REPUBLIC OF TURKEY
SAKARYA UNIVERSITY
GRADUATE SCHOOL OF BUSINESS

THE DETERMINANTS OF INWARD FOREIGN DIRECT INVESTMENT IN TURKEY

MASTER'S THESIS

Maitikuerban ABUDUAINI

Institute	**: Management**
Department	**: International Trade**

Supervisor: Assist. Prof. Dr. Ahmet Yağmur ERSOY

June – 2019

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ÖNSÖZ

Bu tezin yazılması aşamasında, çalışmamı sahiplenerek titizlikle takip eden danışmanım Yrd. Doç. Dr. Ahmet Yağmur ERSOY'a değerli katkı ve emekleri için içten teşekkürlerimi ve saygılarımı sunarım. Dr. Öğr. Üyesi Sedat DURMUŞKAYA tezimin ekonometri çalışma bölümünde desteğini ve katkılarını esirgememiştir. İşletme Enstitüsü doktora öğrencisi Metin SAYGILI da akidimdik makalemin yayınlanması konusunda değerli yardımlarını esirgememiştir. Savunma sınavı sırasında jüri üyeleri Dr. Öğr. Üyesi Esra DİL ve Dr. Öğr. Üyesi Didar SARI ÇALLI da çalışmamın son haline gelmesine değerli katkılar yapmışlardır. Bu vesileyle tüm hocalarıma teşekkürlerimi borç bilirim. Son olarak bu günlere ulaşmamda emeklerini hiçbir zaman ödeyemeyeceğim babam ve anneme şükranlarımı sunarım.

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Maitikuerban ABUDUAINI

26.04.2019

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ABBREVIATIONS

ADF	: Augmented Dickey-Fuller Test
AIC	: Akaike Information Criterion
ARDL	: Auto-regressive Distributed Lag
CBRT	: Central Bank of Republic of Turkey
CPI	: Consumer Price Index
DYY	: Doğrudan Yabancı Yatırım
FDI	: Foreign Direct Investment
GDP	: Gross Domestic Product
GDPG	: Gross Domestic Product Growth
GSYİH	: Gayrisafi Yurt İçi Hasıla
IFDI	: Inward Foreign Direct Investment
INF	: Inflation Rate
INT	: Interest Rate
MNEs	: Multinational Enterprises
OECD	: Organization for Economic Co-operation and Development
OFDI	: Outward Foreign Direct Investment
REEXCH	: Real Effective Exchange Rate
S&P	: Standard & Poor's
SIC	: Schwarz Information Criterion
TRAOP	: Trade Openness
UECM	: Unrestricted Error Correction Model
UNCTAD	: United Nations Conference on Trade and Development
UNEM	: Unemployment Rate
VECM	: Vector Error Correction Model

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Çalışmamızda makro ekonomik belirleyicilerin Türkiye'deki doğrudan yabancı yatırımlara etkilerinin araştırılması amaçlanmaktadır. Çalışmamızda bağımlı değişken ve bağımsız değişkenler arasındaki uzun vadeli eşbütünleşme ilişkisini araştırmak için 2005Q1-2017Q4'ün üç aylık verilerini kullanarak Oto-regresif Dağıtılmış Lag (ARDL) ve Kısıtlanmamış Hata Düzeltme Modeli (UECM) kullanılmıştır. Çalışma sonuçları uzun vadede Türkiye'de bağımlı değişken DYY ile bağımsız değişkenler GSYİH, GSYİH büyüme oranı, Ticaret Açıklığı, Faiz Oranı ve İşsizlik Oranı arasında istatistiksel olarak pozitif ilişkinin olduğunu ortaya koymaktadır. Bununla birlikte, Türkiye'de enflasyon oranının DYY girişleri üzerindeki istatistiksel olarak olumsuz etkisi ampirik analizlerle belirlenmiştir. Çalışma bulguları ayrıca, Reel Etkili Döviz Kurunun, Türkiye'de uzun vadeli doğrudan yabancı yatırım üzerinde istatistiksel olarak bir etkisi olmadığını göstermektedir.

Anahtar Kelimeler: Makroekonomik Belirleyici, DYY, Türkiye, ARDL

Title of the Thesis: The Determinants of Inward Foreign Direct Investment in Turkey

Author: Maitikuerban ABUDUAINI   **Supervisor:** Assist. Prof. Dr. Ahmet Yağmur ERSOY

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This paper mainly aims to explore the macroeconomic determinant factors and its impact on the inward foreign direct investment (FDI) in Turkey for recent years. Auto-regressive Distributed Lag (ARDL) and Unrestricted Error Correction Model (UECM) are the econometric methods that used to investigate the long-term conintegration relationships between the dependent variable and independent variables, using the quarterly data of 2005Q1-2017Q4. The study results reveal that statistically positive relationship exists between dependent variable FDI and independent variables GDP, GDP growth rate, Trade Openness, Interest Rate and Unemployment Rate in Turkey in the long-term. However, the statistically negative impact of Inflation Rate on FDI inflows in Turkey is identified through the empirical analysis. The study findings also indicate that the Real Effective Exchange Rate statistically has no effect on inward FDI in Turkey for long-term.

Keywords: Macroeconomic Determinants, FDI, Turkey, ARDL

INTRODUCTION

Over decades foreign direct investment (FDI) considered as a powerful economic engine for many developing countries. Because it brings capital, technological know-hows and management skills to the host country, which are essential to their economic growth and development. Therefore, what does impact on FDI inflows and how to attract FDI become the most wanted questions. There are many factors that have impact on attraction of FDI. Among which host country's economic size and growth, trade openness, labor cost, human capital, exchange rate, infrastructure, cultural distance and political stability are the most significant factors. Due to the unique geographical location, Turkey has become one of the most favorable place for FDI inflows. However, because of political instability and unstable exchange rate Turkey has experienced a decline of FDI inflows recently. For stimulating economic growth and further development Turkey needs to attract more FDI. Finding out the determinants of inward FDI in Turkey plays more important role in attraction of FDI.

This paper aims at examining the determinants of inward FDI in Turkey. There are several reasons for choosing this topic. Firstly, after 2008 economic crisis worldwide FDI shows declining trends. Under this circumstance, as a part of world economy, Turkey also suffered the decrease of FDI inflows. In order to drawing more FDI, it is essential to explore the determents of inward FDI in Turkey. Secondly, FDI inflows in different period is driven by different factors. Before 2008 economic crisis, the economic growth, infrastructure, human capital and labor cost can be the main factors that influence inward FDI in Turkey. However, after the worldwide economic crisis, except these factors, trade openness, exchange rate, political stability and border effect are getting more important factors. Hence, based on former studies, this paper will present which factors are becoming more decisive to FDI inflows in Turkey. Thirdly, the great amount of FDI in Turkey comes from developed countries. Nowadays, some developing countries like China has also become a considerable resource for FDI outflows. Besides, China-Tukey economic relationship are welcoming new era under the Chinese "One Belt One Road" initiative, which will create more opportunities for both counties. Thus, with purpose of attracting more Chinese FDI, Turkey should aware the main factors that favored by Chinese companies. This paper will concern the determinants of Chinese FDI.

Although there are few studies payed attention to FDI determinants of Turkey, most of the former studies on FDI determinants are focused on predominantly large economies such as US

and China. So, this study will become a part of literature on FDI determinants of Turkey. Besides, compare to other studies, this paper will not just present the determinants of FDI inflows in Turkey, but also will explore the important factors for attracting Chinese FDI. The main purposes and contributions of this study are as followed:

a) Providing a general literature review on inward FDI determinants
b) Presenting FDI inflows and its distribution in Turkey
c) Analyzing the factors that influence Chinese FDI inflows into Turkey
d) Exploring the macroeconomic determinants of inward FDI in Turkey. For example: economic size and growth, trade openness, exchange rate, interest rate and unemployment rate
e) Promoting an econometric study related to the impact of the macroeconomic determinants of inward FDI in Turkey based on second-hand data

With aim of exploring the determinants of inward FDI in Turkey, this paper will start with a brief literature review on the determinants of FDI. The literature review will contain different types of FDI, the determinants and impact of FDI, theories and hypotheses. Then the second part will present FDI inflows in Turkey. The third part will focus on Chinese FDI and its determinants in Turkey. The fourth part will promote an econometric study based on the second-hand data collected from OECD, IMF, UNCTAD and CBRT etc. Besides, there will be further analysis and discussion of results generated from the econometric study. The last part will end with the conclusion of this paper.

1. LITERATURE REVIEW

1.1. Driving Reasons of FDI

Why does foreign direct investment (FDI) take place? The driving reasons behind FDI can be explored through the expectations that home country may have and the benefits that host country might gain. From home country's perspective, as an investor MNEs expect that FDI would help them improve the productivity and increase profits. All these expectations can be fulfilled through FDI after they access a new market and this market has higher purchasing power, lower tax rate and labor cost and so other favorable business environment like political and economic stability, low inflation rate, favorable exchange rate, good economic relationship with other countries and cultural similarity. These elements are essential for MNEs to making FDI decision.

From host country's sight, the benefits that they would gain through FDI might be the needed capital, technological know-hows, managerial and organizational skills and the new economic tunnel to the international market. Besides, FDI has significant impact on host country's economic transition by enhancing competitiveness and innovation. After MNEs enter the host country's market they push local company becoming much more competitive and creative, which brings more opportunities to increase the economic development and transition of host country.

As to the linkage between economic globalization and foreign direct investment (FDI), FDI is considered as one of the key elements in this rapidly developing global economy because of creating direct, stable and long-lasting links between economies. Globalization is not only the internationalization of consumption through trade between two countries, but also the internationalization of production through FDI (OECD, 2008). On the one hand, globalization needs more countries to integrate into the international economy. At this point, FDI creates a beneficial opportunity for the countries willing to be part of the global economy. On the other hand, globalization provides a huge stage for countries' FDI decision. Besides, countries could find more opportunities on the global stage through FDI, which may help economic development and transition.

1.2. Distribution of Global FDI Inflows

World Investment Report (2018) shows that the total amount of global foreign direct investment (FDI) flows is USD 1.43 trillion in 2017. It dropped by 23% compared with USD 1.87 trillion in 2016 (Figure 1). As shown in Fig.1, FDI flows into developed countries and transition economies decreased sharply, while developing countries remained its attractiveness in absorbing global FDI. With attracting 47% of the total global FDI inflows, compared with 36% in 2016, the share of global FDI inflows into developing countries is continuously growing in 2017. (UNCTAD, 2018).
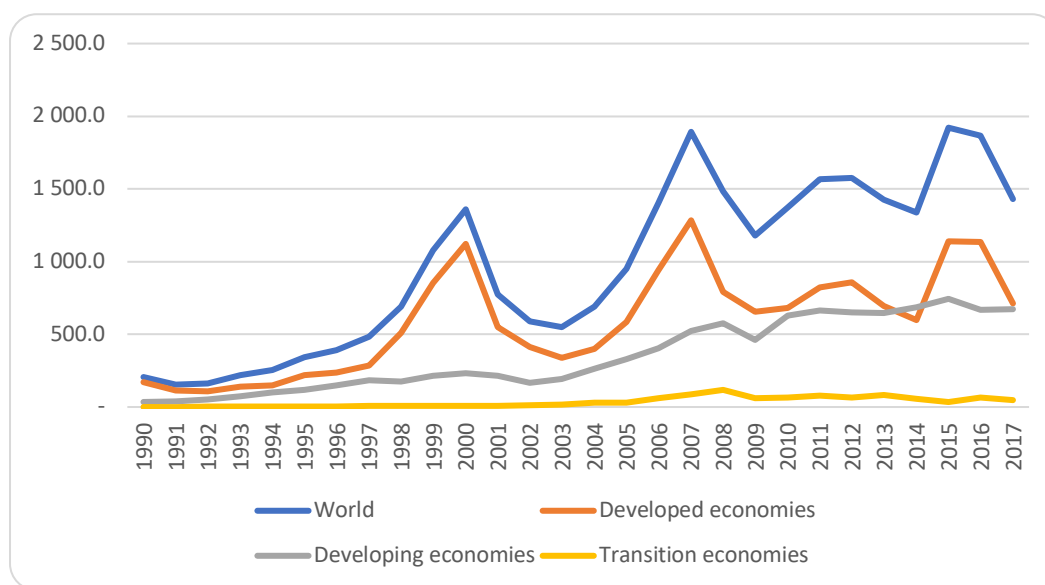
Figure 1: Global FDI Inflows by Region and Economy, 1990-2017, Billion USD

Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics)

