinkers, the main goal of the state was to achieve trade surplus (Cohn, 2012: 59).

Protectionist policies, which aim to develop an industry, in a modern sense started to arise in the 19<sup>th</sup> century after the Industrial Revolution. The idea of trade protectionism around Europe showed up firstly in Germany at the beginning of the 19<sup>th</sup> century due to Germany's late industrialization relative to England and France, and its agricultural based economy.

Germany was a confederation of small states that did not have national integrity. While these small states were separated from each other by means of domestic customs, there was no external customs of the confederation either. Consequently, German Confederation was open to competition with especially England and France which were already developed and industrialized countries. These conditions impelled German thinkers to search alternatives for free trade principle. The tradition of German economic thought was autarchy biased, in other words it had a preference to self-sufficiency in economy. With this kind of economic perspective, economic nationalism became a main principle in Germany.

Friedrich List (1789-1846), who was a leading representative of German economic nationalism and German Historical School, adopted an approach including protectionism in foreign trade. Although List was an opponent to classical economic thought which was the source of free trade doctrine, he did not defend permanent protectionist policies in trade and his argument on this issue was that the protectionism in a specific industry should be temporary and selective. Protection should be implemented on an infant industry until it reaches to a level of maturity in which it could compete with foreign industries. Protection should also be implemented only on the manufacture not on the agriculture (Roll, 1952: 245).

In the same era, Ottoman economic thought was dominated by liberal ideas. After Baltalimani Agreement between England and Ottoman Empire had been signed in 1838, Ottoman economy became

open to foreign trade. Tariff rates within the agreement were determined 5% for import and 12% for export (Bulut, 2012: 80). This agreement caused many problems to Ottoman economy. Under the domination of this liberal period, Ottoman intellectuals started to be affected from Western ideas (Mardin, 2010: 59). List's views inspired many Ottoman thinkers and they agreed with him about that economic liberalism only served to economic interests of England (Sayar, 2000: 385). So, they advocated that each nation should adopt economic policy which was proper to its economic structure.

Especially after the second half of the 19<sup>th</sup> century, there were many critics who influenced by List's protectionist ideas and these critics developed a reaction to free trade doctrine. The first objections against liberal trade views came from laymen who were journalists and writers (Toprak, 1982: 105). These were Namık Kemal (1840-1888), Ahmet Mithat Efendi (1844-1912) and Mizancı Murat (1854-1917) who defended protectionist policies and national economy. On the other hand, Musa Akyığıtzade (1865-1923) was the first one who made critics of free trade doctrine in the framework of political economy. The goal of these thinkers was to find ways which could save Ottoman economy from its bad economic conditions.

In this study, the idea of trade protectionism in Germany and its influence on the 19<sup>th</sup> century Ottoman economic thought will be summed up in the context of List's approach. It will be also shown that there were many opponent Ottoman thinkers to liberal trade views and how these thinkers formed their ideas in the light of economic nationalism.

### References

- Bulut, M. (2012), "Osmanlı Ekonomi Politığıne Yeniden Bir Bakış", *Bilig*, 62, 63-96.
- Cohn, T.H. (2012), *Global Political Economy*, Pearson: New York.
- Heilperin, M.A. (1980), *Studies in Economic Nationalism*, Publications de l'Institut Universitaire de Hautes études Internationales: Genova.
- List, F. (1909), *The National System of Political Economy* (trans. S.S. Lloyd), Longmans Green: London. (Originally published in 1841).
- Mardin, Ş. (1962), "Türkiye'de İktisadi Düşüncenin Gelişmesi (1838-1918)", *Siyasal ve Sosyal Bilimler* içinde (der. M. Türköne & T. Önder), İletişim: İstanbul.
- Roll, E. (1952), *A History of Economic Thought*, New York: Prentice-Hall.
- Sayar, A.G. (2000), *Osmanlı İktisat Düşüncesinin Çağdaşlaşması*, Ötüken: İstanbul.
- Shafaeddin, M. (2000), "What Did Friedrich List Actually Say? Some clarifications on the Infant Industry Argument", *UNCTAD Discussion Papers*, No. 149.
- Toprak, Z. (1982), *Türkiye'de Milli İktisat (1908-1918)*, Ankara: Yurt Yayınları.

