
DETERMINANTS OF FOREIGN DIRECT INVESTMENTS OUTFLOW FROM A DEVELOPING COUNTRY: THE CASE OF TURKEY

Gokhan Onder¹, Zeynep Karal²

Faculty of Business, Anadolu University, Yunus Emre Campus, 26470 Eskişehir, Turkey
E-mails: ¹gokhanonder@anadolu.edu.tr (corresponding author); ²zkaral@anadolu.edu.tr

Received 5 February 2013; accepted 15 May 2013

We thank to Assoc. Prof. Dr. Yılmaz KILICASLAN for all contributions

Abstract. Foreign direct investments (FDI) outflows of Turkey have remarkably been raising over the last decade. This rapid increase brings about the need for questioning the determinants of FDI outflows. The aim of this paper is to estimate the factors affecting outflow FDI from Turkey from 2002 to 2011 by using Prais-Winsten regression analysis. According to estimation results, population, infrastructure, per-capita gross domestic product of the host country, and home country exports to the host country are the factors having positive effects on outflow FDI. We found, on the other hand, that the annual inflation rate of the host country, its tax rate collected from commercial profit, and its distance from Turkey have a negative relation with investment outflows. Moreover our results show that while investment outflows to developed countries are in the form of horizontal investments, investment outflows to developing countries are in the form of vertical investments.

Keywords: Foreign Direct Investments Outflow, Turkey, Panel Data Analysis, Developing Countries, Prais-Winsten Regression, Investment Decision.

Reference to this paper should be made as follows: Onder, G.; Karal, Z. 2013. Determinants of foreign direct investments outflow from a developing country: the case of Turkey, *Business, Management and Education* 11(2): 241–255.
<http://dx.doi.org/10.3846/bme.2013.14>

JEL Classification: F21

1. Introduction

Foreign direct investment (FDI) is an important instrument in realizing the economic growth objectives of countries. This instrument is particularly important for developing countries with limited capital and technical capacity. Developing countries' Transnational Companies (TNC) contribute to the economic growth of home country by transferring the knowledge gained by operating abroad. This internationalization process may also give developing countries TNC's an opportunity to enhance competitive advantages. The last decade has shown a significant rise in developing countries' outflows of foreign direct investment (OFDI). While 11% of global foreign direct investments were made by developing countries in 2001, this rate increased to 32% in 2010 and realized as 27%

in 2011. A three-fold increase in FDI from developing countries over the past ten years would lead one to consider the reasons lying behind those investments. The questions that should be answered: Which factors specific to home and host countries are at play? What are economic, bureaucratic, and cultural factors effecting country choice?

Similar to the trends in developing countries, a large increase in Turkey's OFDI was observed in the last ten years. While OFDI from Turkey was about 250 Million USD in 2002, this figure increased to 2.6 Billion USD in 2011.

The aim of this article is to estimate the factors affecting the OFDI from Turkey by using panel data analysis. The rest of the paper is organized as follows: The next section introduces descriptive statistics of FDI to show the economic magnitude of the subject matter, such as global Foreign Direct Investment (FDI) trends, the shares of developing and developed countries in these investments and the position of Turkey in this picture. The third section covers the theoretical bases of foreign direct investment and discusses empirical studies analyzing the factors affecting the OFDI from Turkey. The model, data and econometric method used in this study are presented in the fourth section. Section five discusses the estimation results. Finally, section six concludes.

2. Foreign Direct Investment - Overview

Global foreign direct investment inflows have increased by 17% to 1.5 trillion USD in 2011 (see figure 1). 51% of these investments went to developing countries (see figure 2). These investments, which significantly decreased due to the global financial crisis, have been steadily increasing since 2009.

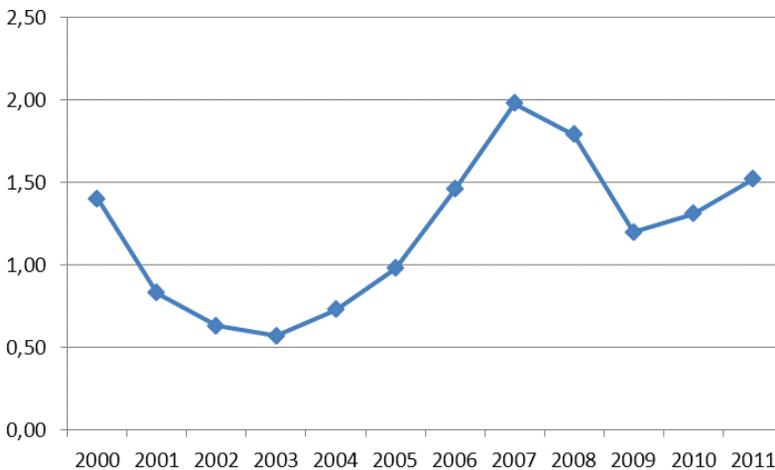


Fig. 1. World Direct Investment Inflow (Trillion \$)
(Source: UNCTAD (2012), World Investment Report 2012)

