### TURKEY'S COMPETITIVENESS IN TERMS OF DETERMINANTS OF FDI: A COMPARISON WITH HUNGARY AND POLAND

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### -Abstract -

Foreign direct investments (FDI) have increased rapidly in the world especially after 1990s. Both developing and developed countries consider FDI as a source of capital and they compete with each other to get more FDI to their countries. In this context, the factors that make attractive the host country are becoming important to attract FDI. Determinants of FDI classified differently by economic, political and geographical in the literature.

In this study, the economic factors determine FDI in Turkey (market size, labor costs, exchange rates, interest rates, economic growth rate, geographic location, infrastructure, taxes, etc.) will be investigated and compared with data of Hungary and Poland. As a result of this comparison, the factors attracting FDI and affecting the competitiveness of Turkey against to Hungary and Poland will be determined.

Key Words: Determinants of FDI, Turkey's Competitiveness, Hungary, Poland

JEL Classification: F21, O52, O57

# **1. INTRODUCTION**

Countries are struggling to attract foreign direct investments (FDI) due to globalization, structural transformations in global economy and, increase in economic integrations in recent years. FDI or foreign investment is generally defined as a firm purchases a firm in abroad, increases of its capital stock or exports technology or management knowledge. Since FDI make some contribution to the host countries, they are assumed as an actor of economic

growth. That's why both developed and developing countries compete to attract FDI inflows. In this concept, the structural features of the host countries are becoming more important. The factors defining FDI are considered as investment climate factors, political factors, or economical factors.

This study is examined the economical factors (the size of the market, cheap labor costs, exchange rates, interest rates, tax rates, the physical infrastructure, geographical location, etc.) that defining FDI in case of Turkey and Turkey's competitiveness in attracting FDI. In this context, FDI status will be discussed first in the world. Afterward Turkey will be compared with Poland and Hungary in attracting FDI and their FDI stocks. Finally, study will be completed with an overall assessment.

# 2. DEVELOPMENT OF FOREIGN DIRECT INVESTMENTS

Studies focused on the FDI emerged with globalization and have thrived especially after the 1990. FDI brings to host countries capital investment, productive facilities and technology transfers, as well as new jobs and management expertise. Thus it is important to understand why in many countries FDI inflow is lower than expected (Baniak et al, 2002:1). On the one hand the developing countries, to choose to receive a share of FDI instead of foreign borrowing, on the other hand Eastern European countries closing its doors to foreign investment become to attract foreign investment after 1990 period. All of these developments managed to keep the agenda the issue of FDI.

Inward FDI stocks in 1980s are 698.952 million dollars, in 1990s are 2.081.299 million dollars, in 2000s 7.445.637 million dollars, and in 2010 increased up to 19.140.603 million dollars. Also, a similar increase in outward FDI stocks took place with these numbers in order; 548.936 million dollars, 2.094.169 million dollars 7.962.170 million dollars, 20.408.257 million dollars (UNCTAD-FDI Reports, 2011). It can be seen that an increase in the FDI inwards over the years.

Figure 1 shows FDI inflows both for developed and developing countries and world in 2005-2010 periods. Due to effect of the global crisis of 2008, both the developed and developing countries have suffered from a decline in foreign direct capital flows. Although developing countries have increased foreign direct capital inflows, developed countries have had a slight decrease in 2010.



Figure-1: FDI Inflows, By Region and Economy, 2005-2010 (Millions of Dollars)

Figure 2 shows FDI outflows both for developed, developing and all countries in 2005-2010 periods. FDI outflows in 2005 are 982.593 million dollars and raises 1.970.940 million dollars in 2007. As a result of the 2008 crises in the world it declines in 2010. The decline of the FDI inflows in developing economies after the crises is lesser than the developed economies.



Figure-2: FDI Outflows, By Region and Economy, 2005-2010 (Millions of Dollars)

Source: UNCTAD, World Investment Report 2011.

# 2.1. Development of Foreign Direct Investments in Turkey

Turkey such as many other countries considers FDI as one of the factors of development. First law related on FDI in Turkey was put into force in 1954 but, many important developments about FDI realized after 1980 in Turkey. The FDI inflows in Turkey rise from 0.2 to 9.1 billion dollars in 1980-2010 periods.

Figure 3 shows FDI inflows and outflows in Turkey in 2000-2010 periods. As seen on the Figure 3 an increase in FDI accumulation happens until 2007. FDI

Source: UNCTAD, World Investment Report 2011.

inflows increased 22 times in this period. FDI inflow decreased after 2008 due to the global economic crises in the world. When FDI outflows take in the consideration in 2000-2010 periods in Turkey, they raise 0.8 to 1.8 billion dollars.

Figure-3: FDI Inflows and Outflows in Turkey, 2000-2010 (Billions of Dollars)



Source: UNCTAD, World Investment Report 2011.

