HACETTEPE UNIVERSITY
Center for Market Economics and Entrepreneurship

5TH INTERNATIONAL ANNUAL MEETING

OF SOSYOEKONOMI SOCIETY

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Themes & Topics

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· Environmental Economics and Environmental Management
· Energy Economics and Energy Resource Management
· Economics of Industrial Research and Innovation
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· Tourism Economics and Tourism Management
· Labour Economics and Industrial Relations
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· Poverty and Income Distribution
· Rural Development Policies
· Business Administration
· Health and Education
· Finance and Banking
· Economics and Law
· Spatial Economics
· Law and Business

DEADLINES	
August 15, 2018	Abstract Submission
August 20, 2018	Author Notification
August 31, 2018	Registration Fee and Registration Form Submission
October 10, 2018	Announcement of Programme
October 20, 2018	Submission of Presentation Documents
October 25, 2018	Opening Ceremony
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October 25, 2018 Thursday

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09.30 - 11.00	Session I / *Salon Mandragola*
11.00 - 11.30	Coffee Break
11.30 - 13.00	Session II / *Salon Mandragola*
13.00 - 14.00	Lunch
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20.00 - 22.00	Session VI / *Salon Mandragola*

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. 38th issue of the journal will be published in October 30th, 2018. Sosyoekonomi Journal has covered by several citation and abstracting/indexing databases like TUBITAK Ulakbim Turkish Social Sciences Database, EconLit, Proquest, EBSCO, RePEc, IDEAS, EconPapers, I2OR, Global Impact Factor, Scientific Indexing Service, SOBIAD, Google Scholar, etc.

Based on a decade of its academical 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, four scientific events have been done in different countries. For this year's meeting, Milan had been chosen by editorial board members and made contract with Hotel NH Milano Machiavelli 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 31 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

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Ahmet Burcin YERELI
President of Sosyoekonomi Society

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Room: *Mandragola*
Chair: **Burcu FAZLIOĞLU**

Electricity Consumption-growth Connection: Evidence from Panel Data Regression for Transition Countries
Antonio GARCÍA-AMÁTE & Alicia RAMIREZ-ORELLANA

Macroeconomic Study of the Oil Sector in Ecuador: Statistical Approach through Data Panel
Antonio GARCÍA-AMÁTE & Eduardo Terán YEPEZ

The Rising Hybrid Structure in Globalization: Economic Nationalism and Protective Policies
Serab DURUSOY & Zeynep BEYHAN

Social Moods in Residential Area of High Ecological Risk: Regional Development or A Threat?
Svetlana MAXIMOVA & Oksana NOYANZINA & Daria OMELCHENKO

Review of Road Funding and Heavy Vehicle Charging Mechanisms; An Empirical Evidence from Turkey's Charging of Heavy Tonnage Vehicles Application
Ceyda KÜKRER

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Deshna SURYANARAYAN & Ritwika VERMA

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25 October 2018 Thursday

Session: I / 09.30-11.00

ENVIRONMENT, ENERGY & TRANSPORTATION

Room: *Mandragola*

Chair: **Burcu FAZLIOĞLU**

- Electricity Consumption-growth Connection: Evidence from Panel Data Regression for Transition Countries

  Antonio GARCÍA-AMÁTE & Alicia RAMIREZ-ORELLANA

- Macroeconomic Study of the Oil Sector in Ecuador: Statistical Approach through Data Panel

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- The Rising Hybrid Structure in Globalization: Economic Nationalism and Protective Policies

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- Review of Road Funding and Heavy Vehicle Charging Mechanisms; An Empirical Evidence from Turkey's Charging of Heavy Tonnage Vehicles Application

  Ceyda KÜKRER

Electricity Consumption-growth Connection: Evidence from Panel Data Regression for Transition Countries

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Abstract

The relationship and direction of causality between energy consumption and economic variables such as GDP, income or employment have been an emerging topic in recent years. The main objective of this work is to know if there is a committed relationship between the consumption of electric power, the use of energy and economic growth. The sample consists of the 11 countries of Central Europe and Balkans: Bulgaria, Czech Republic, Estonia, Croatia, Hungary, Lithuania, Poland, Romania, Slovak Republic and Slovenia. The results suggest that the consumption of electric power does have a positive relationship with the GDP per capita, while the use of energy has a negative relationship. The results may have relevant political and social implications. Future research in this field could be considered.

Keywords : Electricity Consumption, Economic Growth, Energy Transition, Panel Data, Central Europe and the Balkans.

JEL Classification Codes : 013, P28, Q43.

Introduction and Background

Energy plays a fundamental role in society. The concern for the environment and for CO_2 emissions has made the relevance for the consumption of energy and the use of it increase. So, the power consumption is in the spotlight. The relationship between energy consumption and CO_2 emissions has been studied by many authors. In newly industrialized countries, it has been shown that increased energy consumption increases CO_2 emissions. This demonstrates that the environment is affected (Sharif Hossain, 2011: 6991-6999). Through the comparison between types of countries we observe how the variables behave differently. For example, in a study conducted for developed and developing countries, it is stated that CO_2 emissions per unit of energy use is higher than in developed countries. We must consider that energy consumption and energy efficiency is lower in developing countries than in developed countries (Niu, Ding, Niu, Li & Luo, 2011: 2121-2131). It shows a bidirectional relationship between CO_2 emissions and energy consumption. Therefore, the increase in CO_2 emissions is a cause of the growth in energy consumption and vice versa (Wang, Zhou, Zhou & Wang, 2011: 4870-4875). On the other hand, others suggest that the relationship is only unidirectional, being the cause of the increase of CO_2 emissions the economic growth and the consumption of energy. Even in some cases, there is no causal relationship between economic growth and CO_2 emissions (Ozcan, 2013: 1138-1147).

With the increase of this concern, research in renewable energy and its involvement in the economic sphere has been developed. Between the consumption of renewable energy and economic growth there is a bidirectional relationship. This is confirmed by a study for the 20 countries that make up the OECD. The increase in the consumption of renewable energy is explained by economic growth, and vice versa (Apergis & Payne, 2010: 656-660) It has been recently demonstrated how, through a study formed by 42 countries, the consumption of renewable energy contributes to the growth of the countries (Ito, 2017: 1-6). This positive relationship between the consumption of renewable energy and economic growth in the countries leads us to consider this issue from the point of view of politics. The public authorities could promote initiatives to increase consumption of clean energy (Inglesi-Lotz, 2016: 58-63). It has been shown how the consumption of renewable energy sources such as biomass, reports a positive relationship on the growth of the countries. A study with panel data on the countries belonging to the G7 confirms this relationship (Bilgili & Ozturk, 2015: 132-138).

Our framework focuses on the study of the relationship between electricity consumption, energy use and economic growth. The consumption of electrical energy is a much-discussed aspect in the literature, while the energy use is not. No literature has been found that reports information on the possible link between energy use and economic growth. Through this relationship we can know if the energy efficiency of a country affects its economic wealth. This is the gap in the research that we propose to cover. So far, the study has focused mainly on the causality of this relationship in the short and long term. There are studies in which the relationship is bidirectional for the case of a group of countries in the short and long term, but for others only in the short term (Mahadevan & Asafu-Adjaye, 2007: 2481-2490). Others, on the other hand, support that there is a uniquely unidirectional relationship that goes from electricity consumption to economic growth. That is, an increase in consumption leads to an increase in the GDP of the countries (Streimikiene & Kasperowicz, 2016: 1545-1549). A work of great interest for the selection of our sample is the one made by Wolde-Rufael, (2014: 325-330). Taking as a sample country in energy transition, it proves that for some countries the unidirectional or bidirectional relationship between electricity consumption and economic growth does not exist.

Our main objective is to know if electricity consumption and energy use have a significant relationship with economic growth and to know what kind of relationship it has (direct or indirect relationship). As for the analysis, the sample consists of 11 countries belonging to Central Europe and the Balkans, considered as countries in energy transition (Wolde-Rufael, 2014: 325-330). The countries are: Bulgaria, Czech Republic, Estonia, Croatia, Hungary, Lithuania, Poland, Romania, Slovak Republic and Slovenia. We propose a dependency relationship between economic growth (dependent variable) and electricity consumption and energy use (independent variables). The energetic use, measured in equivalent kilograms of oil per capita, is a variable that is not introduced in a generalized way in the models that study the relationship between energy and economy. Therefore, we consider it as a relevant contribution to the investigation. Three types of multiple regressions have been carried out (multiple regression by Ordinary Least Squares, multiple regression by random effects and multiple regression by fixed effects) that, through three robustness tests (Breusch and Pagan multiplier test, modified test of Wald and Hausman test), we have checked the most optimal regression type statistically. The results show that both independent variables have a significant relationship with economic growth measured by GDP per capita. However, while the consumption of electricity has a direct relationship with economic growth, energy use has an indirect relationship. These results have a high implication for energy policies that could be carried out in the countries of study.

The structure of the article is as follows: First, we establish the objectives and hypotheses of the work. After setting the bases of the article, we proceed to the study of the database and methodology

used in section three. The fourth section is intended to report the results. Next, we show the most important implications of the analysis of the results. Finally, we conclude our analysis in the sixth section.

Objectives and Hypothesis

As we have been commenting, the proposed objective is to know if the relationship between the dependent variable and the independent variables is statistically significant. We try to know, therefore, the implication that electric consumption and energy use can have on the economic growth of countries, measured by GDP per capita. In relation to this main objective, we could consider different specific objectives:

- Regarding the relationship we propose, if it is significant, we could know what kind of relationship there is between the independent variables and the dependent variable. That is, whether it is a direct (positive) or inverse (negative) relationship.
- Through the robustness tests that study how efficient the three types of regressions are, the objective is to know which one is considered optimal. With this we extract the model and the statistically more reliable results.
- Finally, we can recommend what kind of energy policies can be considered, based on the results extracted.

The hypotheses proposed for this analysis are closely related to the objectives set. The hypotheses are the following:

H1: The economic growth of the countries is explained by electricity consumption and energy use. They present a significant relationship.

As observed in the literature, the relationship we propose in this article has a causal relationship, unidirectional in some cases, bidirectional in others. Therefore, economic growth can be explained by energy use and electricity consumption (Apergis & Payne, 2010: 656-660; Lee & Chang, 2008: 50-65).

H2: Energy use negatively affects economic growth.

The use of energy does not behave in the same way as energy consumption does. While energy consumption encourages economic growth, energy use tends to slow down economic growth (Chang, Chu & Chen, 2013: 282-287).

H3: The consumption of electrical energy directly affects economic growth.

As we have seen in the section on background, most of the literature studied supports a bidirectional relationship between the consumption of electricity and economic growth. (Apergis & Payne, 2010: 1421-1426; C.C. Lee, 2005: 415-427; Narayan & Smyth, 2008: 2331-2341).

H4: The coefficients of the model follow a non-systematic difference during the period studied. The most optimal model is the multiple regression by random effects.

H5: The behavior of a country affects the behavior of the remaining countries.

Database and Methodology

Database and Sample

The database used for the analysis has been extracted from the official website of the World Bank (<www.databank.worldbank.org>). The database is called "World Development Indicators", considered by the World Bank as the main collection of development indicators. It is made up of world-renowned information sources. Presents data at national, regional and international level. This database has been used for previous articles (Kais & Sami, 2016: 1101-1110).

For the present study we have selected 11 countries belonging to Central Europe and the Balkans. The countries are the following: Bulgaria, Czech Republic, Estonia, Croatia, Hungary, Lithuania, Poland, Romania, Slovak Republic and Slovenia. These countries have been selected as they are considered countries in energy transition, so a longitudinal study of electricity consumption and energy use is interesting (Acaravci & Ozturk, 2010: 604-608). The study period covers from 1989 to 2014.

Methodology

As we have indicated before, the sample consists of 11 countries belonging to Central Europe and the Balkans and is studied over a period spanning 25 years (1989-2014). To work with data longitudinally, we have chosen the panel data technique, through the STATA software (Baltagi, 2008: 351). The data panel is a technique widely used in studies of energy economy (Huang, Hwang & Yang, 2008: 41-54, Wang, Zhou, Zhou & Wang, 2011: 4870-4875). Although it suffers from limitations, such as the use of co-integration techniques (Westerlund, Thuraisamy & Sharma, 2015: 359-363).

The study variables are the following:

- Dependent variable. As a variable to explain we have chosen the Gross Domestic Product per capita, measured in constant dollars of the year 2010 (Huang et al., 2008: 41-54).
- Independent variables. On the one hand, we have chosen the electric power consumption measured in kilowatts per hour per capita (kWh). On the other hand, the energy use measured in kilograms of oil equivalent per capita has been selected (Kais & Sami, 2016: 1101-1110).

From the statistical point of view there are several types of regressions. For the present study three types of regressions have been carried out: multiple regression by Ordinary Least Squares (OLS), multiple regression by random effects and multiple regression by fixed effects. What we achieve with this is to analyze which of the regressions studied is the most convenient in terms of extracting results, through different econometric tests.

The model, therefore, relates the consumption of electric energy and the use of energy with the GDP per capita, considered as a variable to be explained. The econometric model has been estimated as follows:

$$GDPPCR_{it} = \alpha_i + \beta_{1i} \cdot UE_{it} + \beta_{2i} \cdot CE_{it} + u_{it}$$

$$para: i = 1,2,\dots,N; t = 1,2,\dots T \quad (1)$$

where $GDPPCR_{it}$ is the Gross Domestic Product Per Capita, i represents the number of countries, t is the number of years and αi and βi are the independent coefficient and the coefficients of each independent variable. UEit is the energy use measured in kilograms of oil equivalent and CE_{it} is the consumption of electric power measured in kilowatts per hour per capita (kWh).

To compare the regression by OLS with the regression by random effects, we used the LM test. To test the LM test, the null hypothesis is the non-influence of countries on the covariance H0: Cov (u_{it}, u_{jt}) = 0 for all tei ≠ j, while the alternative hypothesis is the dependence of countries on the covariance H1: Cov (u_{it}, u_{jt}) ≠ 0, for at least one pair i ≠ j. To test the alternative hypothesis, we apply the LM test of Breusch and Pagan (Breusch & Pagan, 1980: 239-253):

$$LM = T \sum_{i=1}^{N-1} \quad \sum_{j=i+1}^{N} \hat{p}_{ij}^2 \tag{2}$$

where $\hat{p}_{ij}^2$ is the pairwise estimate of the residuals of Equation 1 for each i. Under the null hypothesis, the LM statistic has an asymptotic chi-square with N (N-1) / 2 degrees of freedom.

After comparing the regression of OLS with the regression by random effects, we started to relate that with the regression by fixed effects. We continue with the basis of Equation 1. To compare the regression by fixed effects, we use the modified Wald statistic. To prove this statistic, we assume the null hypothesis of homoscedasticity H_0: sigma (i) ^ 2 = sigma ^ 2 for all i, while the alternative hypothesis defends that H1 = sigma (i) ^ 2 ≠ sigma ^ 2 for all i. To test the alternative hypothesis, we apply the modified Wald statistic (Greene, 2000: 1189):

$$W. = \widehat{\theta}` I(\theta) \widehat{\theta} \tag{3}$$

where I (y = θ) is the probability for θ and for \ hat {\ theta}, the value of θ that maximizes I (y = 0). The role played by I (θ) in this statistical test is to calibrate the value of θ within the null hypothesis.

Finally, through the Hausman test, we compare the goodness of the multiple regression by fixed effects and the multiple regression by random effects. It is recommended when comparing fixed effects and random effects in the linear regression because it is much less likely that a negative difference will occur in the covariance matrix. To test the Hausman test, the null hypothesis is that the difference of the coefficients is not systematic. On the contrary, the alternative hypothesis argues that the sample follows random differences. To test the alternative hypothesis, we apply the Hausman test (Hausman, 1978: 1251-1271):

$$H = (\beta_C - \beta_e)` (V_c - V_e)^{-1} \cdot (\beta_c - \beta_e) \tag{4}$$

where

β_c is the coefficient of the consistent estimator (fixed effects)

β_e is the coefficient of the efficient estimator (random effects)

V_c is the covariance matrix of the consistent estimator (fixed effects)

V_e is the covariance matrix of the efficient estimator (random effects).

Results

One of our objectives in this work is to know which of the three regression models used (OLS, regression by fixed effects and regression by random effects) is the optimal one for the analysis and interpretation of the results.

In the first place, we report the results extracted from the LM test of Breusch and Pagan. As we have indicated in the methodology section, the null hypothesis is the non-dependence in the countries, while the alternative hypothesis affirms that there is a transversal dependency in the countries. We

observe in Table 1 how the level of significance of the statistic is below 0.05. This forces us to accept the alternative hypothesis. That is, the relationship that exists between the independent variables and the dependent variable in our study is affected by the time series, in this case, 25 years. This result leads us to select the regression by random effects as the most optimal option, in comparison with the regression by OLS.

Table 1. Breusch LM Test and Pagan for Random Effects

	Var	*sd = sqrt (Var)*
gdppercapita	2.44e+07	4934.918
e	1615264	1270.93
u	9202461	3033.586

Test: Var(u) = 0	Chibar2 (01) = 1838.12
	Prob > chibar2 = 0.0000***

*Note: *** Indicates significance at the 0.05 level.*
Source: self-made.

Together with this test, we analyze the homoscedasticity of the model through the modified Wald statistic. To do this we compared the variance of the regression errors by OLS and the regression by fixed effects. The null hypothesis supports the presence of homoscedasticity (when the variances of the conditional error to the explanatory variables are constant throughout the observations). While the alternative hypothesis considers that we are in the presence of heteroscedasticity (the variances of the errors are not constant throughout the observations). As can be seen in Table 2, the model presents heteroscedasticity problems for OLS and fixed effects regressions. The chi-square has a significance level of 0.000 <0.05. The problem of heteroscedasticity may be because we work with transversal variables (energy and economic variables). That is, they do not have a high relation to each other, so the variance of their errors differs. It can also be due to working with time series. After the homoscedasticity problem, the multiple regression is rejected by fixed effects.

Table 2. Modified Wald Test

Chi2 (11)	386.14
Prob>chi2	0.0000***

*Note: *** Indicates significance at the 0.05 level.*
Source: self-made.

Table 3. Hausman Test

	Coefficients			
	(b)	*(B)*	*(b-B)*	*Sqrt diag (V_b-V_B)*
	fe	*re*	*Difference*	*S.E.*
energyuse	-4.004339	-4.08788	.0835408	.1140388
Electricpower	5.81035	5.769414	.0409363	.0238434

Chi2 (2) = (b-B) ' [(V_B-V_B)^(-1)](b-B)	3.26
Prob>chi2	0.1962***

*Note: ***Indicates significance at the 0.05 level.*
Source: self-made.

Finally, through the Hausman test, we will know if the study of the model is affected by the time series. As we saw in the previous section, the null hypothesis defends that the difference in the coefficients is not systematic. While the alternative hypothesis states that the difference in the coefficients is systematic. Table 3 reports the data extracted after the calculation of the Hausman test.

We observe how the chi squared presents a level of significance of 0.1962> 0.05. We affirm that the difference of coefficients is not systematic. Therefore, we must choose the random effects regression model, as the most reliable of the three studies in the analysis.

Once the results of the different tests have been examined, the most reliable linear regression for the interpretation of the results for this model is the multiple regression by random effects. In Table 4 we can see the results extracted from the analysis.

First, we look at the level of significance of the explanatory variables. Both variables, energy use and electricity consumption, are significant in the model and, therefore, are related to economic growth measured by GDP per capita. The p-value is 0.000 <0.05.

On the other hand, we observe that the R-square gives us a satisfactory result. 61.26% of the variance of the model can be explained by the independent variables. Therefore, the variation in per capita GDP is explained by 61.26% due to the variation in energy use and electricity consumption.

Finally, another of the relevant data in Table 4 are the correlation coefficients presented by the independent variables. Energy use has a correlation coefficient of -4.08788, that is, it has an inverse relationship with economic growth. While the consumption of electricity, with a value in the coefficient of 5.769414, has a positive relationship with GDP per capita. These results are of great political implication, which will be studied in the Discussion and conclusions section.

Table 4. Multiple Regression for Random Effects

Gdppercapita	*Coef.*	*Std. Err.*	*z*	*P>[z]*	*[95% Conf. Interval]*
energyuse	-4.08788	.4635289	-8.82	0.000***	-4.99638, -3.17938
electricpower	5.769414	.203481	28.35	0.000***	5.370598, 6.168229
_cons	-846.6044	1394.47	-0.61	0.544***	-3579.716, 1886.507
sigma_u	3033.5558				
sigma_e	1270.9304		R-square = 0.6126		
rho	085068357		(fraction of variance due to u_i)		

*Note: *** Indicates significance at the 0.05 level.*
Source: self-made.

Discussion and Conclusion

The relationship between energy consumption and economic growth has reported a considerable number of different results. Depending on the sample, and the analysis that are carried out, the conclusions may be different. The main objective of this work is to know if there is a significant relationship between the consumption of electric energy and energy use with economic growth measured in GDP per capita. Analyze how this relationship is, whether it is positive or negative. For this we have provided a series of statistics that have allowed us to select the optimal regression model.

Through the LM test (Breusch & Pagan, 1980: 239-253), we know that there is a transverse dependence of the countries in the model. That is, the behavior of a country during the time series studied affects the behavior of other countries. For what we can consider in the face of future implications that the behavior of the countries of Central Europe and the Balkans is related. This result may be because we study 11 countries that are in the same geographic region, so they must behave in an equivalent way. As for energy consumption, these are countries that are currently in energy transition, so all of them will be governed by very similar political actions (Acaravci & Ozturk, 2010:

604-608). We accept, therefore, our hypothesis H5: The behavior of a country, affects the behavior of the remaining countries. This transverse effect is common when studying countries from the same region or continent (Chang, Chu & Chen, 2013: 282-287).

The modified Wald test rejects the null hypothesis of homoscedasticity in the fixed-effect model. That is, the conditional error variances in the explanatory variables are constant. Homoscedasticity is one of the indispensable conditions to carry out a linear regression (Cuadros-Rodriguez, Gonzalez-Casado, Garcia-Campana & Vilchez, 1998: 550-556; Zambom & Kim, 2017: 425-441). For the multiple regression of fixed effects studied here, homoscedasticity is rejected, that is, the explanatory variables for this model are not reliable, since the variance of the error is not constant.

Through the Hausman test (Hausman, 1978: 1251-1271), we accept the hypothesis proposed at the beginning of the article, namely: The coefficients of the model follow a non-systematic difference during the period studied. The most optimal model is the multiple regression by random effects. It must be considered that the proposed model behaves differently in time, this difference being not systematic. This allows us to know the effects of crises such as the Persian Gulf War (Hamilton, 2011: 1689-1699), or the financial crisis of 2013 (Dellink, Chateau, Lanzi & Magné, 2017: 200-214).

The use of energy and the consumption of electrical energy have a unidirectional relationship with respect to the behavior of GDP per capita. We accept our hypothesis, namely: The economic growth of countries is explained by electricity consumption and energy use. They present a significant relationship. Related articles support this unidirectional relationship. The level of electricity consumption and energy use affects the economic growth of countries (Huang, Hwang, & Yang, 2008: 41-54; C.C. Lee & Chang, 2008: 50-65; C.C. Lee & Chang, 2007: 1206-1223). This relationship bears strong political implications, since energy policy affects economic growth in countries belonging to Central Europe and the Balkans.

The use of energy and the consumption of electrical energy behave differently. While the consumption of electricity has a positive relationship with economic growth, energy use has a negative relationship. We accept, therefore, the hypotheses raised at the beginning of our study, namely: The consumption of electrical energy directly affects economic growth; Energy use negatively affects economic growth.

The most relevant contribution of this work is to demonstrate the negative relationship that exists between energy use and economic growth. The correlation coefficient of energy use is -4.08788. In other words, a 1% increase in GDP per capita means that energy use decreases by 4.09%. The economic growth of the countries studied is influenced by the level of energy efficiency. We suggest that efficient energy policies be carried out, through greater investment in renewable energies that contribute to the improvement of economic growth. At the environmental level, the relationship between energy use and CO_2 emissions is also an important aspect. Kais & Sami, (2016: 1101-1110) confirm that energy use is directly related to CO_2 emissions. So, they suggest environmental policies that I promote.

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Macroeconomic Study of the Oil Sector in Ecuador: Statistical Approach through Data Panel

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Abstract

Ecuador is one of the most important oil exporting countries in Latin America. The implication of fossil resources on the economy and society in this country surpasses the limits of a country that is not focused on the oil economy. A large part of its exports is part of oil exports. The dependence on oil in Ecuador has been a subject that has been studied in the past. But no empirical articles have been observed that are framed in a transition that goes from the dependence of fossil resources to become a diversified economy, driven by renewable energies. In this article, we will see the relationship between macroeconomic variables and energetic variables. The study period covers from the year 2000 until the year 2014. The relationships between variables have been studied through three regressions by ordinary least squares, using panel data. Framed in a process of possible transition from an oil economy to a removable energy economy, it is observed as a decrease in the consumption of oil derivatives, propitiating an increase in the production of hydroelectric energy. This and other conclusions have a high political implication.

Keywords : Oil Sector, Ecuador, Macroeconomics, Social-political Approach, Panel Data.

JEL Classification Codes : F41, N76, 013, P28, Q43.

Introduction and Background

Ecuador, like most of the Latin American countries, in its beginnings in the economic activity, was mainly dedicated to the primary sector. At the beginning of the 20th century, the economy of Ecuador concentrated on the export of primary materials, such as banana or cocoa (Escobar, Cañarte, Macías, & García, 2017: 25-36). The economy of Ecuador was changing, and then or did each of the economic sectors. The great change of the Ecuadorian productive matrix came from the fossil resources. Because of industrialization, the consumption of electric power increased exponentially. Due to the technological intensification applied to different sectors, Ecuador had to look for a source of regular energy that would provide it with the electric energy demanded by the economy. Added to this is the rapid increase in sectors such as transport or the domestic sector. Due to these reasons, the exploitation of crude oil was highly necessary to face the energy demand that overtakes the country (Fonteine, 2002: 13). Between 1929 and 1951, oil production was three times greater than the consumption of electric power in Ecuador (Pinzón, 2018: 88-101). That gave the Latin American country enough surplus to export the crude to different countries. Since then, Ecuador has based its economy on petroleum resources.

The situation of oil in Ecuador is highly complex. This country suffers a high dependence on oil from an economic point of view (Ponce-Jara, Castro, Pelaez-Samaniego, Espinoza-Abad & Ruiz, 2018: 513-522). It is said that Ecuador is a mineral economy, because more than 40% of its exports are occupied by the oil sector and more than 8% of the Gross Domestic Product is thanks to the gains in this sector (Caria, 2015: 2000-2015). Not only the dependence on oil is a problem, but the political management of this sector hinders the economic wealth. It was not until 1972, through Decree 430 that the Law of Hydrocarbons was in force, which the oil resources came into the hands of the nation (Cabezas, 1974: 30-33). Through this Hydrocarbons Law, all private companies had to sign a service or association contract, which would give them the authority to operate a concrete oil well (Davalos, 1979: 37). Private companies were forced to sign these contracts, which reflect aspects such as the annual obligatory investment, the fees payable to the State, the premium payable on entry, among others. The companies were then forced to pay a percentage on the extraordinary profits of each company. This percentage was around 25-30% of this extraordinary benefit (Gudynas, 2009: 187-225).

At the end of the 20th century and the beginning of the 21st century, the regulatory policy was not so prejudicial for private companies. It was then that in 2007, the government went from being neoliberal, to be a conservative left. This change was led by former president Rafael Correa. A period known as the "energetic sovereignty" begins. Until then, the private sector produced more than 63% of the crude oil (Mateo & García, 2014: 113-139). After the year 2007, the highest percentage of production is carried out by Petroecuador, the public company of a group of oil companies. This change in the energy policy of the country, brought with it serious consequences for the Ecuadorian economy, among others, the flight of strong private companies operating in the country (Escribano, 2013: 152-159). On the other hand, the policy of subsidies to the group of derivatives that is marketed in the country, makes the level of indebtedness of the same increase exponentially (Creamer-Guillen & Becerra-Robalino, 2016: 9-26).

It should be noted, as another aspect that hinders the good performance of the sector, the low refining capacity of crude oil in Ecuador. In 2015, the cost per import of derivatives exceeded one million dollars, representing 27% of the Derivatives Deficit Financial Account (DDFA). The increase in the demand of internal energy, accompanied by the volatility in the price of crude, makes this situation does not allow to achieve great benefits (Pinzón, 2018). In 2015, 63% of the oil produced in Ecuador was exported, while only 27% was destined for domestic use (Ponce-Jara et al., 2018: 513-522).

Due to this series of problems, and because oil is a finite resource, we have begun to discuss the transition to renewable energies. In 2004, more than 82% of primary energy production came from petroleum derivatives, while only 14% derived from renewable sources. The hydroelectric energy is the second energy that contributes the most, behind the oil. Only 45.5% of the installed capacity corresponds to hydroelectric power (Peláez-Samaniego, Garcia-Perez, Cortez, Oscullo, & Olmedo, 2007: 4177-4189). Because this capacity is not greater, Ecuador is forced to import oil derivatives for thermal power plants, where much of the electricity consumed by the country is transformed. It is expected that in 2018, hydroelectric energy will occupy more than 90% of the energy generated in the country (Ponce-Jara et al., 2018: 51-522). This would ensure that Ecuador change its energy matrix, thus that the level of dependence on oil is not so excessive.

Due to the high political, economic and social implication that the energy sector has for Ecuador, the main objective of this article is to know the relation of dependence that exists between energetic variables and macroeconomic variables. We want to know what implication the oil sector has over the

country's economy, through statistical methods, and observe how that change affects the energy matrix that we have been talking about. The goal is to extract possible practical implications from the results obtained. We have not found a significant number of articles dealing with macroeconomic variables of Ecuador from a statistical point of view. We will to cover that gap through this investigation.

The structure of the article is as follows: we will define the main objective and the hypothesis, to then describe the database and the methodology used. Finally, the results will be presented, along with the practical implications that these entails.

Objectives and Hypothesis

The main objective of this article is to know how the macroeconomic variables are related to the energetic variables in Ecuador. That is, what economic implications have the energetic variables chosen for the study? Once these relations are known from the statistical point of view, the objective will be to draw conclusions and practical implications, which will enable us to formulate possible policy measures. As secondary objectives, the following are found:

- Study the implication of the policy of the oil rents, on the economic and energy variables.
- Know how the production of hydroelectric energy behaves, together with macroeconomic and energy variables.
- Investigate how the Gross Domestic Product behaves in relation to energy variables.

With these objectives, we will try to cover the gap in the research that we indicated in the last section.

Being an empirical study, first, we must formulate a series of hypothesis in the investigation, to then contrast with the results obtained in it. The proposed hypotheses are the following:

H1: The country's rentier policy, studied through oil revenues, affecting the change in the energy matrix, the Gross Domestic Product and the imports of derivatives.

H2: The Gross Domestic Product has a dependency relationship with variables such as oil revenues and electricity consumption.

H3: The production of hydroelectric energy presents an inverse relationship with oil revenues and the consumption of petroleum products.

The acceptance or rejection of this hypothesis gives way to our investigation with the practical implications that this entails.

Database and Methodology

Database and Sample

Two databases have been used to gather the information necessary to carry out the research. One of them has been extracted from the official website of the World Bank (<www.databank.worldbank.org>). The database is called "World Development Indicators", considered by the World Bank as the main collection of development indicators. It is made up of world-renowned information sources. Presents data at national, regional and international level. This database has been used for previous articles (Kais & Sami, 2016: 1101-1110). The other database has been the

BP Statistical Review, extracted from the official website of British Petroleum (<www.bp.com>). It is one of the most important databases in terms of energy indicators. This database has been used by similar investigations to this (Pinzón, 2018: 88-101).

The study has been carried out for the years between 2000 and 2014 for Ecuador.

Methodology

As indicated above, the study has been done for the years between 2000 and 2014. The variables chosen to refer the economy of Ecuador, which has been studied through panel data. To work with data longitudinally, we have chosen the panel data technique, through the STATA software (Baltagi, 2008: 351). The data panel is a technique widely used in studies of energy economy (Huang, Hwang & Yang, 2008: 41-54; Wang, Zhou, Zhou & Wang, 2011: 4870-4875). Although it suffers from limitations, such as the use of co-integration techniques (Westerlund, Thuraisamy & Sharma, 2015: 359-363).

For the extraction of results, three linear regressions for Ordinary Minimal Square (OLS) have been carried out. Each one of these regressions, have as objective to verify the statistical hypothesis that have been described in the previous section. The regressions that have been used are the following:

Model 1

$$HE_t = \beta_t + \beta_t OR_t + \beta_t GDP_t + B_t FX_t + \beta_t FI_t + \beta_t RT_t + \beta_t PEC_t + \beta_t FEC_t + \varepsilon_t$$

$$para: t = 1,2,\dots T \quad (1)$$

where t represents the number of years; HEt is the electrical production from hydroelectric sources measured as a percentage of the total electricity produced; βt is the independent coefficient and the coefficients of each independent variable; ORt is the percentage of oil rent over GDP; GDPt is the Per Capita Gross Domestic Product measured in constant 2010 US $; FXt are exports of oil derivatives measured as a percentage of commercial exports; FIt are imports of oil derivatives measured as a percentage of commercial imports; RTt is the refining performance measured in hundreds of barrels per day; PECt is the primary energy consumption measured in millions of tons of oil equivalent; FECt is the energy consumption from fossil derivatives measured as a percentage of total energy consumption; εt is the model error.

Model 2

$$GDP_t = \beta_t + \beta_t NG_t + \beta_t OR_t + \beta_t FX_t + \beta_t FI_t + \beta_t EPC_t + \beta_t FEC_t + \beta_t WTI_t + \beta_t RT_t + \varepsilon_t$$

$$para: t = 1,2,\dots T \quad (2)$$

where t represents the number of years; GDPt is the Per Capita Gross Domestic Product measured in constant 2010 US $; βt is the independent coefficient and the coefficients of each independent variable; NGt is the electrical production from natural gas; ORt is the percentage of oil rent over GDP; FXt are exports of oil derivatives measured as a percentage of commercial exports; FIt are imports of oil derivatives measured as a percentage of commercial imports; EPCt is the consumption of electrical energy measured as kWh per capita; FECt is the energy consumption from fossil derivatives measured as a percentage of total energy consumption; WTIt is the West Texas Intermediate, reference price of the oil barrel; RTt is the refining performance measured in hundreds of barrels per day; εt is the model error.

Model 3

$$FI_t = \beta_t + \beta_t GDP_t + \beta_t RT_t + \beta_t OR_t + \beta_t EPC_t + \beta_t FEC_t + \varepsilon_t$$

$$para: t = 1,2,\dots T \quad (3)$$

Where t represents the number of years; FI_t are imports of oil derivates measured as a percentage of commercial imports; β_t is the independent coefficient and the coefficients of each independent variable; GDPt is the Per Capita Gross Domestic Product measured in constant 2010 US $; RTt is the refining performance measured in hundreds of barrels per day; ORt is the percentage of oil rent over GDP; EPCt is the consumption of electrical energy measured as kWh per capita; FECt is the energy consumption from fossil derivatives measured as a percentage of total energy consumption; εt is the model error.

Results

To answer the hypotheses that have been formulated previously, we present the results of the statistical analysis. This is formed by three multiple regressions through Ordinary Minimal Squares (OMS).

We observe in model 1 (Table 1), that the electrical production from hydroelectric sources is explained to 92.62% by the dependent variables chosen for the model. Most of the relationships between the variables are representative (P> 0.05). The two variables that do not have a significant relationship with hydroelectric production are those related to foreign trade (exports and imports of petroleum derivatives). Within the significant relationships, we can highlight the relationship with the Gross Domestic Product and the oil rent. Both have an inverse relationship with hydroelectric production. As this increases, GDP and oil rent decrease. We see how the relation with the oil rent is more abrupt than the relation with the GDP (-0.03 and -2.42, respectively).

Table 1. Model 1

Number of obs	15
F (7,7)	30.29
Prob > F	0.0000
R-squared	0.9578
Adj R-squared	0.9262
Root MSE	2.0403

Electricity production from hydroelectric sources	*Coef.*	*Std. Err.*	*t*	*P>|t|****	*[95% Conf. Interval]*	
Oil rents	-2.426033	.5569175	-4.36	0.003	-3.742934	-1.109133
GDP per capita	-.0322556	.007202	-4.48	0.002	-.0488635	-.0156477
Fuel exports	-.2883078	.1867673	-1.54	0.161	-.718994	.1423784
Fuel imports	-.4267963	.2921061	-1.46	0.182	-1.100394	.2468016
Refinery throughputs	.1986876	.0784581	2.53	0.035	0.177629	.3796124
Primary energy consumption	7.731429	1.679483	4.60	0.002	3.858536	11.60432
Fossil fuel energy consumption	-3.930915	0.7231619	-5.44	0.001	-5.598529	-2.2633
Cons	440.2166	68.64579	6.41	0.000	281.9191	598.5141

*Note: *** Indicates significance at the 0.05 level.*
Source: self-made.

Regarding model 2 (Table 2). On this occasion the variable to be explained is the Gross Domestic Product, through different independent variables. The explanation percentage of the independent variable is very similar to the previous one. On this occasion, we observe how GDP per capita is explained in 97.92% by the chosen dependent variables. We see how for this model, there are only two

relationships that are significant at 0.05. On the one hand, oil rent has a significant relationship (0.023). The coefficient of oil rent (79.52) confirms that there is a direct and strong relationship with GDP per capita. On the other hand, the consumption of electrical energy also presents a direct and significant relationship. We observe that there are variables such as the price of crude oil or refining performance, which do not have a significant relationship with GDP per capita. A fact that deserves to be contrasted in the discussion section.

Table 2. Model 2

Number of obs	15
F (6,8)	83.53
Prob > F	0.0000
R-squared	0.9911
Adj R-squared	0.9792
Root MSE	80.553

GDP per capita	*Coef.*	*Std. Err.*	*t*	*P>|t|***	*[95% Conf. Interval]*	
Electricity production from natural gas sources	23.6145	12.19105	1.94	0.101	-6.215917	53.4449
Oil rents	79.52134	26.32601	3.02	0.023	15.10391	143.9380
Fuel exports	-30.68356	15.52682	-1.98	0.096	-68.67631	7.30920
Fuel imports	-26.2056	12.64857	-2.07	0.084	-57.15554	4.74434
Electric power consumption	2.674069	.4800348	5.57	0.001	1.499466	3.84867
Fossil fuel energy consumption	32.43992	32.917	0.99	0.362	-48.10508	112.9840
West Texas Intermediate	-2.01694	4.535537	-0.44	0.672	-13.115	9.0811
Refinery throughputs	-2.413247	3.656451	-0.66	0.534	-11.36026	6.53376
Cons	322.7418	2930.073	0.11	0.916	-6846.888	7492.3700

*Note: *** Indicates significance at the 0.05 level.*
Source: self-made.

Finally, in model 3 (Table 3) we tested the statistical relationship with such a significant variable in Ecuador, such as the import of oil derivatives. On this occasion, the dependent variable is explained in 84.25% by the independent variables chosen. Oil rents (0-002, 0.97) and electric power consumption (0.024, 0.03) are the two independent variables that have a significant relationship with imports of oil derivatives. The coefficients indicate a weak relationship between the variables. There are variables such as refining performance, consumption of derivatives or GDP per capita, which do not have a significant relationship, but which have a direct influence on the dependent variable. This will be explained in the discussion section.

Table 3. Model 3

Number of obs	15
F (6,8)	15.98
Prob > F	0.0003
R-squared	0.8988
Adj R-squared	0.8425
Root MSE	1.9047

Fuel imports	*Coef.*	*Std. Err.*	*t*	*P>|t|***	*[95% Conf. Interval]*	
GDP per capita	-.011709	.0060157	-1.95	0.083	-.0253175	.0018995
Refinery throughputs	-.0908134	0.78771	-1.15	0.279	-.2690057	.0873789
Oil rents	.9705099	.2191537	4.43	0.002	.4747497	1.46627
Electric power consumption	.0331954	.0123054	2.70	0.024	.0053587	.061032
Fossil fuel energy consumption	1.280954	.6608189	1.94	0.085	-.2139223	2.77583
Cons	-76.40412	63.25581	-1.21	0.258	-219.4987	66.69046

*Note: *** Indicates significance at the 0.05 level.*
Source: self-made.

Discussion and Conclusion

After the results obtained, we will comment on these. The results fit into what was said by other authors in past research. Ecuador is in endless debates, which makes the investigation reflect each of the opposing positions. There are political, economic and social debates of many ways, but for the present study, we have only looked at those that have economic or energetic consequences. As we already know, Ecuador is one of the most important oil exporting countries in Latin America, and there is a strong dependence on this resource, which is reflected in its production matrix. Much of its exports (> 40%) are due to oil exports to countries such as Colombia, Peru, China or the US (Luis et al., 2018). More specifically, within the oil sector, there are other debates of great interest to society and the Ecuadorian economy. One of those debates is the rentier politics of Ecuador. There are detractors that there is an excessive rentier policy. These opinions are framed in the fact that the greater the fiscal pressure on companies, the greater the exodus of these will be (Marí Del Cristo & Gómez-Puig, 2016: 2139-2155). But judging from the results obtained, the higher the oil rents of the country, the greater the GDP per capita of this country, thus we have a direct relationship between both variables. This shows that a higher percentage of rent, makes the country improve in economic terms. On the other hand, an increase in oil rent, leads to greater dependence on imports of fuel. It is a direct relationship, since the higher the rent, the Ecuadorian government can afford to face the payment of more imports. This is a problem, since crude oil imports are increasing, due to the low refining capacity in the interior of the country, and due to the little investment, that exists in research and development applied to the oil industry (Peláez-Samaniego et al., 2007: 4177-4189). The rent increases the GDP per capita, but also increases the dependence on the import of fuel. One of the actions that could be carried out by the Ecuadorian government is to maintain the level of rent, in contrast to other researchers (Davalos, 1979: 37), but that the money obtained be invested in research and development, not in the payment of imports of fuel.

Dependence on oil makes it necessary to exploit other sources of alternative energy. In the case of Ecuador, the second most energy produced by oil is the hydroelectric energy. Here we find another debate, which affects the dependence on the oil sector and the change in the energy matrix. Many authors advocate intensifying investment in alternative energy (Escobar et al., 2017: 25-36). Regarding the results obtained referring to hydroelectric energy, we see that the lower the consumption of oil derivatives, the greater the generation of hydroelectric energy. So, we are talking about an indirect relationship. Not only does an increase in hydroelectric energy cause a decrease in the dependence on derivatives, but it is a clean and respectable energy with the environment. According to the research (Ponce-Jara et al., 2018: 513-522), we recommend that political institutions promote measures for the development of this energy, since it brings good consequences both economically and socio-environmental level.

Another of the known relationships within the literature, is that they star in the consumption of electricity with GDP per capita. As in this study, much of the empirical research that studies energy variables with macroeconomic variables, shows that an increase in the consumption of electrical energy leads to an increase in GDP per capita (Acaravci & Ozturk, 2010: 604-608; Lee & Lee, 2010: 1-24; Wolde-Rufael, 2014: 325-330). The greater the industrial fabric, and the greater the domestic economy, it is logical to demonstrate this relationship with GDP per capita. In the case of Ecuador, this increase in the consumption of electric power is no longer a problem. As we have been saying, the internal energy consumption in Ecuador is supported by hydroelectric energy (85%), but it does not cover all of it, thus the remaining percentage must be covered with imports of petroleum derivatives (Peláez-Samaniego et al., 2007: 4177-4189; Ponce-Jara et al., 2018: 513-522). If the national

government does not promote policies to encourage the production of hydroelectric energy or to improve the refining capacity of oil, it will be forced to cover the increase in domestic energy consumption with imports of derivatives, making the balance of payments negative (Pinzón, 2018: 88-101).

This study is part of a Research Project between the Central University of Ecuador and the University of Almeria. The Research Project has the goal of extracting conclusions of great importance, and then apply them to the country's political management, with the intention of changing the situation of dependence on oil and poor management of it. Future research will be happening throughout the Research Project.

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The Rising Hybrid Structure in Globalization: Economic Nationalism and Protective Policies

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Abstract

Recently, nation states have increasingly gravitated towards inward-looking nationalist policies in parallel with the rise of right-wing parties in the world. This has brought along the erosion of neoliberal policies. Embracing the shield of protectionism to pull through the deadlock of the countries which were drifted into deadlock by financial crises in 2008 and the following Euro debt crises, is a significant example of that. In this context, the steps taken by countries towards protectionism and their retaliatory actions increase the global risks by compromising the functioning of globalization. Hence, in 2016 the referendum result of Britain (Brexit) and the USA's elected President Trump's practices that erode the trade give a rise to the state of uncertainty of the international trade. While these changes are taking place, the fact that global alliances get broken during the same time period strengthens the view that global trade rules will be rewritten. In this context, the preference of these kind of policies leads to globalization and crises dialectic.

The purpose of this paper is to investigate the causation of the re-rise of the economic nationalism after the global crisis. Moreover, the relation between economic nationalism and neo-liberalism is examined and then it is evaluated that the capitalism not only producing crisis but also producing its opposing forces like protectionism. In this context, the potential impact of this new global trade policy on the global economy would be discussed; the alternative policies would be proposed as well.

Keywords : Globalization, Protective Policy, Economic Nationalism.

JEL Classification Codes : F52, F60.

Social Moods in Residential Area of High Ecological Risk: Regional Development or A Threat?

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Abstract

Social moods and evaluation of security are determined by several as positive as negative factors, having character. Technogenic industries provoke ecological risks and threats and inevitably effect social moods in the areas of residence of dangerous industries. Objects of nuclear industry often perceived from the positions of a certain ecological threat, despite safe modern exploration technologies. Large ecological and humanitarian catastrophes effect people's moods, treats and anxieties about objects of nuclear energy. Socially acceptable risk is a compromise between the level of security and opportunities of its achievement. Authors present results of monitoring in nine Russian regions, residing industrial objects of nuclear power system (Voronezh oblast, Kursk oblast, Leningrad oblast, Sratov oblast, Sverdlovsk oblast, Murmansk oblast, Rostov oblast, Tver oblast, and Smolensk oblast). The monitoring was about social moods of population, living neat the nuclear plants, trust to the nuclear industry, opinions about its safety, and further perspectives of the nuclear industry.

Keywords : Nuclear Power, Nuclear Energy, Social Mood, Social Acceptability of Risk, Index.

JEL Classification Codes : Z13.

Introduction

Bases to methodology were deep traditions of study about social moods (Toschenko, 2011) as a form of vital perception, dominant form of real public consciousness and behavior, reflecting the level, duration, and extent of emotional-relation perception of social attitudes, social goals and interests by an individual, social group and population. Social moods are forming under the influence of real economic, political and spiritual processes and may be realized, in potential. Social moods were investigated in the field of the accessibility and development of the nuclear energy and in relation with social security issues. The concept of social security includes, besides the security of a society and a human, military, political, social, ecological, scientific-technical, information components, and others (Maksimova & Noyanzina, 2013), (Kuznetsov, 2005). Such as the global social security is an understanding of mounting types of threats, their identifying, preventing measures and minimization (Levashov, 2002). Authors also base on ideas about theory of risk, considering the products of the modern industrial technologies, which constantly developing (Bek, 2000); former researches about social risks, connected with the nuclear technologies (Bergen, 2016), evaluation of social moods in territories, residing nuclear plants (Huang et al., 2009, 2013; Human and Ecological Risk Assessment,

2009); and others. Additionally, authors consider modern Russian policy about the spread and development of nuclear energy. However, the models of quantitative analysis for ecological risk are rather valid, but the social accessibility of the risk in the other question. It the complicated social question, such as ethnics, perception of risk, policy and decision-making process (Oostendorp et al., 2016).

Materials and Methods

The base for the abstract are sociological surveys among population in nine Russian regions, residing industrial objects of nuclear power system. Principles for the sampling formation included two aspects: the representativeness and the compact distribution, so we used stratified multistage sampling. Monitoring covered in 2013 5400 of respondents, in 2014 - 5400 of respondents, in 2015 - 9000 of respondents. Method of data collecting: formalized interview in households among population at the age from 18 to 75. To base the statistical conclusion, we used the corresponding statistical methods: dispersion analysis and construction of indexes. Monitoring covered the following variables: perception of the nuclear industry; relation to concrete nuclear plants; relation to the environment (social, political, economic and so on) in region. To analyze and visualize sociological data we used the method of index construction (as private as integral), based on methodology of indexes about social moods (Levada, 1998). Authors constructed two integral indexes of social moods (integral index of social accessibility of nuclear energy and integral index of social role of the nuclear plant in territory) and three private indexes (index of social approval of nuclear energy, index of development of nuclear energy, index of development of nuclear plant in the region of residence). Additionally, basing on 7 private indexes (index of the status of the plant's worker, index of the plant's positive reputation, index of the role of the plan to regional development, index of security of the plant, index of ecological security, index of openness of information, index of social responsibility) authors counted integral index of social role of the nuclear plant in social-economic development of the Russian region. Private indexes counted as relative value, equal to the difference between parts of positive and negative answers to the sum of part of positive and negative answers. The range of indexes vary between -100 and 100. The higher the value of the index, the better the position of nuclear energy. The integral index is the average of private indexes.

Results

The presented evaluation of social mood varies in territories of residence of nuclear plants ($\chi 2$, $p \leq 0{,}05$). In the considered period we fixed the trend of full approval of the use of nuclear energy (from 27,0% in 2013 to 40,6% in 2015), the number of negative answers decreases from 29,0% in 2013 to 19,2% in 2015. The most approved is the role of nuclear energy as a mean of energy provision - the leaders in positive moods here are in 2013 Leningrad oblast, in 2014 - Murmansk oblast and in 2015 - Kursk oblast. The index of full approval of nuclear energy in 2014 have a wide distribution from full approval in Murmansk oblast (90,1) and Smolensk oblast (82,9) to extremely low approval in Rostov oblast (29,3). High indexes of approval of nuclear energy are in regions with weak economy, agrarian and weakly developed territories, so the development of nuclear energy is considerable input into the regional economy. Respondents showed differences in evaluation of perspectives of development of the nuclear energy. In one region (Smolensk oblast) the level of support of the nuclear plants development is at the level of 46.0%, in the other eight regions it is higher than 72.0%. Besides, the personal relation to nuclear energy is quite lower in all regions: between 24.0% and 36.0% of positive answers, but in Smolensk oblast respondents 69.0% of respondents gave negative evaluations.

The low values of the index of social approval of the nuclear energy fixed in the Rostov oblast (33.8 points in 2014, and 48.0 points in 2015). Four regions demonstrate the lower values in last years of the monitoring: Leningrad, Murmansk, Srartov and Smolensk oblast. Social moods in urban areas are similar with the regional tendencies, but the private indexes and integral index of social acceptability of nuclear energy in nominal expression are higher and connected with the inclusion into social, professional and technological spheres of development of nuclear energy and more objective perception of the development of nuclear energy in Russia.

Discussion

Analysis demonstrates the heterogeneous character of public opinion about social acceptability of nuclear energy, but it is, in total, positive. Social acceptability is necessary condition of development of the nuclear energy, prevention of social tension and formation of positive social moods. However, population understand the high importance of nuclear plants for regional social and economic development, but not for all observed territories. Despite high economical role of nuclear plants, there are still the evident perception of risk of functioning of nuclear plants and social unacceptability of nuclear energy.

Conclusion

We proved that the social admissibility of the risk in regions of nuclear power plants location is a necessary condition for the development of the nuclear industry, elimination of social tension, and formation of positive social moods in regions and cities of location of nuclear power plants.

Review of Road Funding and Heavy Vehicle Charging Mechanisms; An Empirical Evidence from Turkey's Charging of Heavy Tonnage Vehicles Application

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Abstract

Transportation services are services that improve the bridge head function in the most efficient way by facilitating the shifting of the people and the place of the meeting to benefit the place and time. Therefore, transportation services have a multifaceted effect. These effects have benefits as well as harms. Financing of transportation within the transportation services is generally covered by general budget tax revenues, which are common in many countries. Along with the globalization phenomenon, the increase in the number of vehicles and the expansion of the trade volume have increased the demand for the roads and the necessity of increasing the standards. Accordingly, the demand for more qualified service resulted in an increase in road cost. For this reason, it seems that the general budget tax revenues as well as the road fund application have begun to be applied in the financing of highways. In the study, in the application of the Road Fund in Turkey, an example is given regarding the determination of the share of participation in road maintenance and repair expenses related to "Charging of Heavy Tonnage Vehicles" among the highway fund resources. Data used in the application are the secondary data obtained from the reports of the Ministry of Transport and Infrastructure and General Directorate of Highways.

Keywords : Transportation, Road Fund, Heavy Tonnage Vehicles, Charges.

JEL Classification Codes : L92, L98, H2.

Introduction

Transportation services are services that improve the bridge head function in the most efficient way by facilitating the shifting of the people and the place of the meeting to benefit the place and time. Therefore, transportation services have a multifaceted effect. These effects have benefits as well as harms. Financing of transportation within the transportation services is generally covered by general budget tax revenues, which are common in many countries. Along with the globalization phenomenon, the increase in the number of vehicles and the expansion of the trade volume have increased the demand for the roads and the necessity of increasing the standards.

Today, roads are made with different materials and different road construction techniques (Karayolları Trafik Yönetmeliği, Md. 128). Depending on the material and road construction techniques used, there is a certain lifetime of highways. Maintenance and repair is also required every year depending on various factors during this lifetime. Accordingly, every year road maintenance and repair require a certain expenditure.

One of the reasons for the maintenance and repair of highways is; It is the use of the land. In this use, besides the number of vehicles, damage caused by the weight of the vehicles (Heavy Vehicles) is different according to the other vehicles. Spending on maintenance and repair of damaged highways brings additional cost. Covering the additional costs of maintenance and repair of highways; it is possible to make an assessment by taking into consideration the additional cost expenditures that heavy vehicles have brought to the market.

As mentioned in the heading "Highway Fund Approaches" included in the study, the Highway Fund is based on the understanding that road users should pay directly for the highway they consume or participate in the cost of the highway they consume (MEGEP, 2017).

Road Funding and Heavy Vehicle Charging Mechanisms

Along with the globalization phenomenon, the increase in the number of vehicles and the expansion of trade volume have increased demand for roads and raised standards. The demand for more qualified service brought with it the increase of the cost of the road. The increase in the number of vehicles has led to the understanding that increased road demand cannot be responded to with limited budgetary opportunities and that improvements in costs are required to reach high enough levels that the roads will not be financed from the public budget and that roads should be taken out of the budget and that users pay directly for the highways they consume. It is foreseen that the direct payment will be realized with the Road Fund.

The Road Fund can be defined as the fund allocated for use for roadway management (maintenance, repair, protection, assistance, supervision etc.) (Santos et al., 2011). At the heart of the road funding approach is the adoption of the understanding that roads provide a public service. This means that your land is comparable to public services such as water, electricity or telecommunications. Users of such services have to pay a fee to provide income to the public service company. This income is used by the company, with few restrictions, to best suit its purposes. Because of this situation, the state does not have a chance to intervene in how these funds will be used (Heggie, 1999). This understanding is an expanded and modernized version of the old "user-piercing" principle that gained popularity in the 1950s. According to this system, wages and taxes paid by users as a means of using the road service are collected in a special account (or roadway fund) and managed independently from the public budget (Opschoor et al., 1999).

Classical Approach

In the classical approach, roads were evaluated as public goods such as education, health and defense services and accordingly, general budget financing was envisaged. The features of road financing show that the intervention of this sector of the state mechanism is inevitable. The state of monopoly of the state in this area is almost widespread. It is envisaged that the opening and maintenance of the land should be carried out either by the central authority or by the regional authorities. On the one hand, there is the opinion that it is necessary to meet the destructive effects of railway-highway competition and to alleviate the unfair competition conditions in the two sectors in terms of financing possibilities, by ensuring that the road transport system is kept under state control mechanism and in compliance with public interest. Generally, as a financial source, states take tax on motor vehicles as they receive direct road tax (direct budget financing), get a transition picture from vehicles passing through modern concrete roads, allocate highways to some economic institutions and hire them, participate in some costs of landowners under the name of goodwill as well as to other forms of funding (Marshall, 1972).

Today's Approach

The changes in the state understanding along with the globalization phenomenon and the increase in the number of vehicles and the expansion of the trade volume; increased the demand for roads and raised the standards of roads. The demand for more qualified service brought with it the increase of the cost of the road. Increasing costs associated with the use of highway infrastructures have brought to the agenda the ability to keep the land, which is the main issue of highway infrastructure, on a stable basis and to provide the financing resources needed to reach the required level of road network. Due to the increase in the number of vehicles, the increasing demand for roads cannot be answered with limited budget possibilities and the developments in costs have led to intensive and alternative finance discussions on the financing of the road infrastructure.

At the heart of the roadway funding approach is the recognition that highways provide a public service. This means that your land is comparable to public services such as water, electricity or telecommunications. Users of such services have to pay a fee to provide income to the public service company. This income is used by the company, with few restrictions, to best suit its purposes. Therefore, the state does not have the chance to intervene in how these funds are to be used (Heggie, 1999). They found that highways would be forced out of the budget to reach levels that could not be financed from the public budget and that users would have to pay directly for the highways they consumed.

This understanding is an expanded and modernized version of the old "user-piercing" principle that gained popularity in the 1950s. According to this system, wages and taxes paid by users as a means of using the road service are collected in a special account (or roadway fund) and managed independently from the public budget (Opschoor et.al, 1999). Opinions about the economic nature / status of highways over a period of about 20 years have changed. Along with the change in the public goods sector in 1990 and 2000, the restructuring of the road sector in many countries has emerged as a result. While commercial roads in the classical sense are generally regarded as public goods and financed by public funds such as other public goods, the commercial approach to the economic nature of highways along with the 1990s has come to the forefront (Heggie, 1999).