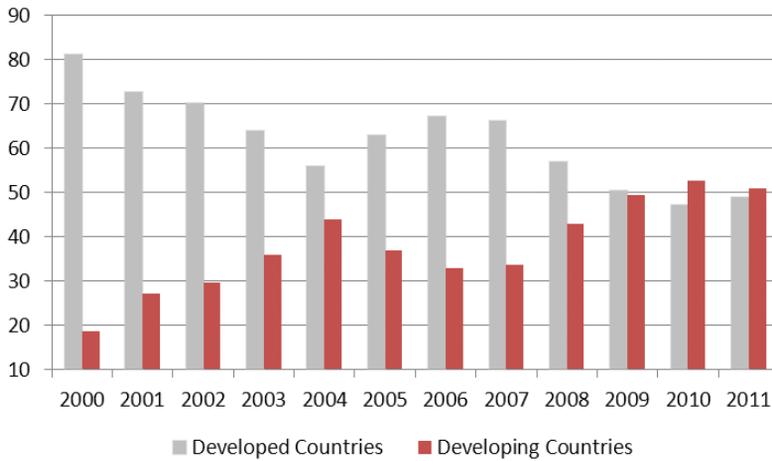


Fig. 2. The Distribution of FDI among Developed and Developing Countries, %, 2000–2011
(Source: UNCTAD (2012), World Investment Report 2012)

It is observed that FDI inflows to Turkey over the past ten years have increased significantly (see figure 3). Turkey, which received approximately 1 Billion USD foreign direct investment in 2000, has received 22 Billion USD in 2007. Although incoming investments have declined from this date onward due to the global financial crisis, Turkey attracted 15 Billion USD in 2011.

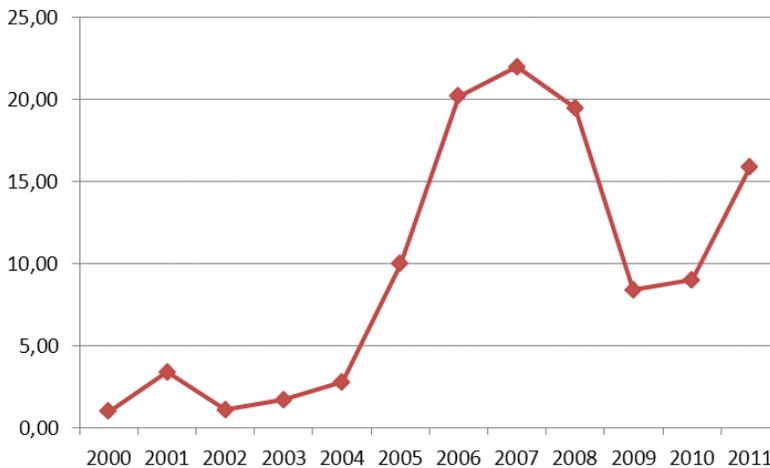


Fig. 3. FDI inflows to Turkey, 2002–2011(billion \$)
(Source: UNCTAD (2012), World Investment Report 2012)

An analysis of the FDI outflows from Turkey over the past ten years shows that these investments have also increased significantly. Turkish TNC's FDI was about 250 Million USD in 2002, and then increased to 2.6 Billion USD in 2011(see figure 4).