The distribution of FDI by region shows geographically uneven. FDI inflows to developed economies is around USD 712 billion, to developing economies is USD 671 billion and to the transition economies is USD 47 billion in 2017 (UNCTAD, 2018). Among which developing economies remains its attraction to FDI, especially Asia with share of USD 671 billion in FDI inflows (Figure 2).
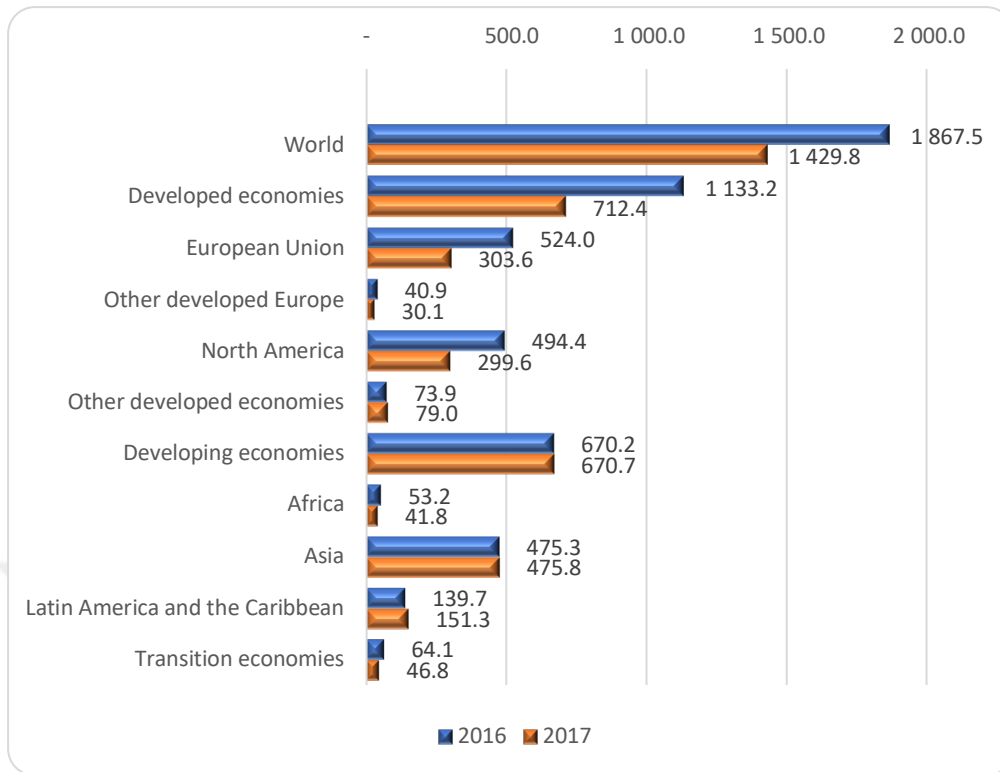
Figure 2: Global FDI Inflows by Region, 2016-2017, Billion USD

Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics)

By countries, United States still comes first with share of USD 275 billion in FDI inflows in 2017. China and Hong Kong, China place second and third with FDI inflows of USD 136 billion and USD 104 billion. The report also shows that developing countries and economies still take up half of the top 10 host economies (Figure 3).
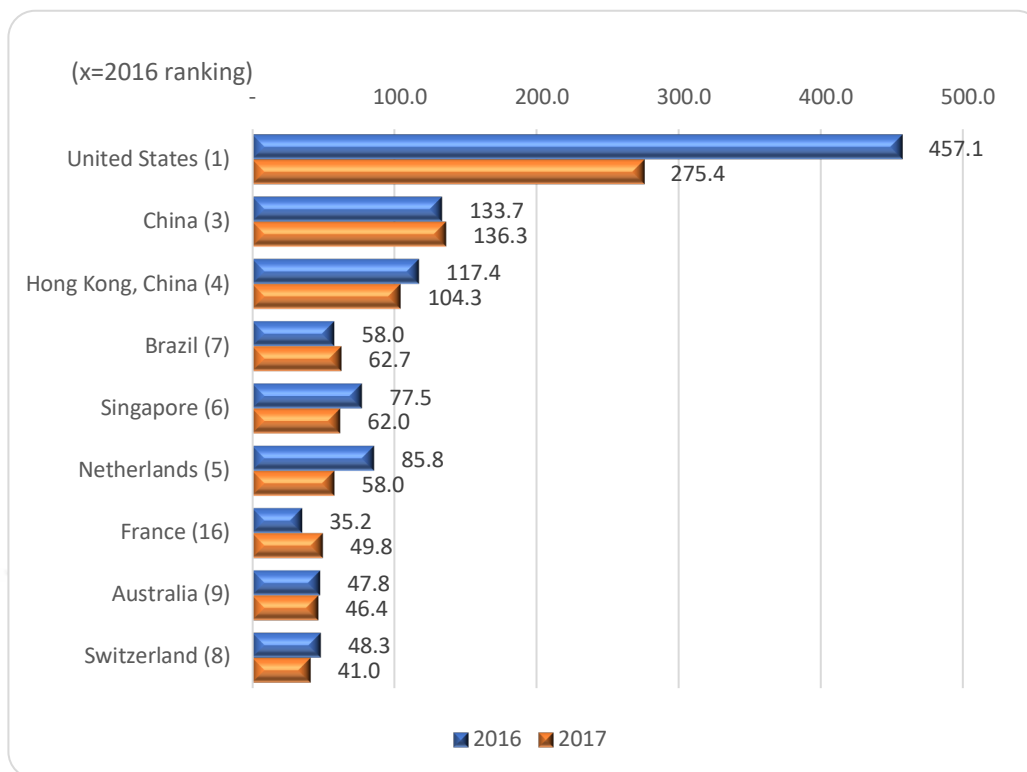
Figure 3: Global FDI Inflows, Top 10 Host Economies 2016 and 2017, Billion USD

Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics)

What makes the distribution of global FDI inflows presents such a pattern. Stephen D. COHEN (2007) argues that two considerations influence the unevenly distribution of global FDI. One is investment return and investment costs. The other one is whether the investment climate in a potential host country is business-friendly or not.

The higher investment return and lower investment cost are two main purposes that drive investor (home country) to make FDI decision. Host country's big market size and fast economic growth indicate higher investment return. However, host country's higher trade openness, low inflation, tax and interest rate, stable exchange rate and low labor price refer to lower investment cost. In terms of recipient (host country), long-lasting sources for needed capital, transfer of new technology and know-how, receiving modern managerial and organizational skills are main purposes that make host country absorbing more FDI. Therefore, FDI goes to the regions where appear higher investment return and lower investment cost. Moreover, FDI also flows into areas where exist favorable investment policies and incentives.

1.3. Different Types of FDI

In terms of the motives for driving MNEs to conduct FDI decision in a foreign market, the strategic role in MNEs FDI decision and the modes of entry, FDI can be divided into many different types (Figure 4).
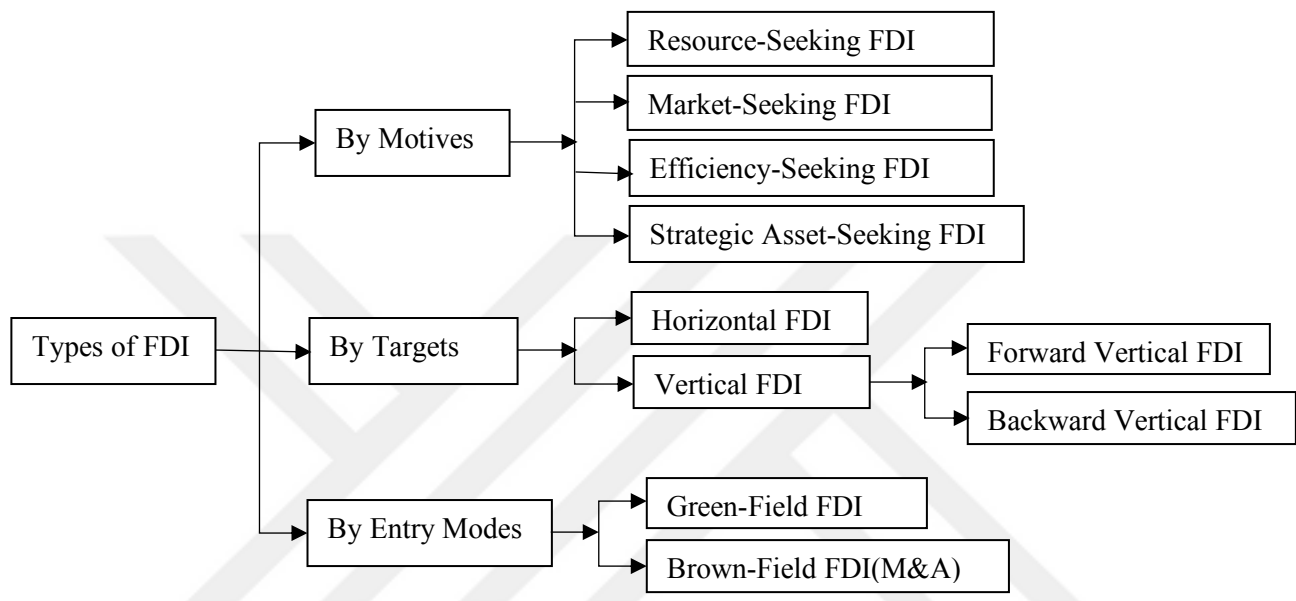
Figure 4: Different Types of FDI

By the motivations of MNEs FDI decision, there are four different types of FDI, which are Resource-Seeking FDI, Market-Seeking FDI, Efficiency-Seeking FDI and Strategic Asset-Seeking FDI. Among which Resource-Seeking FDI occurs in the middle of the nineteenth century. Lack of needed production factors or high price of raw materials in home country force MNEs to invest in host country with abundant production factors and raw materials at lower price. Market-Seeking FDI, otherwise, happens for securing the market share and sales growth in targeted foreign market. Fast growing market size and higher purchasing power are the main reasons that attracting such kind of FDI. As to Efficiency-Seeking FDI, it aims at establishing efficient mechanism through making use of all applicable factors in order to reducing production costs and achieving economic of scale. Low wage, low interest rate, business-friendly environment and some other incentives in host country are account for this kind of FDI. As far as Strategic Asset-Seeking FDI, it is about acquiring assets that are deemed

to enhance the overall competitiveness of the acquiring company or weaken the dominant position of competitors in the market.

Foreign direct investment can be horizontal or vertical through the role of the parent company in the global production strategy. Horizontal FDI refers to the transfer of some domestic production levels to overseas subsidiaries to strengthen the global competitive position of enterprises (Stephen D. COHEN, 2007). It is mostly seen in manufacturing sector. Speaking of vertical foreign direct investment, it is a sub-category that has developed rapidly in the foreign direct investment strategy of MNEs since the 1980s. Forward and backward vertical FDI are two different types of vertical FDI. Forward vertical foreign direct investment is an investment in an industry that sells the output of the company's domestic production process. Backward vertical FDI occurs when parent company invest in an industry aboard that provides needed inputs for the firm's domestic production processes. The former is less common than the latter one.

By the modes of entry, there are Green-Field Investment and Brown-Field Investment. Green-field investment happens when parent company starts a new venture by constructing new facilities in a country outside of where parent company places. This provides parent company more flexible design and more space for operation. Brown-field investment, on the contrary, occurs when parent company buys an existing entity with needed facilities to begin new production processes through mergers and acquisitions (M&A). This may help parent company reducing start-up costs and saving time for building new facilities. M&A is much more common than Green-Field investment. MNEs merges or acquires oversea companies for having valuable strategic assets of these firms, which will improve their competitive position in the industry or sector.

1.4. Theoretical Approaches on Determinants of FDI

Because of the considerable contribution to world economic development and globalization, foreign direct investment (FDI) have been attracting many scholars' attention since the 1960s. There are many researchers conducted a large number of studies to explore FDI and its determinants. As a result, various theoretical approaches have been developed to explain the determinants of FDI. Among which Dunning's Eclectic paradigm (OLI – Ownership, location, internalization), new theory of trade and institutional approach are more popular than other theoretical approaches.

Hymer (1976) and Kindleberger (1969) highlight that FDI occurs because of existing imperfections in commodity markets or factors of production. Hymer (1976) also confirmed the risks inherent in the foreign investment of transnational corporations involving high costs and disadvantages. These investment costs are caused by cultural and language differences and unfriendly treatment of enterprises by host governments, which are the reasons for high information access costs and market access costs. Therefore, MNEs must have the ownership advantages such as new products, efficient management skills, intellectual property rights and etc. to overcome the disadvantages (Dunning, 1993). The theorical approach applied by Hymer and Kindleberger shows that product differentiation, economies of scale and government incentives are the main determinant factors of FDI.

In terms of internalization theory, Buckley and Casson (1976) were first to examine the relationship between MNEs' internalizing operations and FDI. They argued that higher transaction costs, such as information and negotiation costs, than internalization costs related to internal communication and organization are the key factors that cause MNEs' internalizing operations through FDI.

Dunning (1977) developed the eclectic OLI paradigm. The core of eclectic theory is ownership specific advantage(O), internalization specific advantage (I) and location specific advantage (L). Foreign companies must have ownership advantage, internalization advantage and location advantage at the same time in order to engage in favorable overseas direct investment activities. Dunning's eclectic paradigm is widely used in many researches. Because it provides a basic analytical framework for exmining the determinants of MNE' FDI motivations through country, industry, and firm level advantages. In addition, it combines several interrelated theories to identify a range of variables that affect the activities of multinational enterprises.

According g to previous research, another analytical framework has emerged - the "New Trade Theory" - that combines the advantages of ownership (knowledge) and location (market size and low transaction costs) with the inherent characteristics of technology and countries (factor endowments). The new theory complements dunning's eclectic paradigm because it aims to link OLI (ownership, location, internalization) variables to technological and national characteristics in a coherent way. (Markusen, 2002).

All in all, these theoretical approaches try to explain FDI and its determinants from different aspects and levels. As a result, the FDI related literatures are becoming more and more abundant. According to these literatures, some other theories, including Product Life Circle

(Vernon, 1966), Behavior Theory (Aharoni, 1966), Product Differentiation (Caves, 1971) and Oligopoly Markets (Knickerborker, 1973) and Gravity Model have been applied for finding out new determinants of FDI. Assunção et al. (2011) made a systematic and overall literature reviews covering various academic filed, like international business and management, economics, urban and regional economic and economic geography etc.

1.5. Determinants of FDI

Foreign direct investment (FDI) is favored by many developing and emerging economies because of its significant contribution to host country's economic development and transition. As a result, countries, that benefited from FDI, are trying to attract much more global FDI through creating more business-friendly environment. As to business-friendly environment of host country, it involves the improvement of economic, political, institutional, legal, cultural and geographical factors that considered as the determinants of FDI inflows.