According to this, the neoliberal approach since the financial resources required for the construction and maintenance costs of the highways must be met in accordance with the "usage principle", has started to be widely accepted (Marshall, 1972). In addition, increased interest in climate change and the adverse environmental impacts that roads have created have been fuelled by debates about the negative externalities, congestion, pollution, noise and accidents created by road transport, environmental and other external costs, and the cost of roadways by users.

These debates have caused the financing of highways to become increasingly common in the "user fee" approach of neoliberal policies for the financing of public goods and services. On the other side, debates have begun that the vehicles that use the road infrastructure load various costs, such as road infrastructure degradation, congestion, accident and pollution costs, and that these costs must be met by road users.

Payment Determination Data for High-Tonnected Vehicles in Road Maintenance and Repair in Turkey's Highway Fund Application

National and International Road Load Transportation

The formation of a natural bridge between the west and the east and the availability of transit transportation has been a priority for Turkey since ancient times. Our country is a rectangular bridge between Asia, Europe and Africa, running 500 km north-south direction, and 1500 km east-west, and with an area of 776 000 square km. For this reason, it has a separate proposal for international freight and passenger transport (4926 Sayılı Karayolları Taşıma Kanunu).

In order to carry freight by road in Turkey, according to Article 5 of the Road Transportation Law No: 4926 (Kaluhan, 2017), it is obligatory to obtain an "Authorization Certificate" and a "Vehicle Certificate" from the Ministry. According to Article 11 of the same law regular passenger carriers and freight forwarders must notify the Ministry of Tariffs by stating the validity period. In Turkey, the most preferred type of transportation for highways, passengers and cargo is a roadway. At least 90.5% of the domestic passenger transportation and 87.4% of the freight transportation are made by road (TOBB, 2014). In Turkey, 85.9% of freight transport is done by land. In 2014, 234.492 Billion tons - km- of freight transport was made by road. This cargo transportation was carried out by a total of 234,492 vehicles, 95.238 trucks and 139.254 truck-trailer tow trucks registered to the traffic (Karayolu Taşıma Yönetmeliği). Freight transport by road in the Five-Year Development Plan 2015 -2018 years from 294 billion tons - was estimated at Km (Document Transportation Studies Department, 2014).

Table 1. Cargo Transportation Over Land in Turkey per Year (millions of tons-km)

Years	2010	2011	2012	2013	2014
Cargo Carried	**190.365.000**	**203.072.000**	**216.123.000**	**224.048.000**	**234.492.000**

Resource: Features and Trends of Highway Heavy Vehicle Transporter and Freight Transport, Survey Results of 2013, 2014, Ministry of Transport, Maritime and Communications, General Directorate of Highways, Traffic Safety Department, Transportation Studies Department, January, 2016, p. 6.

Table 2. Breakdown of Road Freight Transport by Vehicle Type

Years	Truck	Rate	Truck- Trailertowing	Rate	Total	Rate
2007	128.751	*71*	52.579	*29*	181.330	2,2
2008	124.190	*68*	57.745	*32*	181.935	0,3
2009	107.622	*61*	68.833	*39*	176.455	*3,0*
2010	103.477	*54*	86.888	*46*	190.365	7,9
2011	103.020	*51*	100.052	*49*	203.072	6,7
2012	103.552	*48*	112.571	*52*	216.123	6,4
2013	105.399	*47*	118.649	*53*	224.048	3,7
2014	95.238	*41*	139.254	*59*	234.492	4,7

Resource: Features and Trends of Highway Heavy Vehicle Transporter and Freight Transport, Survey Results of 2013, 2014, Ministry of Transport, Maritime and Communications, General Directorate of Highways, Traffic Safety Department, Transportation Studies Department, January, 2016, p. 13.

International Transit Road Load Transportation and International Transportation in Turkey

In Article 12 of the Highway Transportation Law No. 4926; International passengers and goods transport, transit cargoes entered into Turkey by road or by railway from any border gate or by road vehicles coming to any port of Turkey by sea, by railway, sea or airway to Turkey and by land vehicles

from third country by way of destination transportation of goods from Turkey to road vehicles and other countries, transportation of goods from other countries to road vehicles and to Turkey.

Article 15; The physical limits of the sub-structure, as well as the other transport requirements and complementary, when necessary, shall be included in the scope of the legislation to determine the routes in order to make the international transports made through Turkey more regular and speedy, system can be applied. Vehicles to be used in the carriage of countries that do not have a road transport agreement are the subjects of the Ministry.

Article 16; Transit fees from foreign plate vehicles are collected to cover the maintenance of the highway, the protection of the highway and the management of the roadway. Fees for the use of road infrastructure such as bridges, tunnels and tolls, and services for goods and vehicles are not included in these tolls. Foreign-plated vehicles are required to pay a toll in accordance with the Regulation of Transit Fees if they transit from toll road. Valid from 01.09.2013, Goods or freight vehicles with foreign platelets filled or empty; a) For a unit vehicle or vehicle from an agreed country vehicle; (Euro + 0.01 Euro or TRL in Tons x Km for Vehicle + Load), b) For a unit vehicle or vehicle from an unincorporated country vehicle; (0,015 Euro or TRL in Tons x Km for Vehicle + Load), a toll is charged (Communiqué on Transition Fees to be Purchased from Temporary and Foreign Plated Vehicles, S.28731; Regulation on the Collection of Transition Fees and Administrative Monetary Penalties for Foreign Plated Vehicles on Highway with Charges, S.29982). In some countries, the transit fees (Transit Transitional Document Fee) from Turkish vehicles are 100 Euro for Greece, 86 Euro for Bulgaria, 236 Euro for Romania and 436 Euros for Hungary (Document Transportation Studies Department, 2014).

The border gates in Turkey is arranged according to Directorate of Transport and Maritime and Communications Ministry Highways Statistics 2017.

Table 3. Current Road-related Border Gates in Turkey

Borders in Turkey
Türkiye - Yunanistan: İpsala (Edirne), Uzunköprü (Edirne), Karaağaç (Edirne)
Türkiye - Bulgaristan: Kapıkule (Edirne), Aziziye (Kırklareli), Hamzabeyli (Edirne)
Türkiye - Gürcistan: Posof Türkyüzü (Ardahan), Cambaz (Ardahan), Sarp (Artvin)
Türkiye - Azerbaycan: Dilucu (Iğdır)
Türkiye - Ermenistan: Akkaya (Kars), Alican (Iğdır)
Türkiye - İran: Gürbulak (Ağrı), Kapıköy (Van), Esendere (Hakkari)
Türkiye - Irak: Habur (Şırnak)
Türkiye - Suriye: Cizre (Şırnak), Şenyurt (Mardin), Nusaybin (Mardin), Çobanbey (Gaziantep)

Highway Distance between Bordered Shutdowns

In Turkey Table (4) shows the distance between Europe and Asia, the Middle East, Africa and the border gates that provide the Caucasian - Russian highway connections. It is arranged according to Directorate of Transport and Maritime and Communications Ministry Highways Statistics 2017.

Table 4. Highway Connections and Distance

Highway Connections	Road Distances
İpsala Uzunköprü Karaağaç	Posof Türkgözü-Canbaz (Ardahan) 1800 km; Sarp (Artvin) 1504 km; Dilucu (Iğdır) 1909 km; Alican (Iğdır) 1774 km; Akkaya (Kars) 1689 km; Gülbulak (Ağrı) 1794 km; Kapıköy (Van) 1912 km; Esendere (Hakkari) 1950 km; Habur (Şırnak) 1934 km; Cizre (Şırnak) 1859 km; Şenyurt (Mardin) 1718 km; Nusaybin (Mardin) 1763 km; Çobanbey (Gaziantep) 1214 km; Karkamış (Gaziantep) 1469 km; Ceylanpınar (Şanlıurfa) 1681 km; Akçakale - Mürşidpınar (Şanlıurfa) 1592 km; Öncüpınar (Kilis) 1431 km; Yayladağ (Hatay) 1415 km; Cilvegözü (Hatay) 1394 km; İhsaniye (Hatay) 1359 km.
Kapıkule Hamazabeyli Aziziye	Posof Türkgözü- Canbaz (Ardahan) 1723 km; Sarp (Artvin) 1489 km; Dilucu (Iğdır) 1822 km; Alican (Iğdır) 1836 km; Akkaya (Kars) 1738 km; Doğubeyazıt (Kars) 1781 km; Gürbudak (Ağrı) 1301 km; Kapıköy (Van) 1920 km; Esendere (Hakkari) 2113 km; Habur (Şırnak) 1884 km; Cizre (Şırnak) 1868 km; Şenyurt- Nusaybin (Mardin) 1743 km; Karkamış- Çobanbey (Gaziantep) 1417 km; Ceylanpınar- Akçakale- Mürşidpınar (Şanlıurfa) 1588 km; Öncüpınar (Kilis) 1781 km; Yayladağ (Hatay) 1341 km; Cilvegözü - İhsaniye (Hatay) 1377 km.
Posof Türkgözü Canbaz	Cizre (Şırnak) 274 km; Ceylanpınar- Akçakale- Mürşidpınar (Şanlıurfa) 727 km; Çobanbey (Gaziantep) 856 km; Öncüpınar (Kilis) 910 km; Yayladağ- Cilvegözü - İhsaniye (Hatay) 1057 km.
Sarp	Cizre (Şırnak) 675 km; Şenyurt - Nusaybin (Mardin) 597 km; Ceylanpınar - Akçakale- Mürşidpınar (Şanlıurfa) 694 km; Çobanbey (Gaziantep) 977 km; Öncüpınar (Kilis) 876 km; Yayladağ - Cilvegözü- İhsaniye (Hatay) 1167 km.

Resource: It's prepared by us According to General Directorate of Transport And Maritime And Communications Ministry Highways Statistics 2017.

Maintenance and Operation-Wage Collection Unit Costs and Payments

Highways Zones: The maintenance and operation of highways; "Motorway Zones" between 2007 and 2010; 1. Zones Istanbul, 2. Zones Izmir, 4. Zones Ankara, 5. Zone Mersin, 6. Zones Kayseri, 9. Zones Diyarbakır.

Under the term "Usage Fee" for heavy tonnage vehicles, a separate unit is subject to the weight and number of axles of the vehicle on the bridge and highway crossings. However, when this fee is determined, the cargo weight which the vehicle carries is not considered.

Table 5. By Year, 1 km Highway Maintenance Unit Costs

Years	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Avarage
2010	165.982	110.248	130.394	60.452	32.394	54.536	108.763
2011	186.792	100.768	150.632	79.196	77.942	80.406	125.319
2012	147.180	96.175	140.744	101.347	83.393	92.523	129.104
2013	182.772	100.654	144.857	92.590	93.657	101.322	132.065
2014	213.504	115.005	159.850	133.311	77.218	122.135	158.365
2015	264.530	144.687	191.039	138.052	111.322	108.631	183.646
2016	279.568	197.000	30.2981	144.429	112.988	162.879	206.575

Resource: It's prepared by us According to General Directorate of Transport And Maritime And Communications Ministry Highways Statistics 2017.

Table 6. By Year, Motorway and Bosphorus Bridge Maintenance-Operation and Fare Collection Expenditures

Years	Highway Zones Spending	Bosphorus Bridges Expenditures
2010	210.715.946	13.187.066
2011	261.155.904	13.965.653
2012	268.886.731	13.681.055
2013	274.173.473	15.974.439
2014	344.946.396	12.502.491
2015	407.962.420	17.253.424
2016	465.120.420	20.158.737

Resource: It's prepared by us According to General Directorate of Transport And Maritime And Communications Ministry Highways Statistics 2017.

Highway zone and throat bridge expenditures in the Table 7 year are included in the Oto Zone:1. District Istanbul, 2. District Izmir, 4. District Ankara, 5. District Mersin, 6. District Kayseri, 9. District Diyarbakır is taken as the sum. The distribution of motorway area expenditure totals according to year is given in the table below.

Table 7. Distribution of Motorway Maintenance-Operation/Fare Collection Expenses for Highway Regions

Years	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 9
2010	93.916.169	28.405.348	45.018.759	38.304.056	3.254.169	7.817.316	93.916.169
2011	107.925.580	26.653.549	55.251.983	51.471.947	8.389.829	11.463016	107.925.580
2012	98.837.890	29.195.513	51.245.469	66.061.691	9.788.368	13.757.801	98.837.890
2013	105.378.445	31.784.332	53.943.936	58.750.036	11.240.432	13.276.292	105.378.445
2014	125293.621	40.870.250	53.323.119	86.943.326	11.198.578	17.317.503	125293.621
2015	161.013.500	50.402.479	74.288.368	88.480.586	17.651574	16.125.804	161.013.500
2016	167.789.925	69.131.633	90.414.522	93.788.584	18.965.646	25.033.104	167.789.925

Resource: It's prepared by us According to General Directorate of Transport And Maritime And Communications Ministry Highways Statistics 2017.

State and Provincial Ways Maintenance - Business Unit Costs and Expenses

In Turkey with Table (8) 2016 Year 1 km Cost of Road Maintenance (Escrow + Tender) and Regional Branch Expenditures is arranged according to Directorate of Transport and Maritime and Communications Ministry Highways Statistics 2017.

Table 8. Cost of Road Maintenance (Escrow + Tender) and Regional Branch Expenditures

Zone	**Cost1**	**Cost2**	**Cost4**	**Total**
Zone 1 (İstanbul)	29.321	24.627	53.948	74.091.360
Zone 2 (İzmir)	15.919	19.030	34.949	97.041.977
Zone 3 (Konya)	17.656	16.341	33.997	83.392.964
Zone 4 (Ankara)	33.393	24.104	57.497	82.280.391
Zone 5 *(Mersin)*	12.853	18.194	31.047	84.828.366
Zone 6 *(Kayseri)*	13.925	20.959	34.884	80.905.094
Zone 7 *(Samsun)*	22.211	25.012	47.223	110.739.896
Zone 8 *(Elaziğ)*	17.654	25.333	42.987	90.337.470
Zone 9 *(Diyarbakır)*	15.335	28.427	43.762	122.239.271
Zone 10 *(Trabzon)*	32.709	36.885	69.594	110.397.139
Zone 11 *(Van)*	20.228	40.027	60.255	109.749.543
Zone 12 (*Erzurum)*	16.472	30.502	46.974	62.673.783
Zone 13 *(Antalya)*	39.641	23.482	63.123	77.160.021
Zone 14 *(Bursa)*	20.440	20.301	40.741	91.727.537
Zone15 *(Kastamonu)*	27.317	26.739	54.056	77.036.664
Zone 16 (Sivas)	13.698	20.604	34.302	66.079.664
Zone 18 (*Kars)*	26.562	23.826	50.388	31.499.867

The sum of the total amount of Escrow Expenditures of the State Branches of the Maintenance and Operation Branches of the State Branches of the year 2016 was 1.452.185.912.-TL.

Calculation of Fund Cases

According to the provisions of Road Transport Law No. 4926, it is obligatory to obtain an "Authorization Certificate" and "Vehicle Certificate" from the Ministry in order to carry freight and goods by road in Turkey. Regular passengers and freight forwarders must notify the Ministry of tariffs by stating the period of validity. In addition, according to the provisions of the Tax Procedures Law, vehicles are obliged to arrange the "Way of Delivery" and keep it on board during transportation. For

this reason, it is very easy to find passengers with heavy tonnage and determine the amount of their cargo and the distance transported.

Based on the above-mentioned data, it is possible to calculate the amount of roadway funding as follows, in order to ensure that heavy-tonnage vehicles will participate in roadway costs (road maintenance-repair costs), depending on the distance they carry and the distance they travel.

Fund Amount = Coefficient Value x (Vehicle + Load) Weight x Distance (FT = KD x (T + Y) A x M)

FT = Fund Amount to be Paid M = Distance the vehicle carries the load on the highway

KD = value coefficient (Ton) determined and published each year by the General Directorate of Highways

(T + Y) A = Weight of Vehicle Weight Carrying Weight

Conclusion

Financing of transportation within the transportation services is usually covered by general budget tax revenues, which are common in many countries. Along with the globalization phenomenon, the increase in the number of vehicles and trade volume have increased the demand for roads and the necessity of increasing the standards. Accordingly, the demand for more qualified service has resulted in an increase in road cost or this reason, in addition to funding from the general budget tax revenues, road funding is beginning to be financed for highways.

The highway fund is used to offset the roadway cost (highway maintenance repair expenditures) necessitated by Heavy Tonnage Vehicles. Companies using these heavy vehicles pass on part or all of their uses fees naturally to the cost goods or services. This additional cost is a fair contribution, as it will be paid by the person using the goods or services. In other words, in a sense, it will be justified because it will have the cost of consuming goods or services.

It is possible to determine the "Fund Amount to be Paid" by considering the determination of the participation fee for road maintenance and repair expenses related to "Charging of Heavy Tonnage Vehicles" in the study. With the same model, it is possible to reveal the determination of contribution rates of other fund sources.

Also, given today's technology, it is possible for other road vehicles that use highways to be included in roadway funding to participate in road maintenance and repair expenditures. This will ensure that all vehicles that use the highways participate in the maintenance and repair costs of the road.

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25 October 2018 Thursday

Session: II / 11.30-13.00

BUSINESS ECONOMICS & ENTREPRENEURSHIP

Room: *Mandragola*

Chair: **Antonio GARCÍA-AMÁTE**

- Market Routines and Their Role in Product Innovation
  Gabriel GIMENEZ-ROCHE

- Productivity Impacts of Broadband Internet: Firm Level Evidence from Turkey
  Başak DALGIÇ & Burcu FAZLIOĞLU

- Innovation Behaviour of Turkish Manufacturing Firms
  Selcen ÖZTÜRK & Dilek BAŞAR & İsmail ÇAKMAK & Derya GÜLER-AYDIN

- An Evaluation of the Major Commercial and Financial Components of Shopping Center Investments and a Case Analysis of a Successful Investment in Istanbul, Turkey
  Ali Murat FERMAN & Dursun Onur İLHAN

- A General Evaluation of Major Components and the Future of Shopping Center Marketing
  Dursun Onur İLHAN & Ali Murat FERMAN

Market Routines and Their Role in Product Innovation

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Abstract

The fundamental relationship between market entrepreneurship and uncertainty is pointed out as the distinguishing aspect of the entrepreneurial function (Alvarez, 2007; Casson, 2003; Foss & Klein, 2012; Kirzner, 1973; Knight, 1921; Sarasvathy, 2008; Shane, 2003). Market action under uncertainty means that no full institutionalization of income is possible, implying that any eventual remuneration is residual to market action. Market entrepreneurs are thus profitseekers. Therefore, economic calculation of profits and losses based on money prices is essential for them, since it enables market entrepreneurs to decide how to coordinate and deploy their acquired and hired resources toward profit-seeking (Halm, 1935; Mises, 1935).

Keywords : Emergence, Entrepreneurship, Innovation, Institutions, Routines, Uncertainty.
JEL Classification Codes : B52, D02, L20, L26.

Introduction

Market prices are the consequence of the actions of the numerous market agents behind the supply and demand of both producers' and consumers' goods. Although this makes economic calculation fundamental for comparing market opportunities, it does not reveal any information on the emergence process of the social interactions behind these opportunities. However, this information is indispensable for market entrepreneurship, because one must know which actions are relevant for application of economic calculation as a tool. Indeed, market entrepreneurship is not just about calculating profits, but more precisely about judging the profit potential of the actions and interactions constituting the social processes underlying the market (Klein, 2008). It is about evaluating how routines, conventions, and institutions affect the emergence of market prices and opportunities. The importance of institutions to entrepreneurship is a well-recognized fact. Baumol (1990, 2010) explains that entrepreneurship is a generic behavior that manifests either productively, unproductively, or destructively depending on the incentives produced by the institutional framework. Moreover, the object of entrepreneurship is contingent to one's situation within the institutional framework (Boettke & Coyne, 2009): market profits for market entrepreneurship, social improvement for social entrepreneurship, political power for political entrepreneurship, and institutional change for institutional entrepreneurship. Market entrepreneurship in particular can have different responses vis-à-vis the institutional framework, either abiding to it, evading it, or altering it (Henrekson & Sanandaji, 2011). Indeed, the relationship between entrepreneurship and the institutional framework can involve a top-down process where the latter influences the orientation of the former (Acemoglu, 1995; Audretsch, Keilbach, & Lehmann, 2006; Coyne & Boettke, 2003; Scott, 1995; Van Hemert, 2008). But it can also involve a bottom-up process where market entrepreneurship fosters institutional change (Battilana, 2006; Battilana, Leca, & Boxenbaum, 2009; DiMaggio, 1988; Hwang & Powell, 2005).

Market entrepreneurship is the exploitation of profit opportunities in the socially recursive and interactive process of price determination and resource allocation/distribution known as the market (cf. Kirzner, 1973: 9ff.). It is undertaken by directing and deploying acquired and hired factors of production toward the production and sale of a final product, tentatively higher in price than that of the resources involved. Put simply, profit is any price divergence between product and factor prices resulting in an appropriable residual income. Therefore, a market opportunity is any situation in which the confluence of market actions, among which the entrepreneur's, might result in the emergence of profits. Consequently, it is fundamental for the entrepreneur to assess the interpersonal valuation of products in the market by means of a common denominator allowing for the economic calculation of profits and losses (Mises, 1935). Money prices work as such a denominator by allowing a straightforward comparison of the market values of products and factors-i.e., money revenues vs. money costs -and of the alternative uses of resources- i.e., projected/realized profits vs. opportunity costs (Halm, 1935).

Although economic calculation makes the market dynamics of supply and demand intelligible in monetary quantitative ways, it does not reveal any qualitative information on these dynamics. Since products and resources are the artifacts of a myriad of alternative actions, then the same price and quantity movements in the market can be explained by a diversity of alternative actions and their interactions. Consequently, to have information about the specific interactions that produces a market price is as important as having information on the price itself. It is this qualitative information on interactions that allows the entrepreneur to identify products to sell and resources to employ, and hence to use economic calculation thereafter. Entrepreneurial calculation is thus a combination of both quantitative economic calculation and qualitative judgment of the constituent actions of the market process. The problem is that the market information necessary to secure the exploitation of market opportunities is not available in the present, but only in the future (Giménez Roche, 2011). Therefore, entrepreneurial calculation must be based both on currently available factor prices and on estimated future product prices. Nevertheless, the futurity and the socio-interactive nature of market opportunities involves emergence, that is: 1) they are novel; 2) they are qualitatively different from their constituent parts; 3) they are irreducible to these parts; 4) they display a systemic nature; 5) they depend on the systemic organization of their constituent parts; and 6) they are subject to different rules than these parts.

Profits and losses are novel because they are residuals depending on information that becomes available only in the future (Buchanan & Vanberg, 2001; Harper, 2003; O'Driscoll & Rizzo, 1996). Thus, the situations resulting in these residuals involve totally or partially new information making their outcome unique. Furthermore, profits and losses are qualitatively different from their constituent prices, because the former involve diachronic production of wealth, while the latter imply synchronic exchange of wealth (Giménez Roche, 2011: 736ff.). Profit and loss situations are irreducible to their constituents-i.e., the pricing activities of market agents-because the same activities could have yielded another profit and loss situation in another context (Giménez Roche, 2016: 698–704). Consequently, profits and losses are not individual features of their constituent parts, but of the system of interactions of these constituents, thus being totally dependent on that interaction for their existence.

Given that profits and losses are future emergent features of the market process, they cannot be perfectly predicted in the present. The problem is that the situations leading to these profits and losses involve other actions besides that of the entrepreneur, such as the actions of suppliers, clients, competitors, regulators, and other external stakeholders such as opinion-makers, non-profit organizations, popular idols, and the like. Even if all the market agents in the future were the same

ones in the present, emergence makes the result of their interactions impossible to predict in any precise way, thus implying uncertainty.

Conclusion

This article aims at complementing the literature by describing how institutions enter the entrepreneurial judgment of market opportunities by concentrating on the role of routines. The central argument and contribution of this article is that economic calculation is directed by entrepreneurs through their judgment on the potential of emergent routines to be institutionally consolidated or triggered by their products. We begin by discussing the emergent and hence uncertain nature of market opportunities because of the creativity of boundedly rational agents reflexively reacting to each other's actions, thus resulting in an increasingly extensive and complex market process. In general, agents cope with the fundamental uncertainty of this process by using institutionalized routines to stabilize market relations, thus enabling contractual incomes. Entrepreneurs, however, also act upon un-institutionalized emergent routines by introducing products that can potentially consolidate or trigger these routines, thus resulting in the appropriation of residual incomes. In this manner, the institutional framework is not limited to be an external structure influencing entrepreneurship but becomes an internal reference point for orienting judgment and directing economic calculation.

Productivity Impacts of Broadband Internet: Firm Level Evidence from Turkey

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Abstract

Investing in information and communication technologies (ICT) has factually contributed to productivity growth in various countries (Policy makers want to broaden the social and economic benefits from ICT investments. Thus, governments are envisioning supports other sources of such technologies such as 'next generation' high speed broadband internet (Kretschmer, 2012; Marcus & Elixmann, 2014). The main reason behind this interest is the anticipation that high speed internet will contribute to productivity of firms. While the role of ICT in improving labour, productivity is well documented (see among others the surveys of Draca et al. 2007; Van Reenen et al., 2010; Bertschek, 2012; Cardona et al., 2013), the empirical support for the impact of broadband use on productivity is limited. At macro level it is better established that broadband internet adoption has a significantly positive impact on growth and productivity (Holt & Camison, 2009; Czernich et al, 2011; Koutroumpis, 2009).

As opposed to those positive effects of high speed internet use at more aggregate levels, firm level research has little evidence of productivity gains from broadband usage. Further, evidence of positive productivity effects seems to be limited with cross-section studies. For example, Grimes et al. (2012) show that firms using broadband internet has a 7–10 percent productivity differential with respect to those not using broadband in New Zealand, in 2006. In addition, no significant variation in terms of productivity improvements is observed among rural and urban regions and, with respect to technology intensity of industries. Hagén et al. (2008) uses Swedish firm data and reports that the positive relationship between broadband usage and productivity is limited to a certain time period. Utilizing firm level data from German manufacturing and services sectors Bertschek et al. (2013) cannot find any evidence on the relationship between labour productivity and broadband adoption (leased line or DSL).

De Stefano et al. (2014) uses UK firm level panel and investigates the relationship between ADSL broadband and size, sales and productivity of firms respectively. He finds no significant effect of broadband use on the economic performance of firms.

Combining firm level panels from Netherlands and UK, Van Leeuwen and Farooqui (2008) shows that productivity gains from broadband adoption are realized through capital deepening. Colombo et al. (2013) analyse the impact of broadband use on labour productivity of of small- and medium-sized Italian firms. They demonstrate that broadband usage has no effect on labour productivity by itself, yet they what firms do with the internet matters. Akerman et al. (2015) reports that broadband availability and adoption significantly improves the output elasticities of skilled workers whereas it reduces those

of low-skilled workers in Norway. Haller and Lyons (2015) concludes that DSL broadband adoption does not result in higher firm productivity or improve productivity growth of Irish manufacturing firms. They add that their findings still hold for higher speed internet usage as well as other broadband technologies. Assessing the effect of mobile internet access by employees on labour productivity of German manufacturing and services industries, Bertschek and Niebel (2016) shows a positive relationship. In a similar vein, Polder et al. (2010) reveals that firms' labour productivity enhances with the share of employees with mobile internet.

Against this background, this paper aims to explore the impact of broadband adoption on productivity of firms operating in Turkish manufacturing and services industries. Specifically, we estimate productivity gains from broadband internet use allowing for differentials in broadband technology. In order to conduct our analyses on the broadband-productivity relationship, we utilise endogenous switching methodology (ESM), permitting us to exploit the richness of our data-set as well as to control for endogeneity and selection bias issues. Particularly, we consider the potential endogeneity between firms' productivity and broadband activity through estimating auxiliary regressions (Dutoit 2007). Sample selection problem occurs when observations are non-randomly sorted into discrete groups (firms with broadband internet access and vice versa), resulting in the potential for coefficient bias in estimation procedures such as ordinary least squares. In our case, the non-random sample of firms with broadband internet could lead to selection bias if the determinants of having high speed internet are correlated with the error term. ESM deals with this possible bias by modelling the specification in a two-stage framework (Lokshin & Sajaia 2004). We dissect the effects of different typologies of broadband internet access as fixed broadband use, mobile broadband use as well as differentiating between high speed and low speed internet access.

Our evidence depends on a recent and comprehensive firm level data set for Turkish manufacturing and services industries over the period 2007-2016 mainly constructed from the surveys of "Use of Information and Communication Technology by Enterprises". The surveys are conducted by TURKSTAT on a yearly basis and aim to obtain information regarding the usage of computers, internet, other ICT technologies, technological qualification and integration of firms. We combine the regarding dataset with two other data sources which are Structural Business Statistics and Annual Trade Statistics. The first one reveals detailed information regarding firms' revenue, input structure and investment expenditures while the latter gives information trade flows of firms. We contribute to the relevant literature on the broadband use-productivity nexus by providing the first evidence on the association between firm level productivity and broadband usage for Turkey.

Keywords : Broadband Adoption, Firm-level Productivity, Manufacturing, Services.

JEL Classification Codes : D22, D24, L86.

Innovation Behaviour of Turkish Manufacturing Firms[1]

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Abstract

As innovation became a hot debate subject in the recent decades, policy makers have started to look for ways to support and increase innovative activity among firms. Several programs have been implemented in Turkey to support and nurture innovative activities. However, since innovative activities differ in type, government supports are needed to be tailored to meet specific needs. As a first step, this study aims to assess the underlying factors among different types of innovation and the effect of entrepreneurial decisions on innovation type. Further, the effects of government subsidy and supports on innovative activity of firms in Turkish Manufacturing Industry, using firm level data are assessed. Initial results indicate that there are indeed differences in underlying motivations for different types of innovation and firms that receive subsidies yield process or organizational innovative activities rather than product innovation. Considering low number of product innovation in Turkey, compared to OECD averages, Turkish innovation subsidy and support programmes needs tailoring. The results of this study are expected to give important insight to policy makers in such sense.

Keywords : Innovation, Firm Behaviour, Subsidies, Multinomial Logit, Propensity Score Matching, Turkish Manufacturing Industry.

JEL Classification Codes : D22, O32, O14.

Introduction and Background

Today, many economists and behavioural scientists consider the importance of the entrepreneur in the change of economic, social and cultural structure. The effective role of the entrepreneur in such a change, although described in many different ways, can primarily be associated with its "innovative" and "creative" nature. Innovation is used in different meanings as innovation in production, innovation in production process and organizational innovation. However, in the literature, entrepreneurship is generally confronted with the qualification of management and its function is defined through its

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activities within the existing structure. In these approaches, in which economic and social changes are left out of the analysis, the entrepreneur's role as the balancer and the stabilizer is at the forefront and no other function is defined. However, approaches that emphasize the innovative/creative role of the entrepreneur are approaches that take into account imbalance, discontinuity, and irreversible economic and social change. For example, the innovative entrepreneur can be confronted with the role of the emergence of new consumer goods in an economic area and, thus, the introduction of new firms into the market, thereby creating new jobs, thus enabling both the goods and the labour market to revive.

The importance of the entrepreneur in economic and social change is acknowledged by many economists and behavioral scientists. Historically, Richard Cantillon (1680-1734) is the first scholar to take into account the concept of entrepreneur. Cantillon highlights the important role of entrepreneurship within the economic structure and emphasises the influence of the entrepreneur in exchange relations in the market. In Jean-Baptiste Say's (1767-1832) analysis, entrepreneur is the one who ensures production and distribution rather than the process of exchange. Noting that the role of the entrepreneur in a firm is that of a leader or a manager, Say focused on the managing role of the entrepreneur. Defining the entrepreneur as a risk taker necessitated that he/she is knowledgable, ethical and fair, in addition to having good managerial skills. The entrepreneur in Say's analysis, in short, is defined as the paid, risk taking managers (Praag van, 1999: 315-316; Güler-Aydın & Kılıç, 2008).

Neoclassical economists who include the concept of entrepreneurship in economic analysis are Alfred Marshall, Francis Y. Edgeworth and Arthur C. Pigou. As known, in neoclassical analysis, all decision-making units are assumed to have perfect knowledge. When the production process is taken as given, the aims of the firms and consumers are to maximise profit and utility, respectively. In equilibrium, the quantity demanded equals the quantity supplied at a single price level. As long as there is no external shock, the equilibrium price and quantity as determined by the market does not change. Within the scope of neoclassical analysis, which excludes technological change, dynamic processes and uncertainty, the entrepreneur does not have a defining role in production relations apart from being the manager. It can be claimed that the neoclassical economist who focused on the role of the entrepreneur in production is Marshall.

Since Marshall's entrepreneur is responsible from the supply of goods and innovations, he/she can be defined as the one undertaking all the responsibility and control of the production process within a firm. Therefore, the aim of the entrepreneur, who seems to be both a worker and an employer, is creating production possibilities with the least cost. In short, as mentioned by Say, a successful entrepreneur should have skills such as commercial knowledge, foresightedness, risk taking and natural leadership. In other words, the entrepreneur as defined by Marshall performs all the managerial responsibilities of a firm and enables economic development by taking risks (Praag van, 1999: 315-316).

Another economist giving importance to the concept of entrepreneur is Frank H. Knight. Knight differentiates between risk and uncertainty, and he identifies the role of the entrepreneur as struggling against uncertainties of the production process (Brouwer, 2002: 101). Israel M. Kirzner (1973), on the other hand, defines the entrepreneur as someone who finds out profit opportunities and has a stabilizing power in the market. Although the concept of entrepreneurship has gained different meanings during the historical process, it is Joseph A. Schumpeter who created an analytical relationship between entrepreneurship and economic development. Such technological changes that result from radical innovations cause economic and institutional changes. While Schumpeter mainly emphasises the determining role of the entrepreneur in economic and institutional change, Thorstein B. Veblen also

takes into account technology as the motor of social change. However, technology is a product of common shared knowledge in Veblen. In fact, Veblen's definition of technology is similar to institutions. In the *Absentee of Workmanship* ([1923] 1997), Veblen states: *'*Technological system is an organisation of intelligence, a structure of intangibles and imponderables, in the nature of habits of thought. It resides in the habits of thought of the community and comes to a head in the habits of thought of the technicians*'* (Veblen, [1923] 1997: 280). In brief, both technology and institutions are based on prevalent habits of thought in community. Thus, in Veblen, technological and institutional change cannot be reduced to only the indivudual and the role of the entrepreneur is not disregarded. In addition, entrepreneur evolves from the captain of industry to captain of finance during the capitalist development process in Veblen, while his/her creative role becomes routinised during the process of capitalist development in Schumpeter (Araz-Takay & Güler-Aydın, 2013). Hence, it is possible to claim that in both Veblen and Schumpeter, the evolving role of the entrepreneur is vital for understanding the functioning of capitalism and historical change.

Objectives and Hypothesis

As innovation became a hot debate subject in the recent decades, policy makers have started to look for ways to support and increase innovative activity among firms. Several programs have been implemented in Turkey to support and nurture innovative activities. However, since innovative activities differ in type, government supports are needed to be tailored to meet specific needs.

This study aims to assess the effects of government subsidy and supports on innovative activity of firms in Turkish Manufacturing Industry, using firm level data. "Innovation Survey" data is analysed to show the effects of government subsidies on the type of innovation using propensity score matching. Initial results indicate that firms that receive subsidies yield process or organizational innovative activities rather than product innovation. Considering low number of product innovation in Turkey, compared to OECD averages, Turkish innovation subsidy and support programmes needs tailoring. The results of this study are expected to give important insight to policy makers in such sense.

Analysing the determinants and main characteristics of innovation will paint only a fuzzy picture in terms of understanding the true nature of innovative activities. In this context, this study analyses five different types of innovation using a multinomial logit model; namely product, process, organizational, marketing and multiple innovative activities. Furthermore, this study aims to assess the effects of government subsidy and supports on innovative activity of firms in Turkish Manufacturing Industry, using propensity score matching.

Data and Methodology

This study employs the firm level 2012 Innovation Survey conducted by Turkish Statistical Institute (TurkStat). Innovation survey gives important information regarding the structure and the innovative behaviour of firms. These information include;

- Capital allocation of the enterprise (national/international),
- Sectoral information of the enterprise,
- Average number of workers,
- Main market of the enterprise,
- Innovation status and innovation type,

- Innovation expenditures,
- Financial support/subsidy,
- Cooperation,
- Effects of innovation activity,
- Obstacles in innovation activty,
- Patent applications,
- Number of workers with university or higher education (only available in 2012 data),
- Share of innovative products in total revenue (only available in 2012 data),
- Competitiveness of product and process innovations (only available in 2012 data),
- Strategies used and obstacles in reaching the objectives of the initiative (only available in 2012 data).

Innovation Surveys are conducted every two years and are available for 2004, 2006, 2008, 2010, 2012 and 2014. The surveys are not in panel data format since the respondants are randomly seleceted in each survey year. In this study we use only the 2012 Innvoation Survey since it holds valuable information which are not available in any other survey years in terms of capturing the characteristics of the enterpreneur.

As a first step we estimate a multinomial logistic regression in order to understand the main differences between different types of innovation namely; product, process, organization, marketing and multiple innovation activities. Multinomial logistic regression is an extension to the standard logistic regression for binary data models. Multinomial logistic regression allows us to estimate a model where the dependent variable takes several discrete values of which we are not able to sort (Cameron & Tivedi, 2009). The conditional probability function for any j variable within g groups is given in equation (1) following the notation of Hosmer and Lemeshow (2013).

$$P\left(Y = j / x\right) = \frac{e^{g_l(x)}}{\sum_{j=0}^{g-1} e^{g_j(x)}} \tag{1}$$

Multinomial models are estimated by maximum likelihood similar to logistic models.

According to the data almost 36% of the total respondents are undertaking innovative activity as shown in Graph 1.

Graph 1: Innovative Enterprises

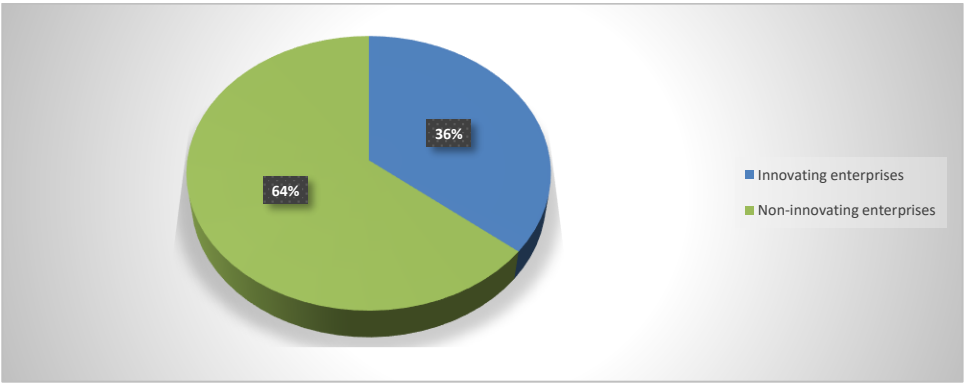

Table 1 presents details regarding the type of innovative activity.

Table 1. Type of Innovative Activity

Type of innovative activity	n	%
Product Innovation	1,089	32.63
Process Innovation	361	10.82
Organizational Innovation	400	11.99
Marketing Innovation	893	26.76
Multiple Innovative Activities	597	17.80
Innovating enterprises	3,337	35.72
Number of Observations	9,342	

The second step, this study aims to assess the effects of government subsidy and supports on innovative activity of firms in Turkish Manufacturing Industry, using propensity score matching. Propensity score matching is a widely used technique for treatment evaluation. Cameron and Trivedi (2009: 864-865) states: "*When treatment participation is not by random assignment but depends stochastically on a vector of observable variables* ***x****, as in observational data or when the treatment is targeted to some population defined by some observable characteristics (such as age, sex, or socioeconomic status), then the concept of* ***propensity scores*** *is useful.*"

Propensity score matching (PSM) technique essentially offers a measure of conditional probability for the specific treatment in question. In this study, we analyse the effects of government subsidies on innovative behaviour of enterprises. In this context enterprises that are granted government subsidies constitutes the treated group where those who did not receive any subsidies are the control group of our study. PSM forms balanced blocks within each group (treated and control) based on observable characteristics of the enterprises, matching similar enterprises to each other for a robust analysis. Propensity scores can be calculated via any parametric or semiparametric method, such as logit or probit. For this study we have calculated the propensity scores using a probit estimation.

After the balancing property is satisfied, PSM is used to evaluate treatment effects for the treated and the non-treated groups and the differences are also reported (Cameron & Trivedi, 2009).

Results

Table 2 presents the results of the multinomial logistic regression and Table 3 presents the results of the PSM estimation.

Table 2. Multinomial Logistic Regression Results

	Variable Name	Coefficient	OR
Process	Profit orientated	.111112	1.11752
		(.126313)	(.1411573)
	National market	-.2258013*	.7978766*
		(.1305249)	(.1041428)
	New for the market	-.5489961***	.5775293***
		(.1353791)	(.0781854)
	New for the enterprise	-1.080701***	.3393576***
		(.1303115)	(.0442222)
	Cooperation	.3653127**	1.440965**
		(.1505689)	(.2169645)
	Financial support	-.0607242	.9410828
		(.1492111)	(.14042)
	Internal R&D	.1938759	1.213946
		(.1362671)	(.1654208)
	Educated personnel	-.2772867**	.7578372**
		(.1387347)	(.1051383)
	Turnover	.0831953	1.086754
		(.1772403)	(.1926167)
	Foreign capital	-.0792829	.9237786
		(.1562244)	(.1443167)
	Centre	.2270235	1.254859
		(.1619194)	(.2031861)
	Financial burden	-.2904914**	.747896**
		(.1291839)	(.0966161)
Organization	Profit orientated	.2471522*	1.280374*
		(.1431425)	(.1832759)
	National market	-.0451279	.9558752
		(.1465631)	(.1400961)
	New for the market	-.3656532**	.6937434**
		(.1506492)	(.1045119)
	New for the enterprise	-.6607204***	.5164791***
		(.1474959)	(.0761785)
	Cooperation	1.115589***	3.051364***
		(.1501834)	(.4582643)
	Financial support	.3750484**	1.455062**
		(.1555339)	(.2263115)
	Internal R&D	.3528373**	1.4231**
		(.1593476)	(.2267675)
	Educated personnel	.3773828***	1.458463***
		(.1459739)	(.2128975)
	Turnover	-.0018344	.9981673
		(.1905932)	(.1902439)
	Foreign capital	-.1744261	.8399389
		(.1733453)	(.1455994)
	Centre	.2472132	1.280452
		(.1910867)	(.2446774)
	Financial burden	.1020348	1.107422
		(.1410906)	(.1562469)
Marketing	Profit orientated	.3298842***	1.390807***
		(.1018023)	(.1415873)
	National market	-.3088801***	.7342688***
		(.1047139)	(.0768882)
	New for the market	.2741031**	1.31535**
		(.1102572)	(.1450269)
	New for the enterprise	-.1824912	.833192
		(.1108056)	(.0923223)
	Cooperation	.4690183***	1.598424***
		(.1160037)	(.1854231)

	Financial support	.1236687	1.131641
		(.1135011)	(.1284425)
	Internal R&D	.4254508***	1.53028***
		(.1107647)	(.1695009)
	Educated personnel	-.2834066***	.7532134***
		(.1096958)	(.0826243)
	Turnover	.2910718**	1.337861**
		(.1238023)	(.1656302)
	Foreign capital	-.0575291	.9440945
		(.1255415)	(.1185231)
	Centre	.297927**	1.347063**
		(.1317982)	(.1775405)
	Financial burden	.1148267	1.121679
		(.1007582)	(.1130183)
Multiple	Profit orientated	-.0354952	.9651273
		(.1539752)	(.1486057)
	National market	-.0579194	.943726
		(.1570952)	(.1482549)
	New for the market	-21.78655	3.45e-10
		(1863.686)	(6.44e-07)
	New for the enterprise	-22.33599	1.99e-10
		(1708.212)	(3.41e-07)
	Cooperation	.4972817**	1.644246**
		(.1964362)	(.3229894)
	Financial support	.0518163	1.053182
		(.1866002)	(.196524)
	Internal R&D	.3276325**	1.387679**
		(.1611988)	(.2236922)
	Educated personnel	-.0810387	.922158
		(.1689245)	(.1557751)
	Turnover	.1768591	1.193463
		(3204.427)	(3824.365)
	Foreign capital	-.0006552	.999345
		(.1843406)	(.1842198)
	Centre	-.1574319	.854335
		(.196271)	(.1676812)
	Financial burden	.0783862	1.08154
		(.1545884)	(.1671936)

Results from the multinomial logit model indicates differentiating among type of innovation is crucial. Different types of innovation are driven by different factors. Results indicate that profit oriented firms choose to perform organization or marketing innovation in Turkey, compared to product innovation. Product innovating firms are focusing on the international market and found to be less cooperative. Firms receiving financial support tend to perform organization or marketing innovation rather than product innovation. Firms operating in the centres rahter than peripheries are more likely to perform marketing innovation than product innovation. Finally firm with internal R&D department are more likely to undertake product innovation or multiple type of innovations at once.

Table 3 presents PSM results. The treatment variable is chosen to be government subsidies on innovation.

Table 3. PSM Results

	N(5)		**N(5) caliper**		**N(5) Kernel**		**N(5) Trim (0.001)**	
	ATT	**SE**	**ATT**	**SE**	**ATT**	**SE**	**ATT**	**SE**
Product	.7898	.0298	.7901	.0299	.7898	.0193***	.7898	.0298
Process	.3157	.0308	.3158	.0306	.3157	.0202	.3157	.0308
Organization	.2739	.0274**	.2689	.0275	.2739	.0182***	.2739	.0274**
Marketing	.3179	.0309	.3191	.0311	.3179	.0201	.3179	.0309
N treated on support	909		909		909		909	
N treated total	2982		2982		2982		2982	
N non-treated	2073		2073		2073		2073	

*Note: *** p<.01, ** p<.05, * p<.1*

Further analysis of the effect on financial support on the type of innovation seconds the results presented in Table 2. PSM results indicate that government subsidy recipients are performing organizational innovation.

Discussion and Conclusion

The basic source of wealth and industrialization is technological innovation and the value added that it creates. Within this context, the result of this study shows that firms are targeting a short-term high profit that will result in a low value added in Turkey by preferring marketing or organization innovation. In fact, in order to increase the value added in the manufacturing industry, firms should prefer product innovation by means of increasing productivity instead of organization innovation.

Preferring marketing or organizational innovation reveals two important existing structural problems in the manufacturing industry of Turkey. Manufacturing can be divided into three subsectors; high, medium and low technology manufacturing. In the 2000s, low technology manufacturing sector has had the highest share in total manufacturing sector with 65.7% in Turkey (Taymaz & Suiçmez, 2005). In addition, productivity has been low in low-technology industries in this period.

It should also be stated that the share of services sector in Turkey is higher than the manufacturing industry, where the productivity and the value added are also low. In order to increase wealth, the policy makers should support new technological improvements in the manufacturing industry. In other words, productivity-based growth policy should be adopted especially at the firm level by encouraging product innovation in Turkey.

It can also be claimed that the type of innovation and the entrepreneur as discussed in the previous section is different from the organization or marketing innovation. For instance, the entrepreneur and his/her innovative activity in Schumpeter is defined as creative and such characteristic of the entrepreneur leads to changes in the economic and social structures. In order to cause such substantial structural changes, innovation or technological change in narrow sense should be radical and should increase productivity.

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An Evaluation of the Major Commercial and Financial Components of Shopping Center Investments and a Case Analysis of a Successful Investment in Istanbul, Turkey

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Abstract

While developing a shopping center, the responsible parties must analyze the commercial, financial, social and environmental components of the project for a long-lasting success. This study focuses on the former two and reinforces its stance through a case analysis of a large-scale shopping center investment from Istanbul, Turkey (shall be called "Project X" for confidentiality). Commercial part of this study's approach is comprised of location analysis (i.e. catchment area, competition and micro location) and developing differentiating concepts, while the financial part is centered on the feasibility model. These two components are interlinked as the potential of a location or concept could not come to fruition without the green light for investment -a decision which is dependent on the feasibility model applied and its results. Two major sides of a shopping center feasibility model are; the cost side (i.e. plot-related, construction, financing, consultancy and brokerage cost items) and the income side (NOI and capitalization rate). Project X case analysis is designed mostly for evaluating real-life impacts of its commercial best practices. Having an established track record of six years, the respective impacts could be observed in a more solid and visible fashion. Major indicators of success which are used in this study are higher customer footfall and sales figures when compared to national averages. Findings strongly support the theoretical framework put forward by the study.

Keywords : Shopping Center, Case Analysis, Best Practice, Investment, Real Estate.

JEL Classification Codes : R33, L81, L85, E22.

Introduction

Since their rise as commercial and social hubs in the US suburbs in 1950s, shopping centers have rapidly evolved and spread around the globe. While it is not easy to coherently and completely calculate their global reach, some industry reports show that the total gross leasable area (GLA) in the major markets stands above 1 billion m2 in almost 21.000 different projects; potentially generating a puzzling situation for the global sustainable development (İlhan & İlhan, 2018). These large-scale investments require huge resources and their failure could lead to losses for various stakeholders. Shopping centers are also long-term investments and it is hard to implement previously un-planned changes, corrections or upgrades after their realization phases. Thus, it would be beneficial to take all four of the fundamental components of development into consideration from the beginning. These could be listed as commercial, financial, social and environmental components.

For delivering a detailed outlook, this study is solely focusing on the commercial and financial components. This is a descriptive effort relying on secondary research and industry know-how. Its commercial part is comprised of an overview of location analysis and concept development processes, while the financial part is focused on explaining the nature and major components of investment feasibility models. These two components are highly integrated as having solid financials is crucial for receiving an investment green light, while an unsatisfying commercial setup shall anyhow prevent reaching to such solid financials.

Especially for highlighting this study's evaluation of commercial components, a case analysis of a shopping center in Istanbul, Turkey ("Project X" for confidentiality) was conducted. The case analysis starts with market and project overviews and concludes with a performance comparison between Project X and national averages. Since only the industry-wide gross customer footfall and sales figures are available through AYD (Council of Shopping Centers Turkey), these were used as major indicators of high performance.

Commercial Components of Development

Developing competitive projects has become more challenging than ever. In order to curb down the negative impacts of uncertainties and challenges, a holistic approach is needed. Below, location analysis and concept development topics are covered as a part of this approach.

Location Analysis

a) History of Location Analysis

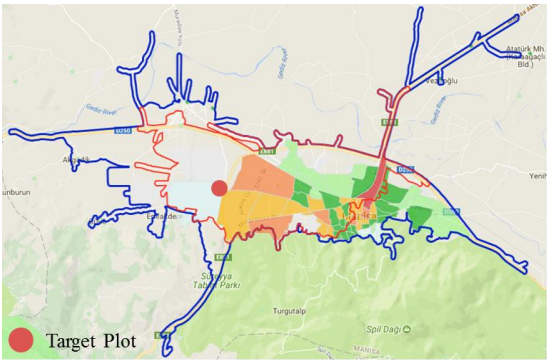
Early industry heavyweight J.C. Nichols (1945) put forward four messages in one of his influential speeches; (1) choose your location based on research and know-how, (2) take the competition into consideration, (3) develop a project that would fit into the physical and socioeconomic characteristics of the location and (4) make sure your project would survive the change. Later, Huff's more scientific study (1964) stated that; (1) every distribution center (i.e. shopping center) has "a demand surface containing potential customers" (i.e. catchment area) limited by distance and the commercial offer, (2) a demand surface is not uniform as it is divided into different zones with varying sales capacities and probabilities of sales realization and (3) the demand surface is probably shared with competitors. While Huff's approach is still the basis of location analysis, the recent technological advances have also been contributing to the depth and quality of data gathering and analyzing processes. New software solutions based on online interactions and smartphone applications and continuously developing geographical information systems (GIS) are among such advances.

b) Catchment Area

Having enough potential customers with substantial retail purchasing power around a shopping center is an indispensable necessity. Of course, different types of socioeconomic textures may require completely different shopping center concepts (e.g. price-conscious customers could be happier with an outlet center). The quality of road and public transportation networks is also important. Currently, most of the institutional shopping center developers are utilizing the advantages of GIS to visualize and analyze their catchment areas. Visualizations contain catchment zones (i.e. the total area of reach divided into rings of private car driving distances) superimposed on socioeconomic data of the surrounding neighborhoods that have been gathered from national statistics institutes and targeted surveys and research. They help developers to see the larger picture and make more educated decisions.

However, a developer should also physically assess a catchment area's potential and get information from business contacts as technologies like GIS could not fully replace field research.

Figure 1. Simple Catchment Area Visualization Made with GIS Software



Socioeconomic Distribution

	Zone I	Zone II
A	2%	1%
B	18%	5%
C1	29%	19%
C2	32%	54%
D	19%	17%
E	0%	5%

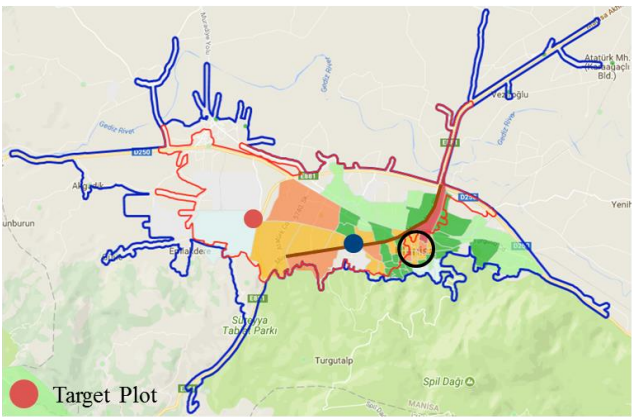
Driving Distance Population

Zone I (0-15 Minutes)	215.000	Inhabitants
Zone II (15-30 Minutes)	135.000	Inhabitants
Total	350.000	Inhabitants

c) Competition

Nowadays, competition could come from a much wider array; including, other shopping centers, large standalone anchor stores, urban spots which have strong commerce, socializing, gastronomy and entertainment potential and the ever-increasing penetration of online retail. Thus, simply mapping competing shopping centers would not be enough.

Figure 2. Simple Competition Data Superimposed on GIS Visualization



Competitor Shopping Center A

City Center
- Some National Retail Brands
- Mostly Local Retail Brands
- Traditional Gastronomy
- Lacks Entertainment
- Parks & Squares
- Public Offices
- Traffic & Parking Problems

Main Inner-City Road
- Strong Bus Line
- Pedestrian Friendly

❑ *Statistics show that **online penetration** is low –inhabitants prefer the Shopping Center A and visiting the neighboring city*

In line with this sea change, retail-centric setup of shopping centers are now transforming into contemporary "third places" where people could socially interact, learn, eat, relax, shop, entertain

themselves and even stay fit (McGee, 2017). Therefore, developers and marketing specialists are looking for more depth and coverage in their analyses. This is also visible in the example above ("Figure 2") where the city center is also highlighted because it is one of the main competitors of the potential shopping center investment in many ways.

d) Micro Location

While macro analysis is crucial, close surroundings of a project also play an important role. A project may show impressive potential in a larger driving distance, but it could be located at a place where the potential customers would not and/or could not go to (e.g. weak infrastructure and socioeconomic constraints). Another issue could be the visibility of the project; as physically dominating and easy to spot locations have an advantage. Moreover, a project could be surrounded by bus, tram or metro lines but their nearest exit could be far away from its entrance. According to the level of service (LOS) approach, the A-level (ideal comfort) maximum distance for uncovered outdoor walking is around 120 meters (Smith & Butcher, 2008). Developers must evaluate the actual value of their public transportation connectivity and work on possible improvements when necessary.

Concept Development

Until recently, through concepts which were mostly overlapping in the major markets, the industry was focused on spotting a promising location and building the risk-free concept of the day on it. However, the current fast trend change pace has created a growing need for differentiation that could transform projects into "multifunctional social spaces" that focus on new concepts, gastronomy tenants and the fresh benefits of technology (Cushman & Wakefield, 2017). Yet, not all centers would survive this transformation and once it is over; not all renovated centers would flourish and those that would flourish shall find themselves in a strikingly similar position with their competitors again -creating a new version of market saturation.

This recalls Drucker's (1959) statement that the long-term plans are not about future decisions but about "the futurity of present decisions." The longevity of present day decisions could be ensured with alternative concepts that are away from the competitors' radars. However, some ideas could also be away from the others' radars simply because they would not be sound commercial moves. This dilemma explains why combining innovative thinking and sustainable performance is extremely hard. In this respect, understanding the past, present and future of concept development and focusing on the right differentiating elements are crucial.

a) History of Shopping Center Generations

In the contemporary sense, this journey had started with a group retailers establishing off-street parking in Baltimore, Maryland in 1907, which was followed by 1920s California "where supermarkets would anchor and serve as a magnet for a strip of smaller stores" and finally Southdale Center, the first air-conditioned and enclosed shopping center, was opened in the suburban Edina, Minnesota in 1956 (Feinberg & Meoli, 1991). Southdale Center's architect, Victor Gruen, envisioned this building as "a kind of town square, a place for social gathering as well as shopping" but would later had to distance himself from the fast pace building of numerous replicate projects with "less glamorous designs" all around the country (Walker Art Center, n.d.).