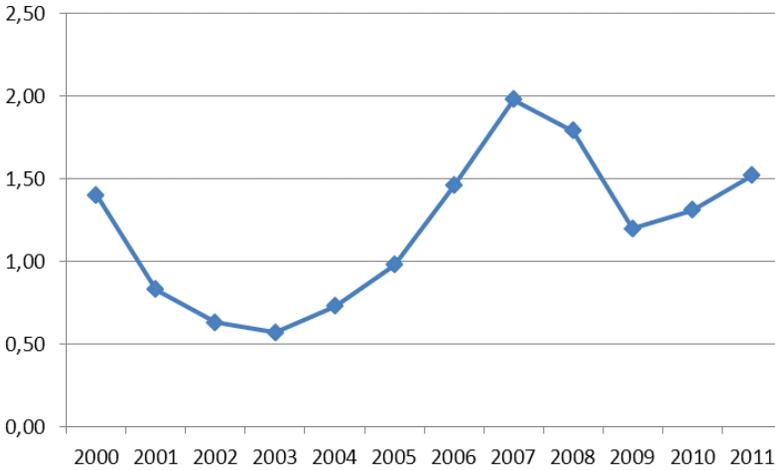


Fig. 4. FDI Outflows from Turkey, 2002–2011(Million \$)

(Source: Central Bank of Republic of Turkey. www.tcmb.gov.tr (accessed: 27.04.2013))

Continental distribution of FDI outflows from Turkey shows that more than half of investment went to Europe in the last decade. Europe was followed by Asia, America and Africa. The reason of this is the fact that Europe and Middle Asia are the major trade partners of Turkey.

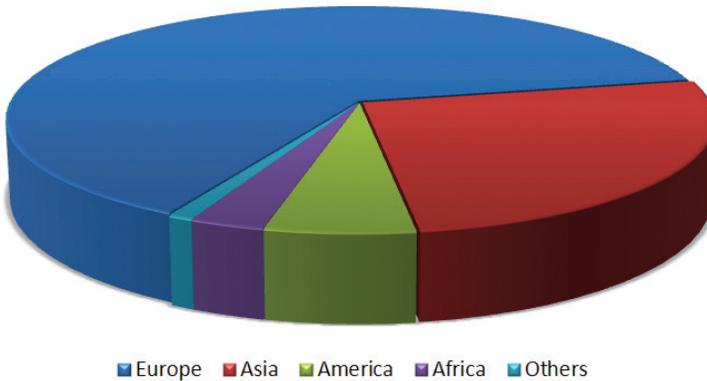


Fig. 5. Continental Distribution of FDI Outflows from Turkey (2002–2011)

(Source: General Directorate of Statistics of Central Bank of Turkish Republic www.tcmb.gov.tr (accessed: 27.04.2013))

In 2000, the developing countries got 20% of global inward FDI. This figure increased to 51% in about ten years. 10% of global outward FDI was made by the developing countries in 2000. Similarly, this figure also reached to 27% within ten years. The implication of this picture is that the developing countries became not only FDI destinations but also FDI source countries in the last decade.

3. Literature Framework

Since 1960's researchers have tried to answer the question that why a business goes abroad. The answers are considered as the cornerstone of FDI literature. Cornerstones are important for our research paradigm. This section includes theoretical framework of determinants of FDI and literature which analyzing these determinants empirically within the context of Turkey.

Vernon (1966) claims that as the newly developed product become a standard product in time, the production facilities will be moved from developed countries where the product was first introduced to the market to less developed countries where production costs are lower.

Knickerbocker (1973) mentions that foreign direct investment decisions of businesses operating in oligopoly market are affected by competitors FDI decisions. According to Knickerbocker, those businesses that do not want to lose market share as a result of investments their competitors made are inclined to make counter investments.

When explaining foreign direct investments Hymer (1976) assumes that businesses that establish production facilities abroad should have some advantages compared to local businesses in the production of a product. He mentions that in imperfect market conditions, such as monopoly or oligopoly, this advantage will be profitable only through the investments that are under the ownership and control of the enterprise.

Buckley and Casson (2009) claim that due to imperfections in the market and transaction costs, some activities can be performed more effectively under control of businesses rather than in the market. For example, if the businesses don't timely procure the raw materials and intermediate goods, they may prefer to produce these materials their selves. Hence an intermediate market becomes internalized.

In the OLI paradigm, Dunning (1994, 1998, 2006) states that production in a foreign country serves to benefit long-term business objectives only when three factors are satisfied simultaneously. The first of these factors is 'Ownership Specific Advantages,' which are the tangible and intangible asset-based advantages of business. The second is the Location Specific Factors, which are those specific to host or home country. The third is Internalization Advantages which are benefits that come from market imperfections (Dunning & Lundan 2008).