### 2.2. Determinants of Foreign Direct Investments in Turkey

Determinants of FDI are classified in different ways based on economic, politic or geographical factors. In this paper, the economic factors affecting FDI will be examined. UNCTAD classifies FDI such as market-seeking, resource/asset seeking and efficiency-seeking (UNCTAD, WIR, 1998).

Investors choose a location of investment according to the expected profitability associated with each location. Profitability of investment is in turn affected by various country specific factors as well as a type of investment motives. For example, market-seeking investors will be attracted to a country with large local market and fast growing market. Resource-seeking investors will look for a country with abundant natural resources. Efficiency-seeking investors will weigh more of geographical proximity to the home country to minimize the transportation cost (Kinoshita, 2002;5).

There are many studies aimed at defining determinants of FDI. The determinants of FDI vary according to host and donor country. The most investigated factors affecting FDI are market size, GDP, trade openness, exchange rates, wages and country risk of host country. In addition, the country's physical infrastructure, geographical location, taxes, budget deficit, foreign trade barriers, other variables such as unionization rates are known as other factors effecting FDI. In this section, theoretical background of the study will be given.

The one of the first studies, aimed at determining the factors that determine FDI, was made by Dunning (1973). In this study, GNP, labor costs, inflation, balance of payments and external debt variables are considered as the determinants of FDI and GNP was stressed as the most important variable. Billington (1999) used countries' market size, market potential, infrastructure, labor costs, trade openness, tax rates, export amount and interest rate variables as the determinants of FDI for USA, Japan, France, Germany, Australia, Canada and England. It was found out that, market potential, labor opportunities, export and interest rate have a positive impact on FDI and taxes makes negative impact on FDI. In addition, the studies aiming to determine the variable affecting FDI and the directions of these impacts, empirical findings and some examples are given in table 1.

	Direction of	Empiricial	Examples
Variable	effects	findings	-
Market Size	+	+	Tsai (1994), Shamsuddin (1994), Billington (1999), Pistoresi (2000), Cheng and Kwan (2000), Tuman and Emmert (1999), Wang and Swain (1995), Love and Lage-Hidalgo (2000)
Warea	+/-	+/-/0	Wheeler and Mody (1992), Pistoresi (2000), Tsai (1994), Cleeve (2000), Lunn (1980), Culem (1988), Blonigen and Feenstra (1996), Cheng and Kwan (2000), Magra (1992)
Wages		. / /0	(2000), Moore (1993)
Trade Barriers	-	+/-/0	Lunn (1980), Culem (1988), Blonigen and Feenstra (1996)
Growth Rate	+	+/0	Billington (1999), Tsai (1994), Martin and Ottaviano (1999), Sin and Leung (2001)
Openness	+	+/0	Kravis and Lipsey (1982), Pistoresi (2000), Wheeler and Mody (1992), Gyapong and Karikari (1999), Sin and Leung (2001)
Trade Deficit	?	+/-	Tsai (1994), Shamsuddin (1994), Pistoresi (2000)
Exchange Rate	+/-	+/-/0	Edwards (1990), Blonigen and Feenstra (1996), Tuman and Emmert (1999)
Tax	-	+/-/0	Swenson (1994), Billington (1999), Porcano and Price (1996), Wei (2000), Schoeman et al. (2000), Hines (1996)
Country Risk	-	-	Lehmann (1999), Ramcharran (1999), Tuman and Emmert (1999)
Incentives	+	+	Ihrig (2000)
Corruption	_	_	Wei (2000)
Labour Disputes and Uninonisation	-	+/-	Moore (1993), Tcha (1998), Yang et al. (2000), Leahy and Montagna (2000), Zhao, 1995 and Zhao, 1998
Cost of capital	-	+	Love and Lage-Hidalgo (2000)
Inflation	-	-	Schnieder and Frey (1985), Bajo-Rubio and Sosvillo- Rivero (1994), Yang et al. (2000)

 Table 1. Variables Affecting Inward FDI to Host Country

Source :Compiled from Moosa ve Cardak (2006).

Some studies have been conducted to explain the economic determinants of FDI to Turkey. Coskun (2001) investigated the determinants of FDI for Turkey and stated that Turkey's economic performance and market size are important factors in attracting FDI and also stated that young and cheap labor, cheap entry and the geographic location of Turkey are advantages of Turkey. Also he noted that the legal framework and incentives have minimal effects.

Eryiğit and Eryiğit (2007) have examined the economic and geographic factors affecting FDI inflows to Turkey. They found a negative relation between FDI inflows to Turkey and labor costs, exchange rate, interest rate and the distance between countries. They also found a positive relation between FDI inflows to Turkey and budget deficit, amount of working-age population and GDP of countries.