First modern centers had been developed around anchors (e.g. hypermarkets, DIY stores, department stores) positioned as customer magnets. Then came an era where fashion and service variety grew considerably (e.g. fast fashion anchors like Inditex Group and H&M working together

with strong mono-brand fashion retailers). This type of branch and tenant mix variety could not cope up with ever increasing competition, a line of challenging customer demands and the disruptive power of online retail. Thus, developers have been trying to focus on leisure and technology in 2010s.

Nonetheless, it is apparent that the industry is generally coming from behind the change. While technology companies like Amazon were having their baby steps, very few brick, and mortar retailers noticed and even after losing the chance of a preemptive strike, majority of today's proactive responses are still unorganized. Amazon started as a bookseller but now its "list of current and possible competitors, as described in its annual filings, includes logistics firms, search engines, social networks, food manufacturers and producers of physical, digital and interactive media of all types"; targets more fitting for a conglomerate than for a retailer (The Economist, 2017).

b) Differentiating Aspects

Developers must spot long-lasting differentiating aspects for their centers' concepts. It is about having a unique tenant, concept or service that the competitors could not successfully and/or easily copy. In this respect, applying the steps of new product development could be a good starting point. In their classic work, Booz, Allen & Hamilton (1982) identified seven steps towards a systematic framework for new product development; (1) strategy development, (2) idea generation, (3) screening and evaluation, (4) business analysis, (5) development, (6) testing and (7) commercialization. Not surprisingly, it all starts with a strategy which gives a proper direction to the entire process. Certain ideas would sprawl out of this strategy and a shortlist of more feasible ideas would be subject to detailed analyses before their trial run and actual release.

Rushed ideas would lead to serious problems. In order to solidify the potential risks with an example, a development group may be rushing to make a deal with Apple because the brand is a "trendy" footfall bringer. The real long-term value of such a deal should be assessed in detail for each specific project. For instance, it was reported that Apple is pushing for lower rents in the US in exchange for the potential they bring to shopping centers but serious criticism regarding this setup exists; (1) it is argued that Apple does not promote cross shopping (i.e. the extra customer footfall they bring is not translated into sales in other shops) and (2) the Apple footfall hike "gives mall owners leverage as they try to wring higher rents from other tenants" (Kapner, 2015). Apple could be the perfect tenant for a project, but this decision must definitely have a solid foundation.

Other ideas may even require the time and money of shopping center investors. Yet, the logic behind is the same; commercialized products and/or services would bring more customers to shopping centers, which would then translate into more sustainable and widespread tenant sales increases and correlatively satisfying rental income flows for the respective projects. ECE, the leading European commercial real estate service provider, is focusing on this issue with its "At Your Service" initiative. ECE (2016) is analyzing the entire customer journey (i.e. decision at home, arriving at the shopping center, being well-informed, shopping, relaxing, leaving the shopping center, arriving at home) and setting up different touchpoints for each journey segment (e.g. better websites and smartphone applications for affecting the customers' decisions at their homes).

This recent narrative from the industry shows that there is no one-size-fits-all solution as each project should have its own strategic approach that would be later translated into solid results. It is clear that differentiation is a tricky topic in the current marketplace. We are living in a unique time of transition where online retailers are opening brick and mortar stores, while shopping centers are trying to go online. Still, it would be bold to call this phenomenon an anomaly. This is simply omni-channel.

It is about being in uninterrupted contact with customers through numerous channels that they could use as they please to order, collect, return and get assistance (Solomon, 2015).

Financial Components

Similar to other real estate types, "creating maximum incremental (residual) land value" in return for their investment is the core target of shopping center developers (Smith, 1980). However, shopping centers are financially more demanding than many other real estate investments because of their larger size and long-term return nature. Thus, guessing would not be enough for the financial green light. Accordingly, this part is focused on explaining the major components of investment feasibility models, while also giving reference to the common mistakes made in the industry.

Main Parts

There are five main parts in a feasibility model with four of them being on the cost side (plot, construction, financing, consultancy and brokerage), while the final one represents the income side with its subdivisions (NOI and capitalization rate). Each of these could potentially kill a project before it even leaves the drawing board. This is the natural flow of business and accepting pet projects via bypassing the necessary evaluation processes could cause risks to surface (Kendrick, 2015).

a) Plot Cost

When complex models had been applied to the much-debated US housing market, it was seen that the increase in plot prices was originated from developer and buyer upward speculation and it became reversed when many investors started to disagree with this "optimistic behavior and short-sold homebuilder equity" (Nathanson & Zwick, 2014). Shopping center industry's veterans would say that this story is extremely similar to theirs; (1) investors start to freely invest in plots with (the potential of) commercial zoning when there is little to no competition and/or regulation, (2) as these projects are flocked by retailers and customers, the remaining plots become much more expensive through speculation based on optimism and (3) new shopping centers are developed in a rush but when (4) the repetitive concepts fail to perform as promised, it could lead to a disagreement over their actual fair value -which could potentially burst their elevated valuations.

Thus, while evaluating plot-related cost items, "going with the flow" attitude could be highly damaging. Some developers are even artificially increasing the income expectations in their feasibility models to cover the increasing plot prices. Long-term rental income trends are highly dependent on the sustainable retail sales potential of a plot. This is beyond any speculative trends in the investment circles. A reasonable developer must focus on determining the realistic long-term income of a project in order to come up with a feasible plot price. Acquiring plots at a so-called "market rate" could lead to disastrous consequences.

b) Construction Cost

Reinforced concrete is the backbone of construction. Its two key components, steel and cement, have hard currency based global prices. On the other hand, personnel, planning, insurance and transportation cost items would vary from region to region. It is also natural to assume that the total cost would dramatically increase, if the complexity (e.g. need for soil improvement, covering certificate conditions, building beyond shell and core, use of non-standard materials and design elements) and/or quality (e.g. landscaping, use of rare materials) are increased. It should be kept in mind that traditional shopping center calculations are made with the assumption that the leasable areas

would be handed over to the tenants as shell and core. However, as the competition gets harsher, retailers tend to ask for semi- and/or fully-decorated stores; which is increasing the construction costs. The recent rise in the green building market is also creating a more challenging development environment because it brings much needed but complex additions and alterations to the decades-old practices. It may take some time before the industry shall be synced with this new normal.

c) Financing Cost

The core items of real estate financing cost are the periodical interest, upfront and balloon payments. Creditors use risk free rates as the basis and generally add market, industry and debtor risks and lender profits and reflected expenses (e.g. service cost, stamp tax on financing contracts) on top. The debtor has to additionally calculate; (1) his/her project-allocable finance personnel expenses and (2) the opportunity cost during construction period (e.g. lost debtor interest income on equity or expected returns of an alternative investment of equal risk). Financing cost items in an investment budget generally focuses on the expenses which take place until the end of the construction period (i.e. before the asset starts to generate its own income) because after the opening, it is assumed that they are going to be deducted from the asset's EBITDA figures.

d) Consultancy and Brokerage Cost

Developers' fee, concept design, initial leasing, financial brokerage, tax consultancy and management and marketing fees before opening could be seen as a part of consultancy and brokerage cost. In the general setup, cost items that are connected to plot acquisition and/or construction are evaluated within their respective parts. With numerous aspects to take into consideration, a shopping center development would require specialized consultants and brokers that could be third parties and/or in-house teams. Either way, the cost they generate shall be reflected in the feasibility model. Of course, determining the right price for advice is important for developers.

e) NOI and Capitalization Rate

Net operating income (NOI) and capitalization rate are widely used while assessing the value of commercial real estate properties. As a mostly manipulation-free indicator, NOI is the income left after non-paid rents, vacancies and operating expenses (e.g. maintenance, service fees, insurance) are deducted from the gross potential income (i.e. total income of a fully-occupied and fully-paid fiscal year). It must be kept in mind that the project would have other items to consider financially beyond a NOI calculation (e.g. interest, taxes, capital expenditures, depreciation and amortization). Therefore, NOI is not pure profit suitable for shareholder distribution. Still, it is crucial because it forms the basis for capitalization rate (CAP rate) calculations. In simple terms, CAP rate is NOI divided by the project value. Combined with the evaluation of the overall investor trust and appetite for the specific market and/or project, lower percentages are signs of a safer investment in contrast to those with higher percentages. Investor trust and appetite mostly come from positive macroeconomic indicators, integration into global markets, political stability, low vacancies and sustainably high unit rents (coming from financially strong tenants that have a continuous demand for additional rental space). However, lower percentages also mean that the potentially safer projects would pay their initial investments back in a relatively longer period. Thus, it is mostly about how investors evaluate the apparent and hidden risks and how much they are willing to take them.

Sample Feasibility Model

Below, there is a sample overview page with arbitrary but understandable figures ("Table 1"). In full models, this is just a part of a much larger and complex calculation set but it is simplified here for explanation purposes. Cost items and project income expectations may show dramatic differences from region to region; leading to different targets. The key is to always work with solid and accountable numbers.

Table 1. Sample Feasibility Model Overview Page

VAT included - all in €

COST SIDE (initial investment)					
Plot-Related Cost	**82.000.000**				
Acquisition Price	**80.000.000**				
Related Fees & Taxes	**2.000.000**				
Construction Cost	**160.000.000**	**Financing Cost**	**9.500.000**	**Consultancy Cost**	**7.783.500**
Shell & Core	**125.000.000**	**Upfront Fee**	**500.000**	**Development Fee**	**2.500.000**
_Retail Part	*95.000.000*	**Interest During Construction**	**4.500.000**	**Concept Design**	**1.000.000**
_Underground Parking Part	*30.000.000*	**Lost Interest on Equity**	**4.000.000**	**Leasing Fee**	**1.138.500**
Contingency & Soil Works	**3.000.000**	**Related Fees & Taxes**	**500.000**	**Management Fee**	**145.000**
Infrastructure Works	**2.000.000**			**Marketing Expenses**	**2.000.000**
Planning & Site Supervision	**12.500.000**			**Financial Brokerage**	**1.000.000**
Extra Tenant Decorations	**12.500.000**				
Related Fees & Taxes	**5.000.000**				

INCOME SIDE (first full year)	
GLA (m2)	**55.000**
Average rent (€/m2/month)	**23**
Gross Potential Income	**15.180.000**
_Non-paid Rent & Vacancies	*-455.400*
_Insurance	*-180.000*
_Maintenance	*-180.000*
_Service Fees	*-575.000*
NOI	**13.789.600**

INVESTMENT BUDGET	**259.283.500**
CAPITALIZATION RATE	**5,3%**

MARKET RETURN	**6,0%**
MARKET VALUE	**229.826.667**

This interlinked overview page shows its users whether the estimated first full year NOI would be satisfactory for realizing the investment. In order to evaluate the situation correctly, developers must look at the market valuations of similar projects. For example, in "Table 1", if the market return is 6% for such projects, it would not be a feasible investment because the market value misses the initial budget by almost €30 million. If investment budget and/or NOI could not be more positive, developers must either cancel the project or wait for the market to value similar projects higher (e.g. accepting 5.3% and below). In case of a future sale, developers would also tend to expect premium gains on the initial investments in return for the risks they have shouldered (e.g. each 0,1% below 5,3% in the market return would create an additional value of over €5 million in "Table 1").

Case Analysis: Project X

Project X is located in a rapidly developing region in the European Side of Istanbul, Turkey. It has a proved track record of six years in one of the most turbulent real estate markets in Europe. The initial target was to create a high standard asset both in terms of commercial and financial components that

would pay the initial investment back in less than eleven years. The entire setup was built in line with the expectations of large-scale institutional investors.

Turkish Market

It is valuable to start with foreign direct investment (FDI) because it somehow determines a country's place in the global scene. With around 60 billion dollars in total, Turkey had experienced its best FDI flows between 2006 and 2008. However, FDI flows declined below 11 billion dollars in 2017; happening simultaneously with real estate investments increasing their share to above 40% from the healthier 15% of the 2006-2008 FDI heydays and the first five months of 2018 pointed out to further losses for other sectors (Eğilmez, 2018). Real estate industry could also experience certain problems soon because (1) without an attractive economy in its entirety, real estate investments could also decline and (2) there is a risk of saturation in many submarkets of the Turkish real estate industry as a result of the unchecked growth of the previous years. Turkish shopping centers are also under risk. By the end of 2017, there were 401 shopping centers in Turkey (114 in Istanbul and 39 in Ankara alone) with an additional 44 are either under planning or construction (JLL, 2018).

Table 2. Annual Turkish Shopping Center Industry Performances (JLL, 2014, 2015, 2016, 2017, 2018, AYD, 2017)

	# of Centers	GLA m2	Annual Visitors	Annual TRY Sales
2013	352	9.494.386	1.720.000.000	65.300.000.000
2014	344	10.018.097	1.890.000.000	83.000.000.000
2015	368	10.889.626	2.110.000.000	96.700.000.000
2016	375	11.184.110	2.120.000.000	100.000.000.000
2017	401	12.218.989	2.160.000.000	110.000.000.000

It is true that the Turkish market's density is still low at 147 GLA m2 per 1.000 inhabitants, when compared to many of its European counterparts such as France and Germany that are at 286 and 177 GLA m2 per 1.000 inhabitants (Cushman & Wakefield 2018). However, retail spending potential and urbanization levels of those countries are much more advantageous than Turkey. The country's GLA m2 supply had increased close to 30% between 2013 and 2017 alone. New projects used to create their own demand, both from the tenant and customer sides. Now, in contrast to the constantly increasing supply, there is a visible slowdown in the growth pace of customer footfall and sales figures. This shows that there is a serious risk of market saturation; meaning that only those which have been developed with a long-term thinking shall flourish in the following years. It is expected that an upcoming market correction would hit ill-advised projects heavily.

Project Overview

It was developed as a superregional shopping center with 73.000 m2 GLA (193 shops, 50 storages and 21 kiosks) because it was successfully forecasted that its catchment area population would be more than doubled to 1.5 million inhabitants. However, without fully utilizing the merits of its location via a fitting and long-lasting concept, this project could not realize its full potential.

a) Selecting the Location

Population and disposable income growth potential, rapidly developing infrastructure (e.g. public transportation and roads) and a modest competition environment were the main attraction points of

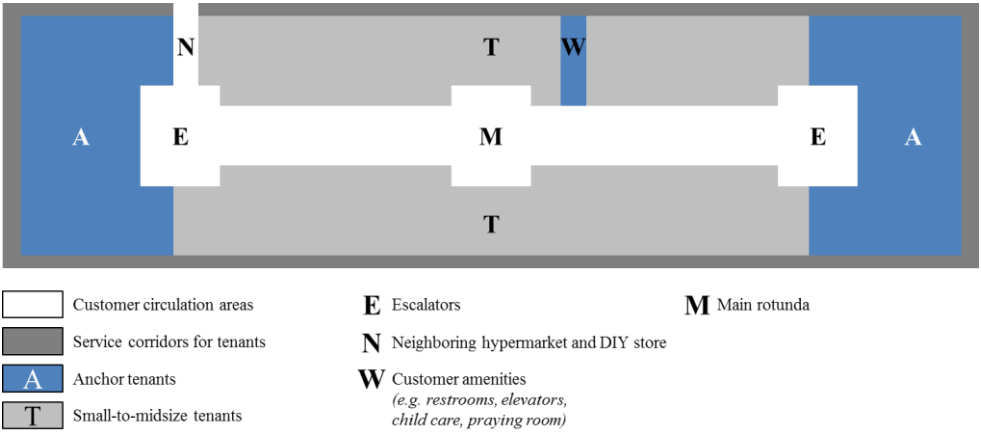
this investment. First, GIS software had been used for visualizing and reporting the overall potential of the catchment area. Then, field research was conducted (e.g. one-on-one discussions with locals and retailers, checking the progress of public and private investments). The plot already had advantageous commercial zoning conditions. Therefore, no development risks were taken in that respect. Moreover, it had more than 400 meters facing one of the busiest highways in the city with two direct entries from its side road. Project X's main pedestrian entrance was also next to a Metrobus (bus rapid transit) line stop. Additionally, the plot was surrounded by existing and upcoming mass housing projects which are now mostly completed and occupied by middle class families. Competitors were either below 40.000 m2 GLA (i.e. they were unable to offer all necessary commercial and social components due to their size limit) or they had certain conceptual flaws (e.g. non-ideal layouts, incomplete branch and tenant mixes and lacking design elements).

b) Developing the Concept

Developing a project that would offer a wide variety of retail, gastronomy and entertainment options to the growing middle class in the project's vicinity was a promising idea. Accordingly, most of the global and national retail brands were placed on Project X's four floors; while 33 fast food stores, restaurants and cafes were planned in the food court and the main entrance plaza. The branch and tenant mix were completed with an IMAX cinema (still a rarity in the market as of 2018), a children entertainment anchor and a large consumer electronics store.

With the plot's long rectangular shape, Project X was able offer all these in a "single mall" scheme. This is a widely-used scheme which is comprised of one linear walkway on each floor with anchors acting as magnets in both ends of each floor. If customer circulation areas, escalators, elevators and rotundas could also be placed successfully, this scheme would be able work almost problem free in terms of both vertical and horizontal customer circulation. Even though bold designs with curvy customer circulation areas may look fresher, they are seriously decreasing the visibility and comfort. In a straight "single mall" there would not be such a problem. At the anchor side, the developers did not have to add a hypermarket or DIY store (i.e. footfall bringers with low rental incomes) to the mix because these were both conveniently located next to the project; transforming the area into an attractive retail destination with a total GLA of 100.000 m2. Accordingly, Project X could allocate more space to small and medium size units for deeper retail variety and much better income.

Figure 3. Simplified Floor Plan of Project X Showcasing Its "Single Mall" Scheme



However, something unique was needed in order to differentiate Project X. Tenant market was extremely limited and it was near impossible to generate differentiation through unique brands. Thus, certain futuristic design elements were brought together under the "shopping galaxy" concept. Exterior design would be more colorful, there would be a rocket climbing wall, a galaxy bridge with a rocket shape containing cafes and space-themed edutainment concepts and common area walls and ceilings would be covered with space images and models. These also affected the launch campaign and the project logo. A digitalization process was also realized through way finder touchscreens, a large interactive LCD screen, a photo boot connected to social media and a smartphone application.

Figure 4. Artist's Impression of Project X's Rocket-Shaped Galaxy Bridge

c) Performance Indicators & Comparison

While there could be numerous ways to analyze commercial performance, only a few are publicly available and comparable. Footfall and sales indexes are the most prominent ones in this respect. It is seen in "Table 3" that, especially after it had stabilized in its first two full years, Project X managed to first catch and then outperform the Turkish market average. The gap was dramatic in 2017 with Project X outperforming the market by 42% and 35% in annual footfall and sales figures respectively. After its final hike in 2014, Turkish market continuously delivered per m2 GLA sales growth rates well below the CPI (i.e. increase in GLA m2 supply had not translated into real sales growth), while the stagnation was turning into a downward trend in the number of visitors per m2 GLA figures (i.e. cumulative annual footfall increase was not covering the increase in GLA m2 supply). Project X had not experienced such problems and proved that it is a durable investment that manages to offset the negative outlook in the market with its successful commercial setup. It was mentioned before that commercial success is highly integrated with financial success. This is also visible in the premium gains of the Project X investors which is around 0.5% (9% investment CAP rate minus 8,5% market return rate independently valued). This is the equivalent of above €13 million additional value in exchange for the risks shouldered.

Table 3: Comparison of Footfall and Sales Indexes of Project X and Turkish Shopping Center Industry (JLL, 2014, 2015, 2016, 2017, 2018, AYD, 2017)

	Footfall Index *(annual # of visitors per m2 GLA)*		**Sales Index** *(annual TRY sales per m2 GLA)*	
	Project X	**TR Average**	**Project X**	**TR Average**
2013	171	181	5.178	6.878
2014	196	189	7.032	8.285
2015	243	194	8.844	8.880
2016	242	190	10.154	8.941
2017	251	177	12.171	9.002

Conclusion

This study described the importance of commercial and financial components of shopping center development through secondary research and industry know-how. The real value of an all-round commercial concept would only come to fruition when it is also a financially viable investment. Especially on the commercial side, the study has solidified its theoretical basis by analyzing an actual project as its case study. Project X showcases some best practices in location analysis and concept development. Since its opening, Project X's performance has steadily increased, and it is now outperforming the market by a large margin. Naturally, this study does not take into consideration any "force majeure" developments (e.g. act of God, act of parliament, act of man) that could not be reasonably foreseen by market players but could cause deeper damage to long-term investments of immovable nature, such as shopping centers.

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A General Evaluation of Major Components and the Future of Shopping Center Marketing

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Abstract

One of the most important components of shopping centers is their marketing strategies. They should be developed with full dedication for each shopping center. For optimum results, developers and marketing specialists must work together from the very beginning. This descriptive study is built on this stance. It employs secondary research and industry know-how for evaluating the major components and the future of shopping center marketing. The process starts with the evaluation of the location component (i.e. catchment area and competition analysis) and continues with the description of different elements of a tailor-made project concept and an accompanying brand image. Then, the importance of bringing these different components together in a sound marketing budget is touched upon. The value of choosing the most suitable campaign and media types has also been discussed. With fierce competition coming from all directions, this topic is becoming more important by the minute. Through analyzing the compiled data, this study puts out a basic marketing model in which the specialists start with a tech-based analysis of both the current situation of and future prospects for creating inspirational marketing ideas. While sticking to the budget limitations, they must be able to transform these ideas into actual campaigns each shaped as harmonious marketing triangles. Each triangle shall cover omni-channel and cross-media elements and the supportive actions taken within shopping centers. Yet, the task is not over with the final budget approval or even the realization of a marketing campaign. Necessary result analyses and upgrades should be done for the future. It is argued that such an approach should help shopping centers to increase their brand equity and commercial performances in the long-term.

Keywords : Shopping Center, Marketing, Brand Image.

JEL Classification Codes : R33, M31, L81.

Introduction

The contemporary shopping center was born in the US suburbs in 1950s. While spreading around the world in the following decades, they have continued "to straddle the line between private and public space" (Schwab, 2016). The debate regarding their interwoven status within the urban fabric would probably carry on but it is also clear that they are the manifestations of a quintessential real estate investment model that have been luring investors in for decades. Yet, it could be argued that the pace of repetition has taken over the pace of innovation in the industry -leading to a "going with the flow" attitude and risk of market saturation in many major markets. This explains why shopping center investors are desperately looking for means of differentiation. Having a tailor-made marketing strategy

is one of the key requirements of achieving differentiation. It is truly an integral part of each shopping center's concept since it has the power to act as a roadmap for; (1) multi-faceted communication with stakeholders, (2) building up the brand equity and (3) achieving sustainable performance figures.

Each successful marketing strategy should be based on a proper location analysis which would then lead to the development of a fitting concept and brand image -while staying within reasonable and operable budgets. Transforming a theoretical marketing strategy into an actual annual budget is also a challenging task; as accumulating and utilizing the relevant know-how regarding campaign and media types are also of key importance. Short-term thinking is not a desirable approach for marketing strategy. Marketing is like a never-ending relay race where the runners, supporters, venue and the weather constantly change. Being an integral part of a multi-billion-dollar industry, it is definitely not something to be done superficially and/or with fixed ideas. Thus, this descriptive study is prepared as an overview of the current state and future of shopping center marketing. It makes use of secondary research and industry know-how throughout the way.

Crucial Trio: Location, Concept and Budget

While marketing strategy is not made out of steel and concrete and there is always a chance to correct earlier mistakes, marketing mistakes may come in the shape of hard-to-fix image problems and low brand equity and correlatively low commercial and financial performance. Thus, "performance measures that encourage decisions that promote the long-term health of the brand are considered to be better than measures that do not encourage strategic decision making" (Wood, 2000). From the beginning, developers and marketing specialists should work together on "the crucial trio" which is comprised of; (1) thoroughly analyzing the location of the project in terms of its inhabitants and competition status, (2) developing an all-round concept and a brand image that goes along with that location and (3) efficiently allocating the available budgets to direct the project in the market.

Location Analysis

Marketing could not be done without taking into consideration a project's location. Location has two key aspects to be analyzed; target customers and competitors. Attracting target customers requires a proper positioning; which is not solely about focusing on the product in hand but mostly about the product's reflection and image in people's minds (Dibb & Simkin, 1991). However, the path which is leading to the minds could be blocked or blurred by the competitors as they may have already filled different product and/or service categories in a given catchment area. Repeating what they have already done could kill a project's chances of differentiation; which, in return, could kill its prospects of success. The attitude of "if you can't be first in a category, set up a new category you can be first in" could come in handy (Ries & Trout, 1993).

In terms of location analysis, determining the right positioning starts at the macro level and geographical information systems (GIS) are among the most useful solutions. GIS have the power to visualize detailed computer-generated spatial models with different informative layers. GIS are generally used by specialists to analyze their projects' catchment areas (i.e. a geographical commercial impact area mostly determined by private car driving distances to the project location and shown via concentric circles made up of different zones). Through an interactive and multilayered map, specialists could check neighborhood-level socioeconomic data (e.g. gender, age, education, income bracket, car and/or home ownership), survey and/or loyalty card data (e.g. purchase habits, frequency of visit, personal and/or group tastes), accessibility data (e.g. the road network and public transportation) and competition data (e.g. shopping centers, stand-alone stores, urban zones which have

commerce, socializing and leisure potential, the impact of online retail). This macro level analysis could help a specialist to determine different customer groups within a catchment area and how and at what level they are currently served by the competition.

At micro level, plot accessibility and visibility are also important determinants of success. There could be a metro line near but is the pedestrian exit close enough? This information alone has the potential to change the fate of a shopping center. Attaining "an in-depth understanding of the goals, needs, and activities of people who use the products and documentation we design and develop" should be an important target and it requires field usability research (Kantner et al. 2003). Specialists could not only rely on software -regardless of the value and accuracy of its dataset. They should be on site, touching the project ground and observing the people it aims to serve.

Concept and Brand Image

This is the next step in the crucial trio and it would be beneficial to explain it through an example. Assume that the location analysis of a catchment area shows that there is a sizeable customer group whose members are highly attracted to fast fashion brands and they could already fulfill their needs at a fashion-dominated second-generation shopping center in their close proximity. Then, it may not be wise to develop a similar project which could potentially lead to the division of that sub-market into much smaller slices; meaning more marketing hardship for attaining originality and/or superiority and more marketing spending to outperform the competition. Of course, if these are even realistic targets. Therefore, developers and marketing specialists must either identify other attraction points for the customer group or skip this group for another group in the catchment area whose needs are not currently fulfilled at a satisfactory level in the market. Either way, location analysis should be solid enough to identify at least one target customer group that has the necessary spending power. The interrelated and successive elements of concept and brand image could only be built upon this.

MaviBahce shopping center in Izmir, Turkey is a suitable example to explain the bond between concept and brand image. It houses 52 restaurants and cafes. Many of them are facing its 20.000 m2 inner garden. This setup is serving as a unique selling point for the project. It is argued that MaviBahce takes its conceptual inspiration from the out-going and open-minded nature of the people of Izmir (Cumhuriyet, 2015). Yet, new ways were needed to highlight this calculated concept. One of such ways was the award winner "Feast on the Sky" event in which 200 customers had dined on a platform suspended 55 meters above ground with cooks serving food; leading to coverage in 160 media outlets and 18.000 new Facebook followers for the project (ECE, 2017). While originally a Belgian concept, it was first tried in Turkey for MaviBahce.

Figure 1. MaviBahce's "Feast on the Sky" Event (ECE, 2017)

It could be argued that this event covered the brand image part of the equation by further strengthening MaviBahce's image as a place for gastronomy and relaxation. It pushes customers to associate the project with specific upsides and characteristics. Coming after a brand's market launch and a period of building up brand awareness and knowledge, brand image is a crucial steppingstone for achieving high brand equity in the long-term; brand image is a combination of a brand's identity (i.e. physical attributes easily identifiable by customers), personality (i.e. human traits of the brand), association (i.e. "recurring and consistent activities"), behavior (i.e. the style of interaction with customers) and competence (i.e. "the values, advantages and distinctive competencies offered by a brand") which are manifested through its tangible and intangible assets (Wijaya, 2013). It could be argued that "Feast on the Sky" event had something to say in virtually all departments of brand image.

Concept and brand image should go hand in hand in a shopping center project and they should be in line with the findings of the preceding location analysis. In a waste of limited resources, numerous projects miss out on this development process and end up in a dangerous mismatch. While repetition is a common mistake in the industry, ending up with a mismatch could potentially lead to much bigger problems that would be harder to solve in the later stages.

Budgeting

Budgets are instrumental for the success of organizations as they would force planning and strategic prioritization, help time and cost management, solidify corporate expectations and performance benchmarks and determine who is going to be responsible for which target (Bufan, 2013). All these characteristics are also visible in marketing budgets. While determining the budget size, the traditional way is to analyze the regional cost of advertisement and the competitors' level of spending within a given catchment area, but it could be more about the requirements of the project-specific marketing approach. Without eliminating the importance of competition as a variable, marketing budget is actually about the project reach (e.g. a superregional center would be marketed in a much larger catchment area, which would require a larger marketing budget) and concept (e.g. an exclusive concept may dictate exclusive events, which would naturally cost more).

Efficiency and long-term perspective are also important; meaning that the specialists must be able to focus on items which would be suitable for the project in hand for a longer period. However, this is a challenging task for three reasons; (1) measuring the actual impact of marketing on sales is hard, (2) measuring the "lag time" (i.e. the time difference between marketing spending and the observation of its results) is hard and (3) since various marketing items are realized concurrently, measuring which impact is directly/mostly caused by which item is hard (Gallo, 2017).

Last but not least, only having a macro perspective in budgeting would not be enough. Shopping center management know-how (i.e. being experienced about the industry-related details) is also required for attaining success. For example, there could be a rare international sports event in a given year (e.g. FIFA World Cup dominates summer campaigns once in every four years in many shopping centers) or a marketing cooperation with another brand (e.g. companies like Samsung have innovative popup store concepts for marketing their new products and technologies). Specialists may need to increase and/or rearrange their marketing budgets accordingly. In order to spend reasonably, budget increase and/or rearrangement may require the permanent or temporary elimination of certain events or advertisement campaigns and specialists must make their decisions based on solid primary and secondary data. In the end, budgets are highly dependent on the nature of annual plans but, in return, they have the power to make annual plans more predictable and accountable.

Campaign & Media Types

In terms of campaign types, there is a basic division; those that directly focus on increasing sales in the short-term (i.e. commercial campaigns) and those that focus on increasing brand equity for higher shareholder value in the long-term. Commercial campaigns have the power to attract price-conscious customers and their impacts are easier to measure. In such campaigns, shopping centers' and tenants' marketing budgets are generally used simultaneously (with different shares in different campaign concepts). Organizing cross promotion deals is a crucial skill in this respect (e.g. know-how regarding which branches and tenants go along with each other). One of the traditional examples is giving away cinema tickets for fast food spending or vice versa. Marketing specialists could also organize discount days through making exclusive deals with tenants. Giving away attractive gifts (e.g. cars, holidays) through lottery is also commonplace in the industry. Since lottery entries and bills are recorded and commercial campaigns are organized for a limited time period, it is easier to observe their instant impact on sales.

Accumulating high brand equity is much more challenging and complex. It is about emotional bonding, trust and making all stakeholders know each other deeply. It is a long, bendy road which is partially going through untouched territory that is full of unknown risks. However, once achieved, high brand equity would be an indispensable asset against competitors and market fluctuations. It is better than unfruitful price wars that could escalate quickly; as brand equity gives decision makers a chance to choose which battles to fight and the ability to fight with non-price actions (Rao et al. 2000). Price wars in the shopping center industry would come in the shape of rent contract conditions. In a saturated market, projects that do not have differentiation power may feel that they have to cut rent, common area cost and advertisement contribution levels to keep their tenants inside. Centers with higher brand equity would be those that are less affected by this downward spiral.

For the 2017 Christmas season, marketing specialists at the Rødovre Centrum (Copenhagen, Denmark) had an unusual campaign in mind for boosting their brand equity. They used a famous model to portray their character "Bad Santa" and built an authentic indoor decoration for the campaign (photos and videos had also been used on the posters, in social media and in the project magazine and customers were welcomed to interact with the character); leading to a 60% increase in the project website traffic and almost 400.000 visits to the Facebook page (MK, 2018). There are certain important elements here; (1) breaking the heavily mocked, stereotypical image of shopping center Santa Claus, (2) efficiently using cross-media marketing for increasing the campaign's reach and the level of stakeholder interaction and (3) creating a new image for the project and successfully personifying it.

Its actual impact on sales may come delayed and/or may never be properly calculated but it has managed to leave a long-lasting impact on the project's brand equity.

Figure 2. Rødovre Centrum's "Bad Santa" Campaign (MK, 2018)

This campaign also demonstrates the importance of efficiently and harmoniously using different marketing media types to cover the fields of traditional announcements and contemporary stakeholder interactions. One common misinformation is the belief that interaction and innovation could only be achieved through contemporary media types (e.g. social media, websites, smartphone applications, e-mail marketing). It is obvious that such media types offer more variety and depth thanks to the technology behind. However, innovation and interaction are mostly related to the responsible marketing specialists. Traditional media types (e.g. print media, TV, radio, direct mail) could also be used in inspirational ways but many shopping centers fail to deliver inspiration, regardless of the types of media they have used. It is also interesting to observe the same stereotypical media usages throughout the industry; (1) heavy and unrealistic use of stock images and Photoshop and (2) happy, objectified women and/or traditional family members with lots of shopping bags.

Burger King, which is also a common shopping center food court tenant, recently launched new print media advertisements that use the tagline "Flame Grilled" next to the actual photos of burned down Burger King restaurants and these were deemed by critics as "the perfect print ads for the social media age" (Nudd, 2017). This is a risky but clever move which targets to play and expand on one of the brand's core competencies. The problem is that tenants generally do not bring this level of creativity into their relationships with the shopping centers and, in return, shopping centers tend to produce predominantly traditional campaigns. Campaign success is heavily dependent on cooperation and understanding between different stakeholders. Moreover, campaigns should be seen as integral parts of the project-specific marketing strategy; as their true value could only be revealed this way.

Figure 3. "Burning Stores" Print Media Campaign (Burger King, 2017)

Future Expectations

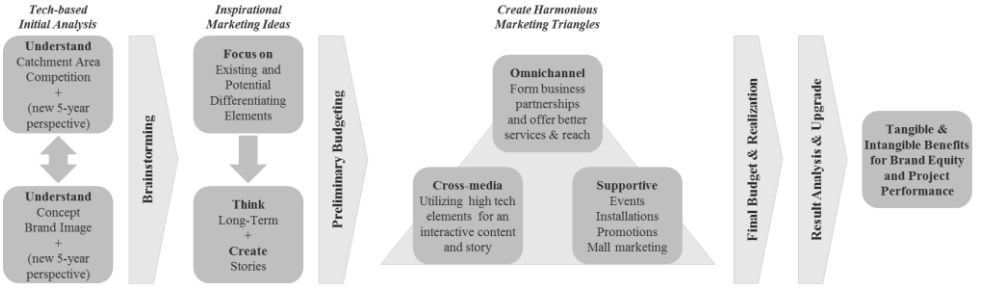
With competition coming from every possible direction and the fall of brick-and-mortar retail still among global hot topics, marketing would have to assume a much more active role in the future of shopping centers. It could be argued that not all developers and marketing specialists are ready for this sea change. Even cross-media marketing would not be enough for sustainable project performance because the rise of omni-channel would demand a fresh approach. Basically, omni-channel is sustaining an uninterrupted interaction with customers through numerous channels (e.g. online shops, brick and mortar shops, social media) that they could use to order, collect, experience, return and get assistance, while the companies are tracking and analyzing their customers' experiences for enhancing their interaction concepts further (Solomon, 2015). As a result of the recent, highly-publicized experimental runs, online conglomerates like Amazon and Alibaba are actually planning to open physical locations in large numbers in order to offer better omni-channel experiences. As a surprise to many, shopping centers have the capacity to become reliable business partners in this respect. Pure online or pure physical retail may not be able to survive in the long-term. Shopping centers also require online partnerships to be more visible in the online world. Possibly, this sea change could push for the following evolution steps in the shopping center industry; (1) more up-to-date and qualified teams that could cover virtually all aspects of omni-channel marketing would be necessary (e.g. event and social media agencies could no longer be separated from each other), (2) technological advances shall bring more depth and variety to data gathering and analyzing, (3) life cycles of trends would be much shorter (i.e. specialists would have to come up with new differentiating aspects in much shorter intervals) and (4) brand equity of a shopping center would be at least as important as its branch and tenant mix (e.g. having the newest gastronomy brands would not be enough; as customers would only choose the projects with a "place to meet" tagline in their minds for eating out).

Conclusion

Marketing does not have one size fits all answers for each unique situation or project. It is more valuable to focus on tailor-made solutions that would have a long-lasting positive impact. The art and science of marketing is also getting more challenging by the minute as the array and density of competition are going up rapidly. In the near future, marketing strategies that are more interactive, integrative and innovative would be indispensable. Traditional ways are already shattering and there is a serious risk of project failure, if decision makers would not adapt themselves to the new normal. Those who would reach to this new level of marketing must work together for mutual and expanded benefits, regardless of being an investor or a retailer. Soon, the need for having an organized approach and solid budgeting mechanism are also going to be clearly visible.

Marketing processes of the future are visualized with a graph (see "Graph 1"). In this simplified linear model, strategists must first understand their current situation and in which direction the market could go in the next five years in terms of catchment area, competition and project's concept and brand image. Then, they should have a brainstorming session for formulating fresh marketing ideas that focus on differentiating elements that could be brought together in a long-lasting marketing story. At this stage, preparing a preliminary budget would be beneficial for staying on the safe side. Afterwards, a marketing triangle that contains omni-channel and cross-media elements and supportive actions to be taken inside the shopping center shall be formed in detail for each marketing campaign. Contents of each triangle must be in harmony with the rest of the annual marketing plan. Naturally, a final budget would be needed for shareholder approval and realization. A post-realization analysis could be valuable for upgrading the individual campaigns and/or the annual marketing plans. The target is to increase the brand equity and project performance in a sustainable fashion.

Graph 1. Marketing Processes of the Future (compiled by the authors).



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25 October 2018 Thursday

Session: III / 14.00-15.30

MACROECONOMICS & SECTORAL STUDIES

Room: *Mandragola*

Chair: **Gabriel GIMENEZ-ROCHE**

- How do the Unemployed Search for A Job? - Evidence from Turkey

  Zehra Bilgen SUSANLI

- Capital Accumulation and the Balance of Payments Constrained Growth Model: The Case of Mexico

  Juan Alberto VÁZQUEZ-MUÑOZ

- Make in India: An Analytical Study of the Manufacturing Sector

  Deshna SURYANARAYAN & Ritwika VERMA

- Tackling Urban Poverty through Decentralization

  Ritwika VERMA & Deshna SURYANARAYAN

- Purchasing Decisions of Low Emission Cars: Case Study of Poland and Turkey

  Aleksandra GÓRECKA

How do the Unemployed Search for A Job? - Evidence from Turkey

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Abstract

This paper has two purposes. First, it provides descriptive evidence on the job search methods used by the unemployed in the Turkish labor market between 2004 and 2015. Second, it explores the determinants of job search intensity by controlling for individual and household characteristics. By drawing on individual level data from Household Labor Force Surveys, analyses indicate that social contacts and direct applications to employers are the two most common search methods. Ordered logit estimations show that women and younger individuals have significantly lower levels of search intensity. Results are also indicative of a hump-shaped relationship between search intensity and unemployment duration with the long-term unemployed using the lowest number of search channels.

Keywords : Job Search, Search Channels, Turkey.

JEL Classification Codes : J20, J64.

Introduction

In September 2018, ten years after the start of the global financial crisis, many OECD countries are at their pre-crisis unemployment rates (OECD, 2018). Despite this, structural unemployment is still seen as a problem in several European countries. Search theory posits that equilibrium unemployment rate depends on the efficiency of the matching of the job searchers and vacancies. Search models are based on the premise that the labor market is characterized with frictions in the sense that it takes time and effort for a worker to find a job. Job seekers can choose which search methods to use and how much effort to put into searching. Each job search method is associated with costs and expected benefits. Costs may be monetary or non-monetary such as time and effort. Benefits may be in the form of job offers and expected earnings in the future.

Generally, research categorizes job search methods into two groups: formal and informal. While formal methods involve labor market intermediaries such as job postings, newspaper ads, and public and private employment agencies, informal methods depend on the use of social contacts such as friends and relatives to find a job. It is well-documented that asking friends and relatives is an important source of information for job search and many workers find jobs through friends and relatives. Holzer (1988) provides evidence that 85 percent of the unemployed youth used social contacts for job search and about 17 percent of job searchers that used social contacts yielded job offers with an acceptance rate of 14 percent. Rieucau (2008) finds that social contacts are one of the mostly used recruitment channels in the Spanish labor market and that the youth are more likely to have found jobs through friends and family. Franzen and Hangartner (2006) document evidence that more than half of the jobs are found through social contacts in southern European labor markets.

The choice of search method and the effort level may affect the outcomes such as the arrival rate of job offers, and job quality as measured by wages. It is well-documented that the use of friends and relatives is associated with more job offers as well as better quality matches (Ionnides & Loury, 2004). Theoretically, the use of social contacts leads to better labor market outcomes in the form of higher wages and longer job duration, by eliminating information asymmetries. One of the mechanisms through which this process takes place is that individuals of similar abilities are likely to be connected and, hence, firms find it convenient to rely on referrals from their own high-ability employees (Montgomery, 1991). Other mechanisms explaining the prevalence of social contacts are savings in recruitment costs related to search, advertising and screening (Pelizzari, 2004). In addition, employed workers' concern for maintaining a good reputation also contributes to advantages of using employee referrals as a form of filling vacancies (Kugler, 2003). Nevertheless, one can argue that family ties and relationships may easily interfere with a genuine process of selection and result in favoring people with more connections over more talented ones (Ponzo & Scoppa, 2010).

This study is particularly related with several other papers on the search behavior of the unemployed in Europe (Weber & Mahringer, 2008; Bachmann & Baumgarten, 2013) and in Turkey (Tasci, 2008). This paper aims to serve as a descriptive study of job search methods used by the unemployed in the Turkish labor market in the period between 2004 and 2015. The data used in the analyses come from Household Labor Force Surveys (HLFS). Due to the cross-sectional design of the HLFS, the analyses do not allow for linking search behavior to subsequent outcomes such as the probability of finding employment, wages, and tenure. Despite this limitation, the findings in this study still provide insights into the factors that influence relative costs and benefits of job search methods. Results are indicative of clear correlations between search intensity and personal characteristics. First, younger and more educated individuals search more intensively. Women are also found to have significantly lower search intensity. These are consistent with the findings in the work of Tasci (2008). Second, individuals that have been searching for 6-11 months (12+ months) search significantly more (less) relative to those that have been searching for shorter than 6 months. Third, individuals in larger households are found to search less.

The remainder of this paper is structured as follows: next section explains the dataset, presents some descriptive evidence and explains the empirical methodology. Section 3 discusses the empirical results; and Section 4 concludes.

Data and Empirical Methodology

The data used in this study come from HLFS carried out by TUIK (State Statistical Agency). The HLFS are annual surveys that are designed to be representative of the population. The surveys collect information on several characteristics of the participants, such as age, gender, educational attainment, labor market status at the time of the survey and one year before the survey, and the duration of unemployment of the currently unemployed. The surveys also contain information on household characteristics, including household size and the labor market status of the household head. Of particular interest for this study is the information on the job search methods utilized by the jobless individuals in the reference period. The survey questionnaire asks the following questions regarding job search:

Did you apply to employers directly?

Did you ask friends, relatives etc.?

Did you contact Turkish Employment Office?

Did you contact private employment agencies ("kariyer.net", "yenibiris.com" etc. on internet)?

Did you study ads in newspapers or magazines?

Did you insert or answer ads in newspapers?

Did you take a test, interview or examination?

Did you look for land, premises or equipment to establish your own business?

Did you wait to be called from Turkish Employment Office?

Did you wait for the results of a job application?

Did you use any other methods to find a job?

There is no consensus on the choice of job search intensity variable in the literature. While some studies use the time spent for seeking employment during a given period (DeLoach & Kurt, 2013), others use the number of employer contacts (Kahn & Low, 1990). Following Weber and Mahringer (2008), search intensity is measured by the number of search methods used by the jobless individual in the reference period.

The sample size in each year of HLFS is about 400,000. The working sample is restricted to the unemployed individuals aged between 25 and 55. This yields about 130,000 observations with a complete set of covariates.

The number of job search methods used by an unemployed person increased from 2.7 in 2004 to 2.9 in 2009, and finally to 3.1 in 2015. Table 1 displays the share of job seekers that used each method over the sample period. Asking friends and relatives is the most commonly used method, followed by contacting the employer directly. A striking observation is the doubling of the use of Turkish Employment Office from 14.7 percent to 27 percent over the sample years.

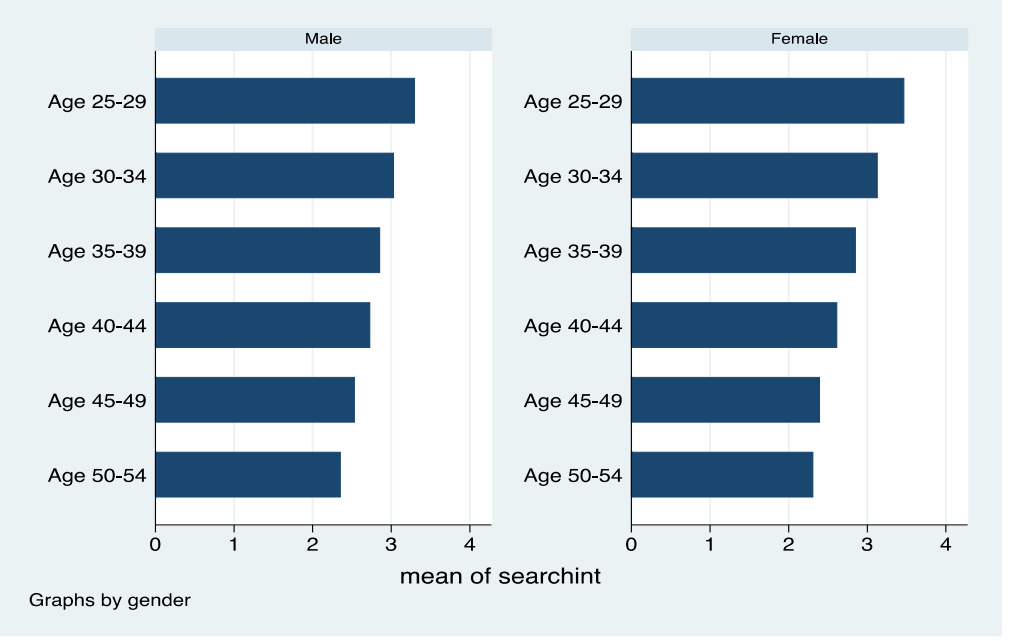
Table 1. Job Search Methods Used by the Unemployed

(%)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Direct application to employers	73.6	71.8	70.9	71.8	70.4	73.3	72.7	70.4	70.9	67.5	64.3	65.4
Friends and relatives etc.	92.9	93.9	93.6	93.9	94.8	95.8	94.9	93.8	92.8	91.9	92.7	92.7
Contact with Turkish Employment Office	14.7	14.6	12.4	14.6	11.9	15.2	16.3	18.7	22.0	27.1	25.2	27.2
Contact with private employment agencies	9.5	9.1	9.4	9.1	8.8	9.1	9.5	8.7	8.7	10.4	14.5	16.6
Study ads in newspapers or journals	31.4	29.4	31.9	29.4	31.5	27.7	26.9	29.6	30.4	31.1	26.8	25.8
Insert or answer ads in newspapers	9.0	8.7	8.3	8.7	8.8	9.2	8.2	8.8	8.6	7.4	6.3	6.0
Used internet	6.0	6.1	6.0	6.1	6.6	5.9	6.1	6.9	7.6	7.2	6.2	5.9
Take a test, interview or examination	2.4	2.1	2.0	2.1	1.8	2.5	2.9	3.2	2.7	2.6	2.6	2.6
Look for place or equipment to establish your own business	1.3	1.0	1.1	1.0	0.9	1.5	1.8	2.3	1.9	1.9	1.7	2.0
Look for credit, license or etc. to establish your own business	7.2	8.1	8.2	8.1	7.5	10.5	11.3	12.6	14.9	20.2	18.9	20.5
Wait a call from Turkish Employment Office	17.8	29.8	36.2	29.8	41.8	40.9	43.0	44.8	42.9	45.6	45.8	45.9
Wait the results of an application for a job	4.6	4.7	5.4	4.7	4.8	4.1	4.5	6.0	6.7	5.8	5.3	4.2
Wait the results of a competition for recruitment to the public sector	0.5	0.6	0.2	0.6	0.1	1.3	2.0	0.5	0.4	0.5	0.2	0.1

Source: Author's calculations using HHLF Surveys, 2004-2016.

Figure 1 presents the search intensity by gender and groups. Most jobless individuals report having used more than one search method during the reference period to find employment. A jobless person uses, on average, 2.9 methods to find work. Women search slightly less intensively, and search effort declines uniformly with age, findings in line with the literature.

Figure 1. Search Intensity, by Gender and Age Group



Source: Author's calculations using HHLF Surveys, 2004-2015.

The empirical analysis consists of two parts. First, descriptive evidence on the search intensity of the job seekers is presented. Next, following Bachmann and Baumgarten (2013) an ordered logit model will be estimated. Specifically, the factors determining individual *i*'s search intensity S_i, is given by estimating the equation:

$$S_i = X_i\beta + u_i \quad (1)$$

where X_i includes the control variables that are expected to be correlated with search intensity; and u_i denotes the error term. Three different sets of covariates will be used in estimations. The first set of explanatory variables consists of individual characteristics such as age, gender, marital status, and education. The second set includes variables that control for the labor market history of the individual, such as unemployment duration measured in months and the labor market status of the individual one year ago. Finally, the third set of factors introduces the size of the household and the labor market status of the household head.

Findings

Table 2 presents the ordered logit estimation results using the three different sets of explanatory variables. The first column presents the results from the baseline specification in which only individual characteristics are controlled for. First, women are found to search less intensively, everything else constant. Second, search intensity declines with age, a finding consistent with the literature (Weber & Mahringer, 2008). The coefficient of the age group 30-34 variable, -0.0489, implies that the odds of observing a search intensity of *k* methods versus fewer than or equal to *k* where *k* is any number of search methods is about 5 percent lower for the age group 30-34 than for the base category of age group 25-29. This result may be an indication of higher search costs or less access to non-standard search methods. In addition, in line with the findings in the work of Riddel and Song (2011) and Weber and Mahringer (2008), more educated individuals search more. This may reflect lower search costs for the more educated resulting from a greater awareness of different search methods as well as better ability to use them effectively. Estimations also include twelve region dummies at the NUTS1 level that are jointly significant. A likelihood ratio test yields chi2(2) = 3681.0667. Column (2) proceeds by adding two more variables that capture labor market history of the individual: labor market status in the previous year and a categorical variable that captures the number of months elapsed in searching. Findings indicate that being in the labor force as employed or unemployed in the previous year is associated with higher search intensity. Search intensity initially rises for individuals who have been searching for 6-12 months. The-long term unemployed search significantly less compared to those who have been searching for less than 6 months. In other words, there is a hump-shaped relationship between unemployment duration and search intensity. There may be several potential explanations for this pattern. First, individuals may become discouraged after several failed attempts to find employment. Second, there may be observable or unobservable factors that affect both search intensity and the likelihood of exiting unemployment. One such factor could be a strong drive to work. Third, there may be reverse causality in the sense that jobless individuals that search more intensively exit unemployment faster. Column (3) introduces household size and a dummy variable that equals one if the household head is unemployed. There is no statistically significant difference in the search effort between individuals living in a household with a jobless head and those in a household with an employed head. This may be a reflection of two opposite forces. On one hand, living in a household with a jobless household head might imply greater financial need and hence higher search effort. On the other hand, a jobless household head might imply lower chances of utilizing certain search channels such as asking friends and relatives and directly applying to the employers. Search intensity also decreases with the number of people in the household.

Table 2. Ordered Logit Estimation of Search Intensity

	(1)	(2)	(3)
Age 30-34	-0.0489**	-0.0415**	-0.0588***
	(-3.23)	(-2.80)	(-3.94)
Age 35-39	-0.131***	-0.110***	-0.126***
	(-8.10)	(-6.81)	(-7.70)
Age 40-44	-0.246***	-0.219***	-0.237***
	(-14.31)	(-12.66)	(-13.33)
Age 45-49	-0.472***	-0.424***	-0.448***
	(-25.40)	(-22.49)	(-23.05)
Age 50-54	-0.689***	-0.614***	-0.652***
	(-32.63)	(-28.76)	(-29.56)
Female	-0.333***	-0.223***	-0.241***
	(-27.22)	(-17.98)	(-18.16)
Primary education (5 years)	0.282***	0.269***	0.241***
	(14.88)	(12.83)	(11.46)
Secondary education or 8 year edu.	0.579***	0.601***	0.560***
	(25.97)	(25.00)	(23.11)
General high school	0.859***	0.889***	0.840***
	(35.69)	(35.31)	(33.05)
Vocational or technical high school	1.009***	1.025***	0.976***
	(39.65)	(39.06)	(36.84)
University or more	1.515***	1.570***	1.510***
	(60.75)	(62.07)	(58.86)
Married	-0.237***	-0.242***	-0.229***
	(-18.78)	(-19.58)	(-17.61)
Employed in the previous year		0.281***	0.289***
		(19.55)	(20.09)
Unmployed in the previous year		0.158***	0.189***
		(11.10)	(13.16)
Searching between 6 months and 12 months		0.213***	0.214***
		(11.47)	(11.50)
Searching 12 months or longer		-0.0386**	-0.0421***
		(-3.18)	(-3.47)
Head of household unemployed			0.000880
			(0.07)
Household size			-0.0462***
			(-16.43)
N	127,572	127,572	127,572
Pseudo R-squared	0.0387	0.0383	0.0389

*Source: HLFS, years 2004-2015, author's own calculations. Notes: The table reports odds ratios from the ordered logit estimation of equation (1). Base categories are male, between 25-29 years old, no education, not married, out of labor force in the previous year, head of household employed, and have been searching for a job for less than 6 months. The regressions also include year dummies and NUTS1 region dummies. T-statistics in parentheses. * p<0.05, ** p<0.01, *** p<0.001.*

Conclusion

By drawing on individual level data from the HLFS for the period 2004-2015, this study aims to examine the job search behavior of unemployed individuals in Turkey. In particular, this paper's focus is the individual and household level determinants of search intensity as measured by the total number of different job search methods used. Over the sample period, the average number of search channels used by an unemployed individual rose from 2.7 to 3.1. An initial look at the data reveals that social contacts is the most commonly used job search channel followed by directly contacting employers. The share of jobless individuals that report having contacted the Turkish Employment Office almost doubled from 14.7 percent in 2004 to 27 percent in 2015. A similar rise is observed in the use of private employment agencies over the sample period (from 9.5 percent in 2004 to 16.6 percent in 2015). An ordered logit estimation of the determinants of search intensity provides useful insights that may serve as a starting point for future research. First, individual characteristics as well as labor market histories are significant factors. Younger and better educated individuals seem to have a higher search intensity. There is a hump-shaped relationship between unemployment duration and search intensity. Holding all other characteristics constant, jobless women search less intensively than men, potentially reflecting higher relative costs of search. Second, there is no significant association between search effort and the labor market status of the household head. Individuals in larger households use significantly fewer number of search methods.

As noted in the earlier in the paper, although the analyses can only capture correlations and cannot be used to associate search behavior to subsequent outcomes, they provide interesting insights that can serve as a starting point to further examine the job search behavior in the Turkish labor market. Understanding the underlying factors for the choice of specific search channels is left as an avenue for future research.

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Capital Accumulation and the Balance of Payments Constrained Growth Model: The Case of Mexico

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Abstract

The present paper looks at the balance-of-payments (BoP) constrained economic growth model from a perspective other than both the original rendition put forth by Thirlwall (1979) and his recent critics (Clavijo & Ros, 2015; Ibarra, 2015). We argue that, apart from the growth rate of exports, capital accumulation and the growth rate of capital productivity determine the long-run growth rate of output which is consistent with BoP equilibrium. The effect of capital accumulation depends on the income elasticity of demand for imports and on -what we call- the gross investment elasticity of demand for imports. On the other hand, assuming that capital productivity is both partly exogenous and partly endogenous, capital accumulation can directly affect the long-run economic growth rate, as well as indirectly through its further effect on capital productivity. In our model, capital accumulation is an important determinant of the (developing) economy's propensity to import, capital flows are not endogenous, and the growth rate of the economy must adjust to maintain BoP dynamic equilibrium. Our model is, then, used to disentangle Mexico's long standing economic stagnation. We show that the reduction of both capital accumulation and capital productivity has caused the decline of the growth rate of economic activity since the 1982 foreign debt crisis.

Keywords : Capital Accumulation, Economic Capacity, Thirlwall's Law, Mexico.
JEL Classification Codes : F41, F43, O40.

Introduction

Next year, we will be celebrating the 40th anniversary of Thirlwall's Law; from its born in 1979, the growth external constraint model developed by Thirlwall has received a lot of attention, there have been innumerable applications to developed and developing countries (Thirlwall, 2011). There have also been so many theoretical discussions related to Thirlwall's Law (McCombie, 2011). Among the theoretical discussions we found two subjects related to the arguments presented in this paper.