Researches on the determinants of foreign direct investment outflows from Turkey have been sparse and concentrated mostly on host country determinants of FDI. Majority

of these researches used firm-level data, while minority of them used macro data as the unit of analyses. These researches commonly try to answer two questions: What Turkish businesses focus on in choosing a host country? Whether or not there is a difference in FDI outflows with respect to development levels of countries? In addition to this, based on Dunning's studies in this area, investments have been attempted to be classified according to market, source, efficiency, and strategic assets purposes.

Anıl's (Anıl *et al.* 2011) analyzed 107 Turkish TNC's that have investments in Central Asia, the Balkan countries, and Russia in order to explore which factors are important in choosing the investment location. The factors were turned out to be the benefit of being the first business operating in the market, the purchasing power of customers, the level of competition in the sector, the growth rate of the country, the market size, the probability of having access to low-cost inputs, and the easy access to neighboring-country markets respectively.

Demirbağ's (Demirbağ *et al.* 2010), which examined investment destination choices of 522 Turkish TNC's, concluded that Turkish TNC's have been making investments in developed countries to reach strategic assets and developing countries in order to benefit from firm-specific advantages. In addition, the results of this research indicates that as the amount of capital required for investment increases, businesses prefer developed countries as the destination of investment. The fact that economic and political risks in developed countries are less than in developing countries has been put forward as the reason for this situation. The research has evaluated that the concentration of investments from the same home country in a host country is a factor that affects the investment destination. When the investment concentration is in question, Turkish businesses prefer developing countries to ease the information exchange in markets where uncertainty is high.

Kayam and Hisarciklilar (2009) in their study examining the factors determining FDI outflows from Turkey from 1992 to 2005 by using the gravity model determined that investments were in the form of horizontal investments for the purpose of reaching out to faraway markets, and as the distance between Turkey and the host country increased, investments also increased. According to their findings, as the exports from Turkey to the host country increases, investment to the host country also increases and an increase in per-capita income both in Turkey and in the host country negatively affect the investments.

According to Akçaoğlu (2005), depending on the characteristics of firm size and the sector of operation, Turkish TNC's have been making investments for different purposes in different countries. The developed countries have been attracting large-scale businesses' strategic-asset-seeking investments. Turkish businesses, however, have been making investments in developing countries because of markets, effectiveness, and natural resources. According to research of 109 businesses with investments abroad, protecting the export markets, gaining new markets, and increasing the efficiency of export activities play an important role in Turkish foreign direct investment outflows.

Akis's (1999) which analyzed the reasons why Turkish businesses are successful in the former Soviet Union, determined that Turkish businesses started their operations in the markets in question before the businesses of other countries provided them a significant advantage. Additionally, Turkish investors' skills in managing uncertainties, Turkey's physical proximity to these countries, the possibility of having communication in Turkish in these countries, and support that the Turkish government provided to investors have been demonstrated as the reasons that make Turkish businesses successful in these countries.

In sum, empirical studies about Turkey's OFDI have some common points. While to be the first business operating in the market and easy access to low cost inputs are said to be the major OFDI determinants for developing countries, reaching strategic assets and protecting export markets are the main motives of developed country OFDI. Market size is a common factor for both country groups. In this study we aim to explore the factors affecting OFDI from Turkey, using some host countries institutional and economic FDI determinants, in addition to factors that used in previous empirical studies.

4. Model, Data and Econometric Method

We, in this study, are attempting to bring forward the factors determining outflow FDI from Turkey. The choice of explanatory variables which affect outflow FDI from Turkey is predicated on certain literature determinations and theories. The empirical foundations of outflow FDI from Turkey are based upon Newton's "general law of gravity". The law of gravity states that the force between two objects is directly proportional to their masses and inversely proportional to the square of the distance between them. The use of the general law of gravity in economics literature has first been made by Tinbergen (1962) and Pöyhönen (1963). With Linnemann's (1966) addition of other explanatory variables and the development of many other economic studies, the model is presently being used in economic literature in many fields, such as commerce, investment, tourism, etc.¹

In this study, we analyze outflow FDI from Turkey by using the adapted version of the gravity model that trade between countries is directly proportional to GDP and inversely proportional to the distance between the two countries. The estimated model in this study has given in equation 1 (Table 1):

$$\ln ofdi_{it} = \alpha + \ln exp_{it} + \ln gdp_{it} + \ln dst_{it} + \ln pop_{it} + \ln inf_{it} + \ln tax_{it} + \ln tel_{it}. \quad (1)$$

¹ Some empirical and direct investment related articles involving gravity model: Anderson, J. E. (1979); Bergstrand, J. H. (1985); Mauro, F. (2000); Kleinert, J., Toubal, F. (2010).