Dumludağ (2007) examining the determinants of FDI in institutional context in Turkey, was found that market size, growth rate and GDP per capita have positive impact on FDI. Kaya and Yilmaz (2003) used data from 1970-2000 in order to investigate the determinants of FDI in Turkey as a result of the analysis they have emphasized that GNP per capita and the exchange rate, have a positive impact on FDI. In addition, these and other studies on the determinants of FDI in Turkey and their findings are presented in table 2.

	Direction	
Variable	of effects	Examples
Market Size (GDP, GDP per capita)	+	Dumludağ (2007), Eryiğit and Eryiğit (2007), Deichmann, Karidis and Sayek (2003), Kaya and Yılmaz (2003), Karagöz (2007)
Wages	-	Eryiğit and Eryiğit (2007)
Growth Rate / Economic Stability	+	Dumludağ (2007), Çeştepe and Vergil (2004)
Trade Openness	+	Vergil and Çeştepe (2006), Karagöz (2007)
Budget Deficit	+	Eryiğit and Eryiğit (2007)
	+	Eryiğit and Eryiğit (2007), Vergil and Çeştepe (2006), Kaya and
Exchange Rate		Yılmaz (2003)
Geographical Distance	-	Eryiğit and Eryiğit (2007)
Infrastructure	+/-	Deichmann, Karidis and Sayek (2003), Karagöz (2007)
Economic Instability	-	Vergil and Çeştepe (2006)
Interest Rate	-	Eryiğit and Eryiğit (2007), Yılmaz and Barbaros (2005)
Inflation	-	Yılmaz and Barbaros (2005)
Labor Force	+/-	Eryiğit and Eryiğit (2007), Karagöz (2007)
Debt (foreign + domestic)		Yılmaz and Barbaros (2005)
Financial Markets	+	Deichmann, Karidis and Sayek (2003)

Table 2. Variables Affecting Inward FDI to Turkey

# **3. TURKEY'S COMPETITIVENES IN TERMS OF FOREIGN DIRECT INVESTMENT**

In this section of the study, the competitive power of Turkey in terms of drawing foreign direct investment will be compared with Poland and Hungary. To this end, first, the countries will be included specific properties, then assessed their performance in attracting foreign direct investment from other countries and countries can then be examined the amount of inward and outward direct foreign investments.

Hungary has traditionally been a very attractive destination for export-oriented foreign direct investment from other EU countries, attracting in total about 3 per cent of GDP in foreign direct investment (FDI) inflows in 2008, a figure that was sharply reduced in the recession of 2009. The World Bank's Doing Business 2010 survey ranks the country at 47 (a slight decline from last year), with the tax system and concerns over investor protection flagged as problematic (EBRD, Transition Report 2010). When it is looked at macroeconomic performance of Hungary, it can be said that the Hungarian economy experienced a strong recovery in the first half of 2010, recent indicators point that the strength of both industrial production and exports which have benefited from a recovery in European Economies. But domestic demand remains weak in the Hungarian Economy; unemployment was 9 per cent in 2009 and it stood at 11.2 per cent in 2010 according to Eurostat. And when it is analyzed GDP growth by years it was 3.9 percent in 2005 and currently it is 1.2 per cent in 2010.

Poland is one of the European Union economies where the involvement of the state is most pervasive, notably in the power, natural resources and banking sectors. A new law on public-private-partnerships was recently passed, though private financing in infrastructure remains minimal. The government's privatization programme for the years 2008-11 provided an opportunity to attract fresh investment and stem the rise in public debt ratios. The programme made important progress when capital market conditions improved markedly in 2010, although the programme has also benefited from streamlined procedures and greater transparency (EBRD, Transition Report 2010). When we analyze growth in The Poland Economy, it can be said that growth remains well balanced in Poland, real GDP growth in 2009 was 1.7 per cent so Poland is the only country in the Central Europe and The Baltic States region to avoid recession. And GDP

growth is 3.8 per cent by 2010, there is also a rising in FDI inward stock; it was 3.329 millions of dollars in 2005, and it is 193.141 millions of dollars by 2010.

After following inward-oriented development strategies for 50 years, Turkey switched to outward-oriented policies in 1980. The policy of further opening up the economy was pursued with the aim of eventually integrating Turkey into the European Union (EU). The definitive prospect of EU membership should make Turkey very attractive for foreign direct investment (FDI), because, among its other strengths, it has a highly skilled and adaptable labor force, a large domestic market, and geographic proximity both to Europe and to Middle East, northern Africa, and Central Asia markets. The recent market -export and domestic market- oriented investments in the automobile industry are a clear indication of Turkey's attractiveness for FDI flows. However, over the last decade, Turkey lost ground to the Central and Eastern European (CEE) countries in attracting foreign investments, especially those from Europe. Although Poland, The Czech Republic, and Hungary together received 71 billion dollars in FDI flows between 1995 and 2000, Turkey received only 5,1 dollars over the same period, almost 14 times less (Dutz et al,2005;261). GDP growth in Turkey in 2005 was 8.4 percent but it is 8.9 percent by 2010, when it is compared with Hungary and Poland, it is possible to say that Turkey has better performance than Hungary and Poland in terms of GDP growth. But Turkey's unemployment rate (11.9 per cent) is higher than Hungary (11.2 per cent) and Poland (9.6 per cent) by 2010.