First, according to Palley (2003), Thirlwall's Law is not a complete model because it only considers the demand side of the economy, however, Palley's solution to this pitfall turns Thirlwall's model into a supply side model (Setterfield, 2006). Related to this debate, for Ros and Clavijo (2015) investment is more relevant than exports, the growth engine in Thirlwall's Law, for the long-run growth rate. Clavijo and Ros alluded to the significant difference in the investment coefficients among Japan and England during the post-war era that produced a higher growth rate in Japan relative to the exhibited by England; and they also highlighted the huge difference in the investment coefficients among China and Mexico that resulted in a growth rate of China five times higher than that of Mexico during the last years. However, Clavijo and Ros' model is based on Say's Law and exports are a

residual after the consumption deduction of total product (Pérez, 2015). So, Vázquez-Muñoz (2018) reconsiders the idea about the lack of the supply side of Thirlwall's law and introduces capital accumulation as a determinant of imports and exports. Then, Vázquez-Muñoz developed a model in which there is a supply side of the economy, but in which capital accumulation and exports are the growth engines.

Second, Ibarra (2015) highlighted the strong bias about the estimation of the income elasticities of demand for imports and exports when capital accumulation is not considered. If the investment coefficient is very low, an expansion of the domestic demand will not find domestic goods and instead it will be satisfied by foreign goods, reflecting a high income elasticity of demand for imports, and in the same way, an expansion of the foreign demand will not find domestic goods and instead it will be satisfied by foreign goods, reflecting a low income elasticity of demand for exports. Retaking Harrod's idea about the double role of investment, as demand and as supply generator (Moudud, 2000), Vázquez-Muñoz (2018) postulates that imports, and exports demands are not only functions of aggregate domestic and foreign incomes, but also of the economic capacity, which mean the production level desired given the net capital stock (Shaikh, 2016). If an economy is accumulating capital, it is also generating economic capacity, which would reduce the demand for imports and would increase the supply of exports, then under this alternative specification, the income demand for exports and imports is not biased in the sense specified by Ibarra (2015).

So, the objective of this paper is to apply Vázquez-Muñoz's model to the case of the Mexican economy for the 1961 - 2014 period. In fact, it was already done by Perrotini, et al., 2018, however, the estimations reported in that paper were done by the Ordinary Least Square econometric methodology, which is not very robust. In contrast, in this paper the estimation of the relevant equations is done through the Bound Test Approach cointegration methodology (Pesaran, et al., 2001) which provides more robust results. We compare the traditional specification in which the imports demand growth rate is only a function of the domestic income growth rate with the specification in which the explicative variables are the domestic income growth rate and the rate of capital accumulation. We found that using the traditional specification, the income elasticity of demand for imports was increased during the subperiod 1982 - 1990 in comparison with its exhibited value from 1961 to 1981, but we also found that from 1991 to 2017 the income elasticity of demand for imports decreased although to a higher level in comparison with its exhibited value from 1961 to 1981. In contrast, with the alternative specification, we found that the income elasticity of demand for imports was increased from 1986 to 2014 in contrast to its exhibited value registered from 1961 to 1985. We also found that capital accumulation seems to be more important in the determination of the long run growth rate with respect to the exports growth rate.

This paper is organized in four sections including this introduction, in the second one we present in a very short way the Thirlwall's model and Vázquez-Muñoz's model; then in the third section we apply the Thirlwall's model and Vázquez-Muñoz's model to the case of the Mexican economy for the 1961 - 2014 period. Finally, in the fourth section we present our final remarks.

Thirlwall's Law and Capital Accumulation as Determinant of the Long-Run Growth Rate

The simplest version of Thirlwall's Law does not include the effect of the percentage variations of the real exchange rate on the growth rates of the demand for exports and imports; moreover, the exports

growth rate is assumed as given. So, in the long-run, the growth rate is restricted by a constant trade balance as a proportion of the total output[1]:

$$\frac{X}{X+F}x + \frac{F}{X+F}f = m \tag{1}$$

where X is the exports level, x is the exports growth rate, F is the initial trade balance in negative value (M - X), f is the growth rate of the trade balance and m is the imports growth rate measured in domestic output. Given the requirement of a constant trade balance as a percentage of the total output:

$$f = g \tag{2}$$

where g is the output growth rate. Now, assuming that the exports growth rate is given (x^0) and that the imports growth rate is given by:

$$m = \psi g \tag{3}$$

where ψ is the income elasticity of demand for imports, we can get the long run growth rate (g_{tb}) by substituting equations (2) and (3) in (1) and solving for g:

$$g_{tb} = \frac{\phi x^0}{\psi - (1-\phi)} \tag{4}$$

where ϕ is the initial ratio X to M. So, in the case in which ϕ is equal to one, we can re-write equation (4) as:

$$g_{tb} = \frac{x^0}{\psi} \tag{5}$$

which is the simplest version of Thirlwall's Law.

Now, how can we modify the Thirlwall's model in order to consider the supply side of the economy? Based on the Classical Development School (Nurkse, 1953; Lewis, 1954) and on the double role of the investment, as demand and as an economic capacity generator, Vázquez-Muñoz (2018) postulated that m is negatively affected by the economic capacity growth rate (ce), which depends on gross capital accumulation (I/K), and positively affected by I/K given the requirements of imported capital goods. Moreover, g is divided among its components, the internal demand for domestic goods growth rate (id) and x^0. Then we substitute equation (2) by:

$$f = \propto id + (1-\propto)x^0 \tag{6}$$

where α is the initial ratio internal demand for domestic goods (ID) to total output (Y); and we also substitute equation (3) by:

$$m = \psi_I \frac{I}{K} + \psi_1(id - ce) + \psi_x(x^0 - ce) \tag{7}$$

where ψ_I is the gross capital accumulation elasticity of demand for imports; ψ_1 is the income elasticity of demand for imports weighted by the initial proportion of total imports derived from the income

[1] *The original model only considered the case of a dynamic equilibrium of the trade balance. However, Moreno-Brid (1998a) extended the model to consider a constant trade balance as a percentage of the GDP, which looks like a more appropriate framework in the real world.*

generated by ID; ψ_2 is the income elasticity of demand for imports weighted by the initial proportion of total imports derived from the income generated by X (it means that $\psi = \psi_1 + \psi_2$); moreover, ce is related to I/K in the following way:

$$ce = a + \frac{I}{K} - \delta \tag{8}$$

where a is the capital productivity growth rate and δ is the depreciation rate of capital. Now, substituting equations (6) and (7) in (1) and solving for id, we get the internal demand for domestic goods growth rate consistent with a constant trade balance as a percentage of total output:

$$id_{tbI} = \frac{[\phi+(1-\phi)(1-\lambda)-\psi_2]x^0-\psi_I\frac{I}{K}+\psi ce}{\psi_1-(1-\phi)\lambda} \tag{9}$$

and finally, substituting (9) in (6) we get the long-run growth rate consistent with a constant trade balance as a percentage of the GDP, which consider capital accumulation:

$$g_{tbI} = \propto id_{tb} + (1-\propto)x^0 \tag{10}$$

Therefore, g_{tbI} depends on x^0, I/K and ce.

Now, in the next section we present the application of the original Thirlwall's law and of the extension proposed by Vázquez-Muñoz (2018) to analyze the behavior of the growth rate of the Mexican economy for the period 1961 - 2014.

Empirical Evidence for the Case of Mexico, 1961-2014

In this section we apply the Thirlwall's Law and the extension proposed by Vázquez-Muñoz (2018) to explain the behavior of the growth rate of the Mexican economy for the 1961 - 2014 period. So, we need to estimate equations (3) and (7) but before we do that, we need to estimate I/K and ce. So, following Berlemann and Wesselhöft (2014) we estimate the net capital stock series through the Perpetual Inventory Method:

$$K_t = K_{t-1} + I_t - (\delta_t K_{t-1}) \tag{11}$$

where the subscript t denotes the time period, K is the net capital stock, I is the gross fixed capital formation and δ is the depreciation rate of K. The initial value of K is calculated as:

$$K_o = \frac{I_1}{\gamma_t+\delta_t} \tag{12}$$

where γ_t is the growth trend of K, which is assumed to be equal to the growth trend of I. Therefore, first we estimate the value of γ_t and using equation (12) we estimate K_0, our results are reported in Table 1.

Table 1. Estimated Results

Dependent Variable: Gross Fixed Capital Formation (Natural Logarithms)		
Independent Variable		
Constant	26.26*	(0.05)
t	0.15*	(0.02)
AR(1)	0.40**	(0.18)
σ^2	0.01*	(0.001)
D95	-0.31*	(0.07)
D6882	0.58*	(0.21)
D8317	1.21*	(0.14)
D6882t	-0.08*	(0.02)
D8317t	-0.13*	(0.02)
R^2	0.99	
Jarque-Bera test	0.07	
LM test (estadistico F)		
White test (estadistico F)		
K_0 (natural logarithm)	27.92	

Source: Author's elaboration using data from the World Development Indicators database of the World Bank and of the World Penn Table version 9.0.
** Denotes statistically significant to the 1% level;*
*** Denotes statistically significant to the 5% level.*
Notes: The estimation was done using the E-Views software version 10.0. t denotes a trend variable. Standard errors between parentheses. DXXYY denotes dummy variables with value equal to one from 19XX(20XX) to 19YY(20YY). The use of simple and composed dummy variables was based on the identification of structural breaks through the Bai-Perron methodology, in the original regressions we only included intercept and trend. AR is an autoregressive term of the residuals and σ^2 is the estimated variance of the residuals. We did not find autocorrelation nor heteroscedasticity through the inspection of the correlalogram of the residuals and of the square of the residual respectively.

Then, following Shaikh and Moudud (2004) we postulate the following long-run relationship between the economic capacity (CE) and the net capital stock adjusted by the relative price implicit price index of I to implicit price index of the GDP (KS)[1]:

$$CE_t = \beta_0 + \beta_1 KS_t + \beta_2 t \tag{13}$$

where β_1 shows the importance of the endogenous increase of capital productivity due to capital accumulation, β_2 shows the exogenous capital productivity growth rate and, CE is the estimated series of the GDP (Y). Before we present our results of the estimation of the equation (13) by the Bound Test Approach cointegration methodology (Pesaran, Shin and Smith, 2001), in Table 2 we present the unit root test for the Y and KS series. As it can be seen, the Y and KS series are integrated of order one. Then, in Table 3 we present our estimation of equation (13).

So, once we estimate CE, we express equations (3) and (7) in natural logarithms levels to estimate both of them for the Bound Test Approach cointegration methodology:

$$lnM_t = \lambda_1 + \lambda_2 lnY_t + u_{1t} \tag{14}$$

$$lnM_t = \lambda_3 + \lambda_4 KB_t + \lambda_5(lnID_t - lnCE_t) + \lambda_6(lnX_t - CE_t) + u_{2t} \tag{15}$$

[1] *The objective is to eliminate any spurious relative price term in the long-run relationship between K and CE (Shaikh, 2016).*

where KB is the gross capital stock, λ_2 is the estimated value of ψ using the traditional specification of the demand for imports equation, $\lambda_5 + \lambda_6$ is the estimated value of ψ using the alternative specification, and λ_4 is the estimated value of ψ_1. In Table 4 we present the unit root test for the series used in the estimations of equations (14) and (15).

So, as it can be seen in Table 4, all series are integrated of order one, except KB which is integrated of order zero, however, the Bound Test Approach cointegration methodology can be applied when the used series exhibit different orders of integration. So, in Table 5 we present our results of the estimations of equations (14) and (15).

Table 2. Unit Root Test for the Natural Logarithms of the GDP and KS Series

	ADF test	Critical value at the 10% level (ADF)	PP test	Critical value at the 10% level (PP)
	1960 - 2014			
lnY	-1.75	-3.18	-1.75	-3.18
d(lnY)	-5.04	-2.60	-5.03	-2.60
lnKS	-0.87	-3.18	-0.83	-3.18
d(lnKS)	-3.95	-2.60	-5.99	-2.60

Source: Author's elaboration using data from the World Development Indicators database of the World Bank and of the World Penn Table version 9.0.
Notes: The estimations were done using the E-Views software version 10.0. d(·) denotes the first difference operator. All level tests were done assuming the existence of intercept and trend, whilst all first differences test were done assuming only the existence of intercept. The number of lags included were determined with base on the Schwarz information criteria (ADF) and with base on de Newey-West information criteria (PP).

Table 3. Estimated Long Run Relationship between CE and KS

Dependent variable: lnY		
	1960 - 2014	
lnKS	0.31*	(0.05)
t	0.03*	(0.01)
D8396	7.23**	(3.29)
D9714	19.92	(4.38)
D8396lnKS	-0.24**	(0.11)
D9714lnKS	-0.65	(0.14)
Error correction coefficient	-0.96*	(0.10)
F-Bound test (F statistics)	12.01*	
Jarque - Bera test	2.61	
LM test (F statistics)	0.03	
White test (F statistics)	0.59	
Ramsey test (F statistics)	0.24	

Source: Author's elaboration using data from the World Development Indicators database of the World Bank and of the World Penn Table version 9.0.
** Denotes statistically significant to the 1% level;*
*** Denotes statistically significant to the 5% level;*
Notes: The estimations were done using the E-Views software version 10.0. Standard errors between parentheses. DXXYY denotes dummy variables with value equal to one from 19XX(20XX) to 19YY(20YY); the use of simple and composed dummy variables was based on the identification of structural breaks through the Bai-Perron methodology, in the original regressions we only included intercept, lnKS and trend as independent variables and were done by the OLS econometric methodology.

The number of lags included were determined with base on the Akaike information criteria.

Table 4. Unit Root Test for the Natural Logarithms of the M, KB, ID-CE and X-CE Series

	ADF test	Critical value at the 10% level (ADF)	PP test	Critical value at the 10% level (PP)
	1960 - 2014			
lnM	-3.39	-3.18	-2.41	-3.18
d(lnM)	-5.91	-2.60	-5.93	-2.60
lnKB	-4.17	-3.18	-3.89	-3.18
lnID-lnCE[a]	-4.58	-4.19		
lnX-lnCE	-0.49	-2.60	-0.47	-2.60
d(lnX-lnCE)	-6.42	-2.60	-6.37	-2.60

Source: Author's elaboration using data from the World Development Indicators database of the World Bank and of the World Penn Table, version 9.0.

Notes: The estimations were done using the E-Views software version 10.0. d(·) denotes the first difference operator.

[a] It is assumed the existence of one structural break in the intercept. Level test were done assuming the existence of intercept and trend for lnM and lnKB, whilst for the case of lnID-lnCE and lnX-lnCE were done assuming only the existence of intercept; all first differences test were done assuming only the existence of intercept. The number of lags included were determined with base on the Schwarz information criteria (ADF) and with base on de Newey-West information criteria (PP).

Table 5. Long Run Import Demand Equations

Dependent Variable: lnM				
lnY	1.28*	(0.07)		
D8290lnY	5.75*	(1.05)		
D9114lnY	1.25*	(0.15)		
Constant	-10.55*	(1.90)	12.77	(2.43)
D8290	-171.58*	(31.23)		
D9117	-37.25*	(4.49)		
lnKB			0.48*	(0.08)
lnID-lnCE			2.14*	(0.77)
D8617lnKB			0.14*	(0.02)
D8617(lnX-lnCE)			1.72	(0.18)
Error correction coefficient	-0.67*	(0.04)	-0.55*	(0.08)
F-Bound test (F statistics)	29.04*		7.10*	
Jarque - Bera test	1.29		0.97	
LM test (F statistics)	0.26		1.77	
White test (F statistics)	0.90		2.19**[a]	
Ramsey test (F statistics)	0.98		0.18	

Source: Author's elaboration using data from the World Development Indicators database of the World Bank and of the World Penn Table, version 9.0.

** Denotes statistically significant to the 1% level;*

*** Denotes statistically significant to the 5% level;*

Notes: The estimations were done using the E-Views software version 10.0. Standard errors between parentheses. DXXYY denotes dummy variables with value equal to one from 19XX(20XX) to 19YY(20YY); the use of simple and composed dummy variables was based on the identification of structural breaks through the Bai-Perron methodology; in the original regressions we only included intercept lnKB, lnID-lnCE and lnX-lnCE as independent variables and were done by the OLS econometric methodology. The number of lags included were determined with base on the Akaike information criteria.

[a] Given the existence of heteroscedasticity in the estimated errors, the standard errors are adjusted by the Newey-West methodology.

As it can be seen, the estimations of both equations (14) and (15) are robust, moreover, in line with previous estimations (see Moreno-Brid 1998b and 1999), using the traditional specification, we found a low value of ψ for the pre-external Debt crisis subperiod (1960 - 1981), which was equal to 1.28 and a high value for the lost decade subperiod (1982 - 1990), which was equal to 7.03, but we also found that the income elasticity was decreased, although to a higher value compared with the 1960 - 1981 subperiod, to 2.53 from 1991 to 2014. In contrast, the estimated value of ψ for the pre-trade liberalization subperiod (1960 - 1985 was equal to 2.14, and it was increased to 3.86 during the trade

liberalization subperiod (1986 - 2014); moreover, we found that ψ_I was equal to 0.48 for the 1960 - 1985 subperiod and it was increased to 0.62 during the 1986 - 2014 subperiod.

However, although both estimations are robust, the implications about the explanation of the behavior of the growth rate are very different. So, in Table 6 we present the estimated values of g_{tb} and g_{tbI} and of their determinants for the identified subperiods through the structural breaks in the long run import demand equations.

Table 6. Estimated Values of g_{tb} and g_{tbI}, Their Determinants and Their Implications

Subperiod	x	I/K	ce	g_{tb}	g	g-g_{tb}	Δxm	cx	cI/K	ψ	ψ_I
1961 - 1981	11.07	16.48	6.67	6.66	6.85	0.20	-0.08	6.66		1.28	
1982 - 1990	7.64	7.83	3.65	1.20	1.11	-0.09	0.60	1.20		7.03	
1991 - 2014	8.15	7.03	2.35	3.18	2.65	-0.53	0.05	2.35		2.53	
Subperiod	x	I/K	ce	g_{tbI}	g	g-g_{tbI}	Δxm	cx	cI/K		
1961 - 1985	10.83	15.25	6.31	7.34	5.81	-1.53	0.28	3.73	3.61	2.14	0.48
1986 - 2014	7.80	7.04	2.47	1.43	2.49	1.06	-0.07	-0.52	1.95	3.86	0.62

Source: Author's elaboration using data from the World Development Indicators database of the World Bank and of the World Penn Table, version 9.0. Notes: Δxm denotes the annual variations of the trade balance as a percentage of the GDP. Cx and cI/K denote the percentage points of g_{tbI} due to x and I/K respectively.

As it can be seen in Table 6, under the traditional estimation we can say that, from 1961 to 1981 the Mexican economy exhibited a high g_{tb} due to a high x (11.07%) combined with a low ψ, it can be also observed that g was higher than g_{tb}, which implied a negative average of the annual change of the trade balance as a percentage of the GDP (Δxm); then, from 1982 to 1990 g_{tb} was strongly decreased due to a strong decrease of x and to a strong increase of ψ, moreover, g was lower than g_{tb}, which implied a positive average of Δxm; until this point, the estimations and implications look well, however, from 1991 to 2014, g_{tb} is increased again due to a strong decrease of ψ, which looks some strange because precisely from 1982 to 1989 there was some structural reforms in order to liberalize the economy. Besides it, reconsidering the bias problem of the traditional estimations of the import demand equation due to the lack of I/K as an explicative variable, we can say that the estimated value of ψ was strongly decreased when the economy exhibited a huge decrease of I/K, then, from 1991 to 2014, I/K is not increased but x is increased and this is reflected in an increase of ψ derived of the expansion process of the economy which can be verified by the higher value of g with respect to ce, so, the estimation value of ψ looks endogenous to the behavior of g and of the economic activity.

With respect to the alternative estimation, as it can be observed g_{tb} also looks like a good predictor of g but the explanation of the behavior of g_{tb} is different, so, from 1961 to 1985, the estimated value of ψ is higher than the obtained by the traditional specification, however, x is not the only determinant of g_{tb} but also I/K is relevant, and as it can be seen in Table 6, both of them explained almost in an equal proportion the estimated value of g_{tbI} (3.73 percentage points were due to x and 3.61 due to capital accumulation). Then, the strong decrease of g_{tbI} from 1986 to 2014 with respect to its exhibited value from 1961 to 1985 is due to three factors: a strong decrease of I/K, an increase of ψ, and a decrease of x, but now, the contribution of I/K is positive whilst the contribution of x, although is almost equal to zero, is negative. And this is explained in the following way, although it is true that exports improve the trade balance, also it is true that they can have a negative effect on the trade balance given that the derived income from them can be used to import goods and services, especially if I/K is low, because there are not domestic goods meeting the demand derived of the income generated by the export sector, so the increase of the exports could result in a necessary reduction of

id to maintain constant the trade balance as a percentage of the GDP. Therefore, in general, we can say that capital accumulation results crucial in the understanding of the behavior of g.

Final Remarks

Thirlwall's Law puts emphasis on the importance of x as the growth engine, however, the supply side of the economy is not considered. In relation with this pitfall, when income elasticities of demand for imports and exports are estimated through the relationship between exports and foreign income and between imports and domestic income, the estimations are biased. Capital accumulation is relevant in the estimation of ψ, if for example, capital accumulation is low, domestic demand booms will have reflected in high values of ψ, whilst foreign demand booms will be reflected in low values of the income elasticity of demand for exports.

In trying to incorporate the supply side of the economy in Thirlwall's model, we retook the double role of investment, as demand and as a generator of economic capacity. So, we maintain the crucial constraint put by Thirlwall (1979) for the growth rate, a constant trade balance as a percentage of the GDP, but we incorporate the positive effect of the capital accumulation in the demand for imports as well as its negative effect through the generation of economic capacity which means that it could be possible to reduce the demand for imports.

We highlighted that id is the adjustment variable to maintain constant the trade balance as a percentage of the GDP. In that sense, whilst exports could contribute to improve the trade balance, also they could affect it in a negative way given that the income generated by exports could be used to import goods and services. On the other hand, capital accumulation contributes to increase id because capital accumulation generates economic capacity, which could contribute to reduce the requirements of imported goods and services.

In the case of Mexico, we found that the estimated value of ψ looks endogenous to the exhibited growth regime, so, whilst from 1961 to 1981 the growth rate was higher than the exhibited value from 1982 to 1990, the estimated value of ψ was lower during the first subperiod compared with the second subperiod. Moreover, the exhibited growth rate was higher from 1991 to 2014 compared with its exhibited value from 1982 to 1990, whilst the estimated value of ψ was higher during the first subperiod compared with its estimated value for the second subperiod.

In contrast, using the alternative specification of the income demand equation, we found that from 1961 to 1985, when the Mexican economy exhibited a high growth rate, it was due, in almost the same proportion, by x and I/K. Then, from 1986 to 2014 the growth rate of the Mexican economy was strongly reduced due to a strong decrease of I/K, an increase of ψ, and to the loss of the positive effect of exports in the trade balance. Therefore, we consider that in order to increase the growth rate, Mexican policy makers should reinstate the capital accumulation promotion economic policy.

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Make In India: An Analytical Study of the Manufacturing Sector

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Abstract

The Make in India activity was propelled in September 2014 as a feature of a more extensive arrangement of country building activities. The Government of India, has launched the 'Make in India' program to portray India to the world as an assembling center and give worldwide acknowledgment to the Indian economy. The main goal is to target India as a famous assembling center for key divisions. Organizations over the globe would be welcome to set up manufacturing plants, grow their offices in India and utilize India's exceptionally capable and gifted labor to make world class zero deformity items. The mission is to fabricate in India and offer the items around the world. Make in India has now turned into a calling card for financial specialists to come and put resources into the Indian development story. To encourage the Indian assembling capacities, the legislature is concentrating on the improvement of divisions that will be the key concentration in the coming years. By presentation of new changes in strategies alongside a positive monetary air, it has made a ripe ground for organizations to flourish in India. Manufacturing has emerged as one of the high growth sectors in India. This initiative aims to raise the contribution of the manufacturing sector to 25% of the Gross Domestic Product (GDP) by the year 2025. Make in India has introduced multiple new initiatives, promoting Foreign Direct Investment (FDI) along with the refinement of existing FDI Policies, amending faulty bureaucratic behaviour and strengthening the manufacturing sector through the National Capital Goods Policy. Among all the divisions, it is the Capital Goods segment that is regularly called the 'mother of all assembling industry'. The essential goal of the Capital Goods Policy is to build the commitment of the Capital Goods area from the current 12% to 20% of aggregate manufacturing action by 2025. Through this Approach, India expects to include among the main capital products creating countries on the planet. These changes are additionally lined up with parameters of the World Bank's 'Ease of doing Business', to enhance India's positioning on it. Since 2014, the Government of India initiated a program of administrative change for making it simpler to work as a business in India. It seeks to create a more business friendly and accommodating environment. Since then, India's ranking on this scale has improved from 164 in 2015 to 155 in 2016. This change has been by the virtue of abatement in number of procedures and time taken to begin a business in India. The study follows a descriptive format of presenting secondary data acquired through government annual reports published under different departments and ministries. Appraisals published under the Statistics and Programme Implementation department, NITI Aayog and Department of Industrial Policy and Promotion, have been employed to generate verified data and its understanding and conclusion. The paper also aims to throw some light on the automotive and infrastructure segment, under the manufacturing sector as automobiles and infrastructure have contributed the most in terms of growth in the post Make in India economy. The auto business in India has been on an advancement heading with astounding spikes in sales, exports, and production throughout the latest two years. With

a production of around 24 million vehicles yearly and employer of 29 million people, the automotive sector in India is one of the most sizable in the world. India is the greatest tractor creator, 2nd greatest two-wheeler maker, 2nd greatest bus producer, 5th greatest heavy truck creator, 6th greatest car producer and 8th greatest commercial vehicle creator. The Automobile Industry contributes around 7.1% to India's GDP by volume. India is poised to be the third largest automotive market in the world by 2020. 100% FDI have been permitted through the automatic route for townships and cities. As an essential work generator, Gross domestic product supporter and FDI earner, the auto business is instrumental in moulding the country's economy and from now on as a 'Sunrise part' under Make in India. As per the Service of Urban Development, 'Urban Infrastructure' ought to be furnished with all the fundamental facilities. It should give personal satisfaction to its inhabitants, promising feasible condition by applying smart arrangements in the space of sanitation, waste management, public transport and governance. With a plan to enhance the personal satisfaction and draw in ventures to the City, getting underway a high-minded cycle of development and improvement, the administration of India has inaugrated different urban advancement plans, for example, Identification of 99 Smart Cities, having an outlay of USD 31.38 billion, Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Pradhan Mantri Awas Yojana- Housing for all (Urban), Swachh Bharat Mission. Infrastructure spending as a part of India's Gross domestic product rose to 9% out of 2017. Amid the most recent three years, more than 7.1 million houses have just been finished which incorporate 1.7 million under Pradhan Mantri Awas Yojana (Gramin) houses. Second biggest employer, after agriculture, utilizing more than 35 Million individuals. Investments of USD 650 Billion in urban infrastructure have been estimated over next 20 years. The different concerned ministries and departments have given their advance reports regarding the fruitful implementation of the Actions Plan. As a rule, the 'Make in India' activity has watched a huge positive reaction from the Indian and the overall populace. In its introductory year, FDI under Make in India, demonstrated an expansion of 29% from the time of October 2014 to December 2015. The aggregate FDI inflow was USD 160.79 billion between April 2014 and March 2017, the activity has additionally brought about the change of the business condition. With the ongoing examination of the FDI, India has been positioned as the third best planned economies for 2015-2017. FDI received by the manufacturing sector between April 2000 and December 2017-USD was 18.43 Billion. As indicated by IMF World Economic Outlook (April 2017) and UN World Economic Situation Prospects 2017, India is the quickest developing real economy on the planet and is anticipated to remain so in 2017 and 2018. The programme provides an impetus to the various existing policies of the government for creating and enabling framework for attracting FDI and promoting rapid industrialization. Make in India also talks about introducing new incentivization, promotional activities for addressing key concerns of the Indian economy, especially regarding manufacturing. The programme is further aimed to reposition India in the global map of trade and commerce. However, to further propel the momentum, it is required that policy and structural transformations are streamlined as per the global trade and commerce practices. 'Make In India's aim to transform the Indian economy with Minimum government, Maximum governance is what lies ahead for the nation.

Keywords : Industrial Policy, Economic Growth, Development Policy, Project Evaluation.

JEL Classification Codes : O400, O250, O210, O220.

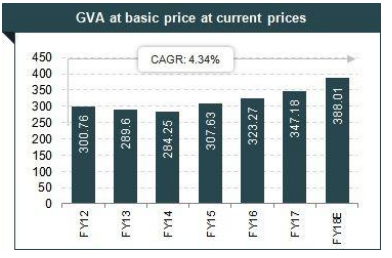
Introduction

What is Make In India? Make in India initiative was launched in 2014 to encourage Indian as well as multinational companies to manufacture in India. After the launch of the programme, India became the top destination globally for Foreign Direct Investment (FDI) in 2015. It focuses on 25 sectors of the economy. The main goal is to target India as a famous assembling center for key divisions. Organizations over the globe would be welcome to set up manufacturing plants, grow their offices in India and utilize India's exceptionally capable and gifted labor to make world class zero deformity items. The mission is to fabricate in India and offer the items around the world.

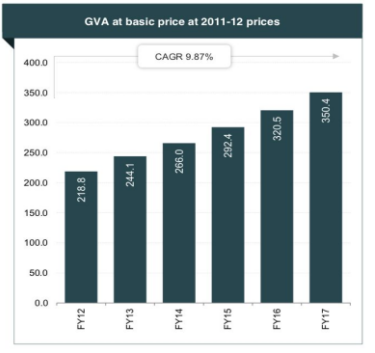
Manufacturing Sector

Manufacturing sector has developed as one of the high development divisions in India. This activity means to raise the commitment of the manufacturing sector segment to 25% of the Gross Domestic Product (GDP) continuously by 2025.

Make in India has presented numerous new initiatives, advancing Foreign Direct Investment (FDI) along with the refinement of existing FDI Policies, amending faulty bureaucratic behaviour and strengthening the manufacturing sector through the National Capital Goods Policy. Through this Approach, India expects to include among the main capital products creating countries on the planet. Manufacturing is important to increase exports and reduce deficit and employee labors who are seeking jobs in unorganized sector.



Source: Ministry of Statistics and Programme Implementation (MOSPI).



Source: Ministry of Statistics and Programme Implementation (MOSPI).

The Gross Value Added (GVA) at basic current prices from the manufacturing sector in India grew at a CAGR of 4.34 per cent during FY12 and FY18 as per the second advance estimates of annual national income published by the Government of India. Under the Make in India initiative, the Government of India aims to create 100 million new jobs by 2022. As per Labour Bureau's Quarterly Report on Employment Scenario, manufacturing sector added an estimated 89,000 jobs in the second quarter of 2017-18. India has become one of the most attractive destinations for investments in the manufacturing sector.[1]

Automation Rising

Concentrating on the automotive industry which is going to be the engine of the Make in India programme, has been on a growth trajectory with impressive spikes in sales, production, and exports over the last two years. With an average production of around 24 million vehicles annually and employer of over 29 million people (direct and indirect employment), the automotive sector in India is one of the largest in the world.

As a major employment generator, GDP contributor and FDI earner, the automotive industry is instrumental in shaping the country's economy and hence regarded as a 'Sunrise sector' under Make in India.

The automotive manufacturing industry comprises the production of commercial vehicles, passenger cars, three & two-wheelers.

- Two-wheelers are by far the most popular form of vehicle in India, taking an 80 per cent share in 2015-16. India became the largest two-wheeler market in the world after selling 17.7 million two-wheelers in 2016.
- Automobile exports from India increased 15.81 per cent year-on-year in April-February 2017-18. During the same period, two and three-wheelers exports increased 20.30 per cent and 37.02 per cent, respectively.

The nation is likewise as of now the sixth biggest market on the planet for cars and is required to end up the world's third-greatest auto showcase constantly 2020. According to the Automotive Components Manufacturers Association of India (ACMA), the world standings for the Indian car division are as per the following:[2]

- Largest tractor producer,
- Second largest two-wheeler and bus producer,
- Fifth largest heavy truck producer,
- Sixth largest car producer,
- Eighth largest commercial vehicle producer.

Today, 100% FDI is permitted in the segment through the programmed endorsement course which implies that foreign investors don't require the earlier approval of the Government of India. It has seen

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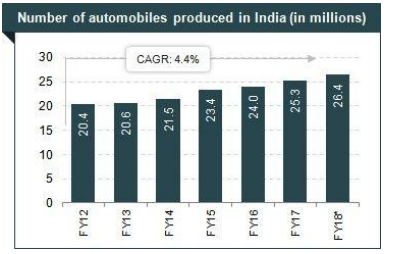
[1] *Ministry of Commerce & Industry, Government of India.*

[2] *Make In India: Sector Survey - Automobiles; India on it's way to become the Primary Global Automotive Manufacturer, 2016.*

gigantic improvement, especially over the last couple of years and has transformed into a base for overall creators. Volkswagen, Renault, General Motors, Ford, Daimler, BMW, Skoda, Audi and so forth are all in all present in India are assembling and producing locally. Mercedes-Benz starting late made the area level GLA-class Sport Utility Vehicle (SUV) in India. Japanese bicycle maker Honda Motorcycle and Scooter India (HMSI) opened its fourth and world's greatest bicycle plant in Gujarat while Chrysler has planned to put USD 513.5 million in Maharashtra, to make Jeep Grand Cherokee model. The legislature of India intends to keep up this upward improvement pattern of the vehicle business and has impelled a couple of exercises to achieve the same.



Source: Society of Indian Automobile Manufacturers (SIAM).

Future

The Automotive Mission Plan 2016-26 (AMP 2026) is one such action. It doubtlessly spreads out the organization's total vision on how the automotive area should create concerning measure, duty to national advancement, mechanical improvement, overall force and institutional structure. It expects to make India among the best three auto ventures on the planet and increment sends out exponentially to reach 35-40% of generally speaking yield. It moreover hopes to assemble its pledge to the GDP to more than 12 %, making 65 million more occupations and furthermore extending the size to USD 300 billion by 2026.

Another activity impelled by the government was the Faster Adoption and Manufacturing of Hybrid and Electric (FAME) India plot in 2015. It relies upon NEMMP (National Electric Mobility Plan) 2020 guide and covers all bits i.e. two, three wheelers, automobiles, LCVs, transports, and a wide range of cross breed and unadulterated electric vehicles. With the rise of 5 immense auto bundles in the country i.e. the Delhi-Gurgaon-Faridabad in the north, Sanand-Halol and Mumbai-Pune-Nasik-Aurangabad in the west, Chennai-Bengaluru-Hosur in the south and Jamshedpur-Kolkata in the east, India is brisk on its way to deal with transforming into the basic overall auto producer.

New Initiatives

Manufacturing Policy under Make In India

The Capital Goods division is habitually called the 'mother of all collecting industry'. By definition, any extraordinary plant or equipment or rigging that is used to create distinctive things (either particularly or by suggestion) is known as a Capital Good. The Capital Goods division in India contributes 12% to the total assembling activity. It gives direct work to around 1.4 million people and circuitous work to 7 million people. The organization's push to gathering through the 'Make in India' action and a couple of various inspirations has given a main impetus to this developing division.

National Capital Goods Policy under MII

The likelihood of a 'National Capital Goods Policy' was first shown by the Deptt. of Heavy Industry to the Prime Minister in the 'Make in India' workshop held in December 2014. The approach has been done after wide accomplice meetings with industry, the academic world, particular administrations thus forth. The key is to make diversion changing frameworks for the capital items part. To realise the objectives of the National Capital Goods Policy, the government has taken the following steps[1] to overcome the issues faced by this sector.

- To create an enabling scheme as a pilot for 'Heavy Industry Export & Market Development Assistance Scheme (HIEMDA)' with a view to enhance the export of Indian made capital goods.
- The policy recommends increasing the scope of the present 'Scheme on Enhancement of Competitiveness of Capital Goods' by adding a set of components including technology, skills & capacity building, user promotional activities, green engineering and energy, advanced manufacturing and cluster development.
- To create a 'Start-up Center for Capital Goods Sector' shared by DHI and CG industry/industry association in 80:20 ratio to provide an array of technical, business and financial support resources and services to promising start-ups in both the manufacturing and services space.
- Skill development: To develop a comprehensive skill development plan/scheme with Capital Goods Skill Council and to upgrade existing training centers and set up 5 regional State-of-the-Art Greenfield Centers of Excellence for skill development of CG sector.
- Cluster approach: To provide schemes for enhancing competitiveness through a cluster approach, especially for CG manufacturing SMEs. Thrust to be on critical components of competitiveness such as Quality management, Plant maintenance management, Energy management, Cost management, Human Resource management and prevention of corrosion with the Government support to the extent of 80% of the cost.
- To modernize the existing CG manufacturing units, especially SMEs by replacing the modern, computer controlled and energy efficient machineries across capital goods sub-sectors, there is need to create a scheme based on capital subsidy to promote the manufacturing of quality products.
- Support services: A robust mechanism for reporting data of production, export and import for all capital goods sub-sectors with minimal time lag to facilitate continuous monitoring of policy effectiveness and timely actions is proposed.

The essential goal of the Capital Goods arrangement is to build the contribution of the Capital Goods area from the current 12% to 20% of aggregate assembling action by 2025.Through this Policy, India expects to include among the main capital merchandise delivering countries on the planet. Manufacturing Industry and the auto division are profoundly interlaced. Manufacturing industry is the mother business which underpins auto, auto parts and other assembling ventures. Auto segments and machine instruments have a cooperative relationship. Part of manufacturing in upgrading auto segment

[1] *Ministry of Heavy Industries & Public Enterprises Department of Heavy Industry, National Capital Goods Policy 2016 Building India of Tomorrow.*

or car area all in all will go up massively as far as better efficiency, better exactness and cost sparing. We are fortifying India's base in having much better assembling in future. So, you see this policy is in long term interest of the industry. Many state governments are concentrating on framework improvement and developing as essential source of fresh orders for the sector. It is assuming a facilitator's part in empowering development by speeding Investments in Infrastructure and a venture observing team to be set up to guarantee ventures being executed according to calendar and furthermore to speed up where fundamental.

Ease of Doing Business[1]

Ease of Doing Business (EODB) is a record distributed by the World Bank. It incorporates diverse parameters which characterize the simplicity of working together in a nation. A high EODB positioning means the administrative condition is more favorable for beginning and working of organizations. To remove 'red tape and to lay down the red carpet', by diminishing human interface and make the system efficient with technology.

Starting a Business

- The necessity of Common company seal is disposed off.
- Presentation of form - 29 by MCA. With this shape three procedures, for example, Name Availability, Director Identification Number and Incorporation of Company are clubbed into one. The organization can be enlisted inside 1-2 working days in India.
- The arrangement is set up for getting PAN and TAN in T+1 day utilizing computerized signature.
- ESIC and EPFO are totally online with no physical touch point for enrollment or report accommodation.

Dealing with Construction Permits

- Corporations of Delhi and Municipal Corporation of Greater Mumbai have presented Metropolitan quick track endorsement framework for issuing building licenses with highlights, for example, Common application shape, arrangement of utilizing computerized signature and online examination of building designs.

Trading Across Borders

- The Central Board of Excise and Customs (CBEC) has actualized 'Indian Customs Single Window Project' to encourage exchange. Presently shippers and exporters can electronically hold up their traditions leeway records at a solitary point just with the traditions.
- The quantity of compulsory records required by traditions for import and fare of products have been decreased to three viz. Bill of Lading, Invoice cum Packing List and Import Declaration.

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[1] *Make In India, Ease of Doing Business, <http://www.makeinindia.com/eodb>, 22.07.2018.*

Enforcing Contracts

- The Commercial Courts, Commercial Division and Commercial Appellate Division of High Courts Act, 2015 has been authorized. The Commercial Courts and Appellate Divisions have just been built up in Delhi and Bombay High Court.
- National Judicial Data Grid (NJDG), gives case information including case enlistment, cause list, case status and requests/judgements of courts the nation over and District-wise. NJDG was opened to overall population on nineteenth September 2015.

Getting Electricity

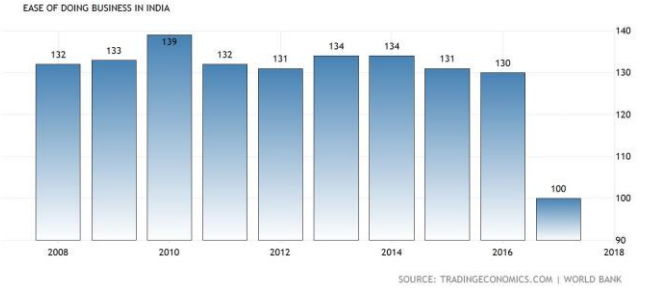
- In both Delhi and Mumbai, the dissemination organizations have stipulated that electricity connections will be given in 15 days and the quantity of archives required to acquire an electricity connection have been lessened to just two. Online application for associations over 100 KVA have been made compulsory in Delhi and Mumbai. This will diminish systems, cost and time taken to acquire a power association essentially.

Registering Property

- In Delhi, all sub-registrar workplaces have been digitized and sub-registrars' records have been coordinated with the Land Records Department and in Maharashtra all property impose records have been digitized. The digitization of property records will defeat the bulky and tedious printed material for enlisting properties.

India ranked low on the World Bank's report of 'Ease of Doing Business', having been cited to have a myriad of regulations and bureaucratic red tape. But with the recent changes brought by the government, it has risen to 100 in 2017 from 130 in 2016. The government aims to be in the top 50 ranks by next 3-4 years.

According to Department of Industrial Policy and Promotion (DIPP), the total FDI investments in India during 2017-18 stood at US$ 44.86 billion, indicating that government's effort to improve ease of doing business and relaxation in FDI norms is yielding results.



FDI under Make In India[1]

- The growth in FDI has been significant after the launch of Make in India initiatives in
- September 2014, with 48 percent increase in FDI equity inflows during October 2014 to April
- 2015 over the corresponding period last year.
- The increased inflow of Foreign Direct Investment (FDI) in India especially in a climate of contracting worldwide investments indicates the faith that overseas investors have imposed in the country's economy and the reforms initiated by the Government towards ease of doing business.
- Government amended the FDI policy to further enable a positive investment climate and sync it with the vision and focus areas of the present Government such as affordable housing, smart cities, financial inclusion and reforms in railway infrastructure. The Construction Development Sector was allowed easy exit norms with rationalized area restrictions and due emphasis on affordable housing.

With an array of measures launching in this phase, focusing on the ease of doing business in India, application and tracking processes replaced files and red tape, while other measures helped streamline and rationalise licensing rules at the state government level, aligning them with global best practices. Additional initiatives such as Digital India, Smart Cities, Atal Mission for Rejuvenation & Urban Transformation (AMRUT), Sagarmala, Housing for All, Skill India and Startup India laid the foundation for the next wave of investment and growth. The sector is highly responsible for propelling India's overall development and enjoys intense focus from Government for initiating policies that would ensure time-bound creation of world class infrastructure in the country.

Infrastructure

Foundation is key for the improvement of any industry. With an expectation to upgrade the individual fulfillment and draw in speculations to the City, getting in progress an upright cycle of improvement and change, the organization of India has pushed distinctive urban advancement designs, for instance:

Smart Cities Mission

It is an urban re-establishment program by the Government of India with a mission to make 100 smart urban networks. The core infrastructural need to make Smart urban networks can be expert with Smart game plans like E-Governance and Citizen Services, Energy Management, Waste Management, Urban Mobility, Water Management etc. Sweden, known for being a sustainable and feasible nation is a pioneer in brilliant innovation which is working intimately with India to build up India's smart cities.

- Atal Mission for Rejuvenation and Urban Transformation (AMRUT)

The goals for AMRUT policy are:

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[1] *Press Release, 48% growth in FDI equity inflows after Make in India, <https://drive.google.com/file/d/0B-Tv7_upCKANdUtxNjVjTDFuSFE/view>, 22.07.2018.*

1. Guarantee that each family unit approaches a tap with guaranteed supply of water and a sewerage association,

2. Increment the enhancement estimation of urban communities by creating greenery and nicely kept up open spaces (e.g. parks),

3. The aggregate cost for AMRUT is USD 7.77 billion for a long time from FY 2015-16 to FY 2019-204 and 500 towns will get benefits. The plan in view of Public Private Partnership (PPP) model will be incorporated with Housing for All by 2022.

- Pradhan Mantri Awas Yojana-Housing for All (URBAN)

The Mission is being realized during 2015-2022 and gives central help to Urban Local Bodies (ULBs) and other executing workplaces through States/UTs for:

1. In-situ Rehabilitation of existing slum dwellers utilizing land as an asset through private cooperation,

2. Credit Linked Subsidy,

3. Reasonable Housing in Partnership,

4. Subsidy for Beneficiary-led individual house construction/enhancement.

- FDI Policy

100 % FDI through programmed route is permitted in construction-advancement ventures (which would incorporate improvement of townships, development of private/business premises, streets or scaffolds, lodgings, resorts, healing facilities, instructive foundations, recreational offices, city and territorial level framework, townships).

Examples of Dubai and Japan:[1]

India holds solid bilateral ties in the center east, particularly with the United Arab Emirates. Alongside oil-related exchange, Cumulative foreign direct venture (FDI) value streams into India achieved USD 114.4 billion amid the last two monetary years 2015-16 and 2016-17. In an ongoing improvement, Abu Dhabi Investment Authority (ADIA) reported its choice to put USD 1 billion in the National Investment and Infrastructure Fund, India's endeavor to raise equity funds for the foundation segment. With a developing enthusiasm for the Indian market, the aggregate venture from Japanese organizations over the most recent one year, has added up to USD 4.7 B crosswise over significant divisions. An unimaginable 1,305 Japanese organizations are enlisted in India. Notwithstanding the foundation of some prestigious Japanese organizations like Honda engines, Mitsubishi and Toyota, Japan is currently captivating in India's framework ventures including the USD 100 B Delhi-Mumbai Industrial Corridor venture and the Mumbai-Ahmedabad Bullet prepare venture.

Conclusion

Make in India wins the 2015- Economic Development Innovation Award for Policy and Programme Implementation Excellence. Frost and Sullivan, USA gave the award at the Pacific economic development innovation. With the help of operational and legal relaxations, effective

[1] *Make In India, 5 Countries That Are Making Big In India.*

infrastructure programs and schemes and focusing on upgrading the strength of skill sets, the Make In India initiative has facilitated the persistent efforts to attract investments from around the world. Right now, our Government's Make in India crusade seems, by all accounts, to be a creative showcasing effort. However, there is much idea and significantly more work that is required to change over this to the real world. This venture will assist us with standing all inclusive with solid economy alongside our Indian image through Make in India. Makes openings for work and searches for by and large improvement of India, but like each coin has opposite sides Make in India isn't in the support of horticulture advancement. The administration of India has found a way to additionally energize venture and further enhance business atmosphere. "Make in India" mission is one such long haul activity which will understand the fantasy of changing India into assembling Hub.

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Tackling Urban Poverty through Decentralization

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Abstract

Urban Poverty is an essential issue of urban advancement and administration in developed as well as developing nations. However, it is more intense and disturbing in developing nations like India. The most challenging of the urban difficulties, undeniably, is the problem generated by urban poverty. The challenges of reducing social abuse, distress and making more altruistic conditions for working and living for those distraught individuals who have made the city their home. As indicated by World Bank, Urban poverty is multidimensional, and the poor experience the ill effects of different hardships. The poor need key capacities, and may have deficient wage or instruction, or be in weakness, or feel feeble and need political flexibilities. Poverty is the greatest test to improvement for half of the world.

The quantity of individuals living in urban regions is expanding contrasted with rural areas. Motive of economic gain remains the leading cause for migration amongst interstate migrants. Migration has been an authentic procedure molding mankind's history, economy and culture. It re-developed as a solid power forming urban communities and urbanization since the season of mechanical transformation. The Economic Survey of India 2017 evaluates that the extent of state relocation in India was near 9 million yearly between 2011 and 2016, while Census 2011 pegs the aggregate number of inner transients in the nation (representing between and intra-state development) at an unsteady 139 million. Economically developed states keep incoming people from backward states, however, does migrating really help? India's urban populace has escalated over the last century in 1901 from 25 to 377 million in 2011 which constitute 31.2 percent of the aggregate populace in the nation.

In any case, the urban zones have neglected to meet the requests of this expanding populace weight bringing about extensive holes in provisioning of essential civilities of lodging, drinking water, sewerage, transportation and so on. Hardship of such administrations has brought about growing of slums with conditions unfit for human home. The vast majority of the urban poor are engaged with informal sector jobs where there is a steady risk of dismissal, evacuation, exchange of goods and nearly non-existent government disability cover. Residential, occupational and social vulnerability are the common hardships faced. Despite the fact that urbanization by and large adds to monetary improvements to urban capacities, developing towns and urban communities in low-income nations frequently confront serious urban lodging, framework and administrative problems and in addition different types of urban clog. Amid times of fast urbanization, it is easy to blame these concerns on migration. Migration leads to a rise in the quantity of individuals and families living in a urban focus, this causes demands for new housing and services. Guaranteeing these requests are met is a genuine challenge, however taking measures to repress movement is probably not going to be a decent arrangement and can become a reason for extreme hardship, not only for present and trying vagrants but rather for low-pay urban populaces for the most part. Governments in low-pay nations by and large

get a much lower offer of their nation's pay than do governments in high-wage nations and need to arrange for free or intensely sponsored housing and services to a significant share of their population. Where governments are unable or unwilling to do so, it is especially critical that they assist individuals with providing for themselves. In times of quick population growth and urbanization, prohibitive zoning and bylaws can restrict the supply of moderate housing exactly when it needs to extend. Private developer drove housing is less restricted yet is barely affordable to low-wage income groups without outrageous congestion.

Local governments have a particular preferred standpoint in distinguishing the poor because of their vicinity to the general population. Their nature with the institutional conditions inside particular locales encourages them to plan and actualize projects and plans to focus on the utilization qualifications to the expected gatherings. Local investment in financing of plans and in executing the projects additionally enhances responsibility to local institutions. Decentralization as a technique that will convey benefit conveyance closer to shoppers, enhance the responsiveness of the focal government to open requests and consequently diminish poverty, enhance the proficiency and nature of open administrations and enable lower units to feel more included and in charge. In this association, decentralization is connected to the idea of subsidiarity that is, settling on choices at the most reduced achievable level. It is additionally intended to diminish over-burden and blockage at the middle and accelerate operational basic leadership and usage by limiting the bottlenecks related with over-centralization of forces and capacities at only maybe a couple focuses in the chain of command of an open administration association or service. Along with decentralizing, the access and opportunity to basic resources is a monumental distribution task that has to be tackled by the state in an effort to minimize the poverty related challenges.

Towns and urban communities contribute significantly to the monetary improvement of the nation. These urban areas additionally assume a critical help in the advancement of the rural areas. To keep this economic change in accordance with requirements and substances at the grassroot level, it is essential that the general population and their agents are completely engaged with the planning and implementation of policies at local level. The majority rule government in Parliament and State Legislature's underlying foundations must reach towns and villages where people reside.

The Constitution (Seventy Fourth Amendment) Act, 1992 has presented another Part IXA in the Constitution, which manages Municipalities in an article 243 P to 243 ZG. This amendment, otherwise called Nagarpalika Act, came into being on 1st June 1993. It has given established status to municipalities and brought them under the constitution. States were put under constitutional commitment to receive municipalities according to framework revered in the constitution. The Ahmedabad Municipal Corporation or the AMC, set up in July 1950 under the Bombay Provincial Corporation Act, 1949, is in charge of the civic infrastructure and organization of the city of Ahmedabad and given municipal authorities and responsibilities under the 74th Amendment.

In the city of Ahmedabad around 20% populace involving 1.76.754 families lived in sub-human (slums) conditions at 710 pockets. Ahmedabad Parivartan, otherwise called the Slum Networking Program (SNP), was initiated in September 1995. It is a participatory approach that worked towards providing slums with sustainable water resources and sanitation arrangements. The venture was embraced by the Ahmedabad Municipal Corporation (AMC) in association with the inhabitants of the slums and chawls in the city and NGOs, with a view to improve the personal satisfaction and wellbeing in the slums through the arrangement of basic services of water and sanitation. This program incorporates different measures on essential water and sanitation foundation, for example, family unit

associations for water supply and sewerage, stormwater seepage, and solid waste administration and incorporates social viewpoints, for example, network assembly, organization building, and smaller scale undertaking development. Towards the finish of December 2005, 28 slum networks covering 4,868 family units and 24,340 individuals had been effectively redesigned. The execution work is continuing in 13 slum networks covering 3,835 family units profiting 19,175 individuals. The undertaking not just aided in the arrangement of essential administrations to take an interest in slums, it additionally connected them to existing civic services along these lines, thus, leading to an encompassing and comprehensive improvement.

SNP program of Ahmedabad city is a case of solid and generous organization among different stakeholders of the society who connected with themselves in giving better physical conditions to its poor fellow members. It is likewise a superb case of how, when an administration body will go into strong, and significant partnerships, numerous components of good administration, for example, Equity, Transparency, Accountability and Sustainability are actualised.

The study uses a descriptive method of portraying secondary literature with reference from government as well as private agency reports. The paper lays the groundwork for public policy discussions on the continuous increase in the number of urban poor, escalating to questioning the productivity and direction of public policies for urban poverty reduction. India is urbanizing. This progress, which will see India's urban populace achieve a figure near 600 million by 2031, isn't just a move of socioeconomics. It places urban communities and towns at the focal point of India's improvement direction. In the coming decades, the urban part will assume a primary position in the auxiliary change of the Indian economy and in maintaining the high rates of financial development. Guaranteeing superb open administrations for all in the urban areas and towns of India is an end in itself, yet it will likewise encourage the full acknowledgment of India's financial potential.

Keywords : Municipalities, Urban Development, Municipalities, Project Analysis, Depressed Areas.

JEL Classification Codes : H7, R580, R1, O220, R110.

Introduction

What is poverty?

Poverty is about not having enough money to address fundamental issues including nourishment, clothing and housing. Nonetheless, poverty is significantly more than just not having enough money. The World Bank Organization describes poverty in this way[1]:

> "*Poverty is hunger. Poverty is lack of shelter. Poverty is being sick and not being able to see a doctor. Poverty is not having access to school and not knowing how to read. Poverty is not having a job, is fear for the future, living one day at a time.*
>
> *Poverty has many faces, changing from place to place and across time, and has been described in many ways. Most often, poverty is a situation people want to escape. So*

[1] *Ministry of Housing and Urban Poverty Alleviation Government of India, Urban Poverty Report, 2009*.

poverty is a call to action -- for the poor and the wealthy alike -- a call to change the world so that many more may have enough to eat, adequate shelter, access to education and health, protection from violence, and a voice in what happens in their communities."

Urban Poverty

It has been estimated that the majority of the developing world's population will live in urban areas, and that the number of urban residents in developing countries will double. India is no exception. Some 50% of the population, or around 600 million people may be resident in urban areas by 2030. These figures suggest that we need to know more about the process of urban development and its effect on urban residents' lives.

Urban population increases are in part fuelled by rural-urban migration as people seek new employment and livelihood opportunities in urban centres.

In India, these conditions are exacerbated by the division of the poor between those living in officially recognised slum settlements where service provision is permitted, and illegal non-recognised squatter settlements, where it is not. In the former, service provision, if it exists at all, is patchy, poorly maintained, and severely under-resourced. The status recognised officially permits poor people to make demands on the political system, but this does not mean that their voices are heard. People in the non-recognised, category however, are invariably the most vulnerable among the poor. They live on the most precarious sites and in untenable conditions along polluted canal banks, on pavements, and along railway lines, in constant fear of eviction or relocation.

Migration

The thought process of financial gain remains the major reason relocation among interstate migrants. Consequently, when the migrant family lands in the city, they find that the lodging, occupations, salaries, and comforts that had 'pulled' them to the city are not accessible or is distant. Thus, in urban areas of most developing nations, 30 to 75 percent of the populace work and live in squatter settlements bringing home the bare minimum resources they can afford.

The Economic Survey of India 2017 assesses that the degree between state migrations in India was close to 9 million yearly somewhere in the range of 2011 and 2016, while Census 2011 pegs the total number of internal drifters in the country at a precarious 139 million. Monetarily forward states continue getting individuals from backward states. Migration and Urbanisation have remained to be the major causes of rural to urban or inter-state by moving, causing the subsequent poverty in urban areas.

First Urban Poverty Report, 2009[1]**:**

India issued its first-since forever report to give an account of the nature and flow of urban destitution in the nation.

Embraced with the help of the United Nations Development Program (UNDP), India: Urban Poverty Report 2009 recognizes the issues looked by poor people and spotlights on the foundational changes that are expected to address them.

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[1] *Ministry of Housing and Urban Poverty Alleviation Government of India, Urban Poverty Report, 2009.*

The report looks at different issues identified with urban poverty, for example, movement, work, the part of sexual orientation, access to fundamental administrations and the horrifying state of India's slums. Key messages of the report include:

- Poverty in India has become urbanised.
- Migration towards urban centres has increased.
- Urban poverty poses different problems.
- Slum populations are increasing.
- Slum dwellers lack access to basic services.

In slums, the report suggests sorting out slum networks, stretching out sewage frameworks and power to ghetto regions, and building open toilets that will be kept up by the network. India: Urban Poverty Report 2009 is a piece of an UNDP-upheld government undertaking to build up a national system for urban neediness.

Problems and Challenges

The connection between financial advancement and urban destitution is unpredictable. In spite of the fact that huge urban areas have bring down levels of destitution the discharge impact of new advancement may turn out to be significantly harsher on the urban poor. Policy making and implementation for the urban poor is a mammoth task for the Government.