Economic factors include country's economic size and growth, trade openness, labor cost and productivity, exchange rate and inflation rate, human capital and infrastructure etc. These macroeconomic factors provide investors (MNEs) a picture of future investment return. Any positive change in these factors may help host country attract more FDI. Political, institutional and legal factors can be proxied by political stability, corruption and protection of intellectual property right in host county. Cultural and geographical factors involve linguistic linkage and cultural similarity, border effect and geographic distance between home country and host country.

As for the determinant factors of FDI, there are an excessive number of studies focused on this topic. Culem (1988) concluded that the size and growth rate of local market are the most important FDI determinants in 6 European countries. Kumar (1996) suggested that the countries of larger domestic market, advanced technology and stronger intellectual property rights protection and infrastructure are more attractive to FDI. In addition, Fung et al (2003) observed that there are two different factors in Chinese market that influencing FDI from Hong Kong and Japan. One is labor cost, which mostly affects FDI from Hong Kong. The other one is local demands, which affect FDI from Japan.

Bevan and Estrin (2004) explored the determinant factors that influence inward FDI in 11 transition European countries. They observed that the labor cost and market size of the host

countries are the important FDI determinants. Moreover, the distance between trading countries and EU membership of the host country also found to be a determinant factor of FDI.

Vijayakumar et al (2010) try to find out the macroeconomic factors that affect FDI inflows into BRICS (Brazil, Russia, India, China, South Africa) countries. They conclude that the market size and labor cost of host country determine the amount of FDI inflows. Besides, their study results also suggest that the infrastructure and currency value are the factors that influence inward FDI within BRICS countries. Similarly, Jadhav (2012) argued that openness of trade, market size, accsesibility of natural resource and raw materials, institutional regulation of host country are the important factors that determining FDI inflows into host country.

Other studies that focused on the FDI determinants also show that the trade openness, EU membership, institutional quality and infrastructures are the main factors that affecting FDI inflows. Tintin (2013) argued that the quality of institutions, openness of trade, GDP and EU membership are the main factors that affecting FDI inflows into 6 European countries. Trade openness is also considered FDI determinant factor by Seyoum et al (2014) in 25 Sub-Saharan African (SSA) countries.

Cleeve et al (2015) indicate that the capability of natural esource, infrastructure and market size of host countries are the determinants factors of FDI inflows in 35 SSA countries. In addition, according to the findings of Masron and Nor (2013) the effective governance and institutional quality are FDI determinants in 8 ASEAN (Association of Southeast Asian Nations).

1.5.1. Economic Factors

In general, MNEs will choose where to invest, which means the highest return on investment, either by minimizing production costs through reducing investment risk or maximizing expected returns. The literature presents some specific advantages of host countries that considered to reduce production costs or increase expected investment returns. These specific advantages include large market size or huge market potential, relatively low factor prices, such as natural resources, labor costs and human capital. In addition, factors such as high trade openness, common trade policy framework, stable exchange rate, low debt, geographical and cultural proximity, low tax revenue, low tax, high infrastructure, stable political and institutional system are also important factors for the host country to attracting more inward FDI (European Central Bank, 2017).

A significant number of literatures examined the macroeconomic factors in host country as the important determinants of FDI. Among which Yiyang Liu (2012) reached the result that the market size and the infrastructure factors influence FDI inflows in China. However, the significant level of these factors differs from one region to another. Moreover, Ab Quyoom Khachoo and Mohd Imran Khan (2012) conducted an econometric study for investigating the determinants of FDI inflows on the base of panel data from 32 developing countries in the 1982 -2008. They applied the Full Modified Ordinary Least Square (FMOLS) method. The authors found that the FDI inflows depends on a set of variables as market sizes, infrastructure, openness of trade and labor costs within the host economy.

1.5.1.1.   Economic Size and Growth

For investors (MNEs) high investment return is one of the main objectives that drives them to conduct FDI in foreign market. High investment return refers to high profit. Improving production efficiency and promoting sales of goods or services provide by MNEs are effective ways of enhancing firm's profitability. Big market with higher purchasing power and increasing market demand are essential to improvement of production efficiency and promoting sales through the realization of economies of scale. Huge economic size of host country means big market for MNEs. Increasing economic growth involves strong potential market demand. GDP and GDP growth rate are usually proxy to economic size and growth of one country. High GDP growth rate indicates growing market size and higher living standard within host country, which attract more FDI inflows.

The existing literatures also conclude that there is a strong mutual effect between FDI and GDP. Hsiao and Shen (2003) examine this relationship and find that GDP is affecting the FDI inflows. Thus, they claim that GDP is an important and optimistic indicator of FDI flows within host country. Further, they also find the two-ways relationship between FDI and GDP as well. Similarly, the study contributed by Kim and Seo (2003) shows that there is a strong and statistically positive effect from GDP growth rate towards FDI. This result generated by utilizing the data in Korea for the period 1985 -1999.

In addition, Zhang (2001) argues that, on the one hand, rapid growth of host country's economy not only creates a huge demand for capital inflows and FDI inflows consided as a ideal capital source for satisfying this demand, but also provides a better opportunity to receive high investment return, and this can make host country become an ideal location for more FDI inflows. On the other hand, FDI can stimulate economic growth and support the economic

development of host country through direct and indirect spillover effect. Therefore, the two-way causality exists between FDI and economic growth. His findings also suggest that more economic activities in the host country on the base of improved infrastructure, qualified human resources and market size can attract more FDI inflows.

Rapid economic growth of host country will generally cause a capital shortage in the domestic economy and therefore it will require more FDI inflows, which requires providing favorable terms and creating FDI friendly environment to attract foreign investors. This is also one of the many reasons that rapid economic growth has affected the confidence and decision of potential foreign investors who intend to invest in host countries.

Besides, Lean (2008) argues that rapid economic growth increases average income, which will create opportunities to attract FDI. These opportunities are not only in the manufacturing industry but also in the consuming sectors in host economies. In addition, the economic growth rate and level of economic development in the host country are the important factors that influencing the volume, type and structure of FDI inflows.

1.5.1.2. Trade openness

Trade openness as a determinant of FDI has been investigated by many researchers. Higher trade openness of host country has significant positive impact on FDI inflows. The share of total trade volume in GDP used as a proxy for trade openness in the most of the research papers. High degree of the trade openness in host country means faster development in domestic market and trade favorable incentives, which are essential to export-oriented FDI inflows. Trade openness also can be seen as an indicator of how the country is willing to be part of the global economy. The more open and liberal the country economy is to the world, the more they will involve the global economy. FDI as one of the main capital flows in the world economy, it will benefit the countries, which are positively involving the world economic activities.

Empirical evidence on the role of trade openness of host country in improving FDI reached different results. Mottaleb and Kalirajan (2010) indicate that more FDI inflows in host country where there has bigger trade openness while Wheeler and Mody (1992), Brainard (1997) conclude that FDI inflow is positively correlated with trade restrictions.

Duran (1999) studied the macroeconomic determinants of FDI for the period 1970-1995 by using the panel data and time series techniques. The study indicates that the openness of trade within host country is the catalysts of FDI. Quazi and Mahmud (2004) examined the

relationship between FDI and trade openness of South Asia countries, and found that trade openness is one of the major determents of FDI inflows in case of South Asia. Jadhav (2012) observed a positive and significant impact of trade openness on FDI inflows in his study on Indian. In case of Turkey, Kiran (2011) proclaims that there exists a strong relationship between FDI and trade represented by total exports and imports of Turkey. Wagle (2010) found that the degree of a countries' trade openness has a certain relationship with FDI inflows. The greater the weight of exports and imports in total GDP of a country, the more FDI flows into this country.

According to World Investment Report 2018 (UNCTAD, 2018), there are many countries continued to implement FDI friendly policies for attracting FDI in worldwide. In 2017, at least 126 investment promotion polices were carried out, 84% of which were investment friendly measures (Figure 5). These measures liberalized the entry regulation in a number of industries such as transportation, energy and manufacturing. In addition, these measures also included simplifying administrative procedures, establishing new special economic zones (SEZs) and providing business friendly incentives to promote and boost investment.
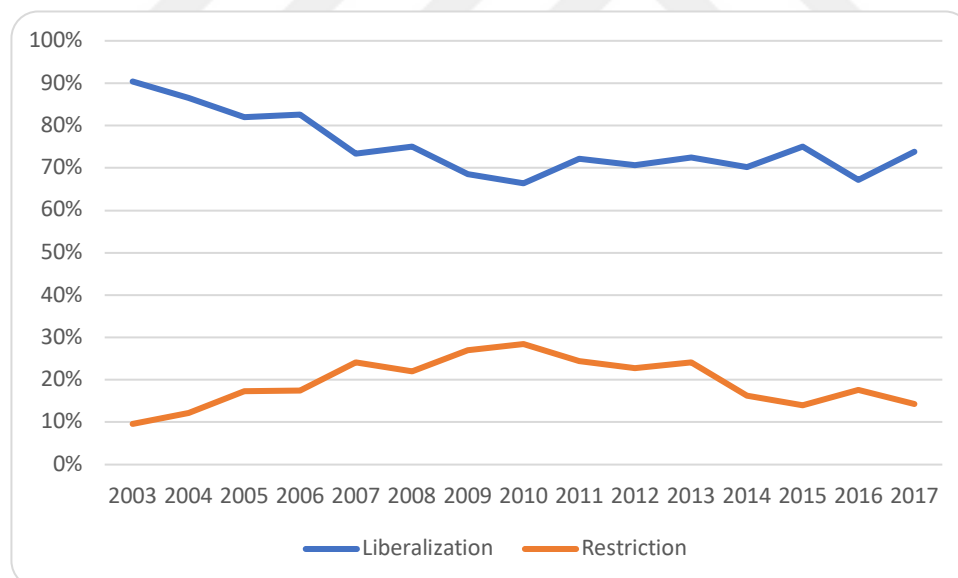
Figure 5: Changes in Investment Policies, 2003-2017

Source: World Investment Report 2018,
https://unctad.org/en/PublicationsLibrary/wir2018_en.pdf

1.5.1.3.   Exchange Rate

A number of literatures have studied the exchange rates of host countries as determinants of FDI. FDI flows to specific host countries can be affected by the level of their exchange rates. The exchange rate level of the host country refers to the exchange rate level, exchange rate fluctuation and the expected change of exchange rate system (Blonigen, 2005). Both theoretical and empirical studies mainly support the negative correlation between the exchange rate level of host countries and inward FDI. However, the impact of exchange rates on FDI may depend on the characteristics of the firm, the type of FDI, the motivation of the investment firm, and the industry characteristics in which FDI occurs. (Blonigen, 2005; Chen, Rau, & Lin, 2006).

Besides, according to a study contributed by Xing and Wan (2006), the devaluation of the host country's currency can also reduce the relative cost of production of its foreign currency. When the currency depreciates, the cost of inputs to production (such as Labour, materials, land and machinery) purchased locally becomes cheaper relative to the export price of the final product. Thus, a country's currency devaluation may encourage the flow of export-oriented foreign direct investment into the country.

1.5.1.4.   Inflation Rate

Relating to empirical evidence gained from studies on macroeconomic policy, Schneider and Frey (1985) figure out that high inflation and a high balance of payments deficit have a negative impact on FDI. Similarly, the study conducted by Apergis and Katrakilidis (1998) show that the inflation rate and its unpredictability negatively impact on FDI. In addition, Yao and Wei (2007) find a negative impact of inflation on FDI inflows.

One study found a long-term inverse relationship between the level of inflation in South Africa and FDI inflows. This means that higher levels of inflation will have a negative impact on the amount of foreign direct investment that South Africa receives (Mohammed Valli and Mansur Masih,2014). The findings came when researchers tried to examine whether there was indeed a long-term theoretical relationship between South Africa's inflation level and the amount of foreign direct investment that the country eventually received. Djokoto (2012) explored the impact of investment promotion on FDI inflows in Ghana between the time period of 1970-2009 and found a negative correlation between inflation and FDI.

1.5.1.5. Human Capital

Human capital is widely regarded as a key determinant of inward FDI. Both foreign direct investment and human capital are seen as major drivers of economic growth (United Nations, 1992). However, high-quality human capital and foreign direct investment are compatible. On the one hand, high-quality human capital helps to attract more global FDI inflows. On the other hand, the FDI operations of MNEs may improve the quality of human capital in host countries, as MNEs provide education and training for local employees (Miyamoto, 2003).

The most significant effect of MNEs on the development of human capital stems from the training and other learning opportunities they provide to their staff in various forms. Such training opportunities may be valuable for workers in host county. Because the workers, who are lucky enough to grab such opportunities, may be able to gain new technical and management skills. All these new gains of the workers turn them into high-quality human capital of host country. Ozturk (2007) argues that FDI is one of the channels that can improve the level of human capital in the host country through training and learning opportunities provide by MNEs.

An adequate supply of human capital in terms of both quantity and quality may help investors obtain labour inputs. The availability of high levels of skilled labour in host countries will be a catalyst for the introduction of new and advanced technologies for the production of high value-added products. The mutual benefits between human capital and FDI would positively affect host country's development.

1.5.2. Political/Institutional/Legal Factors

The institutional environment is considered to be a key factor in determining FDI inflows and is particularly important for developing countries than developed countries (The World Bank, 1998). It includes tax systems of host country, easiness to start up a company, lack of corruption, transparency, contract law, protection of property rights, efficiency of justice and prudential standards. Durham (2004) presented the findings that institutions have a significant impact on the efficiency of FDI inflows in the host country. Besides, Antras (2003) argues that high quality of institutional environment within the host country are considered as a significant factor to help attract FDI as they reduce the investment risk and thereby reduce the cost of doing business.

Francis (2009) argues that the institutional environment will not only bring a lot of pressure to multinational companies and local companies, but also affect the risks and uncertainties faced by companies. Countries associated with good institutional environments generally perform well in terms of economic growth and FDI attraction, while countries with weak institutional environments generally perform poorly in terms of economic growth and FDI attraction. In addition, host countries with poor institutional environments have discouraged FDI inflows for several reasons. Poor institutions that lead to corruption and bureaucratic obstacles may reduce operational efficiency and increase operational costs, thus reducing the profits of multinational companies (Walsh & Yu, 2010).