## Contributors

Deniz ABUKAN	Ankara University	Turkey
Sevda AKAR	Bandirma Onyedi Eylul University	Turkey
Fatih AKBAYIR	Hacettepe University	Turkey
Fatih AKCAY	Pamukkale University	Turkey
Suat AKSOY	Marmara University	Turkey
Emine Ebru AKSOY	Gazi University	Turkey
Mehmet Ali AKSOY	Gazi University	Turkey
Zeynep AKTAS-KORAL	Gebze Technical University	Turkey
Cemalettin AKTEPE	Gazi University	Turkey
Aynur AKPINAR	KTO Karatay University	Turkey
Murat ALP	Nigde Omer Halisdemir University	Turkey
Ali Eren ALPER	Nigde Omer Halisdemir University	Turkey
Findik Ozlem ALPER	Nigde Omer Halisdemir University	Turkey
Emre ATSAN	Nigde Omer Halisdemir University	Turkey
Hakan AY	Dokuz Eylul University	Turkey
Serdal BAHCE	Ankara University	Turkey
Emilia BAMWENDER	University of Wroclaw	Poland
Joanna BARAN	Warsaw University of Life Sciences	Poland
Hayri BARUTCA	Anadolu University	Turkey
Mehmet BAS	Gazi University	Turkey
Anil BASARAN	Gazi University	Turkey
Fetullah BATTAL	Bayburt University	Turkey
Sezercan BEKTAS	Gazi University	Turkey
Tugba BERCINTURK	Hacettepe University	Turkey
Tuba BILGIN	Karadeniz Technical University	Turkey
Erol BULUT	Gazi University	Turkey
Nurbanu BURSA	Hacettepe University	Turkey
Lucas CARVALHO	São Paulo State University	Brazil
Ali Vural CENGIZ	South University	U.S.A.
Vedat CENGIZ	Kocaeli University	Turkey
Affan Hakan CERMIKLI	Gazi University	Turkey
Murat CETINKAYA	Gazi University	Turkey
Ertugrul CINAR	Bayburt University	Turkey
Gokhan COBANOGULLARI	Erciyes University	Turkey
Basak DALGIC	Hacettepe University	Turkey
Fatih Hakan DIKMEN	Gazi University	Turkey
Nagihan DURUSOY-OZTEPE	Pamukkale University	Turkey
Rabia EFEOGLU	Nigde Omer Halisdemir University	Turkey
Furkan ERDOGMUS	Bayburt University	Turkey
Deniz ERER	Ege University	Turkey
Elif ERER	Ege University	Turkey
Irfan ERTUGRUL	Pamukkale University	Turkey
Burcu FAZLIOGLU	TOBB University of Economics & Technology	Turkey
Aydanur GACENER-ATIS	Ege University	Turkey
Michael GASIOREK	University of Sussex	United Kingdom
Richard Andrew GIRLING	University of Wroclaw	Poland
Bilal GODE	Pamukkale University	Turkey
Ali Gokhan GOLCEK	Nigde Omer Halisdemir University	Turkey
Aleksandra GÓRECKA	Warsaw University of Life Sciences	Poland
Aida GULIYEVA	Azerbaijan State University of Economics	Azerbaijan