When it comes to Policy making, it is a challenge for the government to know the number of people they are making policies for as most of the urban poor are undocumented migrants. Moreover, the Government is aloof from the ground level realities and challenges of these people, thus making it an insufficient tool of policy making. Policy implementation causes an issue as well due to various reasons like improper funds, red tapism, corruption, etc.

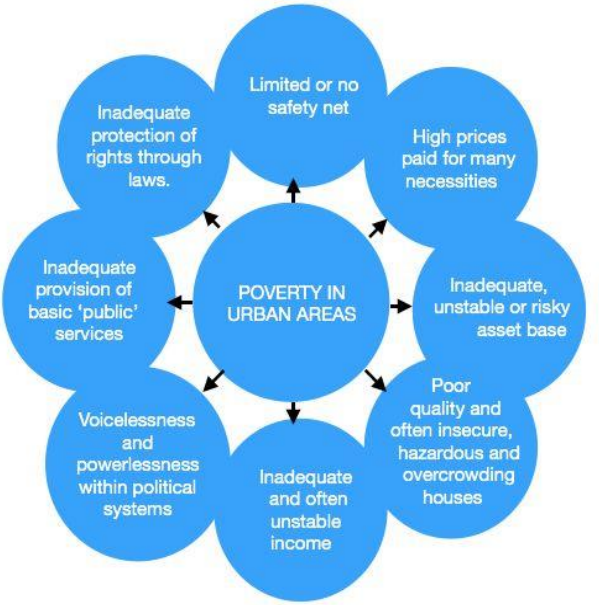
Isolated into three prime classes the difficulties confronted by the urban poor are:

- Residential: Firstly, it is an exceptionally troublesome errand for the poor to discover houses in the city. The couple of reasonable lodging they discover go under this domain, numerous times wind up in regions of urban slums and shanties. The living zone isn't greater than ten square meters, which is used for the limit of nuclear family things, however cooking, washing and snoozing are done basically in the open. There are regular water taps and open comforts. In addition, slums are every now and again slanted to floods, water-logging, fire etc. There is no genuine waste and sewerage framework and these prompts return of water-borne diseases like cholera, gastroenteritis and jaundice. Numerous inhabitants live in risk of a climb in the sea level. Storms, tremors, and other diverse disasters impact city slums more really than various zones, as substandard houses break down or poor drainage structures propel flooding. It is energetically populated and is depicted by substandard lodging and a non-appearance of tidiness.
- Social: Social and cultural hindrances deny kids from slums the chance to get education because of absence of offices, mindfulness or assets. Various adolescents never get any formal education and few complete basic schooling. Girls and women are not considered much to give education, as they are stacked retrieving water from long distances, managing old relatives, young kids,

and so forth. Likewise, in slums with poor (or nonexistent) sanitation workplaces, embarking to the lavatory around night time builds the chances of sexual attack on them.

- Occupational: There is non-accessibility of general beneficial employment, shrinking spaces for work and independent work. The urban poor are compelled to take part in a numerous assortment of easy going work to maintain their families. Work isn't accessible for the whole month, once in a while notwithstanding for 15 days with the beginning of progression and globalization, their officially restricted space for work has shrinked further.

A needy individual can fall into desperation if administration frameworks and foundations neglect to address individuals' social, financial, social, metro and political rights.



Solution

Decentralization

Decentralization has been considered by numerous as a standout amongst the most essential methodologies in bringing about necessary societal and governmental changes. This is on account of benefactors and governments have considered decentralization as a procedure that will convey benefit conveyance closer to customers, enhance the responsiveness of the local government to open requests and consequently decrease neediness, enhance the effectiveness and nature of open administrations and engage bring down units to feel more included and in charge. In this association, decentralization is connected to the idea of subsidiarity that is, settling on choices at the most minimal possible level.

The limit of decentralized governments in view of their closeness both institutionally and spatially to subjects in the country territories who are more receptive to the requirements of the poor than the focal government and consequently will probably define and execute genius poor arrangements and projects. Centralized governments are typically less stable, thus, the ideals of decentralization, for example, vote based system, famous investment, responsiveness, responsibility and value have prompted the conviction that decentralization will prompt more prominent responsiveness to poor people. Since poor people have been barred from governmental issues and consequently difficult to reach to open products and ventures, decentralization is viewed as offering more noteworthy political support to customary residents whose "voice" is more likely to increase with associative pertinence and viability of government's strategies and projects, particularly in poverty reduction. Decentralisation brings about increased opportunities for people to participate in public decision-making, from which they are generally excluded in a highly centralised government system. This in itself represents a form of poverty alleviation as poor people are given voice and thus power. At the same time, participation can increase the supervisory power of local (poor) people and this in turn can lead to higher accountability of public officials: Due to the greater proximity, citizens can easier monitor and thus influence government actions at the local level and this can again affect the political, and possibly this in turn the sociocultural, dimension of poverty. Among several possible accountability mechanisms, officials are assumed to be held accountable through local elections, which serve as a means to evaluate officials' past performance. Only if local citizens have the opportunity to observe officials' performance and reward or punish them at upcoming elections, these can be assumed to have an incentive to act in their electorate's interest. In this sense, decentralisation can be thought of as a means to bring about good governance.

Decentralization in India: 74th Amendment of the Indian Constitution

Constitution (Seventy Fourth Amendment) Act, 1992 has displayed another Part IXA in the Constitution, which oversees Municipalities in an article 243 P to 243 ZG. This amendment, generally called Nagarpalika Act. It has given built up status to regions and brought them under the constitution. States were put under established duty to get districts as per system revered in the constitution.

Indian political decentralization emerged with the Constitution (74th Amendment) Act, 1992. It is a historic point activity of the Government of India to fortify local self-government in urban communities and towns which manages the issues identifying with districts.

Keeping in mind the end goal to give time to enable changes to be made in the then existing laws which were conflicting with the arrangements of the Constitution (74th Amendment) Act, a progress time of one year was accommodated. Quickly after the Act came into drive on first June 1993, the Ministry of Urban Development found a way to guarantee that the arrangements of the State Municipal Laws are in accordance with the arrangements of the above Act. The order of the Municipalities is to attempt the undertakings of making arrangements for 'monetary advancement and social equity' and actualize city/town improvement designs. With the urban population increasing everyday, the issue of urban decentralization is presently taking the spotlight.

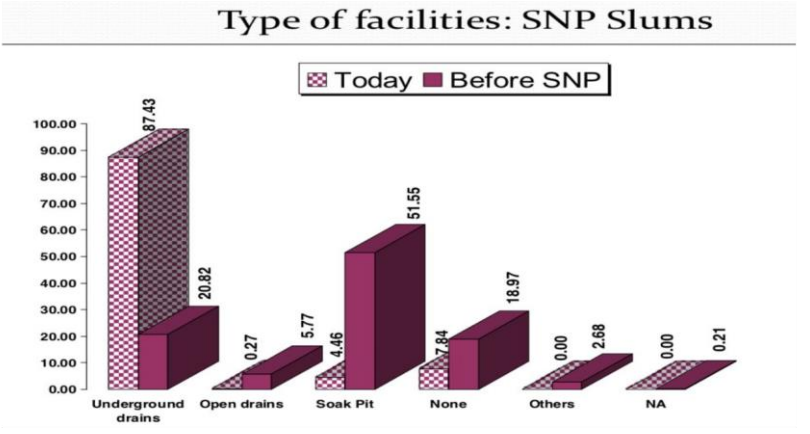
Ahmedabad Case Study

Ahmedabad is a modern and business-oriented city in the state of Gujarat. It is the center of exchange and trade in Gujarat. The assessed populace of Ahmedabad in 2016 was more than 7 million individuals in the city and roughly 8 million in the urban areas. This makes Ahmedabad the fifth

biggest city in India. Forbes magazine positioned Ahmedabad as the third quickest developing city of the decade[1].

It the masses of 8 million in the urban regions, around 1.76.754 families lived in slums and under-balanced zones. By far most of the urban poor who lived in slums had none or constrained access to essential administrations and in steady risk of sudden expulsion. Despite the fact that it is the obligation of the municipality to supply essential administrations to all networks in the city, in absence of land and housing, the citizenry was unwilling to add to such administrations, prompting non-upkeep of framework introduced for these networks. All the more particularly, the issues commonly experienced inside slums are as per the following:

- Aggregate or fractional non-appearance of foundation for water supply, seepage, toilets and
- strong waste administration,
- Absence of support of services and administration,
- Absence of mindfulness on cleanliness and wellbeing,
- Danger of ousting,
- Absence of income for the administrations given by the city partnership,
- Low salary and poor way of life,
- Absence of essential least training and lacking abilities,
- Danger of physical security and wellbeing.



Source: Reaching the Poor Slum Networking Project, Ahmedabad, India, Cept University Ahmedabad, India, 2011.

Ahmedabad Parivartan generally called the Slum Networking Program (SNP), was started in September 1995. The SNP also known as Parivartan was started to furnish slum occupants with

[1] *Joel Kotkin, The World's Fastest Growing Cities, (Forbes, October 7, 2010).*

foundation, including singular water supply, underground sewerage, singular toilets, strong waste accumulation, stormwater channels, inner streets and clearing, road lighting, and finishing. At first, the AMC built up associations with significant private associations and NGOs working in the city making a wide base of partners for the task. The NGOs were paid by the AMC to activate the slum network and energize their organization in the venture. Appealing to the network's proprietorship for the undertaking was significant to its prosperity. Along these lines, associations with common society had made the AMC a supplier of essential administrations, as well as a key facilitator for achieving social change.

The cost of house associations added up to 6,300 Indian rupees (US$138) per family unit. In the slums where the program was directed, the recipients paid 33% of the expenses for water supply and sewerage framework. The rest of the expenses were shared amongst AMC and private financial specialists. In situations where the ghetto family unit was excessively poor, making it impossible to bear the cost of the required commitment (which came to around Rs. 2100 which is somewhat around 30 USD), financing was influenced accessible to slum tenants through advances from SEWA, which is a bank run by independently employed ladies.

The Parivartan program has been perceived as a novel organization between the community, the organization and the private segment for the improvement of the city. The program has helped in the upliftment of various slums inside the city. Toward the finish of November 2006, a sum of 32 slum networks covering 4940 families profiting 24,700 individuals had been effectively overhauled. The people have paid more than US $ 300,000 to AMC as their commitment towards administrations, until now incredible in slum improvement programs in India. In five years, Parivartan achieved 9,435 families with 56,610 individuals in more than 40 slums. It is being extended to incorporate 59 more slums coming to an extra 15,431 households. The venture not just aided in the arrangement of essential administrations to the taking an interest slums, it additionally connected them to existing metro benefits subsequently advancing all encompassing and comprehensive improvement, instead of giving coincidental answers for a specific segment of society.

Conclusion

India has one of the largest quantities of poor living in urban areas. In an economy with critical intercommunity varieties, when there are no huge economies of scale and extension, decentralized arrangement of open administrations can improve effectiveness in the arrangement administration. Proper usage of poverty alleviation arrangements relies on the degree of inclusion and of nearby government establishments. Governments that are 'closer to the general population' should, on a basic level, have the capacity to give benefits more productively and viably than a remote, unified specialist. Decentralization is a procedure that conveys benefit conveyance closer to customers, enhance the responsiveness of the local government to open requests and accordingly diminish destitution, enhance the proficiency and nature of open administrations and enable lower units to feel more included and in charge. In the wake of having characterized both poverty and decentralization, the question of drawing a connection between the two emerges. Given the understanding of poverty as a complex, multidimensional concept, it must be clear that poverty eradication cannot be achieved by any single remedy like decentralisation but that it requires a blend of arrangements intended for country specific conditions. Attacking Poverty, should comprise of three reciprocal components: increasing chances, encourage strengthening, and improving security. First, promoting opportunities refers to giving poor people the chance to improve their material situation of life, and this includes providing access to employment, markets, financial services, infrastructure (roads, electricity, telecommunication), social

services (education, health care), and land. Second, facilitating empowerment implies the inclusion of all people in a society in decision-making processes in order to achieve responsive and accountable public actions and policies. Non-discrimination, good governance and the rule of law are in such manner. And third, enhancing security means reducing poor people's vulnerability to different threats, like economic shocks, natural disasters, ill health, disability and personal violence. This requires macroeconomic approaches to deal with the danger of economy-wide shocks, broadening of households' exercises, an open welfare network and a scope of insurance components. Thus, with the use of decentralization many more successful programs like Parivartan can take off in different cities all over the world. Looking at urban poverty as a challenge for the local government rather than the central government will perhaps have a greater overall effect on its worldwide recession. Urban poverty alleviation is, along these lines not an issue of income growth. The new reasoning is that if distribution of resources is supplemented by successful decentralization, it will have a supportable effect on urban poverty. Guaranteeing astounding local administrations for all urban communities and towns of India is an end, will encourage the full acknowledgment of India's potential.

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Purchasing Decisions of Low Emission Cars: Case Study of Poland and Turkey

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Abstract

In order to meet the long-term greenhouse gas emission reduction target as set out in the 2011 (60% decrease), emissions need to fall by around two thirds by 2050, compared with 1990 levels. Due to growing environmental concerns about greenhouse gas emissions, people are more incline to use electric vehicles in various distribution services and shift to lower emission transport modes.

The aim of the paper is to present the main factors influencing the purchasing decision of low emission vehicles (LEVs) in Turkey in Poland. Based on K-means cluster analysis was undertaken to identify population segments within the Polish and Turkish potential buyers. Three groups were distinguished and characterised: "Pro-green", "Green is goo" and "No-green".

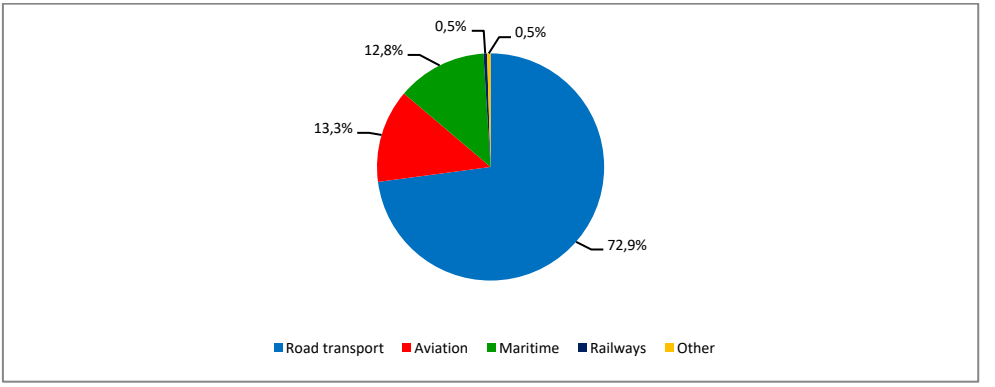
Keywords : Air Pollution, Low Emission Vehicles, Purchasing Decision, Transport Policy.

JEL Classification Codes : O24, O57, F46.

Introduction

European Commission announced that transport represents almost a quarter of Europe's greenhouse gas emissions and is the main cause of air pollution in cities (see Fig. 1). With the global shift towards a low-carbon, circular economy already underway, the Commission's low-emission mobility strategy, adopted in July 2016, aims to ensure Europe stays competitive and able to respond to the increasing mobility needs of people and goods [A European Strategy for low-emission…]. Within transport sector, road transport was by far the biggest emitter accounting for more than 70% of all GHG emissions from transport in 2015 (see Fig.1).

Fig.1. Greenhouse Gas Emissions from Transport by Mode in 2015 in European Countries*



** Including Switzerland, Norway, Liechtenstein, and Turkey.*
Source: own elaboration based on Eurostat data.

In 2015, emission from transport was 23% above 1990 levels despite a decline between 2008 and 2013. Emissions increased by almost 2% compared with 2015. International aviation experienced the largest percentage increase in greenhouse gas emissions over 1990 levels (+105 %), followed by international shipping (+22 %) and road transport (+19 %).

In order to meet the long-term greenhouse gas emission reduction target as set out in the 2011 (60% decrease), emissions need to fall by around two thirds by 2050, compared with 1990 levels [White Paper, 2011]. There are three main elements of this strategy [A European Strategy for low-emission…]:

- Increasing the efficiency of the transport system by making the most of digital technologies, smart pricing and further encouraging the shift to lower emission transport modes,
- Speeding up the deployment of low-emission alternative energy for transport, such as advanced biofuels, electricity, hydrogen and renewable synthetic fuels and removing obstacles to the electrification of transport,
- Moving towards zero-emission vehicles.

Aims and Methods

The main goal of this paper is to investigate and present the crucial factors influencing purchase decision of low electric vehicles in Poland and Turkey. The hypothesis claims that: Polish customers, as the representing group from EU, where the strong restrictions were introduced to decrease greenhouse gases emission, are more "pro-green" when deciding about purchasing private vehicle than the Turkish ones.

Primary and secondary data were used do this research. First group was based on the questionnaire form distributed within the students from Turkey (275 questionnaires) and Poland (322 questionnaires). This group of respondents had been chosen in purpose. Respondents age (between 20 and 26 years of old) and the fact their studying process indicate that in the nearest future, after

graduation, this group will enter labour market, and will probably decide for purchasing the car. The questionnaires were distributed between January 2015 and January 2016.

K-means cluster analysis was undertaken to identify population segments within the Polish and Turkish driver population.

Background

Various studies have emphasized the necessity of market implementation of low emission vehicles (LEV), and its reasons. It is widely proved that the dominant position of the car to service personal mobility needs in the majority of economically developed nations has been firmly embedded over the past half century (Morton et al. 2018). The desire of citizens for car mobility results from the substantial affordances which cars offer (Dant, 2004), allowing their users to decide about transport speeds, flexibility, and seamless movements which alternative modes of transport usually cannot provide (Schwanen & Lucas, 2011). There are initiatives to encourage people to shift their thinking and habits "from ownership to usership" quite well visible in high developed urban areas, however in the nearest future perception of owning the private car will not change. Having this in mind, and with reference to the policy for decreasing emission from transport it is highly important to invest in alternative fuel vehicles since they cause less pollution, enable the use of local resources, reduce import dependency and, at the same time, increase economic competitiveness of the region. European citizens and companies need a steady and reliable supply of energy at affordable prices in order to maintain their living standards. At the same time, the negative effects of energy use, particularly fossil fuels, on the environment must be reduced (Obrecht & Denac, 2013; Knez et al., 2014). As a result, non-fossil energy is gradually grabbing the attention of people. The introduction of green vehicles is a good example of people's attempts to utilize non-fossil energy (Biskupski & Generowicz, 2014). It is low electric vehicles within the next three decades should meet greenhouse gas reduction targets (World Energy Outlook, 2016; Managing the risks…, 2012; Annual report on the technical…, 2015) and, with specific policy support, have lowered vehicle costs in a number of countries (Sierzchula et al., 2014).

However, the electric vehicle market in the private sector has not been effectively developed. Compared with the traditional auto industry, the electric vehicle industry has no competitiveness. The electric vehicles have characteristics of high purchase cost, inadequate charging infrastructure and long charging time, which make consumers unwilling to purchase.

There is research which present the research which authors underlines different factors influencing decisions of purchasing low electric cars, which are actual situational factors e.g. regulatory environments (Colins & Chambers, 2005) together with psychological factors, e.g. personal attitudes (Choo & Mokhtarian, 2004; Laidley, 2013). The authors found environmental concern is an initial factor that finally leads customer's behaviour intention towards purchase of a full electric vehicle. This, however, does not answer the question, what must happen or what kind of circumstances (apart from environmental protection) should appear to encourage customers to buy LEV. That is important not only for researchers but seems to be elementary knowledge for producers and the market, as it is also proved that sales growth of LEVs has fallen short of industry expectations (World Energy Outlook, 2016).

Numerous European countries have implemented regulations which support the purchasing decision of LEVs (see Table 1).

Table 1. The Privileges for LEVs Owners in Selected European Countries

	Direct subsidies for purchacing of LEV	Tax breaks	Exemptions from taxes	Regular cash bonuses for LEVs owners	Free public parking	Free charging stations	Possibility of using bus lanes
Austria				√	√		
Czech Republic			√				
Estonia	√					√	
Finland						√	
France	√						
Germany		√	√				
Greece			√				
The Netherlands		√	√				
Monaco	√				√		
Norway			√			√	√
Portugal	√		√				
Spain	√	√					
Switzerland		√	√				
Great Britain	√		√				

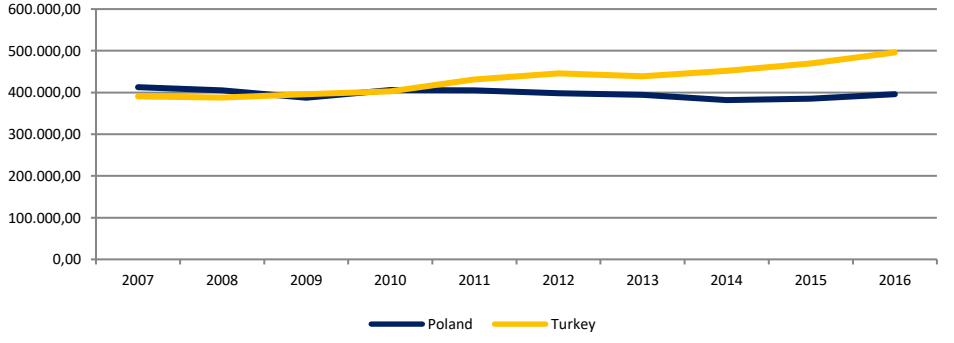
Source: own elaboration.

These privileges mostly relate to exemptions from taxes (e.g. Germany - exemption from the annual road tax for LEVs for 5 years from the date of first registration) and direct subsidies for buying LEV (e.g. in Monaco - subsidies of EUR 9,000 for the purchase of LEV). Otherwise, there are the privileges granted on the local level (e.g. in Rotterdam - subsidy of EUR 2,500 for entrepreneurs when replacing fleet LEV and the possibility of free rental of a gasoline car during the holiday - support owners of LEV with a small range).

Cases of Poland and Turkey

From 2009 until 2011 there was almost the same level of greenhouse gases emission in Poland and Turkey (see Fig.2). From 2011 the emission the situation changed as in Poland this level started slowly decreasing while in Turkey - increasing. However, from 2014 in both countries there has been the permanent growth in greenhouse gases emission.

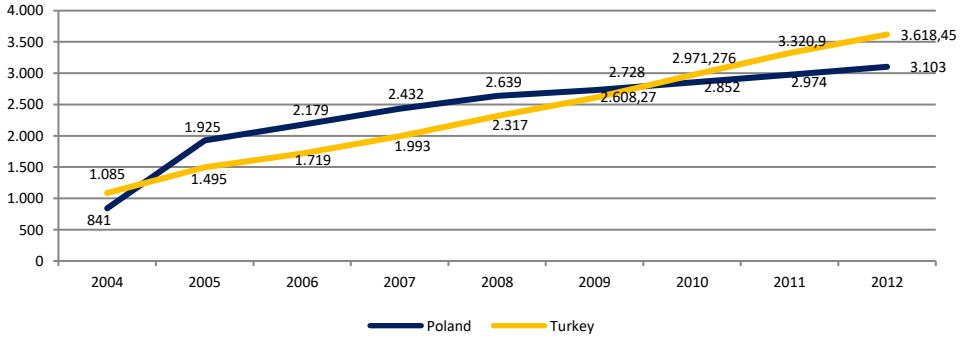
Fig. 2 Greenhouse Gases Emission in Poland and Turkey (in thousand tonnes)



Source: own elaboration based on Eurostat data.

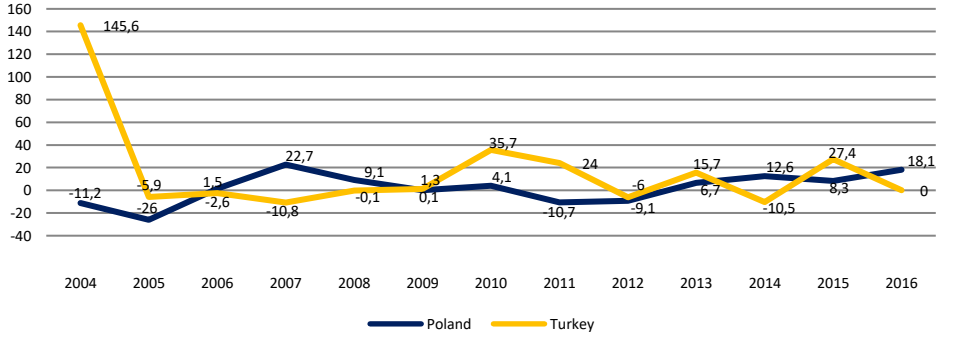
Likewise, from 2004 until 2012 the number of registered private cars has been increasing permanently (see Fig.3), nevertheless in the same time, the percentage change of new registered private vehicles has been fluctuating. After the certain growth in 2007 in Poland, for the consecutive four years there has been decrease in private cars registrations increase. Starting from 2011, the trend has reversed and is growing. In the case of Turkey, new private vehicle market seems to be more unstable and unpredictable (see Fig. 4).

Fig. 3. The Number of Registered Private Cars in Poland and Turkey (2004-2012) (in 000s)



Source: own elaboration based on Main Statistical Office (Poland) and Turkish Statistics Institute.

Fig. 4. The Change in Number of New Registered Cars (2004-2016) in Poland and Turkey (%)



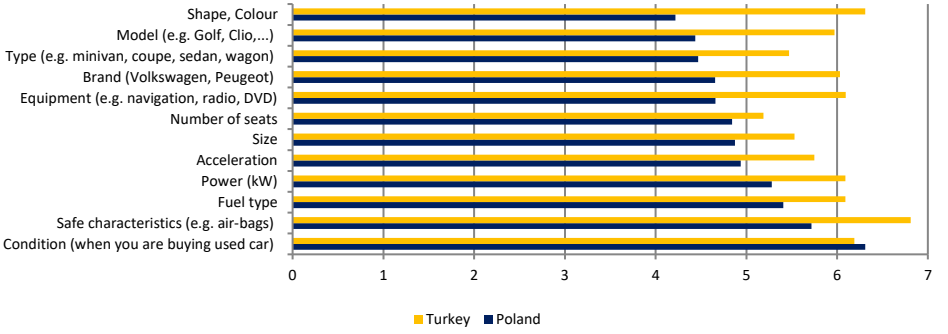
Source: own elaboration based on Eurostat data.

Based on these statistical data it can be said that there is a growth on private car market and is has been developing, but the cars being bought are mostly used ones.

The Purchase Decision Factors

The research was launched to investigate the indicators which are important for student as potential cars buyers and may have a strong influence on their decision in the future. Considering this fact, it is worth to discover their preferences and present the factors which convinced "future" customers of buying LEV.

Fig.5. Important Vehicle Performance Factors

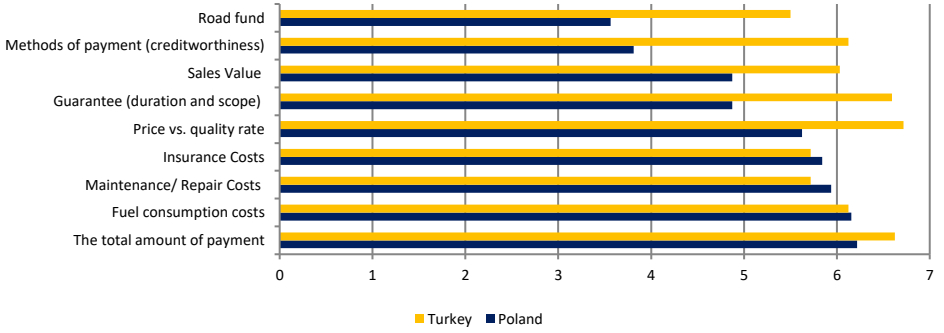


** on a scale from 1 to 7 where 1 = "not important" and 7 = "very important"*
Source: own elaboration

In accordance with Polish respondents the most important vehicle performance factor in the future is its condition. This allows to claim that it is worth to convince customers to moving away from buying the old cars to new ones. In Turkey, the most important factor would be safety, followed by shape and colour and condition (see Fig.5).

When considering financial indicator (see Fig.6), both in Turkey and in Poland respondents indicated the total amount of payment as one of the relevant factor when purchasing the vehicle. However, in Turkey "price vs. quality" is the most crucial indicator. In two countries the fuel consumption costs were also significant.

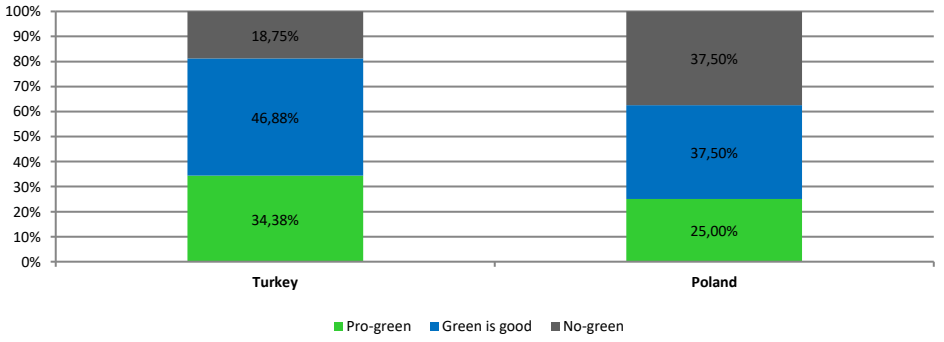
Fig. 6. Important Financial Considerations



** on a scale from 1 to 7 where 1 = "not important" and 7 = "very important"*
Source: own elaboration

It is recognised that any population is made up of individuals with varying levels of susceptibility towards changing their behaviour (Anable, 2005; Carreno and Welsch, 2009). The influence of taxation and other policy measures upon vehicle purchasing decisions will thus also vary and needs to be accounted for in future policy decisions. Therefore, K-means cluster analysis was introduced in order to identify population segments within the Turkish and Polish driver population, resulting in three distinct segments.

Fig. 7. The Distribution between Different Market Segments in Turkey and Poland



Source: own calculation

Based on students' responses regarding the importance of situational factors and strength of psychological constructs, the following groups were formed: 1) Pro-green, 2) Green is good, 3) No-green.

The group "No green" characterises as these which respondents do not consider purchasing the LE vehicle in the (nearest) future. For them, the level of vehicle green gases emission. The "Green is good" group consists of customers who are aware of the problem of air pollution because of using the cars, however there are not innovators on the market, therefore the group would buy LEVs if such cars would already be in use by other customers. The people in "Pro-Green" are very interested in buying a LEV in the future. They are aware of their responsibility to reduce environmental impact. The division of total sample in Poland is (see Fig.7):

- Pro-green: 25% of respondents,
- Green is good: 37,5% of respondents,
- No green: 18,75% of respondents.

The division of respondents in Turkey is as follows (see Fig.7):

- Pro-green: 34,38% of respondents,
- Green is good: 46,88% of respondents,
- No green: 37,5% of respondents.

Furthermore, the effect of different push and pull methods on different purchasers was also studied. We can see in Table that various push and pull methods would have different impact on different groups. The most influential measure is Vehicle scrappage scheme''. This ''pull'' suggestion would have a strong effect on all three groups in both countries.

Table 2. The Measures Encouraging People to Purchase a Low Emission Vehicle

	Turkey				Poland			
	Very pro-green	Green Is good	No-green	Average	Very pro-green	Green Is good	No-green	Average
The VAT would be dependent on the emissions (the owners Of cars with higher emissions would pay higher VAT)	5,64	3,80	4,00	4,47	5,36	4,33	5,00	4,97
First year the road fund would be dependent on the Emissions (the owners of cars with higher emissions would pay higher road fund)	5,82	3,73	5,50	4,78	5,91	5,00	3,83	5,26
Payments support scheme dependent on the emissions (the owners of cars with higher emissions would pay more, subsidized loans for LEV etc.)	6,18	5,13	5,33	5,53	5,64	4,53	4,50	5,06
The price of the car registration would depend on the Emissions (the owners of cars with higher emissions would pay more)	5,82	4,87	5,17	5,25	5,64	4,60	3,83	4,97
The State would allocate additional resources to all owners cars, that would replace their old cars with new ones with lower emissions (scrappage)	6,36	5,53	5,17	5,75	6,00	5,27	5,17	5,68
The amount of payment for the road fund would depend on Emissions (the owners of cars with higher emissions would pay more)	6,18	5,07	5,50	5,53	5,55	4,80	4,67	5,19
The amount of parking fees would depend on Emissions (the owners of cars with low emissions cars would pay less)	5,36	3,07	5,17	4,25	4,73	4,67	3,50	4,61
Lane for low emission vehicles (similar to the lane for buses), where we would have separated bands for cleaner vehicles	4,36	4,40	5,00	4,50	5,27	4,60	2,83	4,65
Car insurance would be dependent on the emissions (the owners of cars with higher emissions would pay more)	5,36	3,93	6,33	4,88	6,09	4,27	4,17	5,03
Good EV charging infrastructure in my country	6,36	5,73	6,50	6,09	5,73	6,20	5,67	6,13
Good fast charging infrastructure in my country, able to charge EV in 20 minutes	6,27	6,13	7,00	6,34	6,27	5,93	5,33	6,13

EV chargers at home, for charging especially when the car is not in use	6,18	6,00	6,83	6,22	5,82	5,87	5,67	6,00
EV fast chargers in my residential area/settlement	6,55	6,40	6,47	6,47	6,09	5,93	5,00	6,00
EV charger at my work place, for charging especially in work time	6,45	5,93	5,97	5,97	6,18	5,53	4,83	5,81

Source: own calculation.

In both countries in "Pro-green" groups the evaluation of factors shows that the very significant issues influencing purchase decision are those representing charging infrastructure. From financial factors in this group, respondents from Poland identified lower car insurance fee for LEV drivers (6,09), while in Turkey scrappage compensation (6,18). The irrelevant factors here are those referring directly the process of driving, as: lane fo LEV (4,36 in Turkey) and lower parking fees for LEV (4,73 in Poland). For "Green is good" respondents in both countries underline the importance of infrastructural equipment in settlement area (6,55 in Turkey) or in the whole country (6,20 in Poland). From the technology and policies point of view, the las group "No-green" is the most challenging, as it requires the special action to change the way of thinking and LEV perception. Here, there is big difference between two researched countries. In Turkey, the results present that respondents are very demanding about most of the factors, in Poland, in the meanwhile, the respondents ignore most of the financial factors (see Table 2). Results confirmed greater influence of pull over push measures and those positive rewards for purchasing a LEV were more influential than those penalising people who choose not to purchase a LEV.

Conclusion

This study provides contribution to understand the indicators influencing car purchasing decisions in Turkey and Poland. The selected groups of customers and their distribution do not confirm the hypothesis of the research.

Different studies, as well as the results of this study, reveal that there is no single measure that would dramatically increase the demand for LEVs. The solution is to combine different measures or strategies like top-down and bottom-up, where both government and car industry should come across. It is clear that Turkish and Polish governments should be aware that single measures do not exist and that they are not effective. If the governments want to increase interest in purchasing LEVs, they should adjust and adopt a variety of different measures, combining both pull and push factors. The most important pull factor is development of special incentives for LEVs. The car producers should take into account that drivers are more familiar with information about fuel economy than information about a car's environmental influences (e.g. carbon emissions). The advice for the car industry selling LEVs is that they need to inform people how much money they could save by purchasing a LEV.

In order to meet European policy needs to decrease greenhouse gases emission from transport it is highly needed to be familiar with each market of LEV deeper. Therefore, more detailed research is needed. That would help in identifying age or financial status groups in each country, and afterwards to use the tools for changing the habits and behaviour of its inhabitants.

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25 October 2018 Thursday

Session: IV / 16.00-17.30

Financial Economics

Room: *Mandragola*

Chair: **Cemalettin AKTEPE**

- Pass-through Mechanism for Turkish Banking Sector; O/N Repo or Weekly Interest Rate, Which One is More Efficient?

  Esra Nazmiye KILCI

- Upon Relationship between Real Exchange Rate and Foreign Trade in Turkey

  Pelin VAROL-İYİDOĞAN & Emin Efecan AKTAŞ

- A Note on Inequality: What Is the Effect of Skill

  Leyla Firuze ARDA-ÖZALP & Hüseyin ÖZALP

- Ontology of An Open System of Hyman Minsky's Analysis

  Fatma Esra SOYLU

- Literature Review on Financial Stress Index

  Ayşen SİVRİKAYA & Hayrullah Ahmet YAŞAR

Pass-through Mechanism for Turkish Banking Sector; O/N Repo or Weekly Interest Rate, Which One is More Efficient?

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Abstract

Changes in monetary policy interest rates have great importance in terms of an economy because monetary policy decisions are transmitted to the real economy through this mechanism. The monetary policy rates of Central Bank have impacts on aggregate domestic demand, investment, and eventually output by leading to increases or decreases in market interest rates which encourage or discourage decisions of households and firms. Since the passthrough mechanism of the policy interest rates to bank lending rates measures the effectiveness of monetary policy in controlling inflation and stabilizing the economy, the channels and the effects of it is studied widely by the economists and researchers in the literature. Assessing the effectiveness of the interest rate transmission mechanism and to improve policy implications as well as provide recommendations in order to strenghten monetary policy effectiveness and help the central bank to ensure price stability is highly important subject. The purpose of this study to examine how the pass-through of changes in the weekly interest rates and O/N repo rates affect banks' interest rates and which one is more efficient in monetary policy transmission in Turkish Banking Sector. In the analysis of relationship, Fourier KPSS Test and Fourier Granger Causality Test has been employed by using monthly data belonged to O/N repo rates, weekly repo rates and nominal credit rates obtained from Bloomberg, BRSA and Ministry of Treasury and Finance.

In the first section of the study, several interest rates which are used by Central Bank of the Republic of Turkey and the key determinants which are often seen as key determinants of the monetary policy transmission mechanism in emerging economies are reviewed briefly. Exchange rate stability, the health and the development of financial system, central bank independence, instituional environment and quality of regulations are significant determinants in this sense. After that, the pass-through of the policy interest rates to bank lending rates and the impacts of bank credit interest rates on aggregate demand, investments and total economic output is also explained briefly.

The following section of the study focuses on literature review and summarized the other studies and results related to the subject. For instance, Wang and Lee (2009) employed asymmetric co-integration test in their study. Their empirical findings showed evidence of complete pass-through in the United States deposit rate and that the lending rates in Hong Kong, Philippines, and Taiwan are rigid downward. Similarly, Kwapil and Scharler (2010) conducted a comparative analysis of the interest rate pass-through from money market rate to bank lending rates in the Euro-Area and the United States using monthly data and Engel-Granger Co-integration as well as Auto-regressive distributed lag (ARDL) method. They found that interest rate pass-through is faster in the United States compared to the European countries. Similarly, Tai et al (2012) examined the effectiveness of interest rate pass-through from the money market rates to the retail rates in Asian countries. Their results revealed that there are no much differences between the money market pass-through rate into deposit

and lending rates, but the money market rate pass-through into deposit rate is slightly higher than that of the bank lending rate. In addition, most Asian countries have slower adjustment rates, especially after the Asian 1997 financial crisis.

In the third section, the relationships between the O/N repo rates and bank lending rates and weekly repo rates and bank lending rates are investigated with the help of econometric analyisis. In this study, the causality relationship between monetary policy interest rates and banking credit interest rates is analyzed using Fourier Approach. The period ranges from 2000:01 to 2018:08. The period covers the periods such as 2000-01 Turkish Economic Crisis in which the market interest rates had a big jump and 2008-2009 Global Financial Crisis in which the macro-financial conditions put heavy pressure in the financial indicators of both developed and emerging economies and market interest rates had an upward trend. In investigation of the relationship between variables, O/N Repo Rates, Weekly Repo Rates and Banking Credit Interest Rates, which are obtained from Bloomberg, Banking Regulation and Supervision Authority (BRSA) and Ministry of Treasury and Finance have been used. In the first stage, Fourier KPSS Stationary Test has been employed to test the stationary of the variables. The Fourier test developed by Becker et al (2006) can detect not only sudden changes but also slow changes and the position, number and form of structural changes do not affect the power of the test. Subsequently, Fourier Granger Causality Test has been employed to test the causality relationship between variables. The VAR with Fourier Frequencies which has been employed by Enders and Jones (2015) that uses Flexible Fourier Form yields powerful results. After introducing trigonometric functions into the model, they found a richer set of interactions between the variables. Since the linkages between the variables have been subjected to gradual shifts and linear specifications are mostly inappropriate to capture the relationships, econometric examinations are not generally direct and simple. Enders and Jones (2015) allows the Flexible Fourier form to capture the multiple smooth mean shifts that are likely to be present in the VAR system. In one respect, their results complement those of Enders and Holt (2014) who estimate a VAR with LSTAR mean shifts. While they focus on long-run mean shifts, Enders and Jones focus on Granger-causality tests and on the short-run dynamics of the system.

To summarize, Central Banks use interest rate policy which is the most effective instrument of monetary policy to have impacts on market interest rates, thereby investments and total economic output. When the CBRT take action to increases O/N repo or weekly repo rate, the funding cost of the banking sector will increase, and the banks transmit these changes to the lending rates. It will result in a contradiction in loans thereby leading to a contradiciton in investments and slowdown in economic output. In especially two-year period, value of the national currency depreciated in a siginificant way against to the basket of foreign currencies. The CBRT, implementing inflation targetting programme, has started to increase interest rates gradually to control the speculative appreciation of especially U.S Dollar. In this study, the effects of changes in monetary policy interest rates as weekly repo rates and O/N repo rates are evaluated and which one is more efficient in lending rates of the banking sector is tested.

Keywords : Bank Lending Rates, Pass-Through Mechanism, Monetary Policy.
JEL Classification Codes : E40, E44, G10.

Upon Relationship between Real Exchange Rate and Foreign Trade in Turkey[1]

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Abstract

The aim of this study is to examine the effect of real exchange rate movements on the foreign trade balance for Turkey over the period 1998:1-2014:3. Pesaran et al. (2001) bounds testing procedure which is employed in this context asserts the existence of cointegration between foreign trade balance and national income, foreign income and real exchange rate. ARDL model implying long-run effects indicates the validity of Marshall-Lerner condition for Turkey in the considered period. According to the estimated short-run error-correction model based on ARDL, the short-run improvements in the exchange rate deteriorates the foreign trade balance, thus J-curve effect is valid.

Keywords : Foreign Trade, Exchange Rate, Cointegration.

JEL Classification Codes : C32, F41.

Introduction

Current account deficits are one of the basic problems in the world in terms of developing economies. Although governments implement monetary and fiscal policies to resolve external imbalances, these policies mostly enable to generate the expected results. World Bank (2014) reveals that during the last five years period while in some economies such as Argentina, Brazil and Mexico, deficits have steadily increased, current account balance has improved in transition economies such as Bulgaria, Croatia, and Poland. In this context it is important to determine the extent to which the applied economic policies are effective in restraining the deficits.

The Mundell-Fleming model provides a fundamental framework for investigating the effects of economic policies on the current balance. In this approach, fiscal or monetary policies determine interest rates, and accordingly the capital inflows together with the value of the national money within a small open economy, where capital movements are free. Depending on the change in the real exchange rate, the trade balance is improving or deteriorating. However, the validity of this predicted transmission mechanism depends upon the elasticity approach proposed by Marshall (1923) and Lerner (1944). In this approach, namely Marshall-Lerner condition, the improvement of the foreign

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trade balance as a result of increasing real exchange rate (currency depreciation) arises in case that the sum of import and export elasticity is greater than 1. Since the elasticities can differ in short and long periods, the J-curve approach laid out in this framework suggests that the corrective effect of increasing real exchange rate on foreign trade balance emerges merely in the long-term which import and export elasticities rise.

Purpose of the Study

Our study which aims to investigate the validity of this approach for Turkish economy is organized as follows. First, we mention both the theoretical grounds of real exchange rate and foreign trade nexus and the regarding litearature. Afterwards, we present data and methodology together with empirical findings. Finally, we conclude and discuss the political reflections of our results.

Theoritical Background and Literature Review

In the theoretical framework suggested by Boyd et al. (2001), the validity of the Marshall-Lerner condition can be tested in two different ways. First of all, requires the estimation of long-term demand equations of import and export:

$$LnX_t = \alpha_x + \beta * LnY_t * + \eta_x LnDT_t + \gamma_x t + \varepsilon_x \quad (1)$$

$$LnM_t = \alpha_m + \beta LnY_t - \eta_x LnDT_t + \gamma_m t + \varepsilon_m \quad (2)$$

The variables LnX_t and LnM_t indicate the natural logarithm of export and import, respectively. LnY represents the natural logarithm of domestic income, LnY* implies the natural logartihm of foreign income, $LnDT_t$ shows the natural logarithm of real exchange rate. The validity of Marshall-Lerner condition, in other words the corrective effect of an increase in exchange rate on the current accout balance requires the condition that the sum of export (η_m) and import (η_x) demand elasticities is greater than 1 as an absolute value.

Secondly, the Marshall Lerner condition can be tested by means of trade balance equation. Recent studies in the relevant literature describe the trade balance as the ratio of export to import, in rather than the difference of exports and imports. (Boyd et al. 2001; Narayan 2004; Narayan & Narayan 2004; Narayan 2006; Yavuz et al. 2010). In this framework, the trade balance equation ($LnDT_t$) derives from equations (1) and (2) and takes the form as following regression:

$$LnDT_t = (\alpha_x - \alpha_m) + \beta * LnY_t^* - \beta LnY_t + (\eta_x + \eta_m - 1) LnDK_t + (\gamma_x - \gamma_m) t + (\varepsilon_x - \varepsilon_m) \quad (3)$$

In the case of simplification of first parenthesis as α, the second as η, and the third and fourth are respectively γ and ε, the trade balance equation is,

$$LnDT_t = \alpha + \beta * LnY_t^* - \beta LnY_t + \eta LnDK_t + \gamma t + \varepsilon_t \quad (4)$$

In the long-term trade balance, the Marshall-Lerner condition is satisfied provided that the coefficient η is negative.

There exists a wide and expanding literature on Marshall-Lerner condition for Turkey Table 1 presents a comprehensive summary of several recent studies in the ragarding literature.

Table 1. Literature Review

STUDY	*AIM AND CONTENT*	*METHODOLOGY*	*DATA SET*	*MAIN FINDINGS*
Kılıç et al. (2018)	- The exchange rate movements in Turish economy induce to test the validity of the hypothesis. - The stationary characteristics of the variables are examined by ADF and PP unit root tests. - The existence of cointegration between the variables is investigated by the ARDL Bounds Testing Approach and the existence of a long-term relationship between the variables is determined. - The long and short cyclic coefficient estimates between the variables are estimated by applying ARDL approach.	Time Series Analysis (ARDL Bounds Testing Approach)	-Two type of data set is used. 1) Annual data from 1990 to 2015, 2) Quarterly data between the first quarter of 1998 and the third quarter of 2016	-According to the first data set -J curve hypothesis is not valid in Turkey. The reason is that the exchange rate and foreign trade balance adjustments take place within 10-12 months. -The deprecation of TL in the first four periods (12 months) has unbalanced the foreign trade and improved in the following periods. According to the second set data set the J curve assumes the hypothesis.
Sezer (2017)	-In this study for 14 transition economis and Turkish economy, effect of real exchange rate, domestic and foreign income on the external trade balance is analysed in the framework of the extended Marshall-Lerner condition and J-curve hypothesis -Cross-sectional dependence is examined with the bias-adjusted cross-section dependence. -Lagrange multiplier developed by Pesaran et al. (2008) and cross-section dependency are observed among the countries.	Panel Cointegration Analysis	For Turkey and 14 transition economies quarterly data is used between 1995:Q1-2015:Q4.	-Marshall-Lerner condition in the relevant period is valid for Belarus, Bulgaria Croatia, Hungary, Latvia, Poland, Romania, Russia, Slovakia, Slovenia and Turkey. The J-curve hypothesis is valid in Belarus, Romania and Slovenia. -Series are not stationary. -There is a cointegration relationship between the series.
Özbey (2018)	-The study aims to examine the validity of the Marshall-Lerner condition and the J curve hypothesis with regard to the long and short term effects of real effective exchange rates on the foreign trade balance of Turkey.	Time Series Analysis (ARDL Bounds Testing Approach)	Monthly data is utilized for Turkey between January 2003 and March 2017.	-Marshall-Lerner condition is valid for Turkey in the long-term. -J curve hypothesis is not valid.
Yılmaz et al. (2017)	-It aims to investigate the existence of relationship between the real exchange rate and the foreign trade balance for Turkey.	Time Series Analysis (ARDL Bounds Testing Approach)	Annual data over the period 1989-2014 on gross domestic product, real exchange rate and foreign trade deficit is used.	- It concludes that although there is a long-term relationship between balance of foreign trade, real exchange rate, GDP of Turkey and of the world, the coefficient of real exchange rate is insignificant in terms of the methodology. -J curve hypothesis is not valid.

Özşahin (2017)	-This study draws from the model of Rose and Yellen (1989) and analyzes the relationship between the volume of bilateral foreign trade and bilateral real exchange rate in Turkey and 20 major trading partners. -The presence of cross-sectional dependence among the countries is investigated -Long-term coefficients for each country are obtained by means of Mean Group Estimator (MG) method developed by Pesaran and Smith (1995). -Canning and Pedroni (2008) panel causality test is performed.	Panel Cointegration Analysis	Annual data between 1995-2015 for Turkey and 20 trade partners is utilized.	-Bilateral real exchange rate has a statistically significant negative effect on the bilateral foreign trade balance in 10 out of 20 countries in the panel. -This negative relationship means that depreciation of the Turkish Lira (TL) against the currency of trading partners improves bilateral foreign balance, and thus, the J-curve effect in these countries is verified. -Panel causality test results indicate that bilateral real exchange rates lead to bilateral foreign trade balance in Turkey with 14 trading partners.
Bahmani-Oskooee and Halıcıoğlu (2017)	-The study distinguishes real appreciations from real depreciations via the partial sum concept and consider nonlinearity in the estimation and testing procedure -Both linear and non-linear estimation models are performed for Turkey and 11 trade partners.	Time Series Analysis (ARDL Bounds Testing Approach)	-For Turkey and 11 trade partners, between 1980:Q1 (1991:Q1 for Germany, 1995:Q1 for Italy and 1988:Q1 for England) and 2014:Q4 quarterly data sets are used.	-The effects of exchange rate changes are asymmetric. -While real appreciation of the lira has no significant effects on the bilateral trade balance of Turkey with its partners, real depreciation of the lira against the euro and the pound has significantly favorable effects on Turkey's trade balance with France, Germany, Italy, Portugal, and the UK.

Data, Methodology and Findings

In the framework of the theoretical background presented above, we aim to examine the effect of the real exchange rate on the foreign trade balance over the period 1998:1-2014:3 of Turkish economy. An extensive description of data investigating the validity of the Marshall-Lerner condition is introdeced in Table 2.

Table 2. Description of Data

Variable	**Description**	**Source of Data**
Trade Balance *(TD)*	-Export of goods and services/Imports of goods and services (at constant prices)	Turkish Statistical Institute (TÜİK)
Domestic Income *(Y)*	GDP by Expenditure Method (at 1998 constant prices)	Turkish Statistical Institute (TÜİK)
Foreign Income *(Y*)*	Industrial Production-Total Index (at constant prices)	Federal Reserve Bank (FED)
Exchange Rate *(DK)*	Real Exchange Rate-Consumer Price Index (CPI) based (at constant prices)	OECD Main Economic Indicators (MEI)

Variables are seasonally adjusted using Census X11 method and are included in the analysis by taking of their natural logarithms.

In the study firstly, the stationary properties of variables are examined by Augmented Dickey Fuller Test (ADF) and Philips and Perron (1998) unit root tests, which are developed by Engle and Granger (1987). In addition, due to the 2001 and 2008 crisis which may potentially lead to structural breaks in series during the analysis period, Zivot and Adrews (1992) unit root test is also used in the analysis for stationarity of variables (Table 3).

Table 3. Unit Root Test Results

Variables	ADF		PP		Z-A	
	Level	1st difference	Level	1st difference	Level	1st difference
LnTD	-3.45(4)**	-	-3.94**	-	-3.72 (2003Q4)	-10.05* (2002Q1)
LnY	-3.20*** (4)	-	-6.83*	-	-3.94 (2008Q4)	-31.06* (2002Q1)
LnY*	-3.69(1)**	-	-2.07	-	-4.49 (2008Q2)	-4.945** (2009Q3)
LnDK	-2.99(0)	-7.36*(0)	-2.89	-10.21*	-4.78 (2005Q1)	-7.16* (2002Q1)

*Notes: i) ADF and PP test statistics are obtained from the estimation of the fixed trend model. ii) Maximum lag length for ADF test is stated as 10 according to Schwarz Criterion. Selected lag lengths are shown in parentheses. iii) Z-A test is based on the estimation of Model A, which includes the break in the constant term. The parentheses show the contents of the break periods. iv) *, **, *** indicate %1, %5 and %10 significant levels, respectively.*

Linear ADF and PP test results show that exchange rate, national and foreign income variables are stationary. However, considering the structural breaks subject to 2001 and 2008 crises, the unit root null hypothesis can only be rejected when the first difference of the series is taken. When the series are integrated at different levels and regime changes are included in the unit root analysis with the Z-A test, the change in stationary degrees of variables necessitates an alternative cointegration method which does not require the precondition of I(1) series. In this context, Pesaran et al. (2001) bounds testing used in this study allows for a long-term relationship to be established regardless of whether the variables I (0), I (1), or mutually cointegrated. The bounds testing, which provides analysis with the ARDL approach of the co-integration relationship is based on the estimation of unrestricted error correction model adapted to the study:

$$\Delta LnTD_t = \alpha_0 + \alpha_1 LnTD_{t-1} + \alpha_2 LnY_{t-1} + \alpha_3 LnY^*_{t-1} + \alpha_4 LnDK_{t-1} + \sum_{i=1}^{p} \beta_{1i} \Delta LnY_{t-i} +$$

$$\sum_{i=1}^{p} \beta_{2i} \Delta LnY^*_{t-i} + \sum_{i=1}^{p} \beta_{3i} \Delta DK_{t-i} + \sum_{i=0}^{p} \beta_{4i} \Delta LnTD_{t-i} + e_t \qquad (5)$$

Here, there is no deterministic trend term in the model with the estimated p lag length. However, since the bounds testing also requires the estimation of the model with trend, relevant model is obtained by adding a trending term (λt) to the equation (5). In determining the appropriate lag length p, the estimated models with different lag lengths are compared with regard to Akaike Information Criterion (AIC) and Schwarz Criterion (SC). The model with minimum selection criteria value gives the appropriate lag length (p). In addition, since the bounds testing requires error terms to be non-autocorrelated, we apply LM test to test the presence of autocorelation while choosing (p). Table 4 presents the selection of the appropriate lag length in the framework of selection criteria and autocorrelation tests for trendless and trendy models:

Table 4. Selection of (p)

	AIC		SC		$\chi^2_{sc}(1)$	
p	Trend	No Trend	Trend	No Trend	Trend	No Trend
0	**-2.44**	**-2.42**	**-2.14**	**-2.16**	**0.17**	**0.02**
1	-2.36	-2.39	-1.93	-1.99	0.89	0.70
2	-2.29	-2.32	-1.71	-1.78	0.01	0.02
3	-2.29	-2.30	-1.57	-1.62	1.36	1.92
4	-2.75	-2.72	-1.89	-1.90	0.46	0.71
5	-2.71	-2.74	-1.71	-1.77	3.16***	3.18***

Note: $\chi^2_{sc}(1)$ shows the LM statistic testing first degree autocorrelation.

According to Table 4, within the models estimated at 5 different lag lengths, p = 0 which has the smallest AIC and SC values with no autocorrelation is selected as the appropriate lag length for both models with and without trend.

Thereafter, the F- statistic is calculated in three different cases for the estimated unrestricted error correction models. F_{III} and F_{IV} are based on the test of the null hypothesis that the lagged values of explained (LnTD) and explanatory variables (LnY, LnY *, LnDK) in both models (with and without trend) are equal to zero, respectively. F_V requires the test of the significance of the trend term as well as the lagged values of those four variables in the model with trend. The calculated F-statistics are compared with the lower and upper critical values in Pesaran (2001). The F-statistic exceeding the upper critical value leads to the rejection of the null hypothesis, thus reveals the existence of a cointegration relationship. In addition to F-statistics, t-statistics which is derived by Banerjee et al. (1998) are also used to analyze the existence of the cointegration relation (Table 5).

Table 5. Bounds Testing Results

F-statistics						**t-statistics**	
Lag Length	**F_{III}**		**F_{IV}**		**F_V**	**t_{III}**	**t_V**
0	4.51[b]		4.28[c]		5.35[b]	-3.94[b]	-3.67[c]
	Critical Values						
k=3	**%1**		**%5**		**%10**		
F_{III}	I(0): 4.29	I(1): 5.61	I(0): 3.23	I(1): 4.35	I(0): 2.72	I(1): 3.77	
F_{IV}	I(0): 5.38	I(1): 6.54	I(0): 4.23	I(1): 5.29	I(0): 3.71	I(1): 4.68	
F_V	I(0): 5.17	I(1): 6.36	I(0): 4.01	I(1): 5.07	I(0): 3.47	I(1): 4.45	
t_{III}	I(0): -3.43	I(1): -4.37	I(0): -2.86	I(1): -3.78	I(0): -2.57	I(1): -3.46	
t_V	I(0): -3.96	I(1): -4.73	I(0): -3.41	I(1): -4.16	I(0): -3.13	I(1): -3.84	

Notes: i) a and b indicate the presence of cointegration relation at levels 1% and 5%, respectively, and c indicates that there is no cointegraiton.