Table 1. Definitions of Variables

Variables	Definition
ofdi	Outflow FDI flows (million \$)
exp	Export to host country(million\$)
gdp	Host countries' GDP per capita (million\$)
dst	Distance between capital cities (kilometers)
pop	Host countries' population
inf	Host countries' GDP Deflator (% annual)
tax	Host countries' Total tax rate (% commercial profit)
tel	Telephone line per 100 people in host countries

While we are attempting to bring forward the reasons of outflow FDI from Turkey, the *per-capita income* (gdp) of the country to which investments are made and *distance* (dst) are included in the model. The distance is measured as the distance between the capital cities in kilometers. The estimation results that we attempt to reach should be consistent with the gravity model.

Turkish businesses have engaged FDI activities in recent years. It is assumed that they intent to invest in export markets that they were previously active in. So the *export* (exp) variable measured as export to the host country from Turkey has been added to the model. Within this framework the expected result is that the export and investment variables move in the same direction.

In addition to these three explanatory variables, in order to proxy the market size the *population* (pop) variable is used in the model. Economic stability in the host country is reflected by using the *inflation* (inf)² variable. The *tax rate* (tax) collected from commercial profit as one of the important determinant investments is included in the model. A *telephone line per 100 people* (tel) is used to proxy the infrastructure level in host country. We expect positive association between outflow FDI from Turkey and population and infrastructure level in the host country, while expecting negative impact of inflation and taxes. All of the variables in the model are log-transformed.

In order to strengthen the explanatory power of the model, we have employed other explanatory variables such as per-capita electricity consumption, inter-country real wage indexes, technological level of countries etc.

The unbalanced country-based data of outflow FDI from Turkey was obtained from the Central Bank of the Turkish Republic in the model. The data for exports from Turkey have been retrieved from the T.R. Ministry of Economy's data base. The distance variables have been retrieved from the "How far is it?" website³, inflation, tax,

² Inflation, GDP Deflator (% annual)

³ <http://www.indo.com/cgi-bin/dist>.

telephone line and per-capita gdp data were taken from World Bank databases. The total tax rate variable is missing for 2002-2004. However export, per-capita income, and inflation data have caused imbalances. The descriptive statistics for the data used is given in Table 2.

Table 2. Descriptive Statistics

Variable	Obs.	Mean	Std. Dev	Min	Max
Inofdi	310	12,278	7,344658	0	20,36516
Inexp	309	20,2609	1,842113	7,507141	23,3588
lngdp	306	9,001615	1,401078	6,173786	11,29466
Indst	310	7,596229	0,559144	6,60123	9,075551
Inpop	310	16,97845	1,713783	13,37245	21,01901
lninf	297	1,468333	1,125689	-2,95756	4,066761
Intel	309	3,219035	0,794501	0,888049	4,307577
Intax	215	3,718767	0,468274	2,272126	4,923624

As it is seen in the equation I, the empirical analysis is being carried out by using a panel data set. This data set covers a 10-year period from 2002 and 2011 and 31 of 33 countries to which more than 50 Million USD or over outflow FDI from Turkey recorded. Luxembourg and Malta, to which more than 50 Million USD of direct investment has gone, were excluded from the study. Luxembourg is a country where tax advantages are utilized rather than direct investments. In Malta, however, during this 10-year period, there has been 1 Billion USD outflow in a single year.

We argue in this study that factors affecting foreign investment decisions may vary with respect to development level of countries. In order to test if the development level of countries is important for the outflow FDI of Turkey, we classified 31 countries in our database into two as developed and developing and estimated the relations for these two groups separately. It turned out to be that while 10 countries in our data set were classified as developed countries, the other 21 countries were classified as developing countries with respect to IMF criteria. Export, distance, and population variables were used in the estimates conducted with respect to development level. These variables are independent from development level of countries. The exp and dist variables are Turkey specific factors (Turkey's export to host country, Turkey's distance the host country). However the pop variable, also independent from development level of countries, was included to answer that how the market size affect OFDI from Turkey respect to development level of countries.