Vuslat GUNES	Uludag University	Turkey
Aybegum GUNGORDU-BELBAG	Bartın University	Turkey
Seyran GURSOY-CUHADAR	Kocaeli University	Turkey
Mehmet Latif HAYDANLI	Izmir Cadastre Directorate	Turkey
Ahmet ILHAN	Bayburt University	Turkey
Ali ILHAN	Uludag University	Turkey
Tugrul IMER	Gazi University	Turkey
Ercan INCE	Igdir University	Turkey
Ahmet INNECI	Dokuz Eylul University	Turkey
Recep KAHRAMAN	Nigde Omer Halisdemir University	Turkey
Melik KAMISLI	Bilecik Seyh Edebali University	Turkey
Serap KAMISLI	Bilecik Seyh Edebali University	Turkey
Hasan Bulent KANTARCI	Kocaeli University	Turkey
Sahin KARABULUT	Dokuz Eylul University	Turkey
Halis KARADEMIR	Nigde Omer Halisdemir University	Turkey
Cihan Serhat KART	Ondokuz Mayıs University	Turkey
Nefise Tugba KART	Ankara University	Turkey
Yasemin KASAP	Gazi University	Turkey
Goksal Selahatdin KELTEN	Pamukkale University	Turkey
Sadik KILIC	Bulent Ecevit University	Turkey
Altug Murat KOKTAS	Nigde Omer Halisdemir University	Turkey
Ozge KORKMAZ	Bayburt University	Turkey
Sultan Fatih KOSTAKOGLU	Anadolu University	Turkey
Habib KUCUKSAHIN	Pamukkale University	Turkey
Adil KURBAN	Kocaeli Izmit Directorate of Public Health Institution	Turkey
Ekrem MERIC	Anadolu University	Turkey
Busra OGUTCU	Uludag University	Turkey
Mehmet Fahrettin ONDER	Suleyman Demirel University	Turkey
Ibrahim ORGAN	Pamukkale University	Turkey
Kamil ORHAN	Pamukkale University	Turkey
Isil Fulya ORKUNOGLU-SAHIN	Gazi University	Turkey
Abdullah OZCIL	Pamukkale University	Turkey
Metin OZDEMIR	Uludag University	Turkey
Eda OZDILER-KUCUK	Ankara University	Turkey
Itir OZER-IMER	Hacettepe University	Turkey
Basak OZORAL	Istanbul Gelisim University	Turkey
Tayfun OZTAS	Pamukkale University	Turkey
Murat PUTUN	Cukurova University	Turkey
Ulvyye RZAYEVA	Azerbaijan State University of Economics	Azerbaijan
Cigdem SAHIN	Nigde Omer Halisdemir University	Turkey
Asli Ceren SARAL	Ankara University	Turkey
Gozde SARI	Pamukkale University	Turkey
Doga Basar SARIPEK	Kocaeli University	Turkey
Isil Sirin SELCUK	Abant Izzet Baysal University	Turkey
Gul SENIR	Nigde Omer Halisdemir University	Turkey
Aysen SIVRIKAYA	Hacettepe University	Turkey
Suleyman SOYDAN	Kirsehir Province Directorate of Social Security Institution	Turkey
Zehra Bilgen SUSANLI	Isik University	Turkey
Joseph S. SZYLLOWICZ	University of Denver	U.S.A.
Merih TASKAYA	Akdeniz University	Turkey
Huseyin TATLIDIL	Hacettepe University	Turkey
Fatih TEMIZEL	Anadolu University	Turkey
Metehan TOLON	Gazi University	Turkey

Mehmet TOSUNER  
Ebru TUZEMEN-ATIK  
Mehmet Sedat UGUR  
Kursat YALCINER  
Yasemin YALTA  
Halit YANIKKAYA  
Ahmet Burcin YERELI  
Busra YUKSEL

Dokuz Eylul University  
Karamanoglu Mehmetbey University  
Cankiri Karatekin University  
Gazi University  
Hacettepe University  
Gebze Technical University  
Hacettepe University  
Bulent Ecevit University

Turkey  
Turkey  
Turkey  
Turkey  
Turkey  
Turkey  
Turkey  
Turkey