In addition to F-statistics, t-statistics which is derived by Banerjee et al. (1998) are also used to analyze the existence of the cointegration relation. t-statistics, tIII and tV, respectively are based on the test of the significance of the lagged value of the independent variable in both models (with and without trend). In the decision-making process, similar to those of the F-tests, comparisons with the lower and upper critical values with regard to Pesaran (2001)[1] are performed. According to Table 5, FIII, FV and tIII statistics exceeding the upper critical values indicate the existence of cointegration relation.

After the analysis of the bounds testing in which the long-term relationship is determined, long-term coefficients are obtained by the estimation of ARDL model. Then, error correction model based on ARDL model is estimated and short-term results are presented (Table 6).

[1] *See. Pesaran (2001) Table C2.iii and Table C2.v.*

Table 6. Short and Long-Term Results

Panel A: Long-Term Results			
Explanatory Variables	**Coefficients**	**Standard error**	**t-statistic (p-value)**
LnY	0.71	0.30	2.35 (0.02)
LnY*	-0.48	0.46	-1.04 (0.30)
LnDK	-1.17	0.23	-5.16 (0.00)
c	-9.43	6.59	-1.43 (0.16)
t	-0.01	0.01	-1.44 (0.16)
ARDL(1,1,1,0) Model Diagnostic Test Results			
R^2	0.78		
$\overline{R}^2$	0.75		
$\chi^2_{SC}(4)$	3.14 (0.54)		
$\chi^2_{RAMSEY}(1)$	1.07 (0.31)		
$\chi^2_{NORMAL}(2)$	3.63 (0.16)		
$\chi^2_{WHITE}(1)$	0.46 (0.49)		
Panel B: Short-Term Results			
dLnY	0.56	0.11	5.36 (0.00)
dLnY*	-2.65	0.63	-4.22 (0.00)
dLnDK	-0.55	0.12	-4.51 (0.00)
dc	-4.44	2.78	-1.59 (0.12)
dt	-0.01	0.01	-1.54 (0.13)
ec(-1)	-0.47	0.09	-4.73 (0.00)

Notes: i) c is constant, t trend, ec (-1) indicates the terms of error correction ii) Estimates are based on the model of ARDL (1,1,1,0) selected according to the SC Criterion.

For the validity of the Marshall-Lerner condition, the coefficient of the exchange rate variable in the long-run equilibrium must be negative and significant (Boyd et al., 2001; Yavuz et al., 2010). The evaluation of the long-term coefficient of the ARDL (1,1,1,0) model presented in Table 4 reveals that the coefficient of the exchange rate variable is negative (-1.17) and significant at 1% level. This long-term result supports that the Marshall-Lerner condition is valid at the analyzed period of Turkish economy. However, the coefficient of national income variable (Y); is contradictory to Keynesian theory, which claims that the increase in domestic growth distorts foreign trade balance by promoting imports. On the other hand, insignificant foreign income variable (Y*), contrary to the predictions of the Keynesian theory, implies that the increase in the income of foreign countries does not necessarily increase exports in Turkey, thus improve the external balance.

Finally, when the short-term results of the error correction model are evaluated, the negative and significant coefficient of the exchange rate *(lnDT*) variable (-0.55) reveals that the J curve hypothesis is valid for Turkey hence the increase in the real exchange rate does not amend the external balance in the short-term.

Conclusion and Discussion

Our study aims to reveal the short and long-term effects of real exchange rate movements on foreign trade which is one of the basic components of economic equilibrium. The cointegration analysis results based on the bounding tests and ARDL long-term model estimation confirm that the increase in the exchange rate in terms of the Turkish economy is ensured that the necessary condition (the sum of export demand elasticity and import demand elasticity is greater than 1 as an absolute value) for the corrective adjustment effect of increase in the exchange rate on the current account balance is ensured. However, the findings of the error correction model estimation indicate that the corrective effect does not occur in the short term.

When the results are evaluated in terms of policy implication, the elimination of foreign trade imbalances with the competitiveness provided by depreciation of national currency in a managed float exchange rate regime is not singly sufficient especially in the short term. Taken together with the production structure based on intermediate good imports of Turkish economy, it seems inevitable that a policy based on a high real exchange rate is an inflationary process. Therefore, the relevant policy can result in a negative effect on domestic production and price level beyond improving the balance of foreign trade.

Considering this framework, it is important to create an exchange rate-monetary and fiscal policy combination in order to improve the foreign trade balance. In particular, public investment expenditures, which are the main instruments of fiscal policy and the main adaptation variable of economic growth, should be prioritized in areas that will provide a production structure compatible with the global value chain, which will reduce the external dependency of Turkish economy. In addition, on the basis of the twin deficits approach, the improvement of the fiscal balance by reforming the expenditure and tax systems would also contribute to the sustainability of external equilibrium.

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A Note on Inequality: What Is the Effect of Skill

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Abstract

Over the past 40 years or more, world economy has witnessed a significant increase in income inequality. The underlying factors behind rising inequality are hotly debated issues. The deterioration in income share mostly is attributed to skill-biased technical change, distribution of innate skills or skills acquired through education. This paper explores empirical evidence for a connection between inequality and skill using panel data analysis. To investigate the relationships, we employ a data set for 16 countries and the period from 1995 to 2014. In order to determine the stationary characteristics of the variables, we employ CADF, (CIPS) tests approaches. Following of this we employ Gengenbach, Urbain & Westerlund (2015) Panel Cointegration methodology. Our emprical test results concludes that there is a relationship between inequality and skill in long run. These results are consistent with the frame of supply - demand framework.

Keywords : Inequality, Skill, Skill-biased Technical Change, Panel Data Models.

JEL Classification Codes : P46, P36, O47, D63, C23.

Introduction

"*There's never been a better time to be a worker with special technological skills or education. Those people can create and capture value. However, it's not a great time to have only ordinary skills. Computers and robots are learning many basic skills at an extraordinary pace.*"

Erik Brynjolfsson and Andrew McAfee

Income inequality is an important contemporary and historic issue. Increasing income and social inequalities in world economy has become a common theme among economists and policy makers. Increasing inequalities appear to be a social anxiety that have deeply affect for all segments of societies for our age. Polarisation of income distribution has many hazards for social integration. Rising gap between rich and poor have undermined social confidence.

Income inequality, is combination of stagnating average incomes at the middle and the bottom of the distribution and increasing average incomes at the top (Morelli & Atkinson, 2015: 32). Piketty defined inequality in his famous book (Capital in the Twenty-First Century). Income inequality in his definition is a result of adding up these two components; "inequality of income from labor and inequality of income from capital". And the more unequally distributed each of these two components is, the greater the total in equality (Piketty, 2014: 242-254).

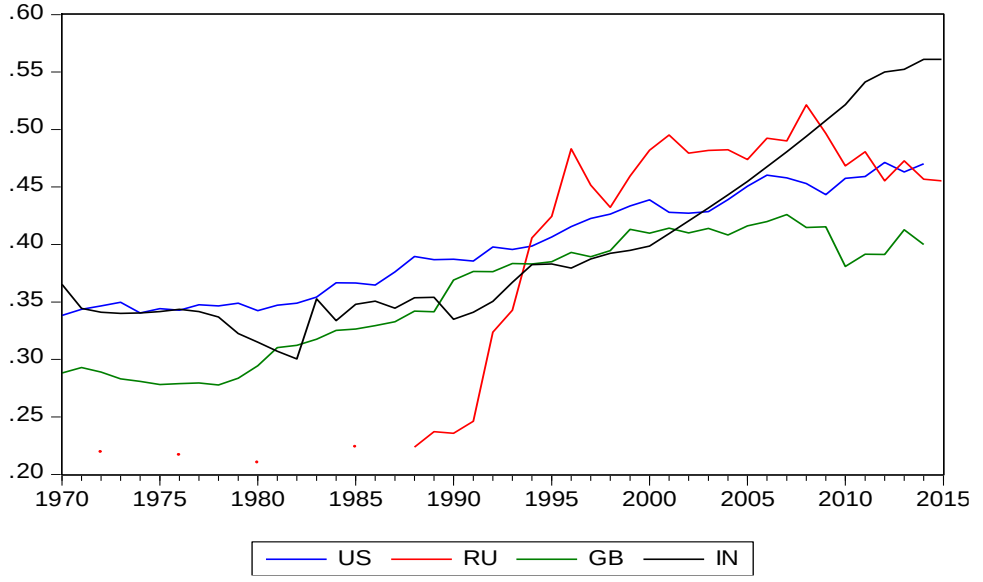
The neoliberal theory stress that overall inequality let people have more incentives for effort and risk-taking, and thereby raises efficiency. As Margaret Thatcher put it, "*It is our job to glory in inequality and see that talents and abilities are given vent and expression for the benefit of us all.*'' (Wade, 2003: 582). This is only one innocent side of inequality. But the rising question is that who efficiency is. Is most of the efficiency growth being captured by the top? If few people get this efficiency by harming rest of society, inequality become a threat for social order. On the other side of the medallion and beyond the efficiency, inequality has many hazards for our living. Countries which have higher income inequality probably goes with: (i) higher poverty (the number of people below the international poverty line); (ii) slower economic growth or finacial instability (it constrains the growth of mass demand); (iii) higher unemployment; and (iv) higher crime (Blau and Blau's study showed that socioeconomic inequality between races and general inequality increase rates of criminal violence. Blau's (1977) form of the theory posits that inequalities are probable causes to conflict and violence (Lee and Bankston, 1999: 33; Piketty, 2014: 297); (iv) health issues (income inequality or social inequalities may be directly hazardous to individual health). According to a recent body of inequality literature, relatively equal societies provide more social cohesion, more solidarity, and less stress; they offer their citizens more public goods, more social support, and more social capital; and they satisfy humans' evolved preference for fairness. (Deaton, 2003: 113).

As we learn from Kuznets' hypothesis income inequality could follow an inverse-U shape along the development period from an agricultural to an industrial society; (i) rising with industrialization and (ii) declining, as more and more workers join the high productivity sectors of the economy. Piketty and Saez indicated that the share of the top percentiles in the United States was U-shaped from 1913 to the present, from 18% in 1913, falling to 7.75% in 1973, then rising to 19% in 2012. So, we could have concluded that a new industrial revolution has taken place that is first leading to increasing inequality and then inequality will decline again as more workers benefit from the new innovations (Deaton, 2014: 783; Piketty & Saez, 2001: 1). Since the 1970s income concentration has in fact been increasing throughout the world. But it strikingly has risen in the US. The income share of the top 1 decile has increased from around 10 percent in 1970 to 20 percent in 2014 and the same time the income shares of the top 10 decile has increased from around 33 percent in 1970 to almost 50 percent in 2014. It is also important not to lose sight of the fact that the income share of the bottom and middle have declined. These no doubt reflect the fact that rising gap between rich and poor in US. But it is not typical, many developed countries or developing countries have experienced these increases. Roughly the same has happened in India, China and Russia. It has increased substantially in these countries. Many countries suffer from rising income inequality but there is also great cross-national variation. It has been stable or has declined in some countries. Income shares of the top 1 decile in Denmark has declined from around 9 percent in 1970 to around 6 percent in 2010. Some European or Nordic countries like France, Netherlands or Norway have pursued this trajectory. And not surprisingly, middle class hasn't losed their income share in these countries[1].

Graph 1 presents a comparison of inequality of some countries with high level of inequality such as US, India, China, Russia and Great Britain. The trends are confirming that inequality has increased in all these countries after 1970 up to today.

[1] *Statistics based on World Inequality Database <https://wid.world>, 22.07.2015.*

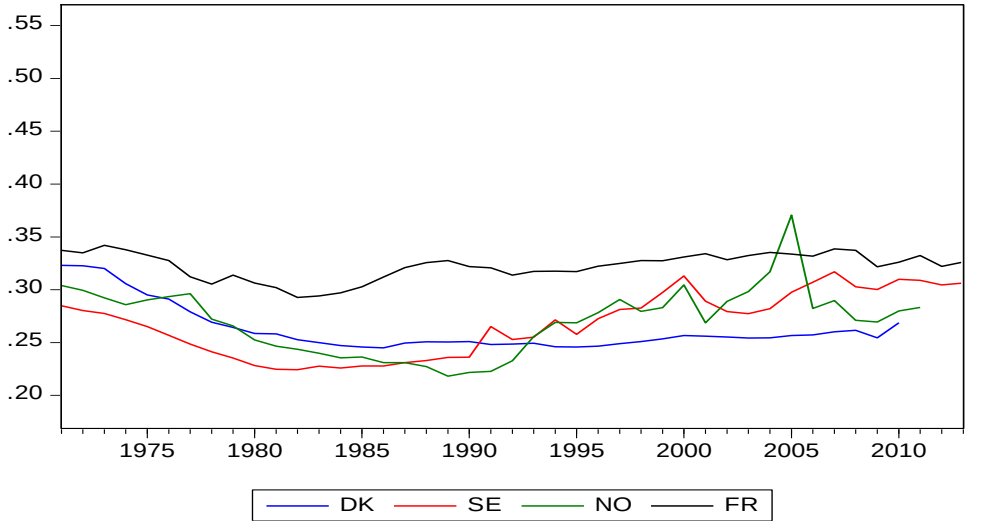
Graph 1. Inequality Level (p90p100)



Kaynak: <https://wid.world/data/>, 22.07.2018.

Not all countries have a similar picture about inequality trend. Graph 2 shows a comparison of inequality of some countries with low or moderate level of inequality such as Denmark, Norwey, Sweden and France. We can easily understand from the graph 2 that contrary to US, India or GB which have a strong trend of inequality, these countries indicate an opposite trend. After 1970s inequality has not risen markedly and even has been stable or has declined in these countries.

Graph 2. Inequality Level (p90p100)



Kaynak: <https://wid.world/data/>, 22.07.2018.

Most of the increase in inequality can be traced to gains of the top decile (Lansing & Markiewicz, 2016: 1). Specifically, if we consider the total growth of the US economy in the thirty years (1977 to 2007), we see that the richest 10 percent appropriated 75 percent of the growth and more just the richest 1 percent appropriated nearly 60 percent of the total increase of US national income in this period. The trouble is that the rate of income growth for the bottom 90 percent, was less than 0.5 percent per year (Piketty, 2014: 297).

Over the past 40 years or more, world economy has witnessed a significant increase in income inequality. The underlying factors behind rising income inequality are hotly debated issues. The deterioration in income inequality is the result of economic growth, liberalization, globalization, changing in household structure, declining union strength, changes in the distributive effects of taxes and transfers, distribution of innate abilities, distribution of human and physical capital and rapid technological change processes. All in all, potential cause of the today's rising inequality is indeed that the world is different. In order to understand why the differences in world an effect on income inequality might have, we need to understand something about how it works. It has two reasonable components (Acemoglu et.al, 2013: 1; Atkinson, 2015: 217; Huber & Stephens, 2013: 2);

- Higher income inequality is due to an increased wage premium for skilled (educated) workers;
- The increased wage premium for skill is due to "globalisation" and "skill-biased technological change (ICT)".

Several countries are experiencing rising income inequality generated by skill biased technological change that means rising demand to higher labor market skill (Smeeding, 2002: 1). Skill biased technological change is regarded as root of the differences in inequality across the countries and it explains the differences of high level inequality countries and moderate level inequality countries such

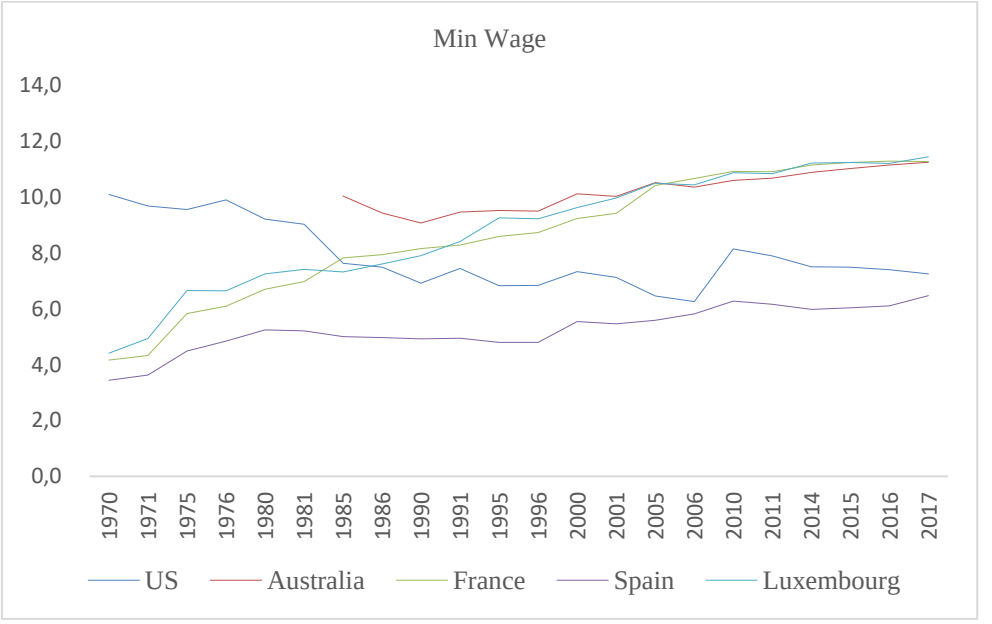
as Nordic or continental european countries. Many countries have similiar technological development but not all of them have rising inequality generated by skill premia. There are three answers which have been useful tool in understanding the U.S. wage inequality given by Acemoğlu and these answers suggest that the lack of increase in inequality in Europe should have been associated with relatively faster increase in the employment of more skilled workers or relatively faster increase in the supply of skills (2002, 1-2):

- The relative supply of skills increased faster in Europe.
- European wage-setting institutions prevented wage inequality from increasing.
- For exogenous or endogenous reasons, technical change has been less skill biased in Europe.

Wage inequality has increased especially in the US and some other countries. Unskilled average wages have stagnated or have fallen since 1970s and also their rates of employment have declined, while some people near the top of the wage distribution enjoyed rapid and sustained wage growth (Murphy & Topel, 2016: 3). Recent evidence shows that technical change favors skilled workers and replaces tasks previously performed by the unskilled workers. In US the the college premium[1] increased by over 25 percent between 1979 and 1995 (Acemoğlu, 2002: 7). According to Bordo and Meissner (2012), the averag wage of US male workers has not risen since 1973. Figures 1 shows that real hourly minimum wages roughly declined for US worker after 1970s. With the effect of relatively faster increase in the supply of skills or less increase in demand of skills and with the effect of wage-setting institutions, Europe has a better wages growth experience. Figure 1 also shows that real hourly minimum wages roughly doubled after 1970s in France, Spain or Luxembourg. And the same trend has taken place in much of continental Europe.

[1] *Wages of college graduates relative to the wages of high school graduates.*

Figure 1: Real Hourly Minimum Wage, in 2017 constant prices at 2017 USD PPPs



Source: OECD, <https://stats.oecd.org>, 22.07.2018.

Supply-Demand Framework

To understand what happened to wage inequality we should first focus on "skill". Skills play a definetly important role in explaining wage inequality. The importance of skills on inequality was presented by Tinbergen (1975)[1] with supply and demand agents. Tinbergen argued that technological change is skill biased that is increases the demand for more skilled workers and therefore their wage premium in the labor market. To capture this point bear in mind that computers, computer associated production techniques and robotics appear to complement skilled workers and replacing many labor intensive tasks. And this is a direct outcome of of technical change effect on inequality in recent years (Acemoğlu, 2012: 7; Broecke, Quintini & Vandeweyer, 2016: 9).

The framework we employ to understand the impact of various factors increasing the inequality is the supply and demand framework. This framework would let us understand how to skill-biased technological generate the deterioration in wages structure (Acemoğlu, 2003: 129-132; 2012: 7);

[1] *Jan Tinbergen (1975), "Income Differences: Recent Research".*

In this framework we assume that there are two types of workers; (1) H(t) skilled - high educated and (2) L(t) unskilled - low educated who are imperfect substitutes[1]. The production function for the aggregate economy at time (*t*);

$$Y(t) = [(A_l(t)L(t))^{\rho} + (A_h(t)H(t))^{\rho}]^{1/\rho} \quad (1)$$

Where $\rho \leq 1$, and $A_l(t)$ and $A_h(t)$ are factor augmenting technology terms. The elasticity of substitution between two type of workers is $\sigma = 1/(1 - \rho)$. As we noted above labor markets are competitive and so in this framework the unskilled worker wage is;

$$\omega_L = \frac{\partial Y}{\partial L} = A_l^{\rho}[A_l^{\rho} + A_h^{\rho}(H/L)^{\rho}]^{(1-\rho)/\rho} \quad (2)$$

This equation implies ($\partial\omega_L / \partial H / L > 0$) that as the fraction of skilled workers in the labor force increases, the unskilled worker wage will increase. The skilled worker wage is;

$$\omega_L = \frac{\partial Y}{\partial H} = A_h^{\rho}[A_l^{\rho}(H/L)^{-\rho} + A_h^{\rho}]^{(1-\rho)/\rho} \quad (3)$$

We can conclude that ($\partial\omega_H / \partial H / L < 0$) as rate of skilled workers increases, their wages will fall. Starting from this point if we combine these equations (2 and 3), the skill premium[2] is;

$$\omega = \frac{\omega H}{\omega L} = \left(\frac{A_h}{A_l}\right)^{\rho}\left(\frac{H}{L}\right)^{-(1-\rho)} = \left(\frac{A_h}{A_l}\right)^{(\sigma-1)/\sigma}\left(\frac{H}{L}\right)^{-1/\sigma} \quad (4)$$

In this framework ω refer to both as a measure of skill premium and as a measure of inequality. This equation can be reinterpreting with log forms;

$$\ln \omega = \frac{\sigma-1}{\sigma} ln\left(\frac{A_h}{A_l}\right) - \frac{1}{\sigma} ln\frac{H}{L} \quad (5)$$

As a natural consequence of this we can conclude that the skill premium increases when skilled workers become scarcer.

Data and Methodological Background

This paper explores empirical evidence for a connection between inequality and skill. To investigate the relationships, we employ a data set for 16 countries and for the period from 1995 to 2014.

We learn from supply and deman framework there are two types of workers, unskilled (low-education) workers and skilled (high-education). In this paper we used the employment ratio of advanced level of educated worker to take account skilled worker. This is motivated by a judgement that in general more skilled worker will earn higher wages with their skills. (But at the same time, it can varies across the countries). Advanced level of educated worker employment data source is International Labour Organization (ILO). We use a version of inequality meausure from World

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[1] *Unskilled workers have high school diploma and skilled workers have college degree and in this section terms of skill and education was used interchangeably.*

[2] *The wage of skilled workers relative to the wage of unskilled workers.*

Inequality Database (WID) to investigate this model. Top 10% share referes to share of total income going to Top 10%.

Table 1. Data Set

	Variables Name	**Sources**
Inequality	Top10	WID
Skill	Advanced level educated workers	ILO

Breush Pagan LM Test test were applied prior to panel unit root test to take account crosss ectional dependency among variables. Breusch and Pagan (1980) proposed a Lagrange multiplier (LM) statistic for testing the null of zero cross-equation error correlations, which is defined as (Sarafidis, Yamagata & Robertson, 2009: 4);

$$\text{LM} = T \sum_{i=1}^{N-1} \sum_{J=i+1}^{N} \hat{\rho}_{ij}^2$$

$\hat{\rho}_{ij}^2$ is the sample estimate of the pair-wise pearson correlation coefficient of the residual.

Table 2. Breush Pagan LM Test

	Statistics	Prob.
İnequality	24.03	0.000
Skill	45.52	0.000
Equation	4.92	0.000
Test of Homogenity		
Test of parameter constancy	chi2(90) = 182.82	0.0000

Pesaran (2007), developed a method to dealing with the difficulty of cross-section dependence. For this purpose, he augmented the standard DF or ADF regressions with the cross-section averages of lagged levels and first-differences of the individual series. This test results referred to as the cross-sectionally augmented IPS (CIPS) test. The cross sectionally agumented DF(CADF) regression is (Pesaran, 2007: 266-267);

$$\Delta Y_{it} = \alpha_i + b_i Y_{i,t-1} + c_i \bar{Y}_{t-1} + d_i \Delta \bar{Y}_t + e_{it}$$

The unit root hypothesis can be written as;

H_0: $\beta_i = 0$ for all i

H_0: $\beta_i < 0$, i=1,2,….N_1 $\beta_i = 0$, i=N_1+1, N_1+2,…,N

We employed CADF Unit root test to take account of the cross-section dependence. According to our unit root test results for inequality, at the %90 (cv10), %95 (cv5), %99 (cv1) significance levels CIPS statistic (t-bar) is -1.968 and less than all critical values. Therefore, according to the CIPS test unitroot hypothesis cannot be rejected (p value 0.175).

CADF Unit Root Test for Inequality

t-bar	cv10	cv5	cv1	Z[t-bar]	P-value
-1.968	-2.100	-2.210	-2.400	-0.935	0.175

According to our unit root test results for skill, at the %90 (cv10), %95 (cv5), %99 (cv1) significance levels CIPS statistic (t-bar) is -1.964 and less than all critical values. Therefore, according

to the CIPS test unitroot hypothesis cannot be rejected (p value 0.179). Our have CADF Unit root test showed that our two variables have unit root.

CADF Unit Root Test for Skill

t-bar	cv10	cv5	cv1	Z[t-bar]	P-value
-1.964	-2.100	-2.210	-2.400	-0.919	0.179

To test for the presence of long-run relationships among our two variables we employed an error correction-based cointegration tests for panel data. Gengenbach, Urbain & Westerlund (2015) panel cointegration equaion is (Tatoğlu, 2017: 205);

$$\Delta y_i = d\delta_{y.x_i} + a_{yi}y_{i-1} + \omega_{i-1}\gamma_i + u_i\pi_i + e_{y.x_i} = a_{y_i}y_{i-1} + g_i^d + \lambda_i + e_{y.x_i}$$

According to our cointegration test results for our model we can conclude that there is a cointegration between inequality and skill and two variables are cointegrated in long run.

Gengenbach, Urbain & Westerlund (2015) Panel Cointegration

Test Stat.	Coef	T-bar	P-val*
y(t-1)	-1.024	-3.855	<=0.01

Conclusion

Over the past 40 years or more, world economy has witnessed a significant increase in income inequality. The deterioration in income inequality mostly is attributed to skill-biased technical change, distribution of innate skills or skills acquired through education. Recent technological changes lead to shift in production technology that favors skilled worker. As a natural consequence of this demand to high skill worker has been rising and their earnings from labor market have been rising as well. This paper explores empirical evidence for a connection between inequality and skill using panel data analysis. To investigate the relationships, we employ a data set for 16 countries and the period from 1995 to 2014. In order to determine the stationary characteristics of the variables, we employ CADF, (CIPS) tests approaches. Following of this we employ Gengenbach, Urbain & Westerlund (2015) Panel Cointegration methodology. Our emprical test results concludes that there is a relationship between inequality and skill in long run. These results are consistent with the frame of supply - demand framework.

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Ontology of An Open System of Hyman Minsky's Analysis

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Abstract

The aim of this paper is to search for the elements of "open system" ontology in Hyman Minsky's analysis, and to suggest that this analysis, which is based on open system ontology is more suitable for the real world than other theories, especially the mainstream theories. Minsky is an intelligently grasped that capitalist system is an evolutionary process and inherently unstable. He argued that the fundamental component of the capitalist system is the financial system, and that the fundamental source of crises in the capitalist system is endogenous to the system. Especially after the 2008 US Crisis, the Minsky model had gained favour as an explanatory approach to this crisis. What distinguishes this paper from the others is to relate the success of Minsky's analysis to the idea that the "open system" ontology included in his analysis is an essential vision for understanding current manner of the capitalist system and its instabilities.

In the first chapter of this paper, open systems ontology, its importance and necessity for economics which should be a social science, and where to find this approach in Minsky's analysis will be addressed. In the second chapter, in the direction of Minsky's concept of capitalism and criticism, the trivets of the analysis and the financial instability hypothesis, elements of open system ontology will be sought. In the conclusion, it will be argued that since innovation and qualitative change as the basic element of the open system take place in Minsky's approach to the evolution of the capitalist financial system, Minsky's open system ontology is superior to other analyses.

Keywords : Financial Evolution, Instability, Open Systems.
JEL Classification Codes : G01, B41, D53.

Introduction

A major issue for Minsky is to explain the capitalist system's crisis. Putting the financial structure and relations at the center of the capitalist system, Minsky explains the instabilities experienced by capitalism with the fragility of this system (Wray, 2011a: 285-286). There are two fundamental propositions of the financial instability hypothesis, which explains fluctuations in capitalist economies. The first proposition is that the capitalist market mechanism does not lead to sustainable, stable prices and full employment equilibrium. Secondly, capitalism has its inherent financial characteristics that cause severe conjuncture fluctuations (Minsky, 2013:178). Minsky's works on the financial instability hypothesis, started in the 1950s, was very impressed with the work of John Maynard Keynes. Even Minsky defines himself as a Financial Keynesian (Wray, 2011b:2). Although Minsky is known as a post-Keynesian economist, there are other non-Keynesian economists who influenced Minsky. Irving Fisher, Michal Kalecki and Joseph A. Schumpeter are the most important of these economists.

Among these names, Keynes and Schumpeter need more attention. Both Keynes and Schumpeter had an idea about the unstable nature of capitalism. However, their ideas about the mechanisms underlying the instability differ and that's why these names seen as anti-thesis of one another (Roubini, 2011: 62-65). But Minsky argued that Keynes and Schumpeter are not substitutionary but complementary (Roubini, 2011). Minsky's analysis is the synthesis of the ideas of Schumpeter and Keynes. He took a comparative static framework from Keynes and dynamic analysis from Schumpeter and tries to introduce an evolutionary approach to macro finance (Burlamaqi, 2000). This dynamic analysis and evolutionist approach points to the open system ontology, that economics as a social science that economics should adopt.

Open System Ontology

The idea of open systems is an approach that is put forward by some philosophers before the science of economics. There are important names who use this approach in evaluating the conditions of doing science such as Karl Popper, Roy Bhaskar, H. Blalock, and Andrew Sayer. After that, Cambridge economists used this approach while criticizing mainstream economics. Cambridge economists were influenced by the Critical Realism approach developed by Roy Bhaskar and identified the main problem of mainstream economics as closed system ontology on which their analysis is based. In other words, the basic problem is that the social reality, which is the scientific object of economics as a social science, is analysed as static, atomistic and based on causality and this is the failure of the mainstream economics. On the contrary, social reality is an open system composed of complex, dynamic, and internally related associations.

There are three analytical frameworks; synchronic, diachronic and dynamic. These are developed to solve the co-ordination problem arising from the market mechanism in the history of economic analysis. The synchronic framework is static, the diachronic framework is comparative static, and the dynamic framework is evolutionary and therefore open. In the synchronic and diachronic frameworks, the sources of changes in the system are outside the system. In the dynamic frameworks, norms or parameters of the system change. Unlike synchronic and diachronic models, which require closed systems, dynamic models have open system ontology, not mechanical ones. Dynamic models are the types of organic models in which "emerging" structures can arise as a result of mutual interactions (Özel, 2009: 79-81). Innovation and qualitative change are fundamental characteristics of human action and this is why social systems are open (Sayer, 2017: 164).

In his analysis, Minsky has adopted an evolutionary approach based on innovation and qualitative change as the basic characteristics of the open system. Minsky, who brought an evolutionary approach to macro finance, has adopted Schumpeter's ideas about to innovation and entrepreneurial activity and evolution of economic systems, and has brought a new dimension to his analysis. There is no room for equilibrium in the analysis of Minsky, which is an investigation of evolution and instabilities of the financial system as the fundamental element of capitalism; rather he has adopted innovative human behaviour and an evolutionist approach (Dow, 2011: 237). For this reason, his analysis is based on open system ontology.

Minsky's Model

Minsky's main problem is the unstable nature of capitalism. According to Minsky, instabilities and crises in capitalist system are inherent to the system, that is to say instabilities are endogenous to the system. Instability of economy is about to nature of economies rather than exogenous shock like petrol

or war or unexpected phenomenon of Money (Minsky, 1986a, 172). As it is said above Minsky has adopted dynamic framework because he argues that instabilities of system are inherent to the system. In the dynamic frameworks, norms or parameters of the system change and therefore open.

This dynamic coordination framework of Minsky can be also seen in evolutionist approach to the financial systems. Financial system is the operation mechanism of capitalist system. The instability of the capitalist system must be also sought in the financial system. Minsky thinks that financial markets are following a path from stable state (stable vulnerable-unstable-crises) to the crises and the process works as such. Financial instability is related to the relative importance of income cash flows in the economy. If realized and expected cash flows of economic units meet all the debt obligations, we are referring the situation of "hedge" financing. If expected and realized cash flows meet only a fraction of the payment commitments, then we are referring the situation of "speculative" financing and in this case, units need to "roll over" their liabilities. In Ponzi financing, economic units need to borrow again to make payment commitments. Such units can sell assets or borrow. This capitalist financing process is the reason why economy is unstable. In the period of temporarily stable economy, the financing status of the units turns into speculative and Ponzi financing situation.

Another proof for Minsky's adaptation of dynamic framework and open system ontology is his ideas on financial innovations. Financial innovations can be described as norm or parameter changes that cause the system to evolve. In Minsky's analysis, financial innovations are the most important factor that destabilizes the system. Financial institutions try to get rid of rigid control through financial innovations and during this process they extend credits. This type of deregulation leads to risky financial innovation and increases the vulnerability of the financial system. In a relatively stable period of positive expectations for the future, financial institutions expand the money supply (which is considered external to mainstream economics). According to the model, when the economy is stable, investors think that economy will be also stable in the future and they become indebted and invest more. Financial institutions, especially bankers, are the ones that accelerate this speculative frenzy. The banking system causes the financial system to grow in a risky manner, through the establishment of new banks or new financial instruments (Kindleberger, 2008: 43-44).

Conclusion

Minsky argues that today's events confirm Schumpeter's vision. According to Schumpeter's vision, economic systems are evolutionist systems, which are subject to historical time and vary depending on internal factors. So, society is evolutionary in a way that cannot be frozen in time and cannot be reduced to static mathematical formulations. No doctrine or vision can be successful that reduces economic systems to equilibrium and stable systems (Minsky, 1992a: 104). In his analyse, Minsky based this vision of Schumpeter and he concluded that the innovations made by financial institutions are an important element in the evolution of financial systems from stable to unstable (Minsky, 1992a: 105).

The success of the Minsky's analysis is this evolutionist and dynamic point of view as an explanation of the capitalist system's crises. Social and economic reality is a dynamic and complex integrity of inherent interactions, constant change, diversification, production and reproduction and therefore it is an open system. In economic process, instabilities and non-equilibrium situations arise from the fact that these systems are open systems and the source of dynamism and discontinuity in economic processes must be looked for within these systems by means of existence. Minsky is an

economist who has adopted an open system approach with an emphasis on both evolutionist processes and internal factors as a source of instability.

Literature Review on Financial Stress Index

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Abstract

In this study, we review the literature on financial stress index. This review reveals that a successful financial stress index demonstrates the well-known crises, business cycles and important events recognized as stress in financial markets. Five sectors, such as the banking sector, the foreign exchange market, the long-term credit market, the stock exchange and commodity market, are considered as mechanisms reflecting stress according to the structure of the economy at hand. In order to measure the effects of the financial stress on the markets, and thus to compare the stress intervals, even though any frequency of data is used in the literature, high frequency is more convenient to detect even subtle changes happening in the financial markets. The widely used methods applied by the studies in the literature vary from variance-equal weight approach, credit weights and simple CDFs to the principal component analysis. This study suggests that to construct a FSI for a small and foreign dependent open economy like the Turkish economy, several sectors should be represented in the applied model. Data with high frequency should also be preferred to be used since that kind of economy is exposed to any changes in the financial markets in the world.

Keywords : Financial Stress, Financial Stress Index, Financial Stability.

JEL Classification Codes : E50, G10.

25 October 2018 Thursday

Session: V / 18.00-19.30

MANAGEMENT & MARKETING

Room: *Mandragola*

Chair: **Altuğ Murat KÖKTAŞ**

- Repro Marketing in Retro Marketing: Eti Bumbo Case

  Havva Kübra ERKAN & Arda ŞAP & Mehmet BAŞ

- A Research on Social Media Usage for Brands: Case of Kahve Dünyasi and Starbucks

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- Double Character of Transnational Social Policy; Good for the Rich, Bad for the Poor?

  Doğa Başar SARİİPEK & Bora YENİHAN

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  Cemalettin AKTEPE

- The Corporate Governance - Approach of the Turkish Commercial Code

  Cafer EMİNOĞLU

Repro Marketing in Retro Marketing: Eti Bumbo Case

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Abstract

As a result of increased competition, businesses have sought to find new strategies to influence customers. Consumers' longing for the past has created a new opportunity for businesses. The name of this opportunity is Retro marketing. Retro marketing; is to reproduce the products that the brands produced in the past, either by adapting them day-to-day or without making any changes. According to Brown (1999) Retro marketing is divided into 3 groups. These; Repro, Retro and Retro-repro. This study researched the retro-repro marketing group and Bumbo products of Eti brand in Turkey were examined.

Keywords : Retro Marketing, Repro Marketing, Eti Bumbo.

JEL Classification Codes : M30, M31, M39.

Introduction

Increasing competition, changing consumer tastes and habits, is driving businesses to search for ways to develop branding strategies. One of the concepts that emerged at the end of this quests is the retro concept which is associated with nostalgia. Businesses that give importance to past habits of consumers and realize the longing for the past tend to this area by realizing the opportunities offered by nostalgia and retro concepts and try to have highest utility by developing strategies on this area.

Retro-with being an English word- has the meanings like "backward, reverse" in Turkish. When retro word associated with marketing, it is expressed moving products and services used in the past to today.

Retro marketing is nostalgia referenced marketing in the form of brands in the past, fashion, etc. revitalization.

Marketing, it has gained strength again thanks to the retro marketing innovation. (Brown, 2001b: 3-4). According to Brown (1999), retro marketing has been investigated in three main groups in the direction of its aims, despite the fact that it is experiencing definite difficulties. These groups are as follows; (Brown, 1999: 365):

- Repro,
- Retro,

- Repro - Retro.

Repro is to reproduce old liked objects. Retro, unlike repro, is a combination of old and new. Repro-Retro, on the other hand, describes products developed using nostalgia. Repro-retrograde, also called neo-nostalgia (Keskin & Memiş, 2011).

In the simplest terms, repro marketing is to reproduce and market the products produced in the past without major changes, preserving the old values. The main purpose is to appeal to consumers' past emotions and revive traditional values.

One of the most recent examples of retro marketing in Turkey is Orange flavoured cocoa biscuit of Eti Brand that named as Bumbo. The reason for reviewing Bumbo in this article is that the very popular and demanded product at the beginning of the 2000's is removed from production without explanation. Then, willingness of consumers that they have wanted to reproduce the product for over 10 years through social media, and as a result of this, the brand's reproduction in 2017 is an example of retro marketing. The need for re-examination of this product is a huge demand after the application of the product to the market.

Methodology

Focus group interview, which is a qualitative interview method, was used in this study. Focus group interviews are research conducted in closed meetings with small groups and used to identify participants' opinions on a topic.

Focus group interview; time savings compared to other studies, advantages such as more flexibility, easier analysis of data, and more economical and natural environment. But there are also disadvantages to discuss sensitive issues, the emergence of dominant groups or a more favourable environment for conflict.

The focus group discussion in this study was conducted with 10 participants who consumed the Eti Bumbo in the 90's and continued to consume it with the re-production, and the effects of Eti Bumbo on the participants were observed.

Findings

In this study; 4 women, 6 men and 10 people were interviewed. There are 2 people in the age group of 20-23, 4 people in the age group of 24-27, 3 people in the age group of 28-31, and 1 person over the age of 32.

In case of monthly income of the participants; there are 2 people less than 1000 TL, 3 people between 1000 and 1999 TL, 1 person between 2000 and 2999 TL and 6 people more than 2999 TL.

Participants have 6 students at the undergraduate level and 4 at the graduate level.

- When you first used Eti Bumbo, the answers are:

1 person consuming in 1994
2 people consuming in 1998
2 people consuming in 1999
1 person consuming in 2000
2 people consuming in 2001

1 person consuming in 2002
1 person consuming in 2004

- What are the associations that Bumbo has woken in our mind, the answers are:

1st participant: monkey, cacao
2nd participant: childhood
3rd participant: cacao, biscuit, orange
4th participant: orange, yellow package
5th participant: orange, teddy bear
6th participant: orange, teddy bear, monkey, lion, elephant, missing
7th participant: orange, childhood, biscuit
8th participant: orange, childhood, teddy bear
9th participant: teddy bear, biscuit, yellow package, orange, childhood, monkey, and lion
10th participant: childhood, orange, spring

They gave their answers. Here, as a common answer, the mostly longing they have for their childhood, the bear and the oranges are remarkable.

- The answers given in the question of what you felt when you were removed from Eti Bumbo's production:

1st participant: sadness, deletion of childhood memories
2nd participant: sadness, reason why
3rd participant: do not notice, do not feel anything
4th participant: sadness
5th participant: sadness
6th participant: sadness, anger, disappointment
7th participant: sadness, search again
8th participant: sadness
9th participant: sadness
10th participant: sadness, disappointment

- Are you taking any action when you are removed from bumbo production? (To communicate with the business, social media campaign, etc.)

9 participants said that they did not do anything, and 1 participant communicated with the wholesaler.

- When asked about whether you have consumed any similar product when you removed the bumbo from production:

There are 6 participants who say yes, and 4 participants who say no. Yes, the participants often pointed out that products such as chocolate biscuits, orange alternatives and Ülker chocolate orange wafers were the main products.

The answers given in the question of how you felt when the Eti Bumbo was reproduced are as follows:

1st participant: happiness
2nd participant: happiness, remember old days

3rd participant: remember old days when I see ads
4th participant: happiness
5th participant: remember my memories
6th participant: happiness, search again
7th participant: immediate purchase request
8th participant: happiness, childhood return
9th participant: happiness, now consuming request
10th participant: happiness

They gave their answers and they were generally perceived to have happiness and desire to consume.

- Whether you have trouble getting there when Eti Bumbo is reproduced:

5 people answered yes, and 5 people answered no, and 2 participants complained that they were not in big markets.

- The answers to the questions about how to think about the Eti brand with the reproduction of Bumbo are as follows:

1st participant: I am glad that they respond to customer requests.
2nd participant: I like the attitude of the Eti brand with the Bumbo production in order to make a difference, but it still needs more moves to make a difference.
3rd participant: Eti must make a difference in the market with new flavours. Bumbo production contributes to this, but more is needed.
4th participant: Eti is a brand I always value.
5th participant: Make feel that Eti cares about its customers has increased brand loyalty.
6th participant: I think that the Eti Brand has a positive effect on the perceptions that occur in our minds thanks to the remembrance of our childhood memories and that our commitment increases.
7th participant: There are many products that the Eti brand is lovingly consumed. The orientation towards the products of nostalgia gave me a positive attitude towards the brand.
8th participant: I liked this approach, I hope it continues.
9th participant: I think it's a loyal brand to the customer.
10th participant: Bumbo lowers the quality of Eti.

- In this regard, what you want to say in addition is the answers given in the question of how:

1st participant: Eti Bumbo should produce more innovative flavours.
2nd participant: I would like this kind of business activities to continue with regard to requests.
3rd participant: Eti brand, turti product must also reproduce.
4th participant: Bumbo should be advertise more and should focus on their advertisements.
5th participant: Bumbo's production must continue at all times.
6th participant: Products such as Eti Oranges, Eti Aydede and Eti Picnic, which are products of the 90's, may be put on the market which may be selling new tastes.
7th participant: I think that most brands and businesses should continue to operate with the needs and desires of people in mind.
8th participant: Approach to reproduce nostalgic products must continue.
9th participant: I love Eti and Bumbo.
10th participant: Eti Bumbo should come back as more innovative.

Conclusion and Suggestion

As a result of this study, it is observed that the repro marketing activity that Eti Bumbo cares about the wishes of the consumers has played a role in bringing consumers back to the past, stimulating memories about Eti, helping to increase their commitment to the Eti brand and triggering the buying behaviour.

For other products that have been removed from Eti brand production (Eti Orange, Eti Picnic, Eti Aydede etc.), consumers may evaluate to reproduce in line with their wishes. Shortcomings in the stocks have been observed since the product was reproduced. The brand can carry out work to eliminate these shortcomings in production and distribution channels.

The study can be carried out in a different product group with different samples. Different businesses can work on this marketing method as the right use of retro-repro marketing strategies increases the emotional attachment to both the product and the brand.

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A Research on Social Media Usage for Brands: Case of Kahve Dünyasi and Starbucks

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Abstract

With the development of technology, social media has entered our lives, has reached a great number of people with the benefits offered. Because of the very popularity of social media among customers in the last few years, it has become a need for businesses to use social media tools for their marketing purposes like escalating brand awareness, communicating with their customers and get feedback from them. Starting from this point of view, the relationship between Starbucks and Kahve Dünyası, which are in Coffee sector in Turkey, and the consumers on social media were studied by examining these brands' social media accounts.

Keywords : Social Media Marketing, Starbucks, Kahve Dünyası.

JEL Classification Codes : M30, M31, M39.

Introduction

Today's Brands should know their costumers well these days because they are social creatures like humans with personalities, values and images. Nowadays, the companies that can follow the innovations are aware of the importance of being customer-oriented. At this stage, the brands and the companies should follow some strategies to be able to respond to demands quickly, to communicate well and collect decent information about the customers. Developing communication technologies contributes to execute these strategies to make the contact between the brands and the consumers easy. Brands use social media which has no time or location limit to communicate with customers.

Social Media can be described as web sites which provide an opportunity for users to express themselves on-line, to contact with other people, to join the groups and contribute with their own opinions and comments (Köksal & Özdemir, 2013).

The shortest and the simplest way to describe social media are both platforms and websites that provide an opportunity for sharing ideas, opinions and information online.

Increasing usage of social media and unlimited access to social media regardless of the time and the location leads the companies or brands to use social media for marketing. This situation reveals the concept so called social media marketing.

Low costs, fast spreading and up-to-date information, easy access, a friendly platform, the opportunity of knowing about your target audience and being popular are the strengths of social media for marketing and these strengths attract most of the companies from all different fields (İbiş & Engin 2016: 325).

Methodology

The study investigates the effect of marketing activities of Starbucks and Kahve Dünyası coffee chains on social networking on consumer brand loyalty. It is aimed to measure how much consumers' social media usage levels and interaction levels in coffee chains on social networks influence over their brand loyalty.

The study was conducted in Starbucks and Kahve Dünyası branches in Ankara, as the research focuses on the use of social media in coffee chains. The main mass of this research is the consumers who use social media in the coffee chains in Turkey. Since the main mass of the research is very large, the convenience sampling method is preferred. Since a large number of data are needed to test the hypotheses in the research model, the questionnaire was chosen as the data collection tool.

Between 1 July and 31 July, 154 completed questionnaires were obtained. Of the questionnaires that were examined in terms of their suitability for analysis, 150 adjectives were found suitable and used in the analysis. The questionnaire used in this study consists of four parts. In the first part, questions about demographic characteristics are included. In the second part, questions about the frequency of use of social media tools are included. In the third part of the questionnaire, questions were asked to identify the coffee chains preferred by the participants and their interactions with these coffee chains in social networks. In the fourth chapter and the last chapter, a judgement has been included to measure the effect of social media tools on consumer behaviour before and after purchasing and to measure brand loyalty. For both questions that show the effects of social media tools on consumer behaviours before and after purchasing and questions for showing brand loyalty, a 5-point Likert-type scale was used and the participants were asked to select the most appropriate one from the options: "I absolutely agree, I agree, I agree, I do not agree, I do not agree" to be elected.

Findings

Descriptive Statistics

Of 150 people who participated in the survey, 86 were male and 64 were female. Men make up 57.3% of all participants and 42.7% of participants are women. 88.7% (133 people) were single and 11.3% (17 people) were married. Ages from participants; 102 (68%) in the age range of 18-25, 32 (21.3%) in the age range of 26-33, 7 (4.7%) in the age range of 34-41, 4 (2.7) in the age range of 42-49, 5 (3.3%) in the age range of 50+.

In the question "How often do you use social media?", 139 participants answered every day, and 11 respondents answered 4-5 times a week. The answers given in the question "How long do you spend in social networks during the period you are using?" 38 people (25.3%) "Less than 1 hour", 75 people (50%) "1-3 hours", 25 people (16.7%) "4-6 hours" and 12 people (8%) "6 hours and above." The answers to the question "What social media platform do you use the most?" are like this; 11 people Facebook, 24 people Twitter, 94 people İnstagram, 14 people YouTube, 4 people others. Responses for "Which devices do you use to reach social media tools?" question are like this; 13 people personal computer, 1 person work computer, 132 people tablet or mobile phone and 4 people other.

Among the questions directed to the participants to measure their brand followership, to the question "Which of the following coffee chains do you prefer?" 96 (64%) participant responded Starbucks, 24 (16%) participant responded Kahve Dünyası and 30 (20%) participant responded other. Respondents who preferred "other" indicated that they preferred Chibo, Kahve Akademisi, Arabica and boutique coffee establishments. Responses to question "Are you interacting with the coffee chain you prefer via social networks?" are; 45 (30%) participants answered "Yes" and 105 (70%) respondents answered "No".

Research Hypothesis

H1a The attitude towards social media marketing activities differs according to the time spent on social networks.

H1b The attitude toward brand-related sharing differs in social media according to the time spent on social networks.

H2a The attitude towards marketing activities in social media differs from the preferred coffee chain.

H2b According to the preferred coffee chain, the attitude towards brand-related sharing differs in social media.

H2c Brand loyalty differs according to the preferred coffee chain.

H3a The attitude towards marketing activities in social media differs depending on whether or not interaction with social networks is achieved with the preferred coffee chain.

H3b The attitude toward brand-related sharing differs in social media, depending on whether or not interaction with the preferred coffee chain occurs in social networks.

H3c Brand loyalty differs according to whether or not interaction with the preferred coffee chain occurs in social networks.

Data Analysis

First, the normality of the independent variables in the research was examined by looking at the coefficients of skewness and kurtosis. The skewness and kurtosis coefficients of the independent variables range from -0.972 to 1.311. It was observed that the coefficients of skewness and kurtosis were normalized with values between -1.5 and +1.5 (Table 1).

Table 1. Skewness and Kurtosis

	Skewness	**Kurtosis**
Attitude Toward To Social Media Marketing	-,972	,606
Social Media Sharing	-,068	-,624
Attitude Toward To Brand	-,901	1,311

Factor analysis was performed to determine the sub-dimensions based on the obtained data. Preliminary studies were carried out with the Kaiser-Meyer-Olkin (KMO) coefficient and Bartlett Sphericity tests to check the suitability of the analysis. The results of the analysis were as follows: BMD value of 0.818 and Bartlett test result of 0.000 ($p < 0.005$). Factor analysis was found to be appropriate because the BMO value is over 0.70 and the Bartlett Sphericity value is significant below

p <0.005. In factoring, varimax is used as a vertical rotation method. Two factors have been determined on the exponent 1 after the rotation.

As a result of the judging factor analysis to measure the effect of social media tools on pre-purchase and post-purchase consumer behaviour, the first factor is composed of 7 expressions and the factor load values vary between 0,565 and 0,876. Factor is called "Attitude towards social media marketing". The second factor of the scale consists of 5 expressions and the factor load values range from 0.648 to 0.911. The factor is called "sharing towards the brand in social networks". The first factor accounts for 44.928% of the total variance, while the second factor accounts for 21.816%. This explains 66.789% of the total variance of the scale. When the reliability analysis of the factors is performed, Cronbach's Alpha coefficient of the first factor is 0.890 and Crombach's Alpha coefficient of the second factor is 904. When any of the expressions in the factors are removed, the Cronbach's Alpha coefficient drops. As a result, the reliability of the factors is adequate (Table 2). The Brand Loyalty Scale is considered as a single factor and is composed of 7 expressions. As a result of the reliability analysis, Cronbach's Alpha value was observed as 0.917.

Table 2. Factor Analysis

Factor	Expression	Factor Load	Explained Variance (%)	Cronbach's Alpha
Attitudes Toward Social Media Marketing	I find it useful for companies to use SM tools for their marketing activities.	,876	44.928	0,890
	Companies need to use SM tools to realize their marketing objectives.	,830		
	SM is suitable for firms to communicate with consumers.	,828		
	I enjoy companies using the SM tools for marketing activities.	,786		
	I think it is fun for companies to use SM tools for their marketing activities.	,740		
	If a brand communicates with me via SM that affects me positively.	,701		
	A brand that I am not satisfied with the goods and services communicate with me via SM, it may cause to change my mind.	,565		
Brand Oriented Sharing in Social Network	If I am satisfied with the product I am purchasing, I would recommend purchasing products other users on SM.	,911	21,861	0,904
	If I am satisfied with the product I buy, I will share it on SM.	,895		
	If I am not satisfied with the product I bought, I will share it on SM.	,866		
	If I am not satisfied with the product I buy, I would recommend on SM that not buying products to other users.	,843		
	I participate with the campaigns that brands organize on SM.	,648		

Hypothesis Tests

Hypothesis 1: One-way variance (ANOVA) test was used because the difference is needed in the hypothesis and the dependent variable had more than two groups.

H1a The attitude towards social media marketing activities differs according to the time spent on social networks: In the first step, the significance (p) value of the Levene Test is examined to determine whether the variances are homogeneous. At this stage, the value of p (0.001) smaller than 0.05 indicates rejection of H0, ie the variances are not homogeneous. When the significance of the ANOVA test was examined, significance (p) was determined as 0.004 <0.05, meaning there were significant differences between the groups (Table 3).

Table 3. H1a One-Way ANOVA Test Summary

Attitude Toward to Social Media Marketing	Mean	Std. Deviation	F	P
Less than 1 hour	3,4737	,80409	4,575	,004
1-3 Hour	3,9314	,75204		
4-6 Hour	4,1543	,54229		
More than 6 Hours	3,7619	1,17224		

The Games-Howell test, which can be used when the variances are not homogeneous from post hoc tests, has been applied to determine which groups differ. As a result of the test, significant differences were found between the participants who used social media less than 1 hour and the participants who used 1-3 hours and 4-6 hours (Table 4).

Table 4. Summary for Games-Howell Determining Difference between Groups

Games-Howell	Std. Error	P
Less than 1 hour 1-3 hour	,15670	,024
4-6 hour	,16964	,001
More than 6 hours	,36267	,856

H1b The attitude towards brand-related sharing differs in social media according to the time spent on social networks: First, the homogeneity of the variances was examined, and it was determined that the variances were not homogeneous because the p value was less than 0.05 (0.002). When whether there was a significant difference between the groups in the result of Anova test, it was found that there was no significant difference between the groups (p 0.161> 0.05). So H0 was accepted and H1b was rejected (Table 5).

Table 5. H1b One Way ANOVA Test Summary

Attitude intendant to share brand on SM	Mean	Std. Deviation	F Value	P
Less than 1 hour	2,6474	1,04642	1,741	,161
1-3 Hour	2,8773	1,00587		
4-6 Hour	3,1600	,75498		
More than 6 Hour	3,2500	1,59801		

For Hypothesis 1; H1a was accepted, H1b was rejected.

Hypothesis 2: One-way variance (ANOVA) test was used because the difference was found in the hypothesis and the dependent variable had more groups than 2 groups.

H2a Attitude towards marketing activities in social media differs according to the preferred coffee chain: Firstly, it was found that the variances were not homogeneous because the p values were less than 0.05 (0.023) in the conducted Levene test to see if the variances were homogeneous. Anova test showed that the p value was greater than 0.05 (0.309), so there was no significant difference between the groups. H2a was rejected (Table 6).

Table 6. H2a One-Way ANOVA Test Summary

Attitude Toward to Social Media Marketing	Mean	Std. Deviation	F Value	P
Starbucks	3,8943	,76980	1,185	,309
Kahve Dünyası	3,8690	,60597		
Other	3,6381	1,01622		

H2b Attitude towards branding differs in social media compared to the preferred coffee chain: First, the p value was found to be greater than 0.05 (0.868) after the Levene test, when the homogeneity of the variances was observed. So, the variances are homogenous. In the Anova test, p value was found to be 0.229> 0.05, so there was no significant difference between the groups. H2b was rejected (Table 7).

Table 7. H2b One-Way ANOVA Test Summary

Attitude intendant to share brand on SM	Mean	Std. Deviation	F	P
Starbucks	2,9104	1,03288	1,490	,229
Kahve Dünyası	3,1417	1,08183		
Other	2,6533	1,03848		

H2c Brand loyalty differs according to the preferred coffee chain: When the homogeneity of the variances was examined, it was observed that p value was greater than 0.05 (0.081). Variances are homogeneous. Anova test was performed to determine whether there was a significant difference between the groups. The significance of the Anova test was found to be 0.00 <0.05, indicating a significant difference between the groups (Table 8).

Table 8. H2c One-Way ANOVA Test Summary

Attitude Toward to Brand	Mean	Std. Deviation	F	P
Starbucks	3,9315	,72872	9,579	,000
Kahve Dünyası	3,7679	,69325		
Other	3,2190	,97450		

The Tukey HSD test, which can be used for homogeneous variances, has been carried out from the Post Hoc tests to determine between which groups the difference lies. As a result of the test, it was found that there were significant differences between participants who preferred other coffee chains and attitudes of participants who preferred Starbucks and Kahve Dünyası (Table 9).