For the investment outflows to developed countries ($ofdi_{DedC}$) and investment outflows to developing countries ($ofdi_{DingC}$), the models were configured equations 2 and 3:

$$Lnofdi_{DedCit} = \alpha + lnexp_{it} + lndst_{it} + lnpop_{it}; \quad (2)$$

$$Lnofdi_{DingCit} = \alpha + lnexp_{it} + lndst_{it} + lnpop_{it}. \quad (3)$$

In analyzing outflow FDI from Turkey, the model was estimated by using the Prais-Winsten regression method. Because it has turned out to be that there is heteroscedasticity, correlation between units, and special AR (1) correlation between units in the model. We used the Prais-Winsten estimator because of the fact that Panel Corrected Standard Errors (PCSE) is an effective estimator for these types of models. Another reason for choosing this method is that in situations where time dimension is more limited than cross-section dimension, this methodology produces more effective estimator than “Feasible Generalized Least Squares” (FGLS), which have been adopted within the framework of this study⁴.

5. Findings

The summary of estimate results performed by the Stata 11 package program is presented in the Table 3.

Because both heteroscedasticity and unit correlation were allowed in the results, 496 covariance are observed, and because countries were allowed special AR (1) correlation, it is observed that autocorrelation coefficients equal to the unit number of 31 were calculated. Wald chi2 test shows that the total of the model gives significant results. Within the framework of these calculations z statistics show that coefficients are significant. As a result variables have turned out to be both in accordance with the gravity model and in the expected direction.

When we analyzed the results of model 1, it was revealed that there is a positive relationship between outflow FDI from Turkey and host countries’ population (market size), infrastructure facilities, per-capita gross domestic product (meaning the purchasing power of the market), and the exports that Turkey makes to host countries. It was also revealed that there is a negative relationship between the inflation rate (economic stability) of host countries, the tax rates that host countries collect from commercial profit, the physical distance between Turkey and these countries, and foreign direct investment outflows from Turkey.

The positive relationship between the variables of population, per-capita GDP and outflow FDI point to the market-oriented direction of the investments. It was shown that market size and purchasing power play important roles in the investment decisions of businesses. On the analysis of the export variable, when the fact that foreign direct

⁴ Beck, N., Katz, J. N. (1995); Podesta, F. (2002); Tatoğlu, F. Y. (2012) and opposite thought is, Reed, W., Webb, R. (2010).

investment outflows from Turkey have reached significant size in recent years is taken into account, it can be taken in stride that first investment experiences are concentrated in the export markets where there exist previous market experiences. In addition to this, it can be said that in directing the investments into export countries, as Akçaoğlu (2005) indicates, protecting and enlarging the export markets and increasing the efficiency of export activities have an effect. The tel variable that we believe to some degree represents infrastructure facilities of the countries shows that host country infrastructure systems have an effect on outflow FDI from Turkey.

Table 3. Estimate Results

Variables	Model 1	Model 2 - Developed Countries	Model 3 - Developing Countries
lnexp	0,4635777* [0.929464]	0,6683486* [0.1240083]	1,784487* [0.0874076]
lndst	-2,817362* [0.4235122]	2,075411* [0.3534391]	-1,132966* [0.2336103]
lnpop	2,031658* [0.1250922]	0,3544824* [0.1422319]	0,2516426* [0.0952131]
lngdp	0,8777977* [0.189958]		
lninf	-0,5090912* [0.0997254]		
lntax	-3,934211* [0.264389]		
lnel	1,289574* [0.4257372]		
Estimated covariance	496	55	231
Estimated autocorrelations	31	10	21
Estimated coefficients	8	4	4
R-squared	0,6208	0,6657	0,255
Wald chi2 (7)	320815,67	592,28	580,99

*5% significance level
Standart erros in parenthesis

It was shown that as expected there is a negative relationship between inflation, tax variables and OFDI from Turkey. This reveals that while choosing host countries, Turkish TNC's prefer countries with economic stability and low tax costs.

When we analyzed the distance variable, however, we found a negative relationship between distance and outflow FDI from Turkey. The negative relationship between outflow FDI and distance can be seen as natural due to the fact that trade activities tend to decrease as the distance between two countries increases. However, in model 2 and 3, where we separated the countries with respect to their development level, we found that the relationship between the distance variable and outflow FDI is positive for developed countries and negative for developing countries. (The fact that in model 1 the majority of our sample was constituted by developing countries is supportive of this outcome). This difference stems from the characteristics of investments. While the basic purpose of horizontal investments is to reach host country markets and better serve them, these investments have been increasing as the distance between the two countries increases while vertical investments', whose basic purpose is to fragment the production process in order to benefit from different factor endowments, have been decreasing as the distance between the two countries increases (Egger 2008). The reason for this is the effect of the distance between the two countries on trade costs. In vertical investments, trade relations between home country and host country are intense (Transportation of inputs from the home country to the host country and the processing of inputs in the host country or production in the host country and sending the products to the home country can be given as examples of the trade relations in question). Because an increase in the distance between the two countries will make trade relations more costly as the distance increases, investments in the character of vertical tend to decrease.