1.5.2.1. Political Stability

Quite a number of studies has been carried out on the issue of political instability and on its impact on FDI inflows in host country. Acar (2012) concluded the factors that affecting the political stability of the state, the effectiveness of state power, political parties, government in the administration of the state, government crises, foreign policy, economic policy, social, democratic, national and religious structures, the effectiveness of trade and labour unions, regulation relating to foreign capital, the application of embargoes against the state and wars at home or abroad.

Lee and Rajan (2009) found that the political instability of host county negatively affects FDI inflows within the 60 APEC countries during the time periods of 2000-2005. It concluded that a 10% decline in the target country's political index would result in a % 3.2 increase in FDI growth. The results show that among the financial, economic and political stability, the political stability is the most important aspect that influencing FDI inflows.

MNEs consider the political stability of host country as one of the most important factors in investment decision. The quality of the investment environment in the host country, especially the political situation, is very important to attract foreign direct investment (Mawanza, 2013).

1.5.2.2. Corruption

Lack of transparency and corruption are also considered as having a negative impact on FDI inflows. Azam and Ahmad (2013) investigated the impact of corruption on FDI in 33 less developed countries (LDCs) between 1985 and 2011. The study shows that the corruption index, market size and inflation rate are important factors affecting FDI inflows in LDCs. MNEs tend to avoid countries with high corruption rates, which causes reduction of incoming

FDI. The findings suggest that host countries with lesser FDI inflows need to create a better investment friendly environment for MNEs through dealing with the significant factors identified by the present study, such as corruption, market size and inflation.

An empirical study offered by Alemu (2012) examined the relationship between corruption and FDI in 16 Asian economies during the period from 1995- 2009. The study result shows that corruption will negatively affect FDI inflows into these countries. Asiedu (2005) argued that macroeconomic and political instability, investment restrictions and corruption are the factors that have negative impacts on inward FDI within Africa. Marcos (2007) analyzed how corruption in a host country affects the amount of incoming FDI. The findings show that corruption is a significant variable and it does have a negative effect on total FDI.

Rahim (2014) studied the impact of corruption on FDI inflows into East and South Asia - two regions that have recently received significant FDI inflows, using panel data for 1995-2011. He found the impact of corruption on foreign direct investment to be significantly negative and strong. In addition, Cristina (2013) attempted to study the impact of corruption on the inflow of foreign direct investment in 10 central and eastern European countries for a period of 12 years, that is, from 2000 to 2012. The results showed that there was a negative correlation between the variables analyzed, but the intensity was lower than expected.

1.5.2.3.   Intellectual Property Right Protection

In general, MNEs engage in FDI to maximize profits or value, and intellectual property hold by MNEs plays an important role in generating high profits or value. Thus, MNEs' FDI decision is influenced by the strength of intellectual property protection in host country.

Intellectual property protection has plays an important role in the new knowledge-based global economy, and it considered as an essential policy issue for many decades. There are many previous study papers have examined how intellectual property protection affects foreign direct investment. Judy and Tiao (2014) investigated the relationship between Intellectual property protection and FDI inflows in 11 main Asian countries through using panel data over the time period of 1985-2010. The empirical study results reveal that strengthening Intellectual property protection system in host countries can increase the amount of inward FDI in Asian countries. The care shown for the Intellectual property protection through legislation and implementation has indirect effects on host countries' FDI performances. (Smarzynska 2002).

Empirical findings contributed by Peter and Julius (2004) find out that unauthorized use of tangible and intangible assets which related to intellectual property in host country will negatively impact FDI inflows. Therefore, stronger intellectual property protection system in host country may help attracting high-quality FDI. The strengthening of intellectual property protection measures in host country promotes both innovation and FDI (Hitoshi Tanaka and Tatsuro Iwaisako, 2014).

1.5.3. Cultural and Geographical Factors

When MNEs carry out multinational activities through FDI or other operations, it will bring additional costs to the company. These costs are associated not only with increased transport costs due to longer geographical distances but also with external liabilities. Foreign liability is defined as "the sum of additional costs, including hidden costs associated with dealing with new rules or new cultures." (Beugelsdijk et al. 2013, p.177)

1.5.3.1. Linguistic Linkage

With the increasingly broaden of using foreign direct investment, MNEs often need to deal with the management and transaction costs associated with multiple languages and language differences (Luo and Shenkar, 2006). It is well known that foreign direct investment involves the production, organization and management of commercial activities. Effective interaction and communication within MNEs and between multinational enterprises and economic entities of host countries are key factors affecting the future success of FDI. Therefore, the linguistic linkage between home and host countries tends to influence FDI location choice (Wei, 2014). Linguistic linkage refers to the language distance between home country and host country. It has been argued that language is a dynamic instrument for reducing transaction costs in international business. It can influence MNEs' decision when they are operating FDI in host country. Moreover, the information asymmetry among MNEs occurs as there is a language difference, because it negatively affects communication processes (Kang & Kim, 2010). In addition, language differences can be an obstacle for MNEs to identify business opportunities and negotiating agreements between home and host countries (Rauch & Trindade, 2002)

International business scholars have been argued that MNEs face Liability of Foreignness as they operate in foreign countries (Hymer, 1976; Zaheer, 1995), which are costs of business operation in foreign countries. Liability of foreignness is one of the key factors that effects MNEs' location choice. MNEs must overcome the liability of foreignness to reduce the costs

of doing business when they are undertaking FDI in a host country. Among many other factors that influence liability of foreignness, language distance between home and host country has a significant impact on FDI inflows to the host country. Because the languages differences between home and host country automatically increase the liability of foreignness (Berry et al., 2010).

Ali and Guo (2005) find that close linguistic linkage as one of the important proxies for cultural proximity has encouraged FDI into China. Their study result shows that FDI related investment businesses from Taiwan are mainly located in Fujian province while Hong Kong investors prefer to locate in Guangdong province. The critical reason causes such a pattern is not geographically closeness to each other but having the same language.

1.5.3.2. Cultural Similarity/Distance

The challenge in FDI operations in a host country with a high level of cultural difference increases uncertainty and risk of doing business. The cultural distance between the host and the home country significantly affects inward FDI (Liu et al., 1997). Guiso et al. (2009) clamis that cultural similarity helps managers to build up trust, which has effect on location decisions of FDI.

Troy (2016) argues that cultural similarity between home and host countries encourages foreign direct investment (FDI) and forecasts the success of MNEs. Culture as a comparative advantage is demonstrated in the relationship between Ireland and the United States. The high volume of American investment into Ireland is due to the two countries' cultural compatibility. Because of the cultural compatibility of these two countries, the transaction costs and information costs dropped dramatically, and FDI inflows increased followingly. The cultural compatibility does reduce the cultural distance between home and host countries. The reduction of cultural distance can minimize or eliminate many added transaction costs involved in location, mode of entry and performance of MNEs (Tang 2012, Shenkar 2001).

Another research carried by Liu et al. (1997) shows that Guangdong province achieved a great success in attracting FDI into China, which is considered as an important typical case. They found that the three advantages: proximity to Hong Kong, historical connection with foreign countries and level of knowledge in exchanging with foreigners, are the main determinants of such a great success.

Anna (2015) employed a random effects panel estimator to examine the impact of cultural distance between Sweden and other 75 destination countries on Swedish outward FDI stock covering the period 1998–2012. The study result indicates that cultural distance has a negative impact on outward FDI stock of Swedish firms.

1.5.3.3.   Geographic Distance

A large number of literatures have studied the impact of geographical distance between home country and host country on FDI flows. Geographical distance has long been seen as a factor negatively affecting FDI flows between home and host countries, as it is a source of friction between markets and it accounts for higher transaction costs (Tesar & Werner, 1995). Shatz and Venables (2000) stressed that American companies have a high level of vertical investment in Canada because geographic distance allows producers to more easily coordinate production when they divide it into parts.

Roberto (2009) examined the impact of geographic distance on the cross-border mergers and acquisitions (M&A) of U.S. companies. He found that U.S. companies tend to acquire higher stakes in geographically nearby destinations than in remote ones. Nicholas Bailey and Sali Li (2014) also found that geographic distance negatively influences outward FDI of U.S. over the time period of 2006–2011. Besides, Grosse and Trevino (1996) explored the determinant factors that influencing inward FDI in the United States and found that geographic distance between invesrtors and U.S. negatively affects the amount of investment.

According to New Trade Theory, the trade costs and frictions that affect FDI are closely related to geographical distance. Transportation and coordination costs are higher when the units of a multinational are geographically highly dispersed (Markusen & Venables, 1998). In other word, the geographic distance between the home country of the parent company and the destination location has a negative effect on FDI. Moreover, it is generally accepted that the liability of foreignness faced by MNEs increases proportionally to the geographic distance between home and host country (Eden & Miller, 2004).

1.6.   Impacts of FDI

The reduction of trade and investment barriers between countries has created new and large markets for MNEs to invest. It has been contributed to global FDI flows for many decates. Of course, during this period, FDI has also experienced temporarily fall in investment flows to emerging markets because of the Asian crisis in 1997-1999 and the global economic crisis in

2008. What are the impacts of FDI on investor and recipient country after its long journey. In terms of the impact of foreign direct investment, it can be discussed through two different perspectives, which are home country perspective and host country perspective. As the investor and recipient, both of home and host country benefit from FDI. That is why home country willing to invest foreign market and host country working hard to attract more FDI.

1.6.1. Impacts on the Home Country

As for the impact of FDI on home country where MNEs come from, there are several benefits that home country may gain as an investor through outward FDI. Firstly, it creates more opportunities for MNEs' development. Specifically, it can be expected that the FDI operation of MNEs in foreign market would help them grow larger or faster than being a local firm in domestic market, especially if the home country's domestic market size is limited and production needed resources are at high price or limited.

Secondly, FDI plays an important role in promoting productivity of MNEs in home country. MNEs might be able to become more productive through different types of FDI. MNEs can access to new foreign market and increase their market share through Market-seeking FDI. Resource-seeking FDI and Backward vertical-FDI, otherwise, would provide production needed materials and inputs at lower costs. Moreover, Strategic asset-seeking FDI would create an opportunity for MNEs to benefit from a new technological innovation or intellectual property through M&A of foreign firms. A large foreign market, needed production inputs at lower price and frim strategic assets will improve MNEs' productivity at different level.

Thirdly, when MNEs successfully enter foreign markets and expand overseas production through foreign direct investment, the need for intermediate inputs from domestic suppliers may increase. The resulting demand growth provides domestic intermediate input producers with the opportunity to use economies of scale to reduce costs and improve productivity (Jitao Tang and Rosanne, 2014). Therefore, FDI will not only help MNEs to improve their productivity, but at the same time also creates new opportunities for intermediate input producers in home country to promote their productivity. As a result, the demand for intermediate inputs will also increase the export volume of home country. Stobaugh et al. (1972) argued that foreign direct investment positively affects home country's exports and employment, because the entry to the foreign market may largely increase the market shares and exports of intermediate products to foreign market. As for employment, MNEs need skilled

and experienced work forces from parent company in home country while they started a new FDI project in host country. This will create new job opportunities and increase employment in home country. Besides, Poole (2006) argues that employees working in host countries may acquire excellent skills through direct or indirect overseas experience and transfer these skills to future domestic employers through labour mobility. These employees may carry useful management skills or new technological skills. This will provide home country firms a high-quality human capital, which is essential to their future development.

Finally, the one of the other main impacts of FDI on the home country was believed to be related to capital flows in terms of balance-of-payments. FDI outflows will note as negative in balance-of-payments, because it is considered as an initial capital outflows to finance the foreign investment project. However, the subsequent inflows of capital in the form of repatriated profits will note as positive in the balance-of-payments. High repatriated profits refer to high investment return, which motivates MNEs to conduct FDI in host country.

In a word, the impacts of FDI on productivity of MNEs and intermediate input producers, on exports, on employment, on human capital and on capital flows in home county will positively affect home country's economic development or economic transition. At country level, all the benefits that FDI brings to the home country may improve economic development directly or indirectly. Besides, these efforts will also help home country economy to integrate itself into world economy, and establishing a good economic relationship with host countries.

1.6.2. Impacts on the Host Country

Foreign direct investment (FDI) enjoys a well-known good reputation on the stage of world economy because of its significant positive effects on host country's development. That is why many countries are competing on attracting more FDI inflows. As for the impacts of FDI on host country, it is recognized that FDI will positively impact host country's productivity, export and economic growth through bringing needed capital, new technological know-how, useful managerial and organizational skills to host country.

What will happen after foreign companies (MNEs) access to the host country's market through FDI? MNEs will bring highly respected products or services, advanced technology, management skills and marketing acumen, which is an attractive complement to any level of economic development (Stephen D. COHEN, 2007). These are critical elements for increasing

host country's productivity and economic growth. The benefits that host country potentially can receive from high-quality FDI include the following:

Firstly, high-quality FDI will provide a large amounts of investment capital for host country. Sufficient capital inflows are needed at any level of economic development. The faster economic development will increase the demand for needed capital. Moreover, with help of these investment capital, MNEs start new production lines or sales positions in host country, and it creates relatively high-paying jobs. These job opportunities provide workers higher levels of training and wages than those provided by local companies. Those higher wages may raise the average wage level in the host country labor market. This accounts for reduction of unemployment and increasing high skilled human capital in host country.

Secondly, the FDI operations of MNEs will contribute to the sales and profits of local enterprises as they purchase components, equipment and services from local companies. MNEs provide technical and financial assistance to local contractors so that they can meet the high standards of MNEs.This kind of technology spillovers may improve local companies' competitiveness and productivity directly or indirectly.