Table 9. Tukey HSD Summary for Determining Difference between Groups

Tukey HSD		Std. Error	P
Other	**Starbucks**	,16279	,000
	Kahve Dünyası	,21314	,029

For Hypothesis 2; H2a and H2b were rejected and H2c was accepted.

Hypothesis 3: Independent two sample t-tests were used to determine whether the attitudes indicated in the hypothesis three sub-hypotheses were significantly different from those of the preferred coffee chain in terms of interaction with social networks.

In the first step, the significance (p) value of the Levene Test obtained from the t-test is examined. When the value of P is greater than 0.05, it means that the variances are equal among the groups, whereas when the value of p is smaller than 0.05, the variances are not equal.

H3a The attitude towards marketing activities in social media differs according to whether or not interaction is made with social network with preferred coffee chain: The result of the t-test shows that the value of p value of the Levene tests is greater than 0.05 (0.73) and this means variances are equal. In this case, the value of p (sig (2-tailed)) in the first row is checked to see if the variances are equal. This value was observed to be less than 0.05 (0.029), so that there were significant differences between the two groups (Table 11).

Table 10. Group Statistics

	Do you follow the coffee chain you prefer on social media?	N	Mean	Std. Deviation
Attitude Toward to Social Media Marketing	Yes	45	4,0571	,74816
	No	105	3,7456	,81175

Table 11. H3a t-Test Summary

Levene		t-test	
F	**P**	**t**	**Sig. (P)**
3,257	0,73	2,204	,029
		2,278	,025

H3b Attitude toward brand-related sharing differs in social media, depending on whether or not interaction with the preferred coffee chain occurs in social networks: The significance value of the Levene test was 0.339> 0.05 as a result of the t-test. The variances are equal, so the value of p in the first line in the t-test is looked at. This value shows that there are significant differences between the two groups whose values are less than 0.05 (Table 13).

Table 12. Group Statistics

	Do you follow the coffee chain you prefer on social media?	N	Mean	Std. Deviation
Attitude intendant to share brand on SM	Yes	45	4,0571	,74816
	No	105	3,7456	,81175

Table 13. H3b t-Test Summary

Levene		t-test	
F	**P**	**t**	**Sig. (P)**
,919	0,339	4,385	,000
		4,487	,000

H3c Brand loyalty differs according to whether or not interaction with the preferred coffee chain is in social networks: According to the Levene test, the variances are evenly distributed (p 0.285> 0.05). Therefore, in the t-test, the values of p (sig (2-tailed)) in the first row are checked to see if the variances are equal. Significance was less than 0.05 (0.00), meaning that there were significant differences between the two groups (Table 15).

Table 14. Group Statistics

	Do you follow the coffee chain you prefer on social media?	N	Mean	Std. Deviation
Attitude Toward to Brand	Yes	45	4,1175	,69539
	No	105	3,6109	,82791

Table 15. H3c t-Test Summary

Levene		t-test	
F	**P**	**t**	**Sİg. (P)**
1,152	0,285	3,595	,000
		3,854	,000

For Hypothesis 3; H3a, H3b and H3c were accepted.

Conclusions and Recommendations

The purpose of this study is to examine the attitudes of the marketing activities of Starbucks and Kahve Dünyası coffee chains on social networking to consumer brand loyalty and attitudes towards social media marketing activities.

As a result of the research conducted, it was observed that a large number of participants (92.6%) spend time in their social networks every day of the week. At the same time, 50% of the participants

stated that they spent between 1 and 3 hours a day on social networks. Therefore, it can be said that participants used social networks very actively and that they spent at least 1 hour of their days on social networks. According to the results obtained from section b of hypothesis 1, participants who spend more time on social networks (1-3 hours and 4-6 hours) has been observed to give more positive reactions to marketing activities in social networks compared to other participants. Therefore, it can be said that participants who spend more time on social networks are more interested in social media marketing activities. However, in the results obtained from section b of the hypothesis, it was observed that the time spent in social networks did not cause any difference in the attitude towards sharing in the social media. Therefore, no impact of the time spent on social networking on sharing towards brands or feed backing on social networking has been observed.

According to the chosen coffee chain for H2 hypothesis, no difference was spotted in attitude towards marketing activities on social media and sharing on social media about the brand. That is, the preferred coffee chain does not affect the attitude towards marketing activities carried out in social networks. There is also no impact on the participants' willingness to share in the brand on the social networks. However, when we look at the results of section c of the H2 hypothesis, it is observed that the coffee chain preference of participants is different in their attitudes towards brand loyalty. Towards the judgements for brand loyalty, participants who preferred the Starbucks and Coffee world responded more positively than the other participants. Therefore, the brand loyalty of the participants who prefer these two brands is higher than those who prefer "other" option.

Although participants were active in social networks, only 45 (30%) responded yes to the question "Are you interacting with the coffee chains you prefer with social networks?" Participants are active in social networks, but not a very large part of them interact with these brands from social networks. When we look at the H3 hypothesis, participants who responded "yes" to the question "Are you interacting with the coffee chain you prefer with social networks?" are more positive towards both judgements for social media marketing, judgements for sharing the brand in social networks, and judgements with brand loyalty than the participants who are not involved in judicial interactions. Therefore, the attitudes of the followers of coffee chains on social network towards the brand's marketing activities on social network is more positive along with feed backing and sharing about the brand than those who do not follow coffee chains on social network. At the same time, their brand loyalty is higher. For this reason, it is very important that coffee chains increase the number of customers they interact with in social networks. Increasing the number of people with whom these brands interact in social networks will contribute to increasing the brand's commitment. In addition, it has been observed that the followers of the brands on social networks are more open to sharing towards the brand in the social media than those who do not follow them. Therefore, increasing the number of followers of brands will also increase the number of people sharing feedback and branding. Users sharing the brand will both contribute to the awareness of the brand as they have provided feedback and have introduced the brand to its followers. Positive feedback and sharing will also contribute to increasing the brand's reputation in the customer's eyes.

The results of the research show that the interaction through social media generally influences brand loyalty.

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Double Character of Transnational Social Policy; Good for the Rich, Bad for the Poor?

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Abstract

Although it is not a new type, transnational social policy has been shadowed in academic analyses by, to a great extent, international, global and supranational social policy debates. While at first it was mostly an individual incidence, which is far from being a systematic and planned relationship between nations, recently it became a more common and a mass movement phenomenon due to some developments, such as forced migrations from regions in war and willingness of rich countries to apply it as a beneficial tool in the provision of their care needs. Put clearly, transnational social policy is increasingly emerging as a system where rich country collectively pay for benefits to poor people in poor countries. This means a real threat for welfare states since they are founded and planned nationally, and welfare is a national concern in every country, circumscribed everywhere by the nation's borders and reserved for its residents alone. In its current position, a welfare state is a national state. While it is not for sure right now that whether a next phase will occur or not in welfare state and if there will be, it would absolutely be determined to some extent by transnational movements of individuals from different nationalities. The basic problem here is to decide whether those transnational "voyagers" should be considered only the service providers, namely the welfare helpers, of rich governments, or they should be entitled for the same welfare rights as the residents already have due to the integration intentions. Regardless of whatever way is picked; transnational social policy is one of the key steps for global welfare state transition.

As a core feature, a welfare state's ultimate goal is to reach the complete loyalty of socially mobile population sectors, particularly workers and other fighting classes. All welfare provisions were launched in the first place and developed in time. This goal was also the basic motivator for Bismarck and later Beveridge as well. Speaking of transnational voyagers' perspective, they are already not keen on being socially mobile. On the contrary, they tend to be invisible to the system. In other words, developed welfare states do not feel the obligation of granting them the same welfare rights and entitlements as the native residents.

In the scope of contemplating welfare states in an international perspective, one should see that territories of states are strictly closed to other states as default and thereby, welfare states have concrete barriers just for foreigners not to violate the domain of welfare entitlements which are designed for residents only. To this end, a welfare state is both a national and an anti-international system at the same time. In short, a socially secure society is always a closed society as well.

A key question to ask rises right here; is there any possibility that these national welfare states can come together and constitute a transnational welfare system? As further questions; is a global level

care system reachable target or just a utopia? Under such a global system, what kind of duty-sharing between poor and rich countries will occur? Will rich countries keep enjoying the high level of welfare in return for poor countries duties of welfare provision under the assumption of transnational welfare state?

The answer for the first question is quite clear: When they come together, welfare states do not constitute an international welfare system, but a bunch of distinct systems. However, the situation has started to change recently as developed welfare states started to benefit from those transnational voyagers as important inputs of their welfare systems. Welfare states today need them at least as much as they need welfare states. In other words, new circumstances make it even for both sides. At the exact moment when those transnational voyagers recognise their own powers, double welfare market will be over, and they will experience the upgrade from secondary market to the primal one. In this sense, it would be possible to talk about a transnational system of welfare for transnational caregivers. Put differently, the first step for a transnational welfare system will be taken thanks to transnational voyagers.

Keywords : Transnational Social Policy, Caregiving, Welfare State, Welfare Provision.
JEL Classification Codes : I31, H53, Z13, F22.

The Future of International Road Freight Transport Companies in Turkey: Challenges and Solutions

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Abstract

Road freight transport is not considered to be one of the largest transportation modes of our time, though it has continued to be one of the most important considerations of international trade throughout the history. Today, although most of international trade is known to be carried by sea transport, road freight transport is still of particular importance for our country. A relatively significant portion of our exports and imports has been carried out by road freight transport. Considering the last five years, 35% of our exports and 16% of our imports are realized through road freight transport. Despite these rates, road freight transport is expected to have a shrinking share due to the efforts to reduce its share over time because of both the high costs and harms it causes to the environment. On the other hand, considering the number of transportation vehicles, Turkey ranks 11th in the world, which signals that the country needs to produce new policies for road freight transport of goods. The aim of this study is to present the current situation of the companies in Turkey that carry out international road freight transport and the measures they take and are required to take and to suggest a prospective vision. For this purpose, the researcher carries out a situation analysis via face-to-face interviews with six logistics companies carrying international goods and develops alternatives solutions to the existing problems.

Keywords : International Trade, Logistics, Road Freight Transport of Goods.

JEL Classification Codes : F14.

Introduction

There are many sub operations in international trade logistics. In addition to storage, packaging, labelling, customs clearance of goods, and insurance, one of the most important issues undoubtedly is international transportation. Each of these processes closely affects the performance of the other. An error or a deficiency that may occur can easily affect the entire transportation system.

In addition to sea, rail, and air transport, road freight transport also creates a significant financial growth in many regions.

Increasing competition and crises because of globalization necessitate the reduction of profit margins and transportation in optimal time (Küçük, 2014: 65). On the other hand, service purchases, such as transportation, contain a considerable amount of detail according to the purchase of goods. Therefore, the margin of error increases (Cora, 2016: 9).

The road freight transport, which is quite ideal for the delivery of goods that are not transported too far and excessively high in tonnage and appears to be one of the frequently-used modes of

transports in international trade, is the primary mode of transportation for the export and import operations in Turkey (Dölek, 2015: 16).

While cheaper, safer, and faster modes of transportation have been developing and influencing the preferences of the industry, the road freight transport continues to be significant in Turkey as in many parts of the world. As of today, approximately 50% of our exports are carried out by road.

Nowadays, road freight transport is the most preferred mode of transportation since it is reliable. It is widely used and can make more cargo transported. All modes of transportation, e.g. moving a house or a factory, are realized via road freight transport. Road freight transport is the most commonly used modes of transportation for both the convenience and costs (<www.webnak.com.tr>). It is effective particularly in countries/regions where there are border trade and regional integration. In China, one of the most important agents in world trade, a significant correlation is observed between the quantity of the road freight transport of goods and the regional agreements. This development can be accounted not only for China but also for the European Union, which is the most important regional integration of the world.

The existence of practices that ensure the compatibility of the road freight transport with the other modes of transportation helps maintain the share of road freight transport. For example, while Ro-Ro transport makes the sea transport possible, road freight transport linked with rail transport systems is also increasing due to the increase in international integration.

Considering the case of Turkey, the fact that the destinations within a 40-hour transport period make up a significant portion (60%) of our exports can be a strong proof that road freight transport is indispensable. Therefore, it is important to demonstrate the pros and cons of road freight transport with a good analysis and identify common policies. Accordingly, the following factors can be listed to sort out the pros of road freight transport.

- The most important advantage of road freight transport is that it allows the transportation of low number of products in short and medium distances in a flexible and fast manner. Thus, it enables the companies that handle order-based work to make ‘Just in Time’ deliveries.
- Besides, the expected waiting time in the ports is bypassed thanks to the road freight transports, and the goods can directly be delivered to the customers’ warehouses. The goods can be delivered to the buyers by road freight transport as safely as sea transports.
- There is usually very little need for terminals.
- It is the most convenient way to connect the whole production and consumption centers, that is, door-to-door transport.
- The transportation network is almost with no borders under appropriate geographical conditions.
- It provides fast service.
- It allows 24/7 loading/unloading/departing and provides convenience in loading and unloading.
- It makes searching and managing rental vehicles easy and allows frequent operations.
- It has relatively low handling costs and risk of damage.
- It is more efficient and economical in short distance.
- It has transportation capacities in very different volumes.

- The transportation vehicle is under the control of the sender/carrier to a large extent.
- It enables to increase and decrease the speed of the transportation.
- It provides easy adjustment with departure and arrival times.

Even though road freight transport is cheaper compared to air transport and has the advantage of delivering the goods in a short time compared to sea transport, it has serious disadvantages especially in terms of cost and safety in some countries. Taking a close look at these disadvantages, the following factors are observed.

- The most important disadvantage of road freight transport is that it has higher transportation costs compared to other modes of transports,
- Fewer infrastructure investments compared to other modes,
- Low amount of cargo transported at once,
- Weight limitations,
- Bad weather conditions,
- Sensitive to the load balance of both ways,
- Inadequate equipment at high volume deliveries,
- Higher risk of an accident,
- Environmental pollution, traffic density and occupying more inland, and infrastructure requirements,
- Price uncertainty in market fluctuations.

In addition to the disadvantages mentioned above, some significant risks emerging from the nature of international trade and the development of world trade await road freight transport. The fact that the world's major exporting/importing countries are in distant parts of the world makes sea transport advantageous. Today 95% of the world's trade is carried out by sea. However, due to the rapid developments in technology in the last 20 years, it is expected that road freight transport will make a competitive move parallel to the development in the world. Despite these moves, there are some developments in the world trade processes that will put international road freight transport in a difficult position. It is important to take measures to ensure that our country's foreign trade is affected in the least way from these negative developments. For this purpose, the determination of the problems and risk factors encountered in international road freight transport is considered important for the success of the measures to be taken.

Threats for Road Freight Transport

Although road freight transport is not the most advantageous mode of transport in international trade, it has a significant place in Turkey's foreign trade. Turkey is one of the countries that have the largest transport fleet in Europe for the road freight transport of goods. Due to its location, it is possible to reach the EU territory where the most important foreign trade partners are located by an average of 40 hours of road transport. On the other hand, Russia and the emerging markets of Europe that constitute the formerly independent states are close to us. The Middle East and Gulf countries which have taken a significant share in the field of international trade for the last 15 years are also within our reach by about the same hours of transport. For these reasons, the road freight transport of goods has

been important for Turkey's foreign trade, and it appears to be that way for a while. In addition to all these developments, according to the information compiled from the National Energy Efficiency Action Plan (2016), it is planned to develop combined transportation applications in freight transport to ensure a balanced distribution between modes of transport.

On the other hand, the external costs of transportation are closely monitored by the European Union (Janic, 2007: 37). Moreover, it is aimed to increase the share of rail transport over 15 percent and the passenger transportation over 10 percent to increase the share of rail and sea transports and to move to corridor-based approach in transportation planning (<www.Lojipark.com>). Thus, the share of the road freight transport of goods is planned to be reduced from 90% to 60% by the end of 2023. This way, the share of other modes will increase. The aim is to reduce the fossil fuel consumption of motor vehicles and increase the share of the rail and sea transports by the city in the transportation of goods.

According to data from 2015, about 25 percent of Turkey's final energy consumption has been realized in the transportation industry. The fact that 91.6% of the energy consumption in transportation is realized by road freight transport brings about the necessity to reduce the share of road freight transport in modern transportation systems, which is clearly stated in all platforms by all relevant institutions and international organizations. The common position is to increase the penalties for many issues such as "the delivery time commitment between pickup and delivery point, responsibility for lost, damaged, and stolen goods, moving on an available route in compulsory conditions, and carrying the loads back" in international road freight transport. As a matter of the provisions of the convention, Turkey is a party to the CMR Convention; therefore, application of the provisions of the agreement is essential.

In general evaluation, in addition to current problems such as severe financial conditions, penalties, and bureaucratic restrictions in business processes, the biggest threats to the industry are discussed in the following six factors. These are;

- Costs and pricing,
- Time factor and speed of delivery,
- Expansion of the distribution area,
- Sources of risk,
- Tonnage and quantity factor,
- Prohibitions and restrictions emerging from international agreements.

In-depth interviews were conducted with five international transport companies that agreed to discuss how these six factors are perceived by the sector, and what kinds of negative developments are they experience in their businesses, and how to resolve them. As is known, the interview method is frequently used as a qualitative research method. In this study, it is concluded that the interview method is the most appropriate method to reach the results for the research. Steward and Cash (1985) describe this method as a mutual and interactive communication process based on asking and answering questions with a predetermined and serious purpose (Yıldırım & Şimşek, 2016: 129). Interview method is an ideal method for uncovering the problems and opinions of the parties with a qualitative research especially on very different topics and topics with subtopics. When compared to other methods such as focus group interview, observation, or document review, the interview method discloses the problems of the sector and the perception of the sector representatives more clearly. For this reason,

face-to-face interviews with sector representatives were planned and realized within the framework of a specific protocol. The researcher conducted the structured interview. Instead of a having a conversation, an interview form has been applied. The interview process allowed to maintain a flexible structure depending on the flow of the interview. This method also offers the possibility to elicit some answers that the sector representatives did not want to give away sooner with the help of further questioning. The distinctiveness of instant responses and in-depth discussion of some issues are also among the important advantages of the interview method. The main objective is to reveal the similarities and differences between the perceptions of the business managers interviewed, their perception of threats and the ways they perceive them, and their views on the solution. In doing so, it is holding a discussion on a predetermined subject. It is also presented to what extent the data from the interviews in the study agree with the literature.

Findings

In this study, five volunteer businesses that are based in Ankara and have branches in Ankara were interviewed. The interviews were conducted with each business with a predetermined 6-point interview protocol covering the points previously mentioned. As the names of the businesses are agreed to be kept confidential by both parties, the codes in the form of letters (A, B, C etc.) are used instead.

In the study, the answers are coded (+, ++, +++) and tabulated by preparing separate tables for each factor addressed. In the process of the tabulation, the researcher tried to classify and shorten the interview data obtained in the form of texts with + statements.

The meaning of +'s (pluses) in all tables given above and in the following parts is as follows;

+++ very, very important,

++ very important,

+ Important.

Cost and Pricing	Fuel	Motorways Tolls	Unfair Practices	Quota Costs	No Return Load
Company A	+++	+++	++	++	++
Company B	++	++	++	++	++
Company C	++	++	+	++	+
Company D	+	++	++	+	++
Company E	+++	+++	++	+	++

For cost and pricing factors, different countries, especially the EU trade is not sufficient because of the commercial quota for Turkey. The existence of these quotas hinders potential trade. However, the companies we interviewed stated that they were not disturbed by the existence of these quotas. This point was found interesting.

Time / Speed Factor	Transit Times in Customs	Quality of Highways	Car Features	Remote Destinations
Company A	+++	+	+	++
Company B	++	++	+	+++
Company C	+++	+	+	++
Company D	++	++	+	++
Company E	++	+	++	++

For time and speed factor, although in the literature factors such as highway quality and vehicle characteristics are mentioned, enterprises state that the quality of motorways is not a significant factor.

Vehicle features, however, did not present a disadvantage for Turkish businesses. Quality of Highways includes roads, floors, tunnels, overpasses and overpasses and signs (Görçün, 2010: 3).

Width of Services Area	Exporters in Far Regions	Road Transport Agreements in Remote Areas	Additional Costs of Remote Regions	The choice of highway in remote areas to be	No Transit Route
Company A	+++	+++	+++	+++	++
Company B	++	+++	++	+++	++
Company C	+++	+++	+++	++	++
Company D	++	+++	+++	+++	+++
Company E	++	+++	+++	+++	++

For the width of the service area, the limitation of transit transitions was not considered to be an important factor in contrast to the literature. Remote delivery points were not seen as a threat to road transport.

Sources of Risks	Thefts	Surprise Driver Visa Barriers	Driver Unavailability	Accident
Company A	+	+	++	+
Company B	+	++	++	+
Company C	++	+	++	+
Company D	+	++	+++	+
Company E	+	+	+++	+

The risks and theft risks foreseen by the literature within the risk sources factor are not considered as risk factors for Turkish enterprises.

The absence of drivers and the prolongation of total carriage times are other factors that have emerged in another study (Hanssen et. al, 2012: 193).

Tonnage and Quantity Factors	Tonnage	Kind of Products
Company A	+++	+++
Company B	++	+++
Company C	+++	++
Company D	++	+++
Company E	++	++

The nature and quantity of the product to be transported in foreign trade is an important factor for the selection of the transport mode. This sector can be closely monitored.

International Agreements Applications	Decrease in Traceability	Requesting Multiple Documents	Data Input Obligation	Trade Barriers
Company A	++	+++	+++	++
Company B	++	+++	++	+
Company C	++	++	+++	++
Company D	++	+++	++	++
Company E	++	+++	+++	++

The traceability of transport vehicles in international regions is not seen as a threat to enterprises. In the recent period, the existence of important software and technological developments have eliminated this problem.

Results

In the scope of the study, interviews were held with the managers holding different positions in the five businesses that carry international goods. Because of the findings obtained from the interviews, the researcher has reached the following results.

1. Among the existing problems, the businesses participating in the interview emphasize six factors as the most important problems that threaten the sector. These six factors that this study also focuses on appear to be the ones mentioned above.

- Costs and pricing,
- Time factor and speed of delivery,
- Expansion of the distribution area,
- Sources of risk,
- Tonnage and quantity factor,
- Prohibitions and restrictions emerging from international agreements.

However, because of the interviews, it is observed that there are sub-factors that bring about these 6 factors, and each sub-factor is evaluated separately.

2. The constant increase in fuel prices and tolls are notable, particularly among the cost factor. Another important point is the absence of a load on the way back. 72% of the Turkish transport vehicles exporting goods cannot find loads to be delivered to Turkey or a different location. The ratio of foreign carriers in Turkey's imports tend to rise. This ratio was 31% in 2016 and went up to 35% in 2017. Especially Bulgarian, Iranian and Romanian carriers are noteworthy for this increase.

Another important disadvantage of the road transport is the expansion of the distribution area. Apart from our trade with the European Union, the Middle East or Russia and the Other Baltic States, the fact that Turkey does not have road transport agreements with more distant areas or multilateral agreements with these countries brings about crucial problems. The presence of transit restriction between Turkey and the EU and that these problems are not to be solved reduce the foreign trade approximately 3.5 billion euros single-handedly. 1.9 billion dollars of this amount can be added to Turkey's foreign trade as exports (<www.ulasimonline.com>). These distant geographies increase the risk factors as well as the costs. However, the most important problem is that the transporters do not prefer road freight transport after a certain distance.

4. The most important risk factors of road freight transport are discussed under two components. The most important risk factor is stated to be that it is becoming more and more challenging for employers to find good drivers. Drivers, on the other hand, express that due to low wages and the difficulty of working conditions, finding drivers will become even more important in the short time.

5. Another threat that was found out about is the shift of large quantities of deliveries in tonnage to the other modes of transport. Excluding air transport, especially sea transport and rail transport that has recently been promoted with international projects (e.g. one belt, one road) pose difficulties for road transport. The fact that some types of goods are not convenient to be carried out by the road transport makes this mode confined to certain sectors only.

6. Another important threat is the practices emerging from international agreements. Turkey is a party to international and multilateral agreements, and there is an increase in the number and types of documents in foreign trade for road freight transport. The increase in the number of documents in the last 10-year period is around 50%. In 2006, the transportations needed 39 documents, and today the number increased to 58 (<www.kargohaber.com>). In addition, electronic data entries, which are also applicable in our country, are requested by different countries nowadays. Providing and monitoring the data correctly is extra workload on the carriers and a mistake, in this case, would cause delays and higher costs.

As a result, the share of road freight transport of goods within total transportation tends to decrease in parallel to the developments in the world. This decrease is slightly less than the average for Turkey.

Therefore, road freight transport is more important for Turkey than in other countries. Furthermore, a large part of the problems mentioned above are the ones that can be eliminated by multilateral agreements. The resolution of these problems can be realized by taking macro measures based on countries and not businesses and by making the new agreements. In this case, road freight transport of goods appears to have a higher risk perception than other modes of transport.

The development of road freight transport of goods will undoubtedly follow up with the increase in our export. The increase in innovative products with high value-added will also bring up other transportation modes over time. In addition to the exploratory results obtained from this qualitative research, the prospective studies can be carried out because of the sector as well as the territories to transport.

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The Corporate Governance - Approach of the Turkish Commercial Code

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Abstract

Corporate governance rose originally to protect investor shareholders and other stakeholders against economic distractions caused by bad corporate management and corporate misdeeds. The application areas of this corporate philosophy were preliminary the open joint stock companies, nevertheless in the progress of time it gained importance for non-public companies too. The Turkish Commercial Code (TCC), entered in force in 2012, is a codification in this regard, that includes reflections of the principles of transparency, accountability, fairness and responsibility. However, that theoretical approach, which dominated the TCC could not resist implicitly and the related regulations were brought in compliance with the daily commercial practices. This paper handles the corporate governance - approach of the TCC on the bases of selected sample regulations with a critical point of view.

Keywords : Corporate Governance Principles, the Philosophy of Corporate Governance in Turkish Commercial Code, the Corporate Governance of Closed Joint Stock Companies.

JEL Classification Codes : G34, K19, M14.

Introduction

Corporate Governance can, by and large, be described as the system in which the companies are governed and controlled based on some certain balances. In this system, the main goals are to regulate relationships between various parties and beneficiaries regarding the partnership; to identify the difference between rights and obligations; thereby to ensure the effective and efficient participation of related parties to the process of partnership. In this way, it is aimed to increase the values revealed during the partnership activities, to create suitable mechanisms providing a fair way of sharing these values and to maintain these mechanisms. In other terms, the philosophy of corporate governance aims to provide the internal peace and external compliance of a company.

The internationalization of competition and commercial opportunities enables the economic consequences arising out of "bad management" to be seen at global dimensions. The company scandals and collapses experienced in the last decades, dominated by the idea of free market, have deeply betrayed the trust of national and international investors. The scandals like Enron, WorldCom, Parmalat and the increasing number of other bankruptcies of companies based on "financial frauds" have created negative effects on world economies and consequently all communities have badly suffered.

These incidents carried the problems of company and risk management and the need for regulation to world's agenda and compelled lawmakers to take cautions. In this framework, many regulations, such as Sarbanes-Oxley Act, which was put in effect in the US in 2002, become a part of the mechanisms of decision taking and risk management. After the depressions and crises causing the collapse of exchange markets, the Cadbury Report and afterwards the Hampel Report generally based on the previous one, both of which are the global basic texts of the approach of corporate governance, have been issued as a result of the attempts aiming to keep entrepreneurs in the area of exchange market trading in England. These developments have also affected Turkey together with the other countries and directed lawmakers, especially after the beginning of the 2000s, to make various regulations in order to encourage and to motivate companies to have a strong structure within corporate governance principles (Çiftçi, 2019).

These attempts for the increase of the quality of management in companies produced results in Turkey too and both the governmental organizations like Capital Market Board and the non-governmental organization interested in the economy have issued some communiqués and advisory texts including corporate governance principles since 2003. Hence, the Turkish Corporate Governance Code was accepted, the new TCC entered into force, Public Oversight Accounting and Auditing Standards Authority was founded, the Capital Market Law was revised.

Although the principles of corporate governance are the rules that should have been applied to companies whose shares are traded in exchange markets; this perception has been changed over time and corporate governance has been accepted for every structure having management mechanisms. In that sense, The Turkish Commercial Code numbered 6102 (TCC), which was enacted in 2011 has accepted the philosophy of corporate governance principles, as one of the "load bearing columns." This means that, the Turkish lawmaker has aimed at the application of the corporate governance principles not only to the open joint stock companies but also to the non-public companies. However, the amendments made in the TCC by the Law numbered 6335 right before the effective date of the TCC have partly disrupted the Code's approach to corporate governance. This paper aims to handle the selected and general reflections of the corporate governance principles in the TCC with a critical method.

Reflections of Corporate Governance Principles in TCC

In General

The previous Turkish Commercial Code (Numbered 6762; Enforcement Year 1957) included also a good deal of corporate governance - friendly provisions, which for instance aimed at the protection of minority in the company, shareholder democracy, transparency and responsibility. Nevertheless, these provisions cannot be the indication of a systematic and planed corporate governance approach. That is because the corporate governance came up as a "systematic" philosophy of good management" not before the 1990s (Aktan, 2013: 151).

Corporate Governance is one of the philosophies that dominated the preparation phase of the TCC numbered 6102 (Yuksel, 2008)[1]. In this regard, one of the main goals was to make the corporate

[1] *See for some evaluations of* Tekinalp*, the president of the TCC scientific preparation commission, conserning this matter: Tekinalp, Türk Ticaret Kanunu Tasarısının Kurumsal Yönetim Felsefesine Yaklaşımı (KY Felsefesine*

governance principles be an essential part of a dogmatic and institutional system of especially limited and joint stock companies (Tekinalp, 2008: 635). That was primarily essential and necessary, because the preparation phase of the new coincided with a devastating financial crisis in Turkey. The financial crisis of 2001 was majorly a consequence of bad management, accounting frauds and violation of all the corporate governance-related principles in companies. Instead of setting a separated "catalogue of rules", the Turkish lawmaker preferred to create institutions and provisions, which should be compatible with corporate governance (Tekinalp, 2008: 635). With other words, the majority of the company law provisions of TCC were tested on their compatibility with the corporate governance principles, as they were written.

In the following, some of significant corporate governance-related regulations of TCC are examined separately under each of four principles, although most regulations contribute to the aims of more than one of these principles.

Transparency

Transparency as a substantial corporate governance principle requires the disclosure of information regarding the significant activities of a company to keep all shareholders and stakeholders timely and truthfully informed. This information should include all material facts regarding its governance, financial situation and performance, social and environmental indicators. An important point is that the shareholders and stakeholders should have a free access to such information. Transparency is limited with the business secrets (Paslı, 2005: 74; Okutan-Nillson, 2007: 212).

One of the most significant transparency-related novelties of the TCC is its provision regarding the company-website obligation. Thereafter, the companies with the share capital that are subject to independent audit are obliged to set up a website in three months after their registration. Within this website a special section for publication of the statutory announcements of the company must be created[1]. Some of these statutory announcements are for example, the action against the company for its annulment according to TCC Art. 353/5, the appointment of the auditor according to TCC Art. 399/1, the call for a general assembly meeting according to TCC Art. 414/1 and the general assembly resolution regarding amendment of the articles of association according to TCC Art. 455/1. It is crucial to state that, the draft of TCC included the website-obligation for all companies with the share capital, regardless of the independent audit obligation. As a result, the number of companies that are obliged to set up a website has been significantly limited (Eminoglu, 2014: 335).

Another significant reflection of transparency principle is the right to information and inspection, not only for shareholders but also for board members. In comparison to the previous code, the TCC has a wider point of view regarding these rights (Tekinalp, 2015: 233). In this context, the TCC obliges the board to make financial statements, annual activity reports, consolidated financial statements, audit reports and profit distribution proposal available to the shareholders, no later than fifteen days prior to the general assembly meeting. Furthermore, at the general assembly meeting, any shareholder can request the board to provide information regarding the company's business. Also, the auditor may be

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Yaklaşım), Uğur Alacakaptan'a Armağan C. 2, 635-652, 2008, İstanbul Bilgi Üniversitesi Yayınları; Tekinalp, Türk Ticaret Kanunu Tasarısı'nın Yeni Uluslararası Açılımlar Yaklaşımı ile Sunumu ve Kurumsal Yönetim, Trendleri Konuşmak, İstanbul, Doğan Yayın Holding, 2007, 24-30.

[1] *See TCC, Art. 1524.*

requested to provide information regarding the results and methods of the audit. The provided information must be true and diligent within the context of the honesty and accountability principles (TCC, Art. 734/2). For the case that the shareholders are not provided with necessary information, the lawmaker has created a right of action for them in the TCC, Art. 437/5. On the other hand, any shareholder may request the general assembly to clarify specific matters per special audit.

The lawmaker has regulated the right to information and inspection also for board members. In this regard, any board member may ask questions, request information and conduct inspections on any business and transactions of the company. However, the application of these rights is conditioned on certain permissions depending on whether the chairman or the member wants to use them and whether they are exercised during or outside of the board meeting.

One of the concerns of the TCC-Scientific Committee was to reduce the power gap and strengthen the shareholder-democracy especially in companies with capital share. This necessity led to possibility and even obligation to organize board and general assembly meetings via virtual platforms. That possibility is as an important step also by means of transparency, because thereby especially the small shareholders and board members will have the opportunity and motivation to join or be represented, attend the discussions and vote in the virtual platform, from far away (Tekinalp, 2008: 650).

One of the outstanding features of the TCC is its effort to bring transparency to the internal relations of the corporate group companies. Indeed, the TCC has for the first time regulated the corporate group law. The aim of this regulation is not only to set the liability regime on a fair basement but also to encumber the group companies to reveal their commercial transactions and ordering relations, to protect especially the third parties and small shareholders against harmful interventions of the controlling company. Thus, the TCC regulates several registration, announcement and declaration obligations both for controlling and controlled companies. In this regard, for instance, if an undertaking directly or indirectly acquires or sells the shares of a capital company in certain percentages, it has to notify this change to the capital company and the related authorities[1]. Furthermore, the board of a controlled company is obliged to prepare a report regarding its affairs with the controlling and group companies within three months of each fiscal year. At the end of the report, the board must comment whether the (controlled) company suffered any loss and whether such loss has been compensated. On the other side, any board member of the controlling company may request the chairman of the board to have a regardful, true and fair report prepared in accordance with the accounting standards regarding the financial and asset positions of the controlled companies, their accounting results for the last three months, the internal relations and transactions of group companies[2].

Fairness

The fairness principle requires the protection of shareholders' rights and securing equal treatment of shareholders. Although this principle is primarily addressed to the board of directors, as the management and representation undertaking organ, the general assembly is also obliged to look after a fair treatment of the shareholders. It must be stated that, the whole corporate governance philosophy is based on the target of achieving an ideal and fair balance between the interests of all stakeholders. From this point of view, all corporate governance-related provisions of the TCC serve at the same time

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1 *See: TCC Art. 198/1.*

2 *See: TCC, Art. 199/1.*

the fairness principle. Therefore, in the following just two significant examples of the fairness principle are analyzed.

The most significant reflection of the fairness principle in the TCC is the so-called "rule of fair treatment under equal conditions", which is regulated in Art. 357 for joint stock companies and in Art. 627 for the limited companies. According to this rule the shareholders must be fairly treated under the same circumstances. In this way the Turkish lawmaker has codified and strengthened an already for a long time in the Turkish doctrine accepted (Okutan-Nillson, 2003: 165ff) and in judiciary system applied principle (Yildiz, 2004). The detailed evaluations regarding the controversial limits and the scope of the rule of fair treatment under equal conditions would certainly exceed the aim of this work. Therefore, we will confine ourselves to the results of the violation of the rule, which certifies how much the lawmaker cares about its application. According to Art. 391/1/a, the board resolutions which are in breach of the principle of fair treatment (regulated in Art 357) shall be deemed null and void. Although the TCC stays silent about fair treatment violating general assembly resolutions, the majority opinion in the doctrine defends that such resolutions should be deemed "cancel" (Kendigelen, 2013: 279; Eminoglu, 2014: 129).

Another reflection of the fairness principle in the TCC is the provision regulating the so-called "liability based on differentiated solidarity principle" at the stage of management. Contrary to the absolute liability principle adopted in the former TCC, the differentiated solidarity principle is based on the idea that each person should be responsible for his own negligence. In this regard Art. 557/1 of TCC states that, where more than one person is liable to recoup the same loss, each shall be liable for that loss jointly with others, to the extent that the loss is personally attributable to him/her depending on his negligence. Hence that, a fair distribution of liability, especially for management loses, is aimed. Furthermore, it is argued that the mentioned regulation reflects the differentiation between "*executive"* and "*non-executive"* board-membership in the area of liability law (Karasu, 2013: 42).

Responsibility

"Responsibility" or "external responsibility" in context of corporate governance requires that a company recognizes the rights of not only the shareholders, but also all other interested parties, namely the stakeholders (Paslı, 2005: 78). In today's modern corporate law approach, it is undoubtedly accepted that the shareholder is not the only beneficiary or interested person of a company. Stakeholders of a company such as creditors, directors, employees, suppliers, unions, the government and even the society have also a great interest in good governance, sustainability and economic success of it. Therefore, the so-called "social responsibility" has been a significant integral component of responsibility principle (Akgül, 2009).

In my opinion, one of the most effective measures that the TCC has taken to protect the stakeholders' interest is its policy to separate, clarify and specify the duties and authorities of the board of directors and the general assembly. Thereby, the board of the directors is better protected against general assembly's preemptive interventions, as it takes the interests of all stakeholders in consideration by decision-making process. In this regard, the TCC has especially in Art. 375 clearly regulated the "non-delegable duties and authorities of the board of directors". In the same way, the inalienable duties and powers of the general assembly are clarified in Art 408/2. In this way the general assembly is positioned as the basic decision-making organ and the board as the management-representation organ. So, we can talk about a clear separation of powers, intensified with the system of the checks and balances.

The only assurance of stakeholders, but especially of creditors is, in the most instances, the capital of the company. Therefore, the lawmakers take measures and put the protective mechanisms as a necessity according to so-called "capital maintenance principle" in place, to protect the capital and assets of companies (Karasu, 2013: 51). These measures are mostly directed against possible abuses of shareholders. A concrete example in this regard is Art 358 of the TCC, which regulates the prohibition on shareholders becoming indebted to the company. According to the provision, shareholders may not become indebted to the company, unless they pay their debts due by their capital subscriptions and the company's profit, including the free reserves, is enough to cover the losses from previous years. It should be pointed out that the previous form of Art 358 included the relevant prohibition unconditionally.

The TCC includes a considerable amount of other provisions which aim at the protection of value and existence of the company capital. In this regard, the rule of minimum capital in Art. 332/1,[1] the appraisal rule for the capital in kind in Art 343; Art. 379, which basically forbids or restrictively allows a company to acquire its own shares or accept them as pledge and Art 347 which states that shares may not be issued lower than their nominal value are reflection of the capital maintenance principle. The board and general assembly resolutions, which do not safeguard the principle of capital protection, will be deemed null and void according to the TCC Art. 391/1/b and 447/1/c.

Lastly, it is worth to mention the Art 523 of the TCC, which serves the social responsibility of companies. According to the provision, the general assembly may decide to allocate reserves from the balance sheet profit so as to form welfare reserves for the employees of the company and other welfare organizations or so as to provide their sustainability or serve other welfare or charitable purposes. In this way, the lawmaker allows and prompts companies to make contributions to charities which are sustainable to meet the social needs.

Accountability

The "accountability principle" in the context of corporate governance requires any transactions of a company to be accounted for and justified. This task concerns especially the board members and directors for the damages arising from their resolutions. Since the accountability principle generates the liability to the company itself and therefore to shareholders, we talk actually about "the internal responsibility principle".

A strong accountability system has two significant components, namely an independent external audit (Millstein Report, 1998: 20) and a fair liability regime. One of the revolutionary regulations of the first version of the TCC was the external and independent audit, which was intended for all capital companies. Indeed, in comparison to the previous TCC (Numbered 6762), which regulated an internal and ineffective audit system (Arı, 2013: 441), the new TCC's audit strategy is based on "Auditing Standards of Turkey", which is compatible with the international auditing standards. These standards are published by the Authority of Public Oversight, Accounting and Auditing Standards. So, the new system relies on the auditing by impartial and independent auditors, whose requirements and qualifications are regulated in detail, in Art 399 and 400. Nevertheless, with the Law numbered 6365 in 2012, the Council of Ministers was authorized to determine which companies would be subject to

[1] *According to the mentioned provision, the registered capital of a joint stock company may not be less than fifty thousand Turkish Liras.*

independent audit. The Council made use of its power and stated the conditions, which should be met in order to be subject to independent audit[1]. Thereby, only a small percentage of capital companies are subject to an independent audit, whereas the rest remained *de facto* unaudited[2].

The objects of the audit are primarily the financial statements, accounts and annual reports of the company. The related reports are substantial reflections of accountability. According to Art 375/1-f of the TCC, keeping commercial books, preparing an annual report and corporate governance declaration are some of the non-delegable and inalienable duties of the board. The board is obliged to prepare the annual activity report, the financial statements and the attachments hereto, which must be in accordance with the "principle of true and fair view" (TCC Art. 515) and accounting standards mentioned before.

Lastly, what is worth mentioning in context of the accountability principle is the new mechanisms of the TCC, which make it possible to hold the controlling company of a group of companies accountable for the losses suffered by the controlled company because of "unlawful" use of the control (Eminoğlu, 2014). Despite of separation of legal personalities and lack of hostility, the TCC entitles the shareholders and creditors of the controlled companies to sue the controlling company and make it compensate such losses. By this way the lawmaker opens the way, even if on paper, to reach the real damaging figure.

Conclusion

The explicit effect of corporate governance on the preparation phase of the TCC had two prominent reasons. The main motive was undoubtedly the financial crisis of 2001 in Turkey, which was, amongst others also a result of economic exploitation within the corporate groups, bad company-management and lack of transparency/accountability. The other significant reason had been the influence of both civil and Anglo-Saxon doctrines on the scientific committee, composed to write the TCC-Draft. Consequently, the "new" TCC contained a considerable amount of regulations that can be characterized as the reflection of the corporate governance principles.

However, the mentioned theoretical, corporate governance-friendly spirit of the TCC could not resist for long. The sui geris habits and customs of commercial and corporate life in Turkey forced lawmaker to amend a great number of its provisions. These changes destroyed partly also the systematic links among various institutions planed in the theoretical background of the TCC and ruined its composure. The most affected provisions were in the area of audit, information society services and capital maintenance of companies.

Despite all the amendments the TCC has not sever its connection to corporate governance. It still encourages the shareholder-democracy with various mechanisms such as minority shareholder rights, virtual corporate meetings and information-inspection rights. The protection of stakeholders is

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[1] *See: Resolution of Council of Ministers numbered 2018/11597, published in Official Gazette numbered 30432, dated 26.05.2018.*

[2] *Although the TCC Art 397/5 regulates that the companies, which are not subject to an independent audit, shall be audited according to the regulation, that should be enacted by the Ministry of Customs and Trade (Newly: "the Trade Ministry"), until the time of preparation of our work in September 2018 such a regulation is not yet enacted.*

strengthened through action rights, responsibility regime combined with the inalienable duties and powers of the board. The responsibility is supported, inter alia, by corporate group provisions and the differentiated solidarity principle.

After this description of corporate governance-outlook of the TCC, it is crucial to state that the degree of corporate governance compatibility of the companies have an enormous effect on their credibility and corporate image. The attempt of the lawmaker to subject them to a more intensive regulation in this regard may have been interrupted partly. But this situation shouldn't keep him/her back to follow a timely extended and gradual corporate governance-based regulation policy, as it is the case in the stepwise extension of number of companies, which are subject to independent audit.

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Migrant Children, Inclusive Education and Elementary Education Skills

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Abstract

Inclusive education, in the broadest sense, covers all children with disadvantageous position and to this end, closely related with the provision of education rights to these children. Inclusive education addresses large-scaled strategies, activities and processes in order to be benefitted from the right of education by all in conformity with its purposes. The purpose in inclusive education is to enable the children from different cultures, different societies, and different regions to participate in education in the best possible way and to contribute benefitting them from all education opportunities.

In order to talk about equal education rights, women and men are required to be equipped with the same elementary education services. The 26th article of European Human Rights Convention regulates the protection of children's rights and equality. The aim of this study is to determine the opinions of university education staffs on the policies required for developing for the education of migrant children from different regions and who are in the inclusive education.

The working group of the study is composed of seven education staffs from Education Sciences of Faculty of Education at Çanakkale Onsekiz Mart University. The research technique of the study is qualitative research which was designed as a scientific research technique. Phenomenology pattern has been established. The main purpose here is to collect in-depth information from experienced individuals on the phenomena which are recognised but not known in-depth. In this sense, an interview form, which is composed of 5 items, has been organized. According to the received findings, migrant children should access the best possible education service and required resources for this aim should be organised and macro education policies should be developed for these disadvantaged children.

Keywords : Migration, Inclusive Education, Elementary Education.

JEL Classification Codes : A29, H74, I21, I25.

25 October 2018 Thursday

Session: VI / 20.00-22.00

PUBLIC ECONOMICS & PUBLIC FINANCE

Room: *Mandragola*

Chair: **Aleksandra GÓRECKA**

- Cryptocurrencies and Taxation

  Ahmet Burçin YERELİ & Işıl Fulya ORKUNOĞLU-ŞAHİN

- Policy Deadlock in Developing Countries: Tax Burden or Human Development Index?

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- Limits of Financial Manager's Responsibility During Financial Crisis

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- Social Effects of Unhealthy Products and Public Policies

  Mehmet Fatih ÇAPANOĞLU

Cryptocurrencies and Taxation

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Abstract

Even though the existence of its idea emerged years ago Bitcoin, started to be used after the 2008 world financial crisis, is the most known of the virtual currencies. Bitcoin has come up with Craig Wright's "Bitcoin: A Peer-to-Peer Electronic Cash System" for the first time, nicknamed Satoshi Nakamoto for the first time and started to be used in 2009. In the period of increasing of financial risks, digitalization and getting stronger the expectancy which economic effects of the changes in world political balances could result in foreign trade wars via giving of unlimited powers to the presidents In China and in the USA, Despite the risks of cryptocurrency, mattress saving is considered an important investment tool. For example, in Greece banks vacationed in July 2015 and withdrawal restriction of 60 euros from ATMs, which has supported the idea that governments and banks could not be relied on during periods of economic depression. Owing to arising bitcoin billionaires with the change in the bitcoin / dollar parity in the USA in 2009-2013, the escape from supervision with the digitization of assets in India and in China and the structure that does not allow to follow of drug traffickers, mafia and terrorists' money transfers with using blockchain encryption technology, have increased the demand for cryptocurrencies. Thus, it has helped spread the cryptocurrencies that can easily be bought, sold, and transferred on free stock exchanges without relying on any state power. Therefore, cryptocurrencies, cryptocurrency exchange and its Regulations, regarding for taxation on income derived from the cryptocurrencies, and practices of selected countries is mentioned to various taxation suggestions for Turkey in the study.

Keywords : Cryptocurrencies, Regulations for Cryptocurrencies Exchanges, Taxation of Cryptocurrencies.

JEL Classification Codes : F6, G28, H2.

Introduction

Today, the increase in interest of cryptocurrencies increases the exchange rate of cryptocurrencies to dollars and other currencies. In 2009, a bitcoin was worth six US cents, exceeding US $ 821 in January 2014, and the highest price of US $ 19,498.68 at the end of 2017. Hence regulations on cryptocurrencies and cryptocurrency exchanges have been needed in many countries for purposes such as price fluctuations in cryptocurrencies, protection of investors against sudden financial risks, prevention of possibilities for the confidentiality of criminal activities, and the inclusion of profits derived from cryptocurrency trading within the scope of taxation. However, there is not yet a standard cryptocurrency regulation applied globally in the world. To ensure the protection of consumers at the level of governments, various preparations of arrangements are underway to prevent the area of tax

revenue leakage and potential digital crimes and cyber-attacks, terror financing and money laundering that can occur through cryptocurrencies. In this respect, in the EU, via the additions to the fourth directive to address the threat of money laundering, launched in 2015, and the terrorist attacks in 2015 and 2016 in Paris and Brussels and the Panamanian papers, regulations have brought to agenda. On 19.04.2018, it has been argued that regulations required to prevent the financing of money laundering and terrorism, approved in EU member states, will be included in national legislation within the next 18 months.

Cryptocurrencies

Globally known Bitcoin, Ethereum, XRP, Bitcoin Cash, Eos, Stellar, Litecoin, Cardano, Tether and so on there are many cryptocurrencies and their numbers are increasing day by day. As of August 2018, there are 1771 cryptocurrency and 12652 crypto currency stocks in the world, and the market value of cryptocurrency is $ 231.038.202.716 and the last 24 hours transaction volume is $ 15.565.846.656. (<https://coinmarketcap.com/>). Cryptocurrencies can be obtained by purchasing from the cryptocurrency market and by being accepted as mining or payment for goods and services.

Cryptocurrency, with Blockchain encryption system offers prevention of following of money traffic, the possibility of conversion to various currencies or services, not in the security of any state, transactions can be made between the users without intermediaries, can be called digital (online) payment system. (Bushmaker, 2018). Since it is not under the responsibility or control of a single person or organization, hyperinflationary effects cannot be mentioned in the supply of this currency. (Barski & Wilmer, 2015: 2). Bitcoin with abbreviated notation BTC can be divided up to 8 digits. The smallest unit of bitcoin is 1 satosh. 0,00000001 bitcoins, 0,0001 dollars. With the BTC system, bitcoin production was controlled until 2140, with a maximum production of 21.000.000 BTC. (<https://www.bestchange.com/converter/>). As of January 11, 2018, the number of Bitcoins in use is 16.796.180. Bitcoin transactions are carried out via computers called “pole” which are connected to the internet. In Bitcoin transactions, “full poles”, which store all the blocks holding global account holders in the system, and “light poles”, which represent bitcoin wallets, it utilizes the *Simplified Payment Verification System*, which allows customers to dedicate blocks of their own transactions only from the system (Çarkacıoğlu, 2016: 52-53).

Concepts Related to Cryptocurrencies

The block chain is the underlying technology of BitCoin, a database in which all transfers on the BitCoin network are replicated, is decentralized (Raval, 2016: 2, 6).

Cryptocurrency mining is the process of producing new cryptocurrency. Mining is the act of collecting and blocking published processes and establishing a block chain exactly and correctly, thus destroying the possibility of changing the information. Decryption takes about 8 minutes even for the fastest online computers with specially equipped systems in the system. (Norman, 2017: 2-4). While the miners are performing the verification process, solves a puzzle; the blocks in the chain are sequentially codes according to the processing order (Uzer, 2017: 32).

The hardware wallet is protected by storing cryptocurrency in an offline wall from digital thefts (O’Mahony et al., 2001: 34). Some types of hardware purses in use are treasure, ledger, keepkey (Okan, 2018). However, this method is much more reliable than the method of protecting the investors’ assets

in the cold storage wallets in the cryptocurrency market, since it does not allow the wallet owner to access the cryptocurrency even if the password is forgotten or lost.

Literature Review

Studies in the literature on cryptocurrency have begun in 2012 and are seen to accelerate in 2014-2015. Especially, in many studies examining bitcoins from crypto parcels, it has been noticed that there are studies which include technical features of cryptocurrency at engineering level and contributions to improve these properties. Following this, there have been studies of cryptocurrency exchanges, their regulation, and the legal arrangements of the states about crypto paralysis, which are not examining the volatility of cryptocurrency. Although taxation of cryptocurrency is very up to date nowadays, there is a limited number of studies in the literature and it is aimed to contribute to the literature in this regard.

Studies on cryptocurrencies can be classified as having positive or negative opinions. According to this, positive opinions about cryptocurrencies in the literature; the fact that it is cost-effective in the transfer of money, the acceleration of transactions, the prevention of print unbacked money (Lee et al., 2018: 19) , the modification of the basic payment system (Narayanan, et al. 2016: vii) and the compatibility with the trends of mobile payment systems such as credit cards and PayPal which are widely used today (Meiklejohn et al., 2016: 86), the fact that exchange rates are not risky international transactions do not cause erosion of purchasing power with inflation (Renterghem & Meerleer, 2017: 15).

Criticisms about cryptocurrencies as representable being easy using by illegal organizations, sustained changings in market value (Descôteaux, 2014: 3, 4), despite the fact that it is more inelastic and more transparent than gold but being much more speculative (Rose, 2015: 620), the lack of legal regimes in some countries, the inadequacy or complexity of some (Polasik et al., 2014: 37), the uncertainty about taxation, the use of cybercriminals as a means of storing bitcoins, openness to double spending attacks (Srokosz & Kopyscianski, 2015: 619), the cumbersomeness of bitcoin system, using bitcoin as a storage medium having many risks,, openness to double spending attacks, the inadequacy of democracy in the bitcoin system, which consists of large mining, enterprising companies and large investors holding large quantities of bitcoins (Spenkelink, 2014: II).

Cryptocurrency Market and Regulation

In the cryptocurrency market, cryptocurrency is bought or sold by cash or credit card or exchanged with official currencies or cryptocurrencies. The cryptocurrencies outside of the bitcoin is generally referred to as “altcoin” in the market. The prices of these subcodes are determined according to their characteristics and the price of cryptocurrency is between US $ 0.001 and US $ 1.000. Some cryptocurrency is not obtained with mining, some have a certain amount of money.

According to the Bitcoin Market Potential Index of 2015, the five countries with the highest potential for bitcoin adoption are Argentina, Venezuela, Zimbabwe, Malawi, and United States. In Argentina and Venezuela, for example, inflation is the dominant factor in the widespread use of bitcoin, while in Zimbabwe the informal markets are the dominant force. (Hileman & Garrick, 2014: 9). However, the first five countries of crypto trading volume are Malta, Belize, Seychelles, USA and South Korea respectively. Most cryptocurrency exchange is in the UK. (<https://www.businessinsider.com/cryptocurrency-exchanges-trading-locations-volumes-2018-4>).

Cryptocurrencies Market

As of September 5, 2018, there are 1910 cryptocurrency, 13.729 cryptocurrency market, $ 223.467.858.476 cryptocurrency market capacity, 24-hour trading volume is $ 15.461.701.744 and the dominance level of BTC in the market is about 54,1%. (<https://coinmarketcap.com/all/views/all/>) There are more than 200 crypto stock exchanges indexed in the world, among which crypto stock exchanges in the first 5 rows are Bitfinex, HuiBo, HitBTC, and Kraken respectively. (<https://cryptocoincharts.info/markets/info>).

There are 9.625 cryptocurrency nodes (wallets) in the system in 05.09.2018, between the countries of the world in terms of the possession of bitcoin wallets in the first five countries of the United States; Germany, France, China, Netherlands, while Turkey ranks 33 (<http://bitnodes.earn.com>).

According to a study analysing global cryptographic money; 1.876 people work full time on the cryptocurrency industry. There are 720 in the Asia Pacific region and 676 in the North American region.

The volume of shopping with cryptocurrency is mostly in Europe, followed by the Asia Pacific region. Bitfinex dominates 16% of all cryptocurrency exchanges in March 2017 and has the highest market share. The sum of small stock exchanges is 25%of the market share. The currency exchanged most in the cryptocurrency market is the US dollar with 65% and the euro with 49% thereafter. Bitcoin is mostly converted to Litecoin and Ethereum. Ripple, Ethereum Classic, Monero, Dogecoin and Dash followed those (Hileman & Rauchs, 2017: 10).

Regulation of Cryptocurrencies Market

When regulating of cryptocurrency market can use various methods. These are the specific security for the stock market, the introduction of standards about the reserve money, introducing standards for currency exchanges (for example, South Korea's financial services commission, cryptocurrency trade may only be from real bank accounts,(the Blockchain Association of Japan has created self-regulatory standards that include the use of cold wallets and aim to strengthen standards following this new event), system risk management (the amount of debt, the number of users, the number of daily transactions can be traced by scaling up the requirements), and finally tax laws (Larsen, 2018).

Whenever the developments in regulation of cryptocurrencies exchanges at international level are examined, it is seen that the studies are still continuing. The European Banking Authority recommended short-term explanations of EU currency makers' virtual currency swaps. Until the development of a comprehensive regulatory regime, only cryptocurrency scheme has indicated that risks arising from the interaction between regulated financial transactions can be mitigated. For this reason, it has been suggested that national supervisory authorities should encourage regulated financial services with cryptocurrencies, in order to protect the institutions, e-money institutions and customers involved in the purchase, possession or sale of cryptocurrencies. For example, the establishment of an immediate response system between financial institutions and the cryptocurrencies stock market will contribute to the current account relationship between financial institutions (EBA, 2014: 44).

In November 2015, the European Court of Justice ruled that Bitcoin should be treated as currency for tax purposes. So, Bitcoin is sold or purchased for fiat money, no value-added tax is due (EU, 2015). The European parliament members and the European Council adopted a December 2017 agreement about aimed at preventing the use of cryptocurrencies in laundering and terrorism financing (Keainge et al., 2018: 46, 50).

On the EU Commission in February 2018, discussed whether the regulatory action on cryptocurrency is required at the EU level (EC, 2018). In the panel called "The Crypto-Asset Bubble" in the world economic forum held in Davos on 23-26 June 2018, debated whether the crypto assets are in the currency of a currency or not (<https://www.weforum.org/events/world-economic-forum-annual-meeting-2018/sessions/the-crypto-asset-bubble>).