Figure 5 shows FDI inflows and compares Turkey, Hungary and Poland. It can be seen from the figure, there is an increase from 2005 until 2010. Hungary's FDI inflows in 2005 compared to 2008 is decreased from 7,709 million dollars to 7,384 million dollars, but they experienced a major decline from 2008 to 2010. Similar situation is also true for Poland and Turkey.



Figure-5: FDI Inflows, by Countries, 2005-2010 (Millions of Dollars)

Source: UNCTAD, Compiled from World Investment Report 2011 Data.

FDI outflows are shown in figure 6 for Turkey Poland and Hungary. Poland is the most FDI donor country among the countries. Can be seen from the figure, there is a major decline through to 2008 for Poland just the opposite situation current for Turkey.



Figure-6: FDI Outflows, by Countries, 2005-2010 (Millions of Dollars)

Source: UNCTAD, Compiled from World Investment Report 2011 Data.

Turkey, Hungary and Poland can also be compared in terms of inward FDI potential index and inward FDI performance. Table 3 shows Hungary, Poland and Turkey's Inward FDI Potential Index for 1990-2009 periods. It can be seen from the table Hungary's ranking is vary between 41 and 48 in 141 countries, and it is followed by Poland (its ranking range is 41-55). Turkey is in the 63<sup>rd</sup> rank among the 141 countries in 1990 but its rank decrease to 72<sup>nd</sup> in 2000. The decrease of the rank of Turkey continues to year 2009.

Selected Countries	Hungary	Poland	Turkey
Years			
1990	48	55	63
2000	41	43	72
2005	42	44	68
2006	42	44	72
2007	42	43	73
2008	46	43	75
2009	46	41	80

#### Table 3. Inward FDI Potential Index, 1990-2009

Source: UNCTAD/Annex Tables

Table 4 shows Inward FDI Performance Index. Best performance among the countries belongs to Hungary. Hungary is in  $33^{rd}$  place among 141 countries in 1990. Hungary maintains its success through the 2005 with its  $25^{th}$  rank. But as a result of the global crisis in 2008 its rank declines to  $81^{st}$  place. Poland shows its best performance with its  $35^{th}$  place in the ranking. Like as Hungary it lost its rank due to global instable economic conditions in 2008. Year 2000 is critical for Turkey. The rank of Turkey decrease from  $78^{th}$  to  $126^{th}$  place in ranking from 1990 to 2000. Turkey's ranking raises up to  $71^{th}$  in 2005 and decrease to 108 in 2010.

Selected Countries Years	Hungary	Poland	Turkey
1990	33	94	78
2000	33	38	126
2005	25	65	89
2006	44	49	71
2007	97	60	91
2008	60	90	94
2009	95	60	102
2010	81	75	108

Source: UNCTAD/Annex Tables

### 4. CONCLUSION

There are over 25800 foreign capital companies in Turkey and many of which comes from EU, Asia and Middle East Countries. According to UNCTAD World Investment Prospects Survey, 2008-2010, Turkey is the 15th most attractive destination for FDI in the world.

An improvement is observed in Turkey when examined FDI performance index for Turkey especially after 2000. Turkey was in the 126<sup>th</sup> rank among the 141 countries. Turkey's rank raises 89<sup>th</sup> and 71<sup>stp</sup> place in 2005 and 2006 but due to global economic crisis its rank decreases to 108<sup>th</sup> place in 2010. When Turkey compared with Poland and Hungary in the framework of FDI performance, Poland and Hungary have better ranks in the range. Hungary is at the 33<sup>rd</sup> place in 2000 and Poland is at the 38<sup>th</sup> place in the ranking. Hungary such as Turkey was affected from the global economic crisis in 2008 thus it loses its place from 60<sup>th</sup> to 90<sup>th</sup> but similar situation didn't happen for Poland. Turkey's large internal market, rapidly developing economy, geographical location, low tax rates, incentives provided equally to domestic and foreign investors, improvement of infrastructure conditions and the arrangements made on investment climate in recent years are increasing the competitiveness of Turkey in attracting FDI. In addition, the Customs Union conducted in cooperation with EU since 1996, the free trade agreements with 20 countries, the accession negotiations conducted in cooperation with EU show that Turkey will increase its FDI performance such as Hungary and Poland in the near future.

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