Thirdly, MNEs may provide advanced technology and advanced management techniques to optimize production process, improve quality control and lower production costs, and this will end up with increasing productivity and producing higher value-added goods. If the domestic market is not enough to spent all these goods or there is some other big market with high potential demand, MNEs will increase exports, and this will bring more foreign exchange earnings to host country.

In addition, there are some secondary effects of FDI in host country. Stephen (2007) concluded these secondary effects, forcing local competitors to perform at a higher level of competitiveness, the success of the first wave of investments attracted additional investment, trained workers leaving foreign subsidiaries and starting their own businesses or transferring their expertise to local firms, and improved environmental protection.

All in all, the impacts of FDI on host country economy can be concluded as transferring essential elements, such as needed capital, advanced technological know-hows, practical managerial and organizational skills to improving productivity, exports and economic growth of host country. Along with these activities, new jobs and training opportunities will be created. Employees of MNEs may receive higher wage than local ones.

At the same time, FDI friendly incentives intended to MNEs may cause a negative emotion in local companies. They might become more critical to MNEs' operations because of increasing market competitiveness. Besides, MNEs may carry out some environmental unfriendly projects for promoting their profits. It will damage the local environment. The possibility of these kind of negative effects of FDI on host country also should be considered and evaluated.

2. FDI INFLOWS IN TURKEY

According to the UNCTAD's Global Investment Report (2018), Turkey, one of the largest FDI recipient in West Asia region, have been received more than a quarter of total inflows into the subregion from 2007 to 2015.

Domestic economy of Turkey and FDI inflows into the country suffered the negative impact of the political instability since July 2016. Leading rating agencies such as Standard & Poor's (S&P), Moody's, and Fitch Group have downgraded Turkey's sovereign credit rating, which has negative impact both on international borrowing and foreign investment in the country. Following a sharp decline in 2016, FDI inflows continued to fall to USD 11 billion in 2017, ranking 28th globally (Figure 6). Turkey's share of global FDI flows rose to 0.76 per cent, compared with 1.6 per cent for developing countries.
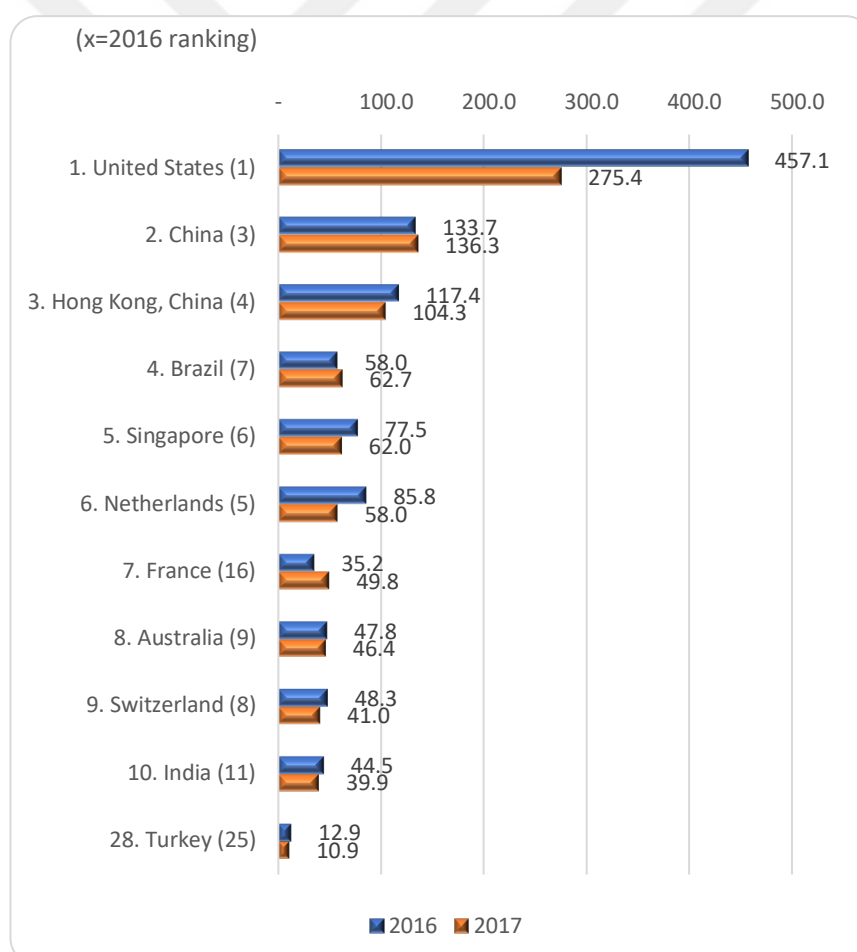
Figure 6: FDI Inflows, Top 10 Host Economies and Turkey, 2016 and 2017, Billion USD

Source: UNCTAD, FDI/MNE database, www.unctad.org/fdistatistics

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2.1. FDI Inflows and Stocks in Turkey

Since the early 2000s, Turkey has been carried out stable and predictable policies for establishing a confident economic environment. As a result, foreign direct investment into Turkey has been on the rise since 2005, reaching more than USD10 billion a year. It reached a record USD 22 billion in 2007 (Figure 7). However, the global FDI flows occurred declining trend due to the 2008 global economic crisis, which also affected inward FDI in Turkey.

FDI inflows started to present upward trend again in 2010 and a relatively high level occurred with amount of USD 16.2 billion in 2011, and reached USD 17.6 billion in 2015, the highest level since the crisis. Cumulative foreign direct investment flows to Turkey between 2005 and 2017 amounted to about USD 186.2 billion with an approximately nine times increase than USD 19.6 billion between 1975 and 2004.
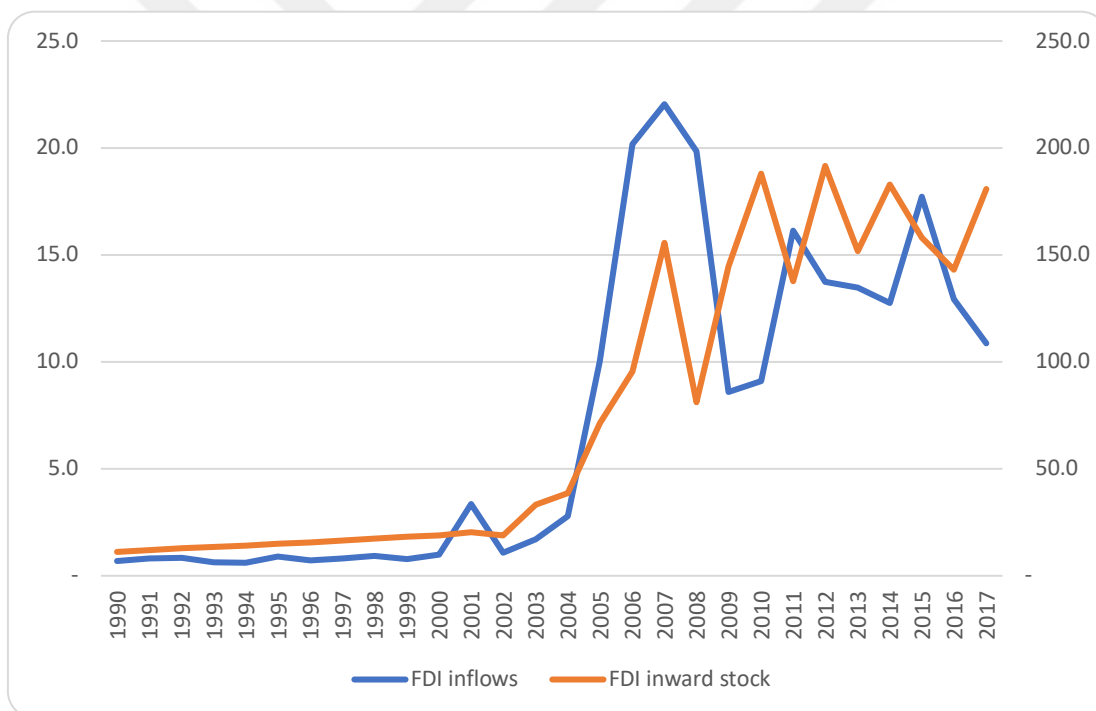
Figure 7: FDI Inflows (Right) and FDI Stock (Left) in Turkey, 1990-2017, Billion USD

Source: UNCTAD, FDI/MNE database, www.unctad.org/fdistatistics

In 2016, FDI inflows into Turkey have exceeded the USD 12 billion threshold thanks to the investment advantages and economic attractiveness of Turkey. However, it has been below the level of USD 17 billion 550 million in 2015 due to the despicable coup attempt and the unpleasant developments in the nearby region and economies.

2.2. FDI Inflows in Turkey by Home Country and Region

In 2017, the Netherlands (USD 1.77 billion), Spain (USD 1.5 billion) and Azerbaijan (USD 1 billion) were the top three home countries that contributed to the most FDI inflows into Turkey (Figure 8). Along with the investors from European Countries, Asian investors continue to grow their appetite for Turkey. Although FDI flows from other regions have been increasing, the share of EU Countries still dominated the sustained FDI inflows with amount of USD 4.97 billion (Figure 9). Additionally, the diversified structure of Turkey's FDI pattern accounted for the similar FDI amount of home countries in 2017.
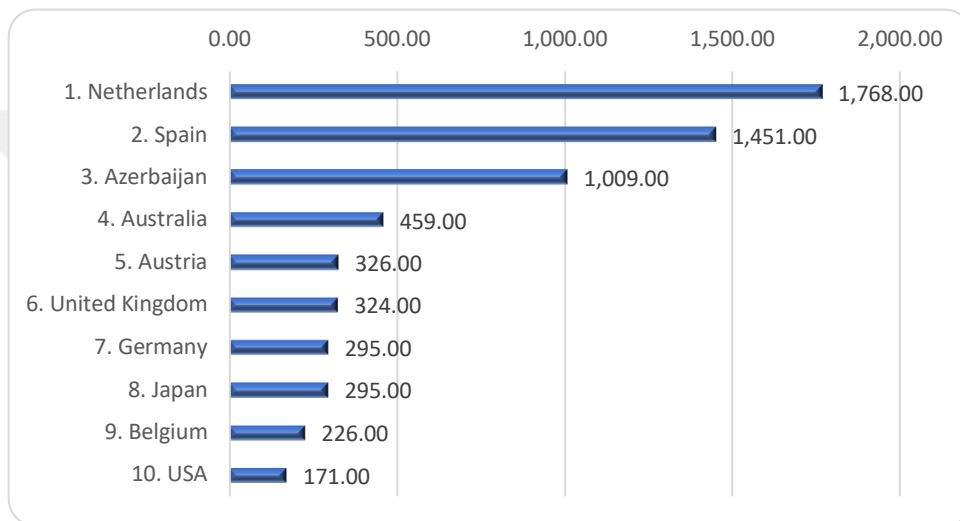
Figure 8: FDI Inflows in Turkey by Home Country, 2017 Ranking, Million USD

Source: Central Bank of the Republic of Turkey
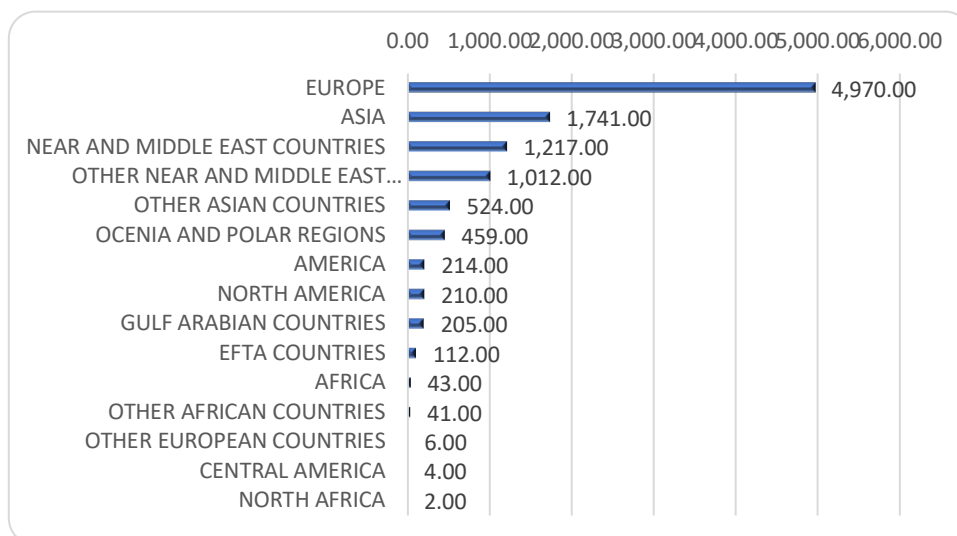
Figure 9: FDI Inflows in Turkey by Region, 2017 Ranking, Million USD

Source: Central Bank of the Republic of Turkey

The West Asia region has been experienced decling of FDI inflows continuously for 9 years since 2008. Even though Turkey has been the leader FDI recipient country in West Asia region since 2012, it also suffered the reducing of inward FDI. Turkey shared 42.6% of global FDI inflows in West Asia Region in 2017. It decreased 0.4% comparing to 43% in 2016 (Table 1).