Taxation of Cryptocurrencies

Nowadays, cryptocurrencies are the new preference of investors because tax havens have lost their popularity in tax evasion due to multilateral tax information exchange agreements. However, problems that may arise in regulations related to cryptocurrency, such as the ineffectiveness of the Tobin Tax proposal from problems experienced in the precise determination of the values of electronic payments, are not wanted to be involved in the depths of financial markets and can be evaluated in common with the problems experienced in the delivery of e-services. Especially when the online presentation of some electronic services is paid out, the problems experienced in the taxation also apply to the cryptocurrencies. For example, some evidence indicates that Bitcoin is used for tax evasion purposes. According to a study on the topic; the majority of Bitcoin wallet owners use them as investment accounts. Such accounts do not send Bitcoin; it is only used to receive. The gains in such wallets are not accessible to the tax authorities unless they are expressly granted. In addition, researchers have discovered that many Bitcoin users use the cut, split and combine method. Generally, Bitcoins are divided into multiple small accounts of the same person, or large amounts are transferred in bulk using multiple wallets. Tax evaders and money launders often use these methods to hide funding sources and the destination (Melendez, 2013) As a result, the legal regulations on cryptocurrencies vary from country to country. In some countries the use and trading of cryptocurrency is illegal, and in some cases legal. Legal regulations on cryptocurrencies are taxed or excluded, depending on whether the cryptocurrency is being assessed as "currency", "capital gains" or "commodities". The EU explained that cryptocurrency trading should not be subject to VAT on the basis that foreign exchange transactions are a substitute for a supply of goods. This was also adopted by the UK (Norry, 2018).

Selected Country Applications in the Taxation of Cryptocurrency Transactions

Cryptocurrency transactions defined and taxed differently in many countries like Canada, USA, Germany, UK, and Australia. In June 2014, Canada is the first country in the world to establish a tax on virtual currencies. The Bank of Canada has expressed a willingness to acknowledge the developing virtual currency market, but currently recognizes cryptocurrencies as investments (Duhaime, 2014). In the United States, a cryptocurrency has been accepted as "asset", according to the Swedish Financial Supervisory Authority cryptocurrency is "a payment method". In the UK is treated as a special currency and VAT is applied to the purchases made with them. The Finnish Central Tax Board has exempted the Bitcoin transactions from VAT (Carkacioglu, 2016: 57), which identified cryptocurrency as a financial service. In April 26, 2018 in France Conseil d'Etat identified the gains from cryptocurrencies as capital gains. The tax rate applied to crypto-dollar decreased from 45% to 19% (Terenzi, 2018). Iceland (Hofman, 2014), Russia, Denmark and China are preparing lunch to the market their own cryptocurrencies (Tarhan, 2018). China, Thailand, Bangladesh and Bolivia limit the use of cryptocurrency. While prohibiting the use of it by enterprises in China, it is possible for individuals to own cryptocurrency, with the risk and use being on their behalf. In December 2015, the People's Bank of China prevented the cryptocurrencies transactions of financial institutions (Tumber, 2015: 7)

As shown in Table 1 in UK, US, Japan, France and Germany, cryptocurrency is subject to capital gains tax. In Austria, tax authorities treat cryptocurrency as an intangible asset, and mining is defined as an operating activity. Therefore, income gained from the sale of cryptocurrency is subject to income tax. Taxpayers in Switzerland must pay income tax, profit tax and wealth tax to cryptocurrency assets. The European Court of Justice (ECJ) has ruled that BitCoin represents a currency and that transactions must be exempt from VAT (CJEU, 2015: 1). So in EU countries, Switzerland and Liechtenstein, cryptocurrency sales are exempt from VAT (Langer, 2018).

Table 1. Cryptocurrencies Taxation in Some Selected Countries

Country	Definition	Regulation Year	Taxation
Australia	Property	2014	Capital gains tax, goods services tax is not applicable
Germany	Private money	2013	No capital gains tax, if owned less than one year, a progressive income tax of up to 45% applies for all gains
Switzerland	Foreign currency	2015	No capital gains tax, sales tax is not applicable
US	Property	2014	Capital gains tax, sales tax is not applicable
UK	Asser or private Money determined by court on case by case basis	2014	Capital gains tax, exempt from consumption tax
Japan	Legal method of payment	2017	Capital gain tax, exempt from consumption tax
China	Virtual commodity	2017	No taxes
Italy	Financial instrument,	2018	No taxes, but preparing
France	Moveable property,	2014	Capital gain tax
Canada	A commodity	2014	Capital gain tax
Estonia	An investment and a payment method,	2014	Capital gain tax and VAT

Source: Adapted from: <https://cryptoresearch.report/crypto-research/taxation-cryptocurrencies-europe/>; <https://www.log.gov>, 2014; <https://www.canada.ca>, 2014.

Countries have no tax on cryptocurrency transactions are Belarus, Denmark, Portugal, Singapore, Slovenia, the Netherlands, Italy, Turkey and several states in the US. (Wyoming, Arizona, Georgia) (Oldale, 2018). The Spanish government has proposed a law on incentives for small businesses in the cryptocurrency sector (Mitic, 2018).

U.S.A.

In January 2015 in the US, the cryptocurrency was legalized (Farell, 2015: 12). In the United States, they have been regarded as assets for federal tax purposes. The principles applicable to the asset operations are also applied to the cryptocurrency transactions. Income derived from cryptocurrency transactions within the United States is subject to income tax, capital gains tax and employment tax. If the value of the cryptocurrency obtained by the people who make mining is the value to be calculated on the market value and the workers who pay the salary with cryptocurrency, it is subject to the income tax, the employment tax and other related taxes (IRS, 2014-21: 2-6) .Regardless of how small is, all types of bitcoin operations must be reported to IRS. However, in the US, long-term gains from cryptocurrency transactions are taxed at a lower rate than short-term earnings, considering individual income levels (Weller, 2018). In the US, the question of sales tax on Bitcoin-transactions is currently subject to discussion (Boehm & Pesch, 2014).

U.K.

Bitcoin buyers are subject to capital gains tax on their gains. The capital gains on cryptocurrency is exempt from £ 11,300 income tax. The next £ 8,500 is taxed at a tax rate of 10%, with income on it being taxed at 20%. Revenue from Bitcoin mining operations is not covered by VAT. When you change for a sterling or currency like Bitcoin, Sterling, or Dollar, there will be no VAT on the value of Bitcoins. However, in any case, the value of the goods or services to be paid by VAT, Bitcoin or any other goods or service supplier sold for similar cryptocurrency will be the value of the

cryptocurrency at the point where the transaction takes place. For the Bitcoin transactions, earnings of less than £ 11,600 per year are tax-exempt. If a person uses bitcoin to buy games or send overseas money, these are consumer transactions and there is no need to keep records. If you buy a bitcoin to keep it for investment purposes or set up a business to get paid at Bitcoin, appropriate records should be kept, and the administration should notify the earnings. Failure to meet this obligation may result in a penalty of 100% or a penalty of £ 3,000 per year (UK, 2014).

Japan

Capital gains on crypto-currency transactions in Japan are considered "various income". Bitcoin sales are exempt from VAT. However, the income derived from the sale of Bitcoin is subject to income tax and capital gains tax. Cryptocurrency investors are taxed at 15-55% on their earnings. According to the Japanese tax code, "various incomes" include cryptocurrency operations in the stock market, purchases from sales, purchases from mining, and related network charges (Bourgi, 2018). However, it is planned to reduce the capital gain tax rate in Japan to 20% by 2018.

Germany

German Income Tax Act defines Bitcoins as a privately held movable asset which as a classification are subject to capital gains tax only if the asset is sold within a year of purchase. When bitcoins as an investment sold for profit before the one-year mark would be subject to a 25% capital gains flat tax. If bitcoins are sold more than a year after they are bought, the gains are exempt from tax. But not individuals, who have to pay a tax on profits greater than €600 or if they hold it for less than one year (Summers, 2013).

Turkey

In the definition of electronic money in Law No. 6493, cryptocurrency is not included in electronic money. As a monetary value for which "electronic money" funds are issued can also be produced by cryptocurrency miners, according to Banking Regulation And Supervision Agency (BDDK) Bitcoin cannot be evaluated as electronic money and it is not possible to supervise. A working group was set up by the Treasury and the Ministry of Finance to develop regulations on cryptocurrency parallelism, and the public was informed about cryptocurrency risks. Cryptocurrencies has not legalized in Turkey as currency, commodity, or as a financial instrument yet. However, they should be defined legally in order to prevent the loss of revenue. According to the Securities and Exchange Commission, financial instrument does not comply with Bitcoin's definition, there should be a real product on which it is based. According to experts of the central bank, the cryptocurrency cannot be accepted as currency because the money is required to be printed by the central bank for a value. According to revenue administration in Turkey, cryptocurrency is acceptable as commodity (<https://www.cnnturk.com/ekonomi/kripto-para/turkiyede-bitcoinden-para-kazanan-gelir-vergisi-ve-kdv-odeyebilir>).

If bitcoin is regarded as a commodity, if the person once bought and sold Bitcoin and earned income therefrom, this gain may be taxed as either capital gains or as incidental earnings. In the legislation, if cryptocurrency will be accepted as a capital market instrument. In the phrase given in paragraph 1 of Article 80 of the Income Tax Law the gains and revenues derived from the exclusion of other capital market instruments are included in the article be within the scope of capital gain. If you are constantly buying and selling Bitcoin and you have earned commercial income from it, then you must pay the income tax return and pay your tax. Since income from cryptocurrency mining requires technical knowledge and professional expertise, it can be taxed as self-employment incomes.

However, according to Article 82 (4) of the Tax Procedure Law, since the proceeds collected due to accidental self-employment activities are regarded as incidental earnings, the cryptocurrency mining may be subject to taxation under incidental income when it is made extrinsically.

If we classify the cryptocurrency as cash or a similar asset, the gain from Bitcoin is not subject to any taxation for real persons without tax liability. Traders' gains from cryptocurrency transactions are subject to income tax. In terms of institutions, the gains obtained from the valuation of cryptocurrencies are subject to the corporation tax. If the cryptocurrency is classified as a financial asset, the provisions of Article 75 of the Income Tax Law and Article 279 of the Tax Procedure Law should be considered in terms of income tax. Accordingly, the profits to be earned from the sale of the financial instruments will be taxed within the scope of the provisions of the capital stock, and the proceeds will be valued with the purchase price arising from the profit and loss of the issuer, which is not possible to be calculated on the day of valuation. However, if Bitcoin is regarded as a non-cash financial instrument in terms of these institutions, the gains arising from the purchase and sale will be subject to the corporation tax. Cryptocurrency purchase and sale transactions are exempted from VAT since they are not included in the transactions mentioned in Article 1 of VAT Law No. 3065 and entered into the subject of VAT Law. In case of providing intermediary service for cryptocurrency purchase and taking commission, it is necessary for the institution providing the intermediary service to calculate the VAT for the related service fee. However, if the cryptocurrency is treated as a cash-asset, the cryptocurrency transfer transactions must be subject to the banking and insurance transaction tax (Cebecioğlu, 2018).

Conclusion

Although it is an alternative currency option in terms of users is positive, it is not recommended to widely use the cryptocurrency because of the unknown risks and uncertainty of the gains and losses of bitcoins hiding for investment purposes. However, it is thought that cryptocurrency can even pass the credit card, if designed by a central institution in a highly secure manner, primarily for a sectoral pilot application and support the official currency of the country. The most basic reasons for this are the inability to process online transactions from ATMs and the possibility of trading with cryptocurrency outside official holiday or weekend break times, which will increase the preference of it. In recent days, will be held in comparison with the gold payment system in Turkey, physical money exchange gold stored in Istanbul seem to be more reliable than an investment with cryptocurrency through guarantor institutions located behind is that can be transferred in the EFT speed. However, because of the more innovative payment system, the availability at the global level, providing the opportunities to its criminal incomes, and the opportunity to obtain high profit if it is risky to its users, cryptocurrency can substitute for other payment systems in the long run.

But, cryptocurrency has been criticized for the availability of mobile wallets, the ongoing risk of user education such as inadequacy, reliability, accessibility and price change in the storage and transfer of cryptocurrency, and the low perception of users' ease of use of cryptocurrency. The necessity of using the online shopping service in most of the places and the fact that the density of use is not allowed is deepened. It is estimated that cryptocurrency ATMs have become widespread and will be an important player in the online payment market of cryptocurrency (Baur et al., 2015: 14-15). In this context, in practice bank investment instruments, credit card payments, cash, cryptocurrency can be compared. While the Bank pays interest payments to the investment vehicles, the deposit is subject to such interruptions as the insured amount, there is no interest payment in the cryptocurrency. Although the high amount of cash transfer is quite costly and difficult, the risk of taxation in the long run of crypt money, which is easy to use in high amount of money transfer, is fast and cheap. Cryptocurrency is

considered unavailable for the purpose of hiding value due to price fluctuations. While it is advisable not to control money supply, it can be criticized for being banned by governments (Franco, 2014: 31-32). Besides, the development of crypto coin and blockchain encryption technology will enable many new technologies to be achieved in the future. However, the various technological business opportunities created by the cryptocurrency industry are also remarkable. These include web development expertise, web security system design, market research analyst, marketing manager, financial analyst, and data scientist, business development representative and mining. For example, the most known "mining" in the mentioned works is getting harder day by day due to the difficulties that are expected to be solved and as a result the money earned in the sector is falling. The cost of crypto coin production is high if the cost is not available in countries offering low electricity. Since the cryptocurrency mining has caused the investment, maintenance and high level of energy consumption required by expertise, the residence of miners is more concentrated in China and Russia. But, Russia plans to rent cheaper apartments and transfer investors to the industrial zones by making cryptocurrency mining. It is also on the agenda to sell cryptocurrency miners electricity at different prices.

The main problem is that tax laws have difficulty in catching up the technological development in cryptocurrencies. In the taxation of cryptocurrency, there is no inter-country cohesion. Different applications can be found even in the states of the same country. Cryptocurrency is defined as payment system in some countries, commodities, and as financial instrument or foreign currency in some cases. Depending on these definitions, the methods of taxing countries' cryptocurrencies transactions vary. As a result, it is very difficult for taxpayers and tax administrators to determine whether the sale of cryptocurrency, the exchange of sales, the exchange of one cryptocurrency, or the delivery of goods and services through cryptocurrencies. When examining the various countries' practices regarding the taxation of cryptocurrencies, it is seen that the taxation applied to cryptocurrencies transactions is complex and the taxpayers are not sufficiently understood. At the same time, the variability of the prices of cryptocurrency makes it difficult to register as a taxpayer for cryptocurrency transactions. It is thought that the application of online income management for the application easiness and the loss of the tax base is considered to contribute to the calculation of the taxes arising from the cryptocurrency transactions in order to prevent these (as in our system, online tax calculation and real estate taxation for real estate capital gains are offered). The revenue administration must allocate the fund for the training of the staff and the implementation framework. It is also possible to use software that will track cryptocurrency transactions to prevent possible tax evasion from cryptocurrency transactions by the revenue administration and effectively control them. However, if there are countries that do not yet comply with the proposal for taxation of the cryptocurrency at the global level, it is likely that the cryptocurrency wallets will escape to countries that are not taxable. For example, if stocks and foreign currency gains in Japan are taxed at about 20% in the country, then gains from cryptocurrency transactions are subject to a higher rate of taxation between 15% and 55%. So, may be expected to transfer cryptocurrency account holders to Slovenia or to Italy, whose transactions are not yet taxed. To set an average rate for the country (like 15% -40%, etc.), may be considering the tax rates applied to securities in the country (e.g. around 10-15%) and the tax rates applied to cryptocurrency transactions in other countries (13% and 50%). In addition, applications should be encouraged in order to keep the taxpayers' records of cryptocurrency transactions in detail and to use them. In this way, it will be possible to follow the activities such as the date of the transaction to be based on the transaction, what the transaction is, and conversion of the amount of the cryptocurrency to the value of the transaction date in the official currency of the country (TL or Dollar).

Cryptocurrencies legally as commodity, currency or financial instrument in Turkey, must be defined urgently. In this regard, since the cryptocurrency can be regarded as a commodity exchange transaction or money exchange transaction, it will be subject to VAT. In order to regulate the cryptocurrency markets, it is obligatory to keep the registers of the hardware purse owners in the stock market, cryptocurrency transactions must be allowed to be exchanged only with the official currency deposited in the stock market, it must be registered by the users of the transactions and reported to the revenue administration of these records, if the records are not kept and not reported, the fines related thereto shall be determined and applied. Therefore, tax losses, fraudulent and other fraudulent activities that can be done with cryptocurrency transactions can be prevented and monitored to a certain extent. However, as the ease of use and widespread use of digital money increases with the needs of technology in the long run, the digital divide that may arise among the countries that bail out these countries, some speculative movements are likely to be affected by the destructive economic activities of the nationalities or individuals with the majority of these cryptocurrencies on the stock Exchange. Turkey's government should be printed their cryptocurrency and should done related regulations.

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Policy Deadlock in Developing Countries: Tax Burden or Human Development Index?

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Abstract

How can we explain the gap in economic welfare when we cross the border from the USA and reach Mexica? How does Smith's economic theory change in our day? It is a challenging process to predict which policy preference will succeed in ensuring human development by reaching welfare society and playing a more efficient role in economic development in long run; is it economic stability or social change? Growth, development and distribution relations are among social policy issues of not only developed, but also developing countries. The UN Heads of State and Government Summit (Millennium Summit) participated by 189 United Nations countries in 2000 considered it necessary to develop a global partnership for development within the scope of 8 development goals to be achieved by 2015.

Keywords : Economic Development, Tax Policies, Tax Burden, Human Development Index.

JEL Classification Codes : H1, H11, H2, H21.

Introduction

All disciplines in social sciences including economics, must ground their theories on institutional change. In today's world, the indicator of economic development is compared with the indicators of other countries rather than the change of domestic socio-economic indicators. In the last century, development indicators that used to be explained with factors such as labour force, capital accumulation, education, health have been replaced by factors such as geography of countries, openness, human capital and institutional quality in the literature of modern development. The claim of neo-liberal approach foreseeing the numeral increase of national income for development has been invalid in case of developed countries.

In general terms, development includes the fact that especially social, political and institutional mechanisms are significant factors to improve life standards of people today, in addition to the efficient distribution of limited sources in order to ensure a sustainable economic growth. The understanding of classic economics modelled within the framework of rational choice and efficient market assumption has been replaced by the challenges of modern individuals while deciding and predicting the consequences of their decisions as a result of the lack of information, costly information processing, complexity of the environment and institutionalization-derived sunk costs. This behaviour model gets even more radical in 3rd World peoples, when ideological and religious patterns in people's world of thought stand up against sound modern institutions in developed countries.

John Coatsworth depicts the institutional framework in the 19th century Mexico: interfering and commonly arbitrary nature of institutional framework required every initiative, either urban or rural, to use subsidized loan, to help various strategies for collecting labour force, to collect debt and to enforce contracts, to evade tax, to avoid court, to claim rights on land and to use kinship bonds, political and family prestige to advocate these rights in a highly politicized environment. Success or failure in economics used to depend on the relationship between the manufacturer and political authorities.

In the study of Hall and Jones (1999) seeking for an answer why some countries are more productive than others, it was asserted that only a part of the difference of output per capita between countries can be explained with physical capital and education, the main point is government policies and institutional differences that can be called social infrastructure. A strong and close relationship was found between outputs per capita and social infrastructure in this study conducted for 127 countries.

Economic structure and political structures are two inseparable parts to determine the performance of an economic system / structure. For economic development, there is an obligation to put forth a political discipline as well. Political system must detect the share of the current and ever-changing structural regulations within GNP in global world with realistic predictions as well as defining the ownership rights that determine the basic structure of the economy. In developing countries that try to achieve development with the inadequacy of source, distribution process reveals a socio-political attitude: Tax policies.

The development of tax system of a country depends on the stability of political system, not economic structure. Furthermore, taxes are effective in determining saving level and source distribution in developing countries, tax structure is an important indicator of economic development level. The ratio of direct taxes to total tax revenues is high at the beginning of development process, falls in late labour society level and raises again in countries that ensured human development level. Chelliah (1989) concluded that the share of indirect taxes in total tax revenues decreased in line with economic development while the rate of direct taxes increased. Tosun and Abizadeh (2005) analysed the effects of income per capita, which can be used as economic development variable for 1980-1999 period in OECD countries, on tax structure. According to this study, the effect level of development on tax structure was detected; it was found that the share of direct taxes in total tax revenues increased as the income per capita increased while the share of indirect taxes decreased. In the study of Cural and Çevik (2015), the effect of development on tax structure was analysed via long-term regression analyses and structural breaking tests between 1924-2013 periods, and it was found that direct taxes increased in long-term development process.

The major issue for economic development in developing countries is the resource shortage and, the lack of employment increase in parallel to this shortage. These countries cannot give weight to direct taxes in order to increase employment and reduce the substitution effect of taxes. In addition, tax burden remains under the responsibility of ultimate customer also because of the fact that tax competition, which is increased by globalization effect, causes less increase in direct taxes than the expected. Furthermore, attempts to reduce the tax burden on financial capital with the effect of globalization obligate global-level tax competition to reduce the rates of corporation income taxes. Therefore, this situation leads to an increase in tax revenues to prevent the failure of public services to be offered in developing countries, which are making effort to rank higher in human development ranking. The cost of equal tax rate for everyone is the deterioration in income distribution. On the other hand, the marginal tax rate causes the loss of efficiency since it is effective on labour supply decisions.

Governments can increase tax revenues and redistribute income by adjusting these two parameters. The optimal preference between these parameters depends on to what extend the government wishes to increase tax revenues, society's preferences regarding the redistribution, and hence social welfare function, how the labour force supply will be shaped as a result of individuals' reaction to the after-tax income, and the unfairness of the pre-tax income distribution.

The change of economic and social structure is obligatory in development, and balanced distribution of welfare level by ensuring that the region takes a share from the welfare as well as a certain class or group of society is essential. In a study conducted with the data of five countries, Kuznets suggests that there is a correlation between income distribution and economic growth. As the income level increases, inequality initially increases, and then decreases. Kuznets explains the abovementioned correlation with the employment flow from agriculture to non-agricultural sectors. As is known, the productivity in non-agricultural sectors is higher compared to the agricultural sector. At the first stage, production will increase, and income distribution will deteriorate. However, the further stages of the production increase will bring along the improvement or recovery of income distribution. According to another study conducted on this issue, in the first stages of economic development, the wage gap between qualified and unqualified labour force will get bigger, and therefore there will be a deterioration in income distribution. Nevertheless, the social segment having a higher level in terms of human capital will transfer these savings to the low-wage segments, and in the end, human capital and wage differences will decrease, and income distribution will become more just.

Being among the most important factors of social structure, socioeconomic factors such as national income, education, health, personal freedom, entrepreneurship, security, social capital, unemployment must be analysed well during the evaluation of the performance of countries which aim to develop. Amartya Sen, in his theory which considers capitalism as data contrary to Marx, draws a framework based on human capacity and freedom as an alternative to the traditional economic understanding of inequality and human development in general. In the capacity approach, the achievement of all or a particular part of compulsory human functions is more important than having a certain level of goods. Aristotle suggests that the use of human capacities and human power is what makes a good life, however, the development of these occurs historically not determined by a fixed biological phenomenon. Sen also emphasizes that life is *something* beyond reaching a benefit. He considers sees happiness or meeting needs as just a component of human existence.

To conclude, nation states must become liveable countries in terms of fair income distribution and human development by adopting a "human" centered approach in their development policies to be applied independently in today's globalization and knowledge/know-how era and preventing tax burden to remain upon the salaried and consumer section which is more engaged with indirect taxes by means of the tax reforms to be prepared accordingly.

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Causal Relationship between Infrastructure Expenditures and Regional Income: The Case of Turkey

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Abstract

This research aims to demonstrate the regional role of the relationship between economic development and infrastructure expenditures that Turkey had lived in the growth process, arising as a result of the reforms implemented after the 2001 economic crisis. In this context, we investigate the Granger causal relationship between infrastructure expenditures and economic development in bidirectional framework. The analysis, using the panel data of 81 provinces, covers 2004-2014 period and is based on the three-stage analysis procedure, such as cross-section dependency, stationarity and causality investigation. To check robustness and investigate whether the causality varies between the geographical regions of Turkey we examine the causality both at national and at sub-national levels. The empirical findings show that on the national level there is one-way causality from GDP to Infrastructure expenditures. While on the regional level, the Granger causality test results vary considerably due to the geographical characteristics of these regions.

Keywords : Infrastructure Expenditures, Regional Economic Growth, Granger Causality, Turkey.

JEL Classification Codes : O18, P44, C23.

Introduction

Turkey has entered a period of rapid economic growth, arising as a result of the reforms implemented after the 2001 economic crisis. Public spending has made a significant contribution to this economic growth process. One of the most important expenditures that has increased rapidly during this period is the renewal of the transportation infrastructure. In this sense, significant investments have been made in areas such as highways, railways and airports. These expenditures have made important contributions to the economy by accelerating access to economic services, by providing access to the markets by saving time with the utilization of the transport facilities and by reducing operational costs (Farhadi, 2015: 73; Kuştepeli et al., 2012: 2619; Yu et al., 2012: 13).

One of the most important criticisms of these investments concerns the regional imbalances that the country has experienced. As it is shown in many studies there is East-west regional inequality in Turkey (Elburz & Gezici, 2012; Gezici, Walsh & Kacar, 2017; Karahasan, 2014; Yavan, 2010;

Yesilyurt & Elhorst, 2014). Specifically, economic activities in Turkey are mostly concentrated in western regions such as Istanbul, Kocaeli, Bursa, Ankara and Izmir.

The intention of this research is to demonstrate the regional role of the relationship between economic development and infrastructure expenditures that Turkey had lived in the growth process. This issue is frequently discussed in the international literature. In a pioneering work in this area (Aschauer, 1989) by using the standard production function it has been shown that the decline in infrastructure investments has resulted in a reduction in productivity in the United States. In other pioneering works like Munnell (1992) and Gramlich (1994), this method has been criticized and it is stated that the causality relationship is directed from GDP to infrastructure investments. According to this statement, regions with high income are also considered to have high infrastructural investments at the same time. In this study we looked over the causal relationship between regional income and infrastructure expenditures for Turkey.

When the literature is considered, it is seen that there are many studies using different approaches and analytical methods that overlook the relation between the transport infrastructure and the economies of the countries or regions. For example, Pereira and Andraz (2011) for Portugal and Blanchard and Perotti (2002) for the United States of America employed Vector Auto Regressive (VAR) Model, Tranos (2012) in provincial level for Europe, Yu et al. (2012) and Song and Mi (2016) for China, Sahoo and Dash (2009) and Maparu and Mazumder (2017) for India, Babatunde (2018) for Nigeria and Mohmand et al. (2017) for Pakistan used Panel Unit Root and Granger causality analysis. And finally, Yu et al. (2013) and Chen and Haynes (2015) for China and Arbués et al. (2015) for Spain used spatial data analysis methods in their estimations.

In the studies conducted for Turkey Kuştepeli et al. (2012) used Panel Unit Root and Granger causality analysis methods to analyze period between 1970 and 2005. Their estimates indicate a weak relationship in short term, while in the long run there is no correlation between transport infrastructures and the economic growth. Eruygur et al. (2012) used the vector error correction model to analyze period between 1963 and 2006. Communications and transportation spending has been shown to be a lagged impact on economic growth in this study. Kara et al. (2016) used panel fixed effect methods to analyze period of 2004-2008. Their analysis indicates that infrastructure spending, both nationally and regionally, increases economic growth. For a large literature review and meta-analysis on public infrastructure investments and regional revenue growth in both Turkey and the other countries, see Elburz et al. (2017).

In our study, the analysis method to be followed in the next section and the data set to be used in the third section will be introduced. The fourth chapter will contain the analysis made and the empirical results achieved. In the fifth section, we will sum up our main findings and draw some conclusions.

Methodology

According to the definition given by Granger (1969: 430) the causality is based completely on the foreseeability. Basically, Y_t is said to cause X_t in the Granger sense if lagged values of Y_t significantly improves the forecast of X_t . In this context, the Granger causal relationship can be both in the unilateral and in the bilateral direction. Bilateral causality is existing if two variables are Granger cause each other simultaneously.

We applied a three-stage analysis procedure to determine the existence and direction of Granger causality between government infrastructure investment and GDP for national and regional levels:

cross-section dependency, stationarity and causality investigation. The first stage of our analysis is, in principle, preliminary and provides information for appropriate generation selection for panel unit root tests. Since the Granger causality is assumed to be only between stationary series, on the second stage we investigate the stationarity of variables. The interpretation of the panel unit root tests results for eight different samples (a state and seven regions) is based on the existence of cross-section dependency. We tread carefully on this step, because first generation panel unit root tests, which don't deliberate over cross-sectional variation among units, may lead to spurious conclusions. On the other hand, the second-generation panel unit root tests consider cross-section dependency and therefore are more powerful than related first generation tests in the case of presence of cross-sectional dependency. After concluding that the variables meet the necessary assumptions we test the causality relationships.

Data Set

Due to data limitations, the analysis covers 2004-2014 period. In the full sample, which covers all country, the analysis is based on the panel data of 81 provinces. Along with this, we investigate whether the causality varies between the geographical regions of Turkey. In this context, all analysis procedures are also implemented for each seven regions: Mediterranean, Aegean, Marmara, Black Sea, Central Anatolia, Eastern Anatolia and South Eastern Anatolia regions. The public infrastructure investments are represented by public transportation and communication expenditures, expressed in thousands of Turkish Liras, and comes from the Strategy and Budget Ministry of Turkey. The economic development is proxied by GDP, expressed in thousands Turkish Liras, and comes from the Turkish Statistical Institute' Regional indicators database. In all specifications (in general sample and at regional levels) variables are transformed in the logarithmic term.

Empirical Findings

In this study we scrutinize the Granger causal relationship between infrastructure expenditures and economic development in bidirectional framework. In this regard our analysis is based on the following empirical models:

$$GDP_{it} = \beta_{0i} + \beta_{1i} InfrExp_{it} + \varepsilon_{it} \quad (1)$$

$$InfrExp_{it} = \alpha_{0i} + \alpha_{1i} GDp_{it} + \varepsilon_{it} \quad (2)$$

Here *GDP* denotes the real GDP, expressed in logarithms; *InfExp* is the public infrastructure expenditures in the log form; ε is the error term; while *i* and *t* symbolize province and year.

On the first stage of the analysis we investigate the cross-sectional dependency (CD) issue both on the state and on the regional levels. For this purpose we run the CD test proposed by Pesaran (2004) for all eight sample specifications. In compliance with the CD test results we strongly reject the null hypothesis of cross-section independence in GDP series on country level, as well as on all seven regional levels. At the same time, we also have similar results for Infrastructure expenditures with one exception for Mediterranean region, where the test result indicates existence of cross-sectional independency. Based on this result we should consider the CD issue to get unbiased results in the next steps of analysis. Therefore, we employ first and second-generation panel unit root tests to investigate stationarity.

The Granger causality is assumed to be only between stationary series. For this reason, on the second stage of our analysis we investigate the stationarity of variables. In order to bear the cross-

section dependence issue in mind and to demonstrate the possible difference in the test results, we apply first and second-generation unit root tests. The tests assuming cross-section dependence and known as "first generation" tests are presented in our study by following standard tests: Levin, Lin and Chu (LLC) (2002); Im, Pesaran and Shin (IPS) (2003); Augmented Dickey Fuller (ADF) - Fisher test, suggested by Maddala and Wu (1999), and PP-Fisher test, developed by Choi (2001). The "second generation" panel unit test based on the covariate-augmented Dickey Fuller (CADF) statistics procedure (Pesaran, 2007) is also applied to investigate the stationarity of variables.

We conduct all stationarity tests for levels and for first differences of each variable, by including and excluding a trend. Even the results for mentioned above five different panel unit root tests are contradictory among themselves in some samples, we interpret stationarity in general based on the "second generation" CADF test results. According to the results of panel unit root tests each of two variables is stationary in levels for national, as well as for regional specifications. Thus, we can conclude that our variables are I(0).

In other words it means that variables, employed in our study, satisfy the main assumption of Granger causality assuming that only stationary series are embraced (Granger, 1969). Based on this, at the next stage of our analysis we conduct the Granger test on the country level and on the seven geographic regions. The main reason behind this analysis approach is the desire to check robustness of our results and to determine the possible differences among regions.

In the framework of the Granger causality, analysis is investigated the direction of causality relationship between two variables. As mentioned above, this relationship can be both one-way and two-way. The null hypothesis states that "*A* does not Granger-cause *B*". In this regard it is very important to interpret the meaning of this statement correctly: "*A* is Granger-cause *B*" does not stand for "*A* is the effect or the result of *B*".

The results of the Granger causality test are reported in Table 1. We investigate the causality between Infrastructure expenditures and GDP for the whole country and for regions as well. As it is seen from the test results, in general there is one-way causality from GDP to Infrastructure expenditures. When we evaluate the results in more detail, the empirical findings show that at the national level (full sample) there is a unilateral causality from GDP to Infrastructure expenditures at the 1% significance level. At the regional level, there are same results for Aegean, Black Sea, Central Anatolia and Eastern Anatolia regions. While for the Mediterranean region the direction of the causality is in the opposite way: In this region infrastructure expenditures Granger-causes GDP. For the Marmara region there is bidirectional Granger causality. Due to the development level of that region infrastructure expenditures and GDP growth are moving together interdependently. However, by reason of existence of geographical problems South Eastern Anatolia region cannot reach significant economic development and better infrastructure level as well.

Table 1. Granger Causality Test Results

Null Hypothesis	chi2	Prob > chi2	Conclusion
Full Sample (Turkey)			
GDP does not Granger-cause *InfrExp*	12.075	0.001	One-way causality from *GDP* to *InfrExp* (*GDP* does Granger-cause *InfrExp*)
InfrExp does not Granger-cause *GDP*	1.670	0.196	
Mediterranean Region (Geo1)			
GDP does not Granger-cause *InfrExp*	0.734	0.693	One-way causality from *InfrExp* to *GDP* (*InfrExp* does Granger-cause *GDP*)
InfrExp does not Granger-cause *GDP*	8.047	0.018	
Aegean Region (Geo2)			
GDP does not Granger-cause *InfrExp*	42.131	0.000	One-way causality from *GDP* to *InfrExp* (*GDP* does Granger-cause *InfrExp*)
InfrExp does not Granger-cause *GDP*	0.017	0.897	
Marmara Region (Geo3)			
GDP does not Granger-cause *InfrExp*	3.726	0.054	Bilateral causal relationship between *GDP* and *InfrExp*
InfrExp does not Granger-cause *GDP*	3.457	0.063	
Black Sea Region (Geo4)			
GDP does not Granger-cause *InfrExp*	2.963	0.085	One-way causality from *GDP* to *InfrExp* (*GDP* does Granger-cause *InfrExp*)
InfrExp does not Granger-cause *GDP*	0.434	0.510	
Central Anatolia Region (Geo5)			
GDP does not Granger-cause *InfrExp*	11.200	0.004	One-way causality from *GDP* to *InfrExp* (*GDP* does Granger-cause *InfrExp*)
InfrExp does not Granger-cause *GDP*	2.486	0.289	
Eastern Anatolia Region (Geo6)			
GDP does not Granger-cause *InfrExp*	2.938	0.087	One-way causality from *GDP* to *InfrExp* (*GDP* does Granger-cause *InfrExp*).
InfrExp does not Granger-cause *GDP*	0.273	0.601	
South Eastern Anatolia Region (Geo7)			
GDP does not Granger-cause InfrExp	2.607	0.106	No Granger causality between *GDP* and *InfrExp*.
InfrExp does not Granger-cause *GDP*	0.468	0.494	

Source: Authors' own calculations.

Concluding Remarks

In this study, we have investigated the causal relationship between infrastructure expenditures and GDP in the context of Granger causality for Turkey. In the framework of our analysis we utilized regional panels corresponding to Turkey's seven geographical regions. The aim of this approach is to examine causality both at national and at sub-national levels. In Turkey, as mentioned before, both economic activities and infrastructure expenditures are intensely intensified in the Western regions, especially in Istanbul and its neighborhood provinces. According to the analysis our test results varies across regions because of their geographical characteristics. One-way Granger causal relationship from GDP to Infrastructure expenditures can be found at the national level and also for Aegean, Black Sea, and Central Anatolia and Eastern Anatolia regions. It can be interpreted as economic development results in an increasing demand for infrastructure. At the same time for the Mediterranean region there is also unilateral causality, but from Infrastructure expenditures to GDP. For the South Eastern Anatolia region, being the least developed in country, there is no significant relationship in the context of Granger causality. When our results are evaluated together for the economic policy perspective, economic growth is based on other factors than infrastructure when it is considered geographically which we will analyze these spatial characteristics in our future research papers.

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Poverty-Environment Nexus: A Review of Environmental Sustainability

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Abstract

Poverty can harm the environment and natural resources, but degradation of the environment and natural resources has also an impact on the poor. Particularly the dependence of poor people on natural resources can cause this poor people to be affected more with environmental degradation and to cause more environmental damage as they are affected. Thus, this creates a situation called poverty-environment trap by causing the poor to be more affected by degrading the environment. There was a turning point for the world when the "New Development Goals" which aims to end poverty, were declared. But is it possible to overcome poverty and environmental degradation by sustainable development or the concept of green economy which come to the forefront, can help to eradicate poverty? These discussions are the main axis of this study.

Keywords : Poverty-Environment Nexus, Sustainable Development, Green Economy.

JEL Classification Codes : I30, Q01, Q50.

Introduction

17 new global "Sustainable Development Goals" and 169 sub-titles were accepted by the United Nations in New York, United States of America on September 25-27, 2015 in order to fulfil them until 2030. These goals and their sub-titles include critically important subjects for humanity and the planet for 15 years between 2015 and 2030. The core of those goals is to end all sorts of poverty. Thus, the first aim is to end poverty, which is the most major global challenge and an indispensable requirement for the sustainable development. These goals consider various aspects such as hunger, healthcare, justice and inequality, global warming and oceans. In addition, Sustainable Development Goals form a development agenda, which will be prepared through economic, social and environmental dimensions.

According to the recent studies, it has been seen that poverty could harm the environment and natural resources. However, the destruction of environment and natural resources make a significantly bigger impact on the poor. As indicated on the previous paragraph, Sustainable Development Goals clearly target to integrate environmental matters into the poverty alleviation programs. So, where do poverty and its relation to the environment take place on the international agenda? How do the multi-dimensional precautions support this agenda? These questions form the main subject of the study.

The Relation between the Poverty and Environmental Quality

Folke Henschen describes the history of humanity as the "history of poverty, filth and diseases". According to Henschen, the life is all about fighting against poverty and diseases to survive (Hartwell, 1974: 4). In this context, the fact that poverty being as old as the history of humanity and being as real as life and being able to survive its significance until today keeps the interest on poverty. In a very basic sense, the poverty is briefly described as: "Not having the income level to afford basic needs such as food, clean water, shelter and toilet".

Despite the global wealth increased over the years, the inequality in the distribution of welfare among individuals continues. Income injustice is a very essential issue since it is accompanied by; (i) high level of poverty, (ii) low grow rate, (iii) high unemployment rate and (iv) high crime rates (Wade, 2004).

Multidimensional Poverty Index (MPI) calculated in 2010 by UNDP by considering education, healthcare and life conditions, focused not only on monetary poverty but also the other aspects of poverty as well as other deprivations in individuals. In this context, it is possible to benefit from aforementioned index in the redistribution of resources to alleviate poverty. According to the report, 1.5 billion people in 102 developing countries suffer from multidimensional poverty and 900 million are under the risk of poverty.

The World Bank Report (2008) which is titled as "Poverty and the Environment: Understanding linkages at the household level", is an important report that examines the poverty-environment nexus. The following key conclusions are worthwhile considering in environment-poverty relationship:

- Natural resources are a significant source of income for many households.They can also provide insurance during times of need.
- In the absence of policy reforms,economic growth is likely to increase resource use in the short to medium term. Both poor and nonpoor households will contribute to resource degradation.
- The high discount rates of the poor and high population growth will likely mean continued degradation of local natural resources.
- The impact on welfare of slow and small changes in resource availability is small, which may encourage resource degradation.As degradation occurs,households use alternate resources or obtain their resources from alternate areas.The low opportunity cost of time in poor households implies that the welfare impact of degradation is likely to be small.
- Poverty reduction will need to be linked to parallel environmental management strategies if the aim is to conserve natural resources or environmental services. Poverty reduction efforts alone will not necessarily increase environmental quality unless specific environmental reforms are undertaken (The World Bank, 2008: 9).

It is crucial to ask why the environmental quality is important at this point. Economies of many developing countries rely on natural resources. The majority of the population in those countries spend their lives by relying on those natural resources. Considering this resource dependency, it is obvious that any kind of environmental degradation in developing or poor countries will increase the poverty.

The Relation of Environmental Degradation and Poverty

Environmental degradation and poverty are two cases triggering each other since the poor could cause environmental degradation as well as being the most affected ones from any kind of environmental degradation. There are studies that argue poor people are more vulnerable to environmental degradation because they are more dependent on natural resources (Angelsen & Vainio, 1998; World Bank, 2008; World Bank, 2011; Heger et al., 2018).

According to Borghesi and Vercelli (2003), environmental degradation is inclined to make the life conditions of the poor worse and it makes them use more natural resources to survive. The relation between poverty and degradation of natural resources could be based on complex selections and changes for poor people which in the absence of capital, labor, and land markets, is affected by their access to outside employment and any natural resource endowments (Barbier, 2010).

Moreover, there is also the risk of turning environmental quality and poverty being together into a trap at some point. Environmental quality effects labour force efficiency and welfare dynamics. On the other hand, distribution of welfare determines the level of trust on technology, which has also a massive environmental load and thus, determines the evolution of environmental quality. This interaction creates a "poverty-environment trap" in which the degrading environment reduces incomes and makes environment degradation faster (Ikefuji & Horii, 2007: 1041).

As the poor are dependent on natural resources and the natural resources have been degraded (hence the natural capital) due to the poverty - environment relation as well as the poverty - environment trap, it is also very difficult to restore the damage experienced. In the report (2011) of the World Bank regarding the welfare conversion, the case is presented as follows:

"Natural capital is the source of many ecosystem services, provided as externalities without market prices; hence, these services are often undervalued and vulnerable to threats. Many forms of natural capital are nonrenewable, or renewable only under restricted management regimes. Losses and degradation of natural capital may lead to irreversible changes in the provision of ecosystem services and biodiversity, and the potential for substitution is limited (for example, in the case of the ozone layer) (World Bank, 2011: 8)"

In their study, Dao and Edenhofer (2018) have examined the poverty-environment trap with a dynamic general equilibrium model. According to this research, the effect of environmental quality on the life expectancy of the agents, enables them to determine the most appropriate savings for consumption. Their savings in terms of physical capital, will affect the environment negatively through dirty intermediate input. According to the article, the stalemate mechanism of an economy in the poverty-environment trap is as follows: Initially, a lower environmental quality reduces the life expectancy of the agents and deters them from saving. This prevents the accumulation of capital, as the agents spend more when they are young. The article recommends a tax and subvention strategy in order to reduce the production of dirty intermediate input for the allocation of the capital in the economies that are in a stalemate due to the poverty-environment trap. Therefore, it will be possible to improve the environment quality both short and long term. A better environment increases life expectancy and capital accumulation. Thus, the interaction between the environment and capital through the life expectancy channel will help the economy break the poverty-environment trap under such an appropriate periodical strategy.

The Poverty-Environment trap reveals a very complex process as well. This trap is a two-way process which makes the poor to degrade the environment as well as the increase in poverty caused by

poor conditions of the environment. However, this process does not only cause the degradation of environment. It also includes various relations such as work force opportunities, income distribution and quality of natural resources.

"In summary, the perception of a 'poverty-environment trap' as a two way process in which poverty drives rural households to degrade the environment, and a deteriorating environment subsequently worsens poverty, needs to be revised. Although poverty-environment traps are still prevalent, they encompass more complex relationships involving links between asset poverty, lack of income opportunities or access to key markets for land, labor, and credit, and the availability and quality of natural resources, including land, to exploit." (Barbier, 2010: 647).

Sustainable Development and Green Economy

The concept of sustainable development is not a new notion and the term "sustainable development" associates economic development with protecting the environment by balancing them. It is evident that there is a relation between poverty and environment which is called the "poverty-environment relation".

Ram (2012) has stated a crucial question that includes the relation between sustainable development and natural capital. According to Ram (2012), "If natural capital is important for sustainable development, why is development that is dependent on resource exploitation seemingly a failure for low and middle-income economies? The answers to these questions stem from the failure of resource-based economies to adequately capture the rents from resource exploitation, particularly where the rents are low, and to reinvest these rents in other productive activities in the economy. Another aspect of this apparent failure is that frontier land seems to serve as an outlet for the rural poor. Thus, the type of marginal mainly agricultural activity performed by the poor on frontier lands generates very little rents and provides limited opportunities to improve their livelihoods" (Ram, 2012: 45).

After heavy criticism on sustainable development concept, the concept of green economy has come to the forefront. It is not possible to give a precise definition of the green economy. The United Nations (2011) state the following in a report entitled as "Towards a Green Economy": "In its simplest expression, a green economy can be thought of as one which is low carbon, resource efficient and socially inclusive. In a green economy, growth in income and employment should be driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services. These investments need to be catalysed and supported by targeted public expenditure, policy reforms and regulation changes."

UNEP defines an inclusive green economy as an economy which increases welfare and reduces environmental risks and poverty. Moreover, it states that an inclusive green economy is an alternative to the dominant economical model that fortifies the inequalities in our modern life, encourages extravagancy, triggers resource scarcities and creates grave threats to the environment and human life (UNEP, 2018). UNEP has also noted that the green economy is directly in relation with the 1st, 8th, 9th, 11th and 12th sustainable development goals. These goals are as follows respectively: Ending all sorts of poverty wherever experienced, ensuring sustainable and inclusive economic development, providing complete and reproductive employment and jobs respecting the human dignity, constructing resistant infrastructure, encouraging sustainable and inclusive industrialization and new inventions, making urban areas and settlements safe, strong and sustainable, ensuring sustainable consumption and production.

Thus, an important feature of the green economy is to offer various opportunities to reduce poverty and ensure economic growth without liquidating the natural assets of a country. Moreover, natural capital is at utmost importance for the green economy and investments should be made on natural capital in terms of a green economy. Furthermore, fossil fuels should be replaced with clean energy and low-carbon technologies.

Even though the rapid development of clean energy and energy efficiency markets supports the global green economy, it still does not guarantee that a growth based on green economy will reach a sustainable economic growth. Hence, it is possible to express that there is a lot of criticism on the notion of "green economy".

According to Barbier (2011), green growth will not mean sustainable growth as long as the problems such as degradation and loss of global ecosystem and the ecological scarcity problems in the world worsens. As long as a global policy is not adopted to overcome the financing challenges and the sustainability of the globally rising ecological scarcity, the welfare of the existing and next generations is at risk. Financing and sustainability problems are clearly linked to each other.

Brand (2012) states that there are a lot of limitations for the concept of green economy. He states that green economy will not effectively address the problems of environmental degradation and poverty and will not deal with the necessary development of new understandings and forms of wealth.

Conclusion

It was a turning point for the world when the "New Development Goals" for 2015 were declared. Increasing inequalities with globalization, deepening poverty, removal of the frontiers and the protectionism also raise a lot of question marks about this process. Moreover, the New Sustainable Development Goals target to eradicate all sorts of poverty by 2030 and the world has to work in coordination and achieve a global mutuality to be able to fulfil those goals. Hence, it is not easy to bring globalization and its problems together with sustainable development and the notion of "sustainable globalization" also gains importance to reach 2030 goals.

The underlying complex connections of the poverty-environment relation, which is emphasized in this study, demonstrate that it is crucial to have a series of relevant policies and purposes to accomplish the goal of ending global poverty. As the poor are mostly the victims of environmental degradation, the policies correcting this degradation are in their direct concern. Thus, governments should prioritize the enforcement of policies that internalize environmental externalities. This will make it possible to prevent environmental degradation and will be a step forward to end poverty.

Undoubtedly, fulfilling sustainable development goals or making the economy greener will have a cost. In this context, it is crucial to emphasize the point that Krugman (2010) has stated for this matter: "Action will have costs, and these must be compared with the costs of not acting."

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Limits of Financial Manager's Responsibility During Financial Crises

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Abstract

The recent turmoil in Turkey's economy revealed the financial fragility of emerging economies against the US dollar. The sharp increase in USD exchange rate caused financial difficulties in the companies. A Macro level monetary crisis is an exogenous shock for a company that can only take some measures against the financial risks and taking these measures is one of the main responsibilities of financial managers. Having said that in which extend can a financial manager hold accountable for the financial distress in a company resulting from a crisis at macro level? That is the main question of the study. We discuss this question within the case of recent exchange rate distress in Turkey. In this regard we first discuss the nature of the currency crisis and in general financial crisis. We then evaluate the predictability of the financial crises. With analysing the crisis in Turkey, we try to answer the question about financial manager's responsibility during the latest exchange rate distress and generally during a turmoil or crisis.

Keywords : Financial Crisis, Currency Crisis, Financial Management, Global Financial Markets.

JEL Classification Codes : G32, G01, F65, F31.

Introduction

IMF and World Bank collect the member countries' data on public debt, housing prices and exchange rates changes but they do not warn the member countries about the quality of the collected data. Since 1929 Great Depression vast amount of empirical analyses, investigating the causes and implications of global crises, had been done. One of the most important is the Reinhart and Rogoff's (2009) book that investigates 800 years of financial history with all available data. In the book they analyse the economic indicators related to financial crises for many countries. They conclude that international institutions, notably IMF and World Bank, should warn the countries about providing more clear and qualified data on public debts and explicit or implicit government loan guarantees in order to mitigate the risks of global banking system. Today all the information on national economies that serve as financial crises warning should be treated as **public goods.**

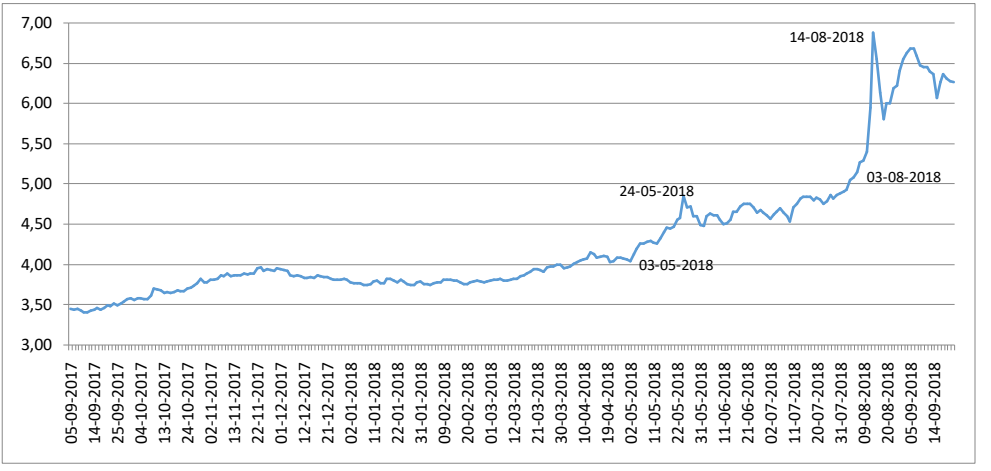
The expectation from a contemporary financial manager of an institutional company is a cautious businessmen action that is evaluating the national and global economic indicators in proportion to their effects on future financial decisions of the company. In such corporation, one of the most important

tool for such evaluations that financial manager have is the monitoring the fluctuations in exchange rates. As financial history reveals, even floating exchange rate system could not have been a sufficient cure for monetary crises and even the currencies of developed countries have collapsed without any warning.

There isn't any working quantitative model that can be used for preventing corporations from a debt failure, yet. Many companies, notably Lehman Brothers that were evaluated with AAA by the credit rating agencies, whose main responsibility is to prevent companies from a debt failure, have collapsed during 2007/2008 Global Financial Crisis.

The worst case scenario for a financial manager whose main traditional responsibility is to find the funds with possible longest maturity and lowest interest rates after 2007/2008 Global Financial Crisis is to face a currency crisis whilst economic indicators haven't signalled any kind of warning for such a crisis. Considering the fact that even the most reliable credit rating agencies have failed majorly, this is a very challenging issue for a financial manager. This was the case when the fluctuations in USD exchange rate started to increase in May 2018 in Turkey and accelerated after August 2018.

Graph 1. US Dollar Exchange Rate (Daily, Buying) September 2017-September 2018

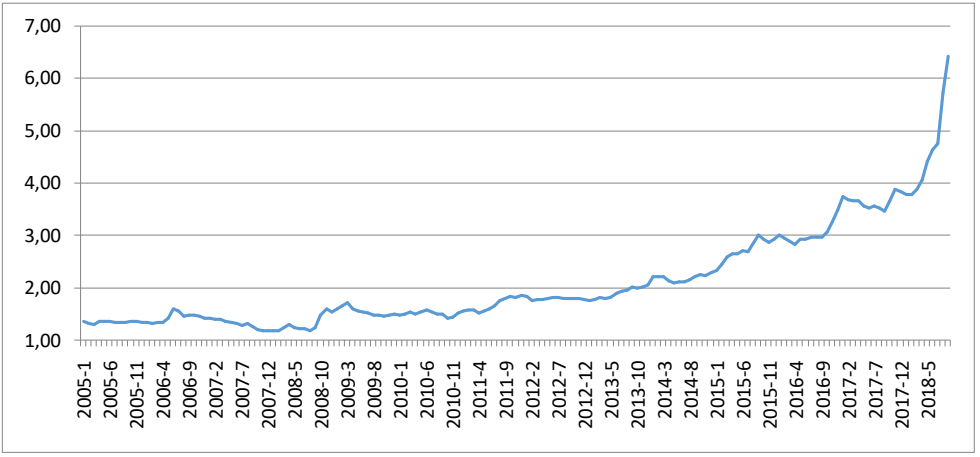


Source: Central Bank of Turkey, Electronic Data Delivery System

It is apparent in the graph below which shows the realization of the USD exchange rate for last 13 months that the increase in the second part of the 2018 is outstanding.

The graph below which shows the monthly developments in US dollar exchange rates from the beginning of 2005 reveals that sharp increase in the second part of the 2017, even after considering the increasing trend.

Graph 2. US Dollar Exchange Rate (Monthly, Buying) January 2005-September 2018



Source: Central Bank of Turkey, Electronic Data Delivery System

One of the most important indicator of the unpredictable nature of 2018 exchange rate increase is the results of comparison between Central Bank's Survey of Expectations and realization. In the table below expectations of the end of year US dollar rate in the interbank foreign exchange market, end of year realizations and the difference between them are displayed. As can be seen in the table, the difference between expectation and realization has been at most 0.5 point in 2002-2017. But the difference between 2018 expectation and September realization is 2.25. This shows the failure of the expectations of *96 participants of The Survey of Expectations, consisting of 75 experts from the financial sector, 13 experts from the real sector and 8 professionals.*

Table 2. Central Bank's Survey of Expectations, US dollar Exchange Rate January Expectations and December Realizations

Years	Interbank Market End of Year US Dollar Exchange Rate Expectation (January)	US Dollar Exchange Rate Realization (December)**	Deviation from The Begining of the Year Expectation
2002*	1.97	1.58	0.38
2003*	2.06	1.43	0.63
2004*	1.58	1.39	0.19
2005	1.49	1.35	0.15
2006	1.41	1.43	-0.01
2007	1.55	1.17	0.38
2008	1.29	1.54	-0.25
2009	1.63	1.50	0.13
2010	1.54	1.51	0.03
2011	1.55	1.86	-0.31
2012	1.84	1.78	0.06
2013	1.82	2.06	-0.24
2014	2.21	2.29	-0.08
2015	2.41	2.92	-0.51
2016	3.17	3.49	-0.32
2017	3.86	3.85	0.01
2018	4.12	6.37	-2.25

Source: Central Bank of Turkey, Electronic Data Delivery System
** For simplicity and comparison, the values are in million*
*** September realization*

Concluding Remarks

In conclusion, countries are affected by the global turmoil and crisis in proportion to their financial fragilities. The magnitude of short term debt to GDP ratio of the countries increases the financial fragility. Despite the fact that it is not possible to build an early warning system with using the economic indicators, the need for international financial institutions to provide data support, especially to emerging countries, is apparent. In current situation, the economic indicators that affect the

expectations are immune to controls and perhaps unpredictable in the globalized financial markets, where all the financial markets act as a single market. This fact limits the financial manager's responsibility. Another important aspect of the responsibility of the financial manager is the tools she/he has for mitigating the risks. In parallel with the magnitude of the risk, the magnitude of the measures against this risk increases. Especially for non-financial corporation using the funds for mitigating the financial risks as those risks increase can be more problematic.

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Social Effects of Unhealthy Products and Public Policies

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Abstract

Today there are many unhealthy products produced and marketed. The abandonment of natural production methods and the ambition to gain more profits have led the producers to behave in a way that adversely affect the health of the society. On the other hand, in general, the fight against diseases and treatment methods constitute great costs for countries. Various public policies can be implemented to correct this situation and prevent the problem from happening. Intervening, checking and imposing fines after the situation has occurred and will result in costlier and irreversible consequences. Before starting the production phase, the additives and the type of production to be used should be subjected to various classifications and cost-compensating measures should be taken to ensure the use of those who are beneficial to health. Especially cheap and unhealthy products imported from abroad should be banned, and those with low risk should be preferred to use different rates in taxation. In this study, the awareness of sensitive researchers and the risks to public health were discussed and regulatory public policy recommendations were included.

Keywords : Unhealthy Products, costs, Public Policies, Taxation.

JEL Classification Codes : H20, H30, I18.

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