Like distance, labor is also an important determinant for vertical FDI⁵. When average minimum wages (AMW) were compared for countries in our data sample, developed countries' AMW were about 1762 USD, this figure were 256 USD for developing countries in 2011. When we evaluated the relations between OFDI, labor and distance, we can say that outflow FDI from Turkey to developing countries is in the character of vertical investments to benefit from different factor endowments. The fact that the export variable within the two country groups has a higher coefficient for the developing countries group is in keeping with this idea. It can be said that outflow FDI from Turkey to developing countries is complementary to exports going to these countries from Turkey. We can also say that outflow FDI from Turkey to developed countries is in the character of horizontal investments toward the markets to which previous exports were made.

In model 2 and 3, where we separated the countries with respect to their development levels, it is seen that for both groups there is a positive relationship between the

⁵ Labor cost statistics of developing countries in our sample aren't systematically available for research's time period (2002–2011). Therefore, we couldn't estimate the labor cost effect on OFDI. We calculated minimum wage statistics, for giving an opinion about labor cost. Minimum wage statistics are collected from Eurostat and U.S. Department of State's Country Reports on Human Rights Practices for 2011.

population of the home country as well as exports made from Turkey to the host country and outflow FDI from Turkey. In this case we can say that, irrespective of development levels of countries, outflow FDI from Turkey is affected by the market size of the host countries and that they prefer the markets to which previous exports were made.

6. Conclusions

This study explores the factors affecting outflow FDI from Turkey from 2002 and 2011 by Prais-Winsten regression analysis. According to estimation results, populations of host countries, their infrastructure facilities, their per-capita gross domestic product, and Turkey's exports to the host country have positive effects on outflow FDI from Turkey. The annual inflation rate of the host country, its tax rate collected from commercial profit, and its distance from Turkey are, on the other hand, the factors having negative effects on investments.

We found that populations of host countries and exports made from Turkey to the host country affect the investments positively for both developed and developing countries. The only variable that has different impact in different countries with respect to the development level is the *distance*. Investments going to developed countries increase as the distance between the host country and Turkey increase, investments going to developing countries decrease as the distance between the host country and Turkey increases. The reason for this is the differences in the characteristics of investments going to each country group. We can say that investment outflows to developed countries are in the form of horizontal investments in order to better serve the markets of these countries and avoid export costs while investment outflows to developing countries are in the form of vertical investments made in order to benefit from different factor endowments and cost advantages.

References

- Akçaoğlu, E. 2005. *Türk Firmalarının Dış Yatırımları: Saikler ve Stratejiler*. Ankara: Türkiye Bankalar Birliği.
- Akis, Y. 1999. Turkish firms success factors in the former Soviet Union, *Cross Cultural Management: An International Journal* 6(4): 3–10.
- Anderson, J. E. 1979. A theoretical foundation for the gravity equation, *American Economic Review* 69(1 march): 106–116.
- Anıl, İ.; Armutlulu, I.; Canel, C.; Portfield, R. 2011. The determinants of Turkish outward foreign direct investment, *Modern Economy* 2: 717–728. <http://dx.doi.org/10.4236/me.2011.25080>
- Beck, N.; Katz, J. N. 1995. What to do (and not to do) with time series cross section data, *American Political Science Review* 89(3): 634–847. <http://dx.doi.org/10.2307/2082979>
- Bergstrand, J. H. 1985. The gravity equation in international trade: Some microeconomic foundations

and empirical evidence, *The Review of Economics and Statistics* 67(3): 474–481.
<http://dx.doi.org/10.2307/1925976>

Buckley, P.; Casson, M. 2009. The internalisation theory of the multinational enterprise: A Review of the progress of a research agenda after 30 years, *Journal of International Business Studies* 40: 1563–1580. <http://dx.doi.org/10.1057/jibs.2009.49>

Central Bank of Republic of Turkey [online], [accessed 27 April 2013]. Available from Internet: www.tcmb.gov.tr

Demirbağ, M.; Tatoğlu, E.; Glaister, K. 2010. Institutional and transaction cost determinants of Turkish MNE's location choice, *International Marketing Review* 27(3): 272–294.
<http://dx.doi.org/10.1108/02651331011047989>

Dunning, J. 1994. Re-evaluating the benefits of foreign direct investment, *Unctad Transnational Corporations* 3(1).