Table 1: FDI Inflows in West Asia Countries, 2017 (Million USD)

Ranking	Region/Economy	2017	%
1	Turkey	10 864.0	42.6
2	United Arab Emirates	10 354.2	40.6
3	Lebanon	2 628.0	10.3
4	Oman	1 867.4	7.3
5	Jordan	1 664.8	6.5
6	Saudi Arabia	1 421.0	5.6
7	Qatar	986.0	3.9
8	Bahrain	518.9	2
9	Kuwait	300.5	1.2
10	State of Palestine	203.2	0.8
11	Syrian Arab Republic	-	0
12	Yemen	-269.9	-0.1

Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

2.3. FDI Inflows in Turkey by Sector

According to CBRT's data, service and industrial sector were the two main sectors that observed the most of FDI inflows in Turkey for decades. The FDI flows into these two sectors were closer between 2009 and 2014. Service sector became the top sector with higher amount of FDI inflows since 2014 (Figure 10). In 2017, service sectors attracted 72.3% of total FDI inflows in Turkey, which was USD 5.4 billion. Industrial sectors took up 27.3% of total FDI inflows, which approximately was USD 2 billion.
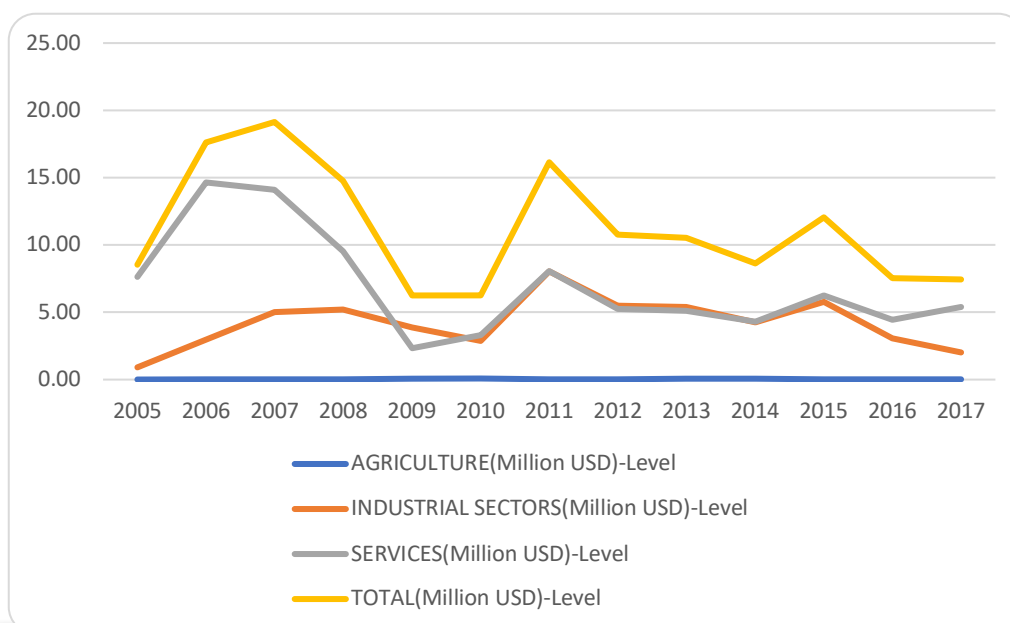
Figure 10: FDI Inflows in Turkey by Sector, 2005-2017, Billion USD

Source: Central Bank of the Republic of Turkey

In 2017, financial and insurance activities (USD 1.5 billion), transportation and storage (USD 1.3 billion) and manufacturing (USD 1.2 billion) were the top three sectors which absorbed 54% of the total FDI inflows (Table 2). Compared with the previous year, FDI inflows declined in all these three sectors and declining rates were 17.1% for financial and insurance activities, 46.5% for transportation and storage, and 45.1% for manufacturing sector.

Table 2: FDI Inflows of Top 10 Sectors, 2017 (Million USD)

Rank	Sector	FDI Inflows	(%)
1	Financial and Insurance Activities	1,464	20
2	Transportation and Storage	1,333	18
3	Manufacturing	1,199	16
4	Wholesale and Retail Trade	1,077	15
5	Construction	626	8
6	Information and Communication Services	565	8
7	Mining and Quarrying	448	6
8	Electricity, Gas, Steam and Air-conditioning Supply	371	5
9	Accommodation and Food Service Activities	82	1
10	Human Health and Social Work Activities	65	1
	Other	168	2
	Total	7,398	100

Source: Central Bank of the Republic of Turkey (CBRT)

According to the analysis of sectoral distribution of FDI inflows over the past 10 years, the financial and insurance activities sector came at the top place with USD 28.2 billion, almost 28.1% of the total amount (Table 3). It was followed by 27.9% for manufacturing sector (27.9 USD billion), 15.4% for energy sector (USD 15.4 billion), 7.7% for wholesale and retail trade sector (USD 7.7 billion) and transportation and storage sector (USD 5.3 billion).

Table 3: Sectoral Distribution of FDI Inflows, 2008-2017 (Million USD)

Sector \ Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
Financial and Insurance Activities	6,136	817	1,621	5,883	2,084	3,415	1,470	3,516	1,766	1,464	28,172
Transportation and Storage	96	230	183	221	130	364	594	1,524	635	1,333	5,310
Manufacturing	3,972	1,640	924	3,599	4,519	2,843	2,742	4,227	2,241	1,199	27,906
Wholesale and Retail Trade	2,088	389	435	707	221	379	1,137	599	688	1,077	7,720
Construction	337	209	310	301	1,427	178	232	106	291	626	4,017
Information and Communication Services	97	173	36	36	134	120	214	150	91	565	1,616
Mining and Quarrying	145	89	136	146	188	717	382	207	148	448	2,606
Electricity, Gas, Steam and Air-conditioning Supply	1,055	2,153	1,824	4,293	773	1,794	1,131	1,338	676	371	15,408
Accommodation and Food Service Activities	25	55	113	122	16	59	24	11	259	82	766
Human Health and Social Work Activities	147	105	112	232	546	106	204	58	274	65	1,849
Other	650	406	562	596	723	548	502	341	465	168	4,961
Total	14,748	6,266	6,256	16,136	10,761	10,523	8,632	12,077	7,534	7,398	100,331

Source: Central Bank of the Republic of Turkey (CBRT)

2.4. M&A in Turkey

According to the report published by Ernst & Young (2018), the volume of cross-border M&A transactions increased by 84% with amount of USD 4.6 billion in 2017 (Figure 11), comparing with USD 2.5 billion in 2016. However, the number of cross-border M&A transactions decreased by 16%, realized as 78 (Figure 12). It was 93 in 2016. In 2017, the volume of cross-

border M&A accounted for 62.2% of the total volume of M&A transactions in Turkey, increased 7.9% comparing with 54.3% in 2016.
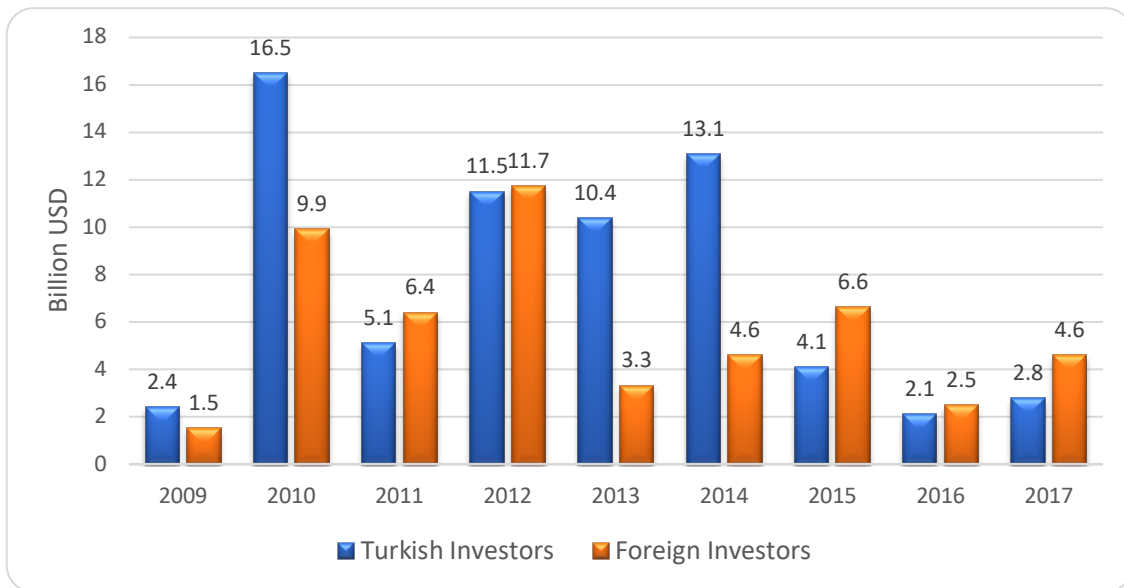
Figure 11: Transaction Volume by Turkish and Foreign Investors

Source: Mergers and Acquisitions Report of Turkey 2017
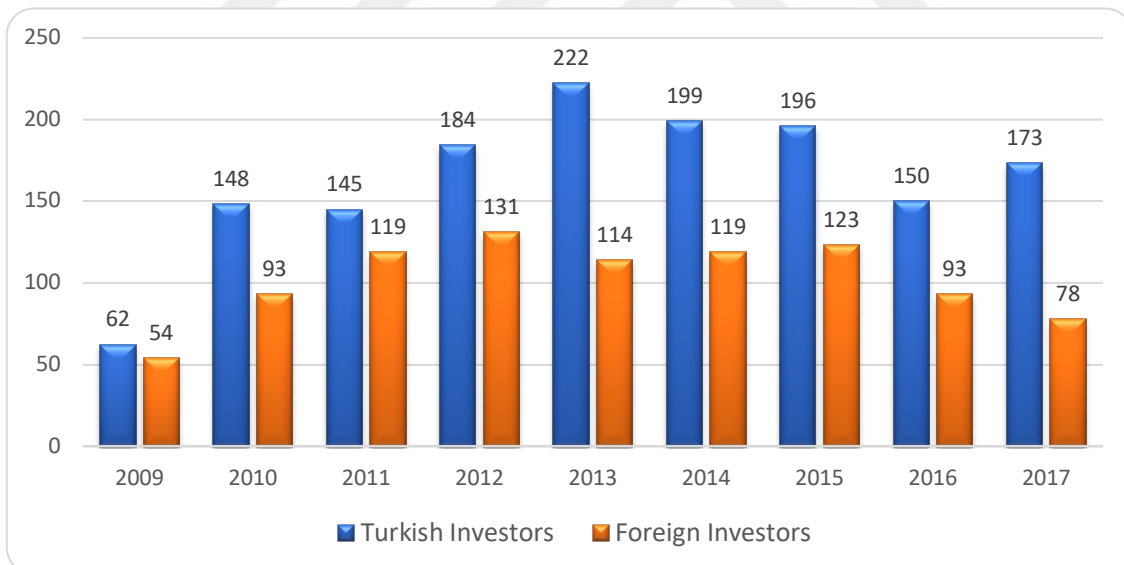
Figure 12: Number of Transaction by Domestic and Foreign Investors

Source: Mergers and Acquisitions Report of Turkey 2017

According to the report, there were 127 deals with disclosed values of approximately USD 7.4 billion. The volume of total transaction slitghtly increased because of high value transactions. However, the fact is there were only 17 deals over USD 100 million, indicating that the investors still preferred to Small and Medium-sized Enterprises (SMEs), as they have in previous years. Private sector deals (238) accounted for 91% of the total volume of all disclosed

transactions with total value of USD 6.8 billion in 2017. Moreover, public sector deals (13) contributed USD 604 million to the total transaction volume.

In 2017, the biggest cross-border transaction was the sale of OMV Petrol Ofisi to Netherland based Vitol Investment in return of USD 1.44 billion (Table 4). This was the only 1 cross-border transaction greater than 1 billion US dollars and the total volume of the top 5 cross-border M&A transactions was USD 3.7 billion. All of these cross-border transactions were in the private sector.

Table 4: Top 5 Cross-Border M&A Transactions in 2017

Acquired Company	Sector	Acquiring Company	Home Country of Acquiring Company	Stake	FDI (Million USD)
OMV Petrol Ofisi	Energy	Vitol Investment	Netherlands	100.00%	1,441.0
Garanti Bank	Financial Services	BBVA	Spain	9.95%	917.0
Mersin Port	Transportation	IFM Investors	Australia	40.00%	869.0
Banvit	Food and Beverage	BRF, Qatar Investment Authority (QIA)	Brazil, Qatar	79.48%	299.0
Unit International Energy	Energy	SK Engineering	South Korea	30.00%	177.0

Source: Mergers and Acquisitions Report of Turkey 2017
https://www.ey.com/Publication/vwLUAssets/MA_2017_Raporu_ENG/%24FILE/EY_Mergers_and_Acquisitions_Report_Turkey_2017.pdf

EU and the US investors were the main force of the foreign investor transactions in 2017. EU countries and the US were followed by the UAE, Japan, South Korea and India. In 2017, the US placed top in the list in terms of the number of transactions with 14 deals, followed by France with 7 deals, Luxembourg and the UAE with 6 deals (Figure 13).
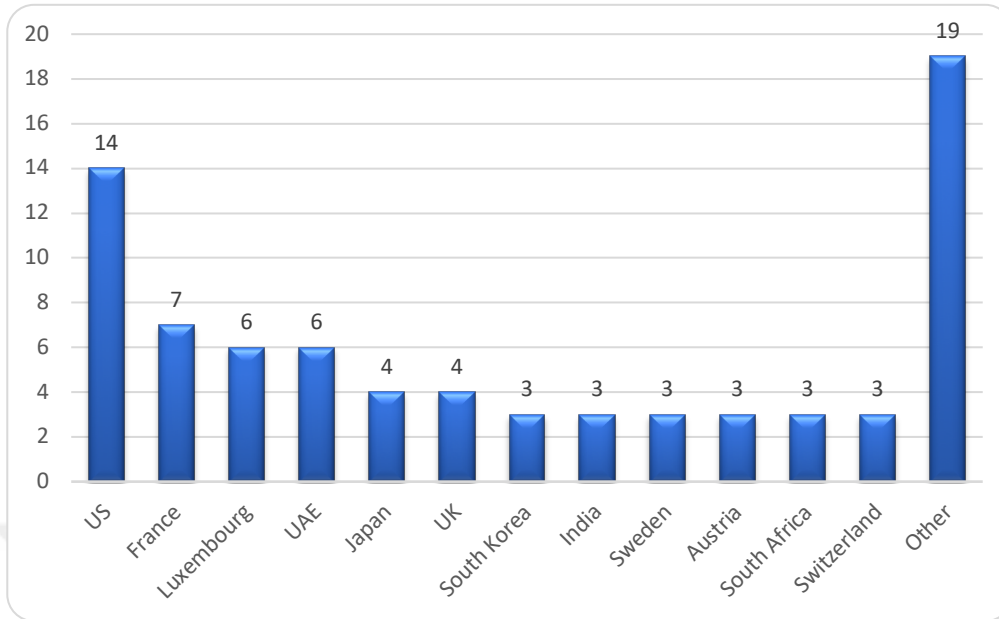
Figure 13: Number of Deals Completed by Origin of Investor

Source: Mergers and Acquisitions Report of Turkey 2017

In terms of transaction volume, the Netherlands ranked first in 2017 with amount of USD 1.44 billion, followed by Spain and Australia with USD 921 million and USD 869 million, respectively. These two countries aside, EU countries were not prominent in 2017. Besides, South Korea and the US also performed well with amount of USD 246 million and USD 206million (Figure 14).
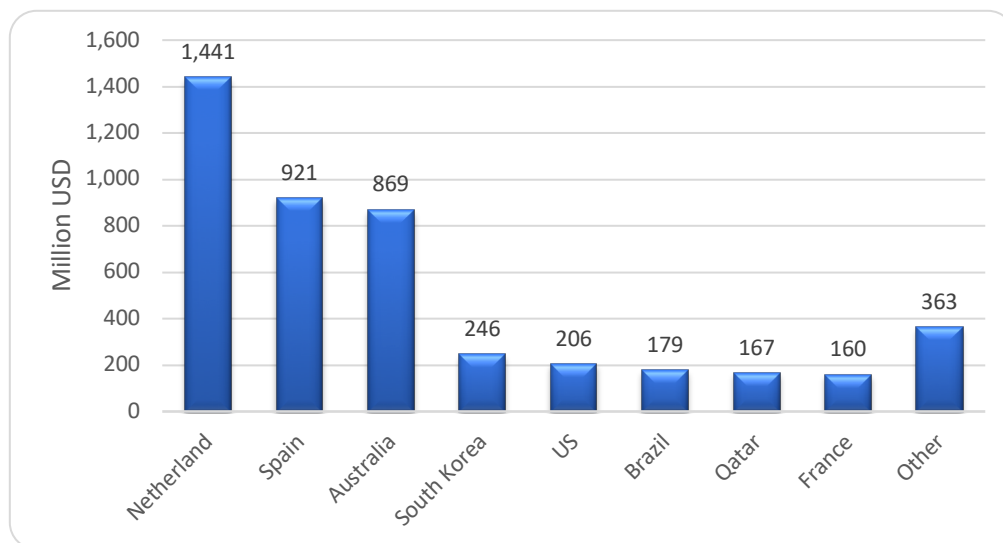
Figure 14: Breakdown of the Total Transaction Volume by Origin of Investor

Source: Mergers and Acquisitions Report of Turkey 2017

2.5. Companies with Foreign Capital in Turkey

According to the FDI report (2017) released by ministry of economy, there were 53,156 companies operating with foreign capital in Turkey by the end of 2016. Among which 46,478 were companies and branch offices of foreign companies, and of which 6,678 were established by foreign companies and existing local companies (Table 5).

Table 5: Number of Companies with Foreign Capital by Year According to Their Mode of Establishment

Countries	1954-2011 (Cumulative)	2012	2013	2014	2015	2016	Total
Company Establishment	23,235	3,595	3,480	4,420	5,292	5,277	45,299
Participation	5,272	569	205	205	222	205	6,678
Branch Office	737	87	93	78	85	99	1,179
Total	29,244	4,251	3,778	4,703	5,599	5,581	53,156

Source: Foreign Direct Investments in Turkey 2016

With a total number of 21,751 companies, EU countries came at top place in 53,156 companies with foreign capital. Germany (6,876 companies), the United Kingdom (2,993 companies) and the Netherlands (2,708 companies) were the top three EU countries that operating with foreign capital in Turkey. Besides, there were 5,581 companies established in 2016 with foreign capital, of which 1,120 have foreign partners from the EU, 3,204 from Near and Middle Eastern and 380 from other Asian countries (Table 6).

Table 6: Companies with Foreign Capital by Home Country

Countries	1954-2011 (Cumulative)	2012	2013	2014	2015	2016	Total
EU Countries	15,151	1,536	1,351	1,308	1,285	1,120	21,751
Germany	4,768	483	415	376	434	400	6,876
Netherlands	1,959	173	157	143	151	125	2,708
United Kingdom	2,276	171	163	137	152	94	2,993
Italy	910	107	103	101	91	64	1,376
Other EU Countries	5,238	602	513	551	457	437	7,798
Other European Countries (Except EU)	3,270	418	341	321	351	274	4,975
African Countries	606	151	207	306	390	403	2,063
North America	1,407	150	135	112	152	147	2,103
USA	1,194	113	106	92	125	106	1,736
Canada	213	37	29	20	27	41	367
Central and South America, Caribbean	159	18	24	17	23	16	257
Near and Middle East Countries	6,213	1,636	1,372	2,268	2,991	3,204	17,684
Other Asian Countries	2,109	303	317	326	377	380	3,812
China	441	55	71	96	95	84	842
South Korea	184	29	29	25	14	11	292
Other	1,484	219	217	205	268	285	2,678
Other Countries	329	39	31	45	30	37	511
Total	29,244	4,251	3,778	4,703	5,599	5,581	53,156

Source: Foreign Direct Investments in Turkey 2016

Istanbul, as a biggest city with largest population in Turkey, was an ideal place for many foreign companies. By the end of 2016, there were 32,311 companies established with foreign capital, sharing 60.8% of the total number of foreign companies. Antalya, Ankara and İzmir followed with number of 4936, 2931 and 2418 companies, respectively.

Investors from Netherlands were established 2,708 companies until the end of 2016. In 2016, these companies accounted for USD 955 million FDI inflows in Turkey. However, 6,876 companies established by German investors just accounted for USD 430 million FDI inflows in Turkey. Qatar, as a wealthy near Middle East country, established 112 companies and invested USD 375 million in 2016. For Japanese investors, they were established 217 companies and it brought USD 329 million FDI inflows for Turkey in 2016 (Table 7).

Table 7: FDI and Number of Companies for Countries in Top 10

Rank	Country	Number of Companies in Turkey	FDI in Turkey (2016, USD million)	Global FDI Outflows (2016, USD million)
1	Netherlands	2,708	955	173,658
2	United Kingdom	2,993	950	-12,614
3	Azerbaijan	1,974	652	2,574
4	Germany	6,876	430	34,558
5	Spain	653	409	41,789
6	United States	1,736	390	299,003
7	Qatar	112	375	7,902
8	Austria	873	361	-2,208
9	Switzerland	831	350	30,648
10	Japan	217	329	145,242

Source: Foreign Direct Investments in Turkey 2016

2.6. Chinese FDI in Turkey
2.6.1. China's outward Foreign Direct Investment

China's outward foreign direct investment (OFDI) has a relatively short history. Large-scale investment began after 2004. China's history of attracting foreign investment (IFDI) can be traced back to the 1980s. The biggest obstacle for Chinese firms to go out is that they are not familiar with culture, law, history and politics of destination countries. However, decades of experience in attracting foreign investment can make up for this gap to some extent. Therefore, China's overseas investment is bound to have a close relationship with attracting foreign investment. We call this relationship market stickiness. That is to say, Chinese companies are

more likely to invest in countries familiar to Chinese people when other conditions remain unchanged.

Since joining the World Trade Organization (WTO) in 2001, China's OFDI has expanded greatly. In 2002, China launched the "going out" strategy (Luo et al., 2010). During 2003-2008, the annual growth rate of China's OFDI was 73%, while the world average was 29% (UNCTAD database). Although the world financial crisis has greatly reduced the scale of global investment, China's foreign direct investment (FDI) still grows at an annual rate of 11% during the crisis period of 2009-2012. According to the UNCTAD's statistics, China's OFDI accounted for 54.5% of total FDI outflows of developing economies, and ranked top place in 2017 (Table 8).

Table 8: FDI Outflows of Top 10 Developing Economies, 2017 (Million USD)

Ranking	Developing Economies	2017	%
1	China	124,630.00	32.7
2	China, Hong Kong SAR	82,843.49	21.8
3	British Virgin Islands	70,779.56	18.6
4	Korea, Republic of	31,675.80	8.3
5	Cayman Islands	30,371.00	8.0
6	Singapore	24,681.57	6.5
7	Thailand	19,283.14	5.1
8	United Arab Emirates	13,955.50	3.7
9	China, Taiwan Province of	11,357.00	3.0
10	India	11,304.35	3.0
	Developing Economies Total	380,774.79	1

Source: UNCTADSTAT

In recent years, with the globalization of China's economy and the deepening of China's participation in trade investment, inward foreign direct investment (IFDI) and outward foreign direct investment (OFDI) attracted by Chinese companies have been showing an upward trend. On the one hand, the scale of IFDI attracted by China has increased steadily and the quality of foreign investment has been upgraded gradually; On the other hand, the OFDI of Chinese companies continues to grow rapidly and the scope of investment is expanding. The average annual growth rate of UFDI was as high as 22.7% between 2002 and 2016. In 2014, China's OFDI amounted to USD 123.12 billion, and the amount of IFDI was USD 119.56 billion, both reaching record highs. Meanwhile, the scale of Chinese companies' OFDI exceeded the scale of IFDI attracted by China for the first time, becoming net foreign direct investment countries. Since then, China's direct investment in foreign countries has increased rapidly. In 2016, the amount of direct investment in foreign countries reached USD 196.15 billion, while in 2016,

the amount of IFDI reached USD 126 billion, and the amount of direct investment in foreign countries exceeded USD 70.15 billion. This phenomenon caused widespread concern.

Attracting foreign direct investment (FDI) has become an integral part of the national development strategy. In recent years, changes in foreign direct investment policies around the world are more conducive to the entry and operation of foreign companies, but the degree of liberalization of FDI is still far lower than that of trade in goods and services.

The scale of foreign investment has increased year by year, which has played a positive role in China's economic development and achieved mutual benefits and win-win results. Since 2017, global FDI inflows into China is generally stable and continuous, and foreign direct investment has also shown more new changes. The operating companies with foreign capital in China still have strong competitive advantages, but the global business environment is intensifying competition, and foreign investment in China is shifting from focusing on preferential policies and factor costs to focusing more on China's business environment.

Foreign direct investment (FDI) is an important way to accelerate the integration of China's economy and the world's economy. In terms of flow, China's OFDI increased by 22.8% in 2013, breaking USD 100 billion for the first time and reaching a new stage of USD 107.8 billion. In the same year, the inward foreign direct investment (IFDI) in China reached USD 117.6 billion, and the flow of IFDI and OFDI in China was nearly balanced for the first time. In 2017, the amount of IFDI and OFDI were USD 120.2 billion and USD 131 billion (China and China, Hong Kong SAR), respectively. (Table 9).

Table 9: FDI Outflows of Top 10 Economies, 2017 (Million USD)

Ranking	World Economies	2017	%
1	United States of America	342,269.00	23.9
2	Japan	160,449.43	11.2
3	China	124,630.00	8.7
4	United Kingdom	99,613.57	7.0
5	China, Hong Kong SAR	82,843.49	5.8
6	Germany	82,336.48	5.8
7	Canada	76,987.89	5.4
8	British Virgin Islands	70,779.56	4.9
9	France	58,115.95	4.0
10	Luxembourg	41,155.18	2.9
	World Total	1,429,972.17	1

Source: UNCTADSTAT

The investment development theory holds that the inflow and outflow of foreign capital in an economy depend on the stage of economic development. When the economic development of an economy gradually develops from the superiority of labor force and resources to the superiority of capital and technology, the net outflow of foreign capital (the difference between the outflow of foreign capital and the inflow of foreign capital) of the economy will go through a process from negative to positive. Especially in developing countries, with economic development, the mode of OFDI will be transformed from labor-intensive OFDI to technology-oriented OFDI and business-oriented OFDI to service-oriented OFDI. Economic development can also change a country's factors endowment and comparative advantages, and encourage firms to conduct transnational operations through OFDI. In turn, OFDI can enhance the competitiveness and multinational operation of local firms in home countries.

Buckley et al. (2007) found that China's OFDI was mainly attracted by the market size and natural resources of the host country during 1984-201. The results also show that China's OFDI is related to the host country's political risk and cultural proximity. Cheung and Qian (2009) also found evidence that China's OFDI driven by market and resource-seeking motivation from 1991 to 2005. Zhang and Daly (201) used the actual OFDI flows between 2003 and 2009 to find that China's OFDI is positively correlated with the host country's international trade, market size, growth of GDP, openness and resource endowment. Yang and Gu (2016) found that China's OFDI was attracted to larger markets and countries with rich natural resources and backward systems.

2.6.2. China's FDI in Turkey

Turkey was once regarded as the center of the world in the middle ages. After entering the 21st century, its political stability, rapid economic growth, huge market and improving investment environment attracted foreign capital. Then, influenced by political risks, economic development level, legal environment, market competition and other factors, Chinese companies' investment in Turkey is still at a low level. It accounts for a very small proportion of China's total foreign investment and is still in the budding stage, but has great potential for development.