Dunning, J. 1998. Location and multinational enterprise: A Neglected factor?, *Journal of International Business Studies* 29(1): 45–66. <http://dx.doi.org/10.1057/palgrave.jibs.8490024>

Dunning, J. 2006. Towards a new paradigm of development: Implications for the determinants of international business, *Unctad Transnational Corporations* 15(1).

Dunning, J.; Lundan, S. 2008. *Multinational Enterprises and the Global Economy (Second Edition)*. Edward Elger Publishing.

Egger, P. 2008. On the role of distance for outward FDI, *The Annals of Regional Science Springer* 42: 375–389. <http://dx.doi.org/10.1007/s00168-007-0166-y>

Eurostat. European Commission Statistics Database [online], [accessed 20 March 2013]. Available from Internet: <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>

Hymer, S. 1976. *The International Operations of National Firms: A Study of Direct Foreign Investment*. Cambridge: The MIT Press.

How far is it? [online], [accessed 20 October 2013]. Available from Internet: <http://www.indo.com/cgi-bin/dist>

Kayam, S.; Hisarcıklılar, M. 2009. Türkiye'den çıkan doğrudan yatırımları belirleyen etmenler, 1992–2005, *İktisat, İşletme ve Finans* 24: 47–70.

Kleinert, J.; Toubal, F. 2010. Gravity for FDI, *Review of International Economics* 18(1): 1–13.
<http://dx.doi.org/10.1111/j.1467-9396.2009.00869.x>

Knickerbocker, T. F. 1973. Oligopolistic reaction and multinational enterprise, *The International Executive* 15(2): 7–9. <http://dx.doi.org/10.1002/tie.5060150205>

Linnemann, H. 1966. *An Econometric Study of International Trade Flows*. Amsterdam: North Holland.

Mauro, F. 2000. The impact of economic integration on FDI and exports: A Gravity approach, *CEPS Working Document*.

Podesta, F. 2002. *Recent Developments in Quantitative Comparative Methodology: The Case of Pooled Time Series Cross Section Analysis*. DDS Papers.

Pöyhönen, P. 1963. A Tentative model for the volume of trade between countries, *Weltwirtschaftliches Archiv*: 93–100.

Reed, W.; Webb, R. 2010. *The PCSE Estimator is Good, Just not As Good As You Think*. Working paper. Available from Internet: <http://www.econ.canterbury.ac.nz/RePEc/cbt/econwp/1053.pdf>

Tatođlu, F.Y. 2012. *İleri Panel Veri Analizi*. Beta Yayınevi. İstanbul.

Tinbergen, J. 1962. *Shaping the World Economy: Suggestions for an International Economic Policy*. New York: Twentieth Century Fund.

Unctad. 2012. *World Investment Reports 2012*. United Nations Publications. Switzerland.

United States Department of State. 2011. *Country Reports on Human Rights Practices for 2011* [online], [accessed 20 March 2013]. Available from Internet: <http://www.state.gov/j/drl/rls/hrrpt/humanrightsreport/#wrapper>

Vernon, R. 1966. International investment and international trade in the product cycle, *Quarterly Journal of Economics* 80: 190–207. <http://dx.doi.org/10.2307/1880689>

Gökhan ÖNDER. I was born in Samsun in 1987 and graduated from Business Administration department of Anadolu University, in 2009. I have graduated master degree in International Business Administration at Anadolu University. I am a PH.D. candidate in Management & Organization at Anadolu University and also I have been working as an assistant to the Faculty of Business Administration in Anadolu University since 2011. I work in the areas of foreign direct investments, competition, clusters and business history.

Zeynep KARAL. I was born in Ankara in 1986 and graduated from Public Finance department of Ankara University, in 2009. I am a PH.D. student in Public Finance at Anadolu University. There I have been working as an assistant to the Faculty of Economics in Anadolu University since 2011. I work in the areas of investment policy, labor policy and public choice.