As shown in Figure 15, Turkey was becoming target country for OFDI of Chinese companies since 2014. It reachesd hightest level in 2015 with total amount of USD 451 million. However, the China's OFDI in Turkey presented decling trend because of political insitibilitey and unpleseant development of economy within country and nearby regions. Even if it shows

downward trend, but the value of each year is greater than the one before 2015. Comparing with Turkish OFDI in China, the sum of the Turkish OFDI in China for past ten years (USD 141 million) is lower than the hightest level of China's OFDI in Turkey in 2015 (USD 451 million) (Figure 16).
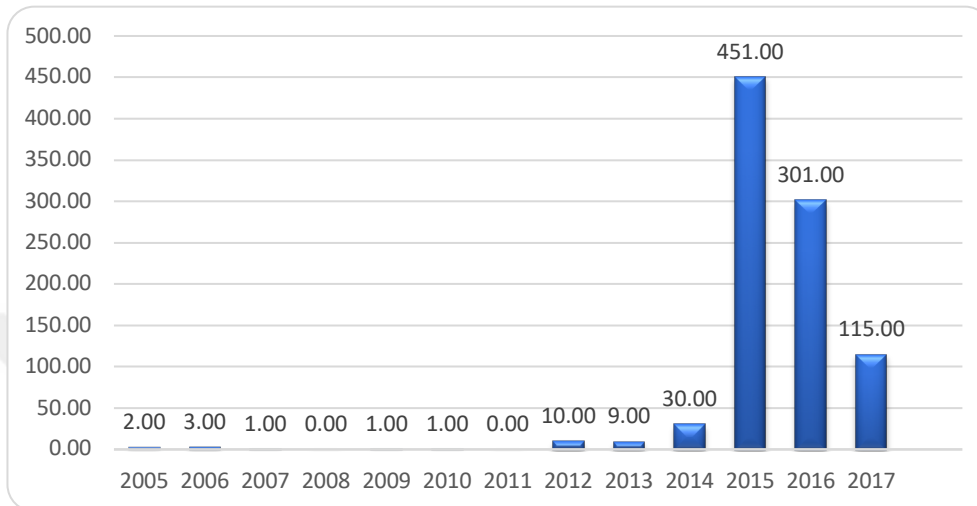

Figure 15: Chinese FDI in Turkey, 2005-2017, Million USD

Source: Central Bank of the Republic of Turkey
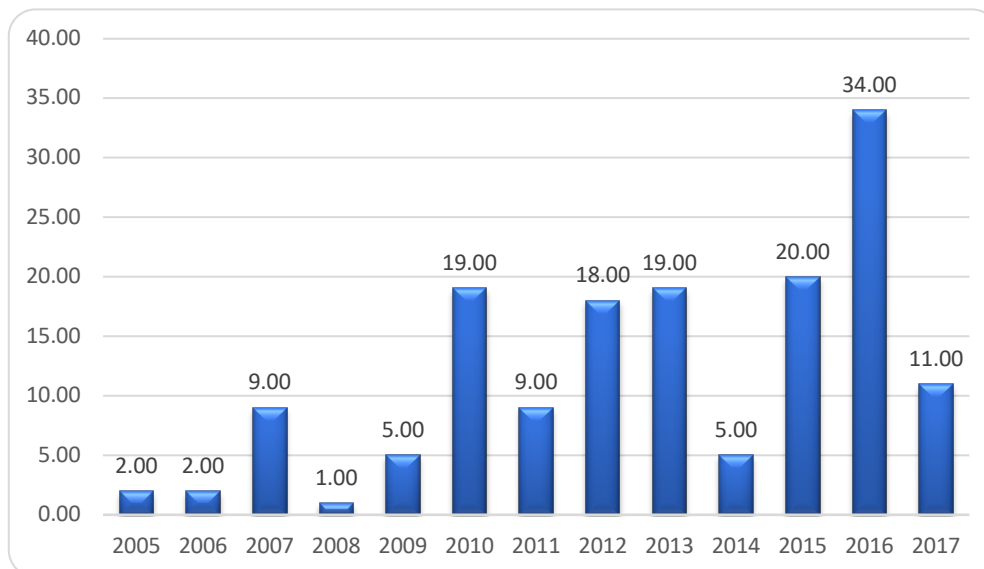
Figure 16: Turkish FDI in China, 2005-2017, Million USD

Source: Central Bank of the Republic of Turkey

2.6.3. The determinants of China's OFDI in Turkey

In terms of the determinant factors that influencing China's OFDI in Turkey, macroeconomic factors such as market size and growth, inflation, exchange rate affect Chinese firms' OFDI decision at the country level. In addition, economic development and political stability, FDI friendly business environment etc. are considered as a determinants of China's OFDI in Turkey.

According to the study results conducted by Mehmet (2017), the three main determinants of Chinese FDI in Turkey are market size and potential market growth (68.6%), geographical location (58.6%), tax and fiscal incentives (41.4%). The results of the questionnaire also show that the above three determinants are the factors that have the greatest influence on the investment of Chinese companies, far exceeding the other eight factors, that is, natural resource availability (21.4%), economic and financial stability (20%), labour cost (20%) and economic openness and labor resource (17.1%), respectively.

Among the all determinant factors that affect China's OFDI in Turkey, political stability within the country is the most influencial factor. Turkey experienced a despicable coup attempt in 2016, which caused instability in the country. This event affected confidence of foreign investors directly or indirectly. In terms of Chinese investors, they started to reduce the amount of OFDI in Turkey. It is a common sence that political stability within host country is a bace of all other factors, such as economic development and stability. At the meanwhile, the exchange rate also suffered fluctuation because of despicable coup attempt and unpleasant economic development within the country and nearby regions. It creats a great opportunity to foreign invastors, including Chinese investors, to aquire hight value assets at a cheap price. As one of the most well-known acquisition case, Chinese e-commerce giant ALIBABA acquired the share of the e-commerce platform: TRENDYOL, when the exchange rate of Turkey was devaluating. In addition, Turkey's accessibility to EU market as a part of custom union also plays a critical role in increasing the attractiveness of absorbing the China's OFDI.

3. MACROECONOMIC DETERMINANTS OF INWARD FDI IN TURKEY

In terms of the business-friendly environment, the macroeconomic elements that influence the FDI inflows within the country play a significant role in absorbing much more FDI. These macroeconomic factors include country's economic size and growth, trade openness, labor cost and productivity, exchange rate and inflation rate, human capital and infrastructure etc. These macroeconomic factors provide investors (MNEs) a picture of future investment return. Thus, a large number of studies, which are given below focused on the relationships between these macroeconomic determinants and FDI inflows in host country.

3.1. Literature Review on Macroeconomic Determinants of FDI

Trevino and others (2002) investigated the determinant factors that influence FDI inflows in seven Latin America countries using error correction model with time series data of 1988-1992. They found that GDP has positive effect on the inward FDI, while the FDI inflows into these countries are negatively influenced by current deficit, inflation and real exchange rate.

Kaur and Sharma (2013) carried out a study about the determinants of FDI that influence the inflows of FDI into India by applying cointegration tests and VECM using the quarterly data of the time period of 1990-1991 and 2010-2011. The empirical analysis concludes that trade openness of host country and GDP positively impact on FDI, while the negative effect of the inflation rate and exchange rate on FDI inflows in India are detected through the empirical study.

Nandipha and Andrew (2018) explored the macroeconomic determinants that influence FDI inflows in South African economics using the ARDL model with collected data between 1994 and 2016. Their findings' reveals that the relationship between FDI and GDP per capita, government size, real interest rate and openness of trade are significantly positive in the long-term. While the inflation rate has negative effect on FDI. Moreover, the short-run analysis indicates that the negative relationship exists between all variables and inward FDI in the short-term.

Qaiser (2018) analyzed the various determinants of FDI inflows in India during the time period of 1978-2016. He used ARDL approch to test the cointegration between FDI inflows

and its determinants. The study results indicate that trade openness, exchange rate and GDP per capita are the factors that positively impact on FDI inflows in India for the short-term.

Michael, Daniel and Jacob (2019) explored the FDI determinants in Ghana by applying the Johansen Cointegration test and VECM with the time series data (1990-2015). The study findings show that the inflation, exchange rate and interest rate of the host country are the macroeconomic factors that have negative effect on FDI inflows in Ghana both in the short-term and long-term. However, the positive impact of GDP is found through the research.

Sevda (2006) attempted to examined the macroeconomic factors that influence FDI inflow in Turkey during the time period of 1970-2006. He conducted a cointegration test and error correction model to estimate the effect of GDP, trade openness, real exchange rate and openness. He found that GDP and openness positively affect the FDI. While real exchange rate and trade openness are negatively impact on inward FDI in Turkey.

Talat (2008) constructed a single regression model using data from 1960 to 2004 to estimate the microeconomic determinants of FDI inflows into the Turkish economy. According to the research findings, the statistically significant determinants of FDI in Turkey are openness and growth rate of the economy, foreign capital stock, infrastructure investment and economic stability.

Serdar (2017) examined the influence of macroeconomic determinants on FDI flows in Turkey and four given Latin America countries by conducting the ARDL and ECM model with the collected time series data between 1980 and 2012. According to the study results, trade openness is considered as the most important factor that affects FDI inflow in Latin America. As for Turkey, significant effect of income per capita and inflation on FDI inflow are found through the study results.

Bahar (2018) analyzed the impact of macroeconomic variables on the sectoral FDI in the long-term and short-term in Turkey for the time period from 2005 to 2016, using the cointagration analysis and error correction models. The empirical findings show that openness of the economy to international market is an important factor which influens the FDI flows into Turkey. Real GDP has positive effects on agriculture and three other sectors. Real interest rate also has positive effects on total FDI.

According to the literature review conducted above, it can be easily found that host country's macroeconomic factors, such as economic size, economic growth, trade openness, exchange rate and so on, play a significant role in attracting more FDI into the host country. Turkey as one of the most favorable economics for attracting world FDI inflows within West Asia region, its macroeconomic factors have a considerable effect on FDI inflows in the country.

3.2. Hypothesis

In this chapter, an empirical study will be demonstrated for testing the long-run relationship between Turkey's macroeconomic factors and FDI by using ARDL bound test approach. The following hypothesis are developed for investigating such a relationship.

H1: Economic size has long-run positive impact on FDI.
H2: Economic growth has long-run positive impact on FDI.
H3: Trade openness has long-run positive impact on FDI.
H4: Real effective exchange rate has long-run negative impact on FDI.
H5: Inflation has long-run negative impact on FDI.
H6: Interest rate has long-run negative impact on FDI.
H7: Unemployment rate has long-run negative impact on FDI.

In order to build an econometric model to explore these hypothesis, some proxies will be used for projecting the macroeconomic factors. In this study, the value of real GDP for the quarter was used as an indicator of the size of the national economy. GDP growth rates are used as an indicator of economic growth. The ratio of total import and export in the quarter to the total real gross domestic product (GDP) of the quarter will be used as an indicator of trade openness.

3.3. Data and Modeling
3.3.1. Data Definition and Source

Quarterly data about macroeconomic indicators and FDI inflows of Turkey have been collected from the Organization for Economic Co-operation and Development (OECD) database and Central Bank of Republic of Turkey (CBRT) for the time period of 2005Q1-2017Q4. FDI is measured by net inflows in million USD. Real GDP value in million USD is a proxy for the economic size of the country, and the quarterly growth rate of real gross domestic product is used as a proxy for the country's economic growth compared with the same period of last year. Trade openness is calculated as the ratio of the total quarterly import and export value to the total quarterly real GDP value. Real effective exchange rate is measured by CPI Based Real

Effective Exchange Rate (2003=100). Inflation is obtained by Consumer Price Index (2003=100). Interest rate defined as the long-term commercial loans (USD) interest rate. Unemployment rate while measured as the ratio of total number of unemployed individuals to the total number of labor force in the country. Table 10 shows the brief definition and source of the data.

Table 10: Data Definition and Source, 2005Q1-2017Q4

Variable	Definition	Data Source
FDI	Quarterly Value of Foreign Direct Investment Inflows in Turkey (Million USD)	CBRT
GDP	Quarterly Value of Gross Domestic Product in Turkey (Million USD)	OECD
GDPG	Quarterly Growth Rates of Real GDP, change over same quarter, previous year (%)	OECD
TRAOP	The ratio of total quarterly import and export value to total quarterly real GDP value, (Import + Export) / GDP, Quarterly	OECD
REEXCH	CPI Based Real Effective Exchange Rate (2003=100)-Level, Quarterly	CBRT
INF	Consumer Price Index (2003=100), Quarterly	CBRT
INT	Commercial Loans (USD) (Flow Data, %)-Level, Quarterly	CBRT
UNEM	Unemployment Rate (%)-Level, Quarterly	CBRT

Source: https://stats.oecd.org/;
https://evds2.tcmb.gov.tr/index.php?/evds/serieMarket

3.3.2. Modeling

For testing the hypothesis mentioned above, FDI will be taken as dependent variable and GDP, GDPG, TRAOP, REEXCH, INF, INT and UNEM are taken as independent variables. The empirical model for testing these hypothesis is as following Eq. (1):

$$FDI = f(GDP, GDPG, TRAOP, REEXCH, INF, INT, UNEM) \qquad (1)$$

Where:

FDI = Foreign Direct Investment

GDP = Gross Domestic Product

GDPG = Gross Domestic Product Growth Rate

TRAOP = Trade Openness

REEXCH = Real Effective Exchange Rate

INF = Inflation Rate

INT = Interest Rate

UNEM = Unemployment Rate

Eq. (1) can be transformed as following Eq. (2):

$$LnFDI_t = \beta_0 + \beta_1 LnGDP_t + \beta_2 GDPG_t + \beta_3 TRAOP_t + \beta_4 REEXCH_t + \beta_5 INF_t +$$
$$\beta_6 INT_t + \beta_7 UNEM_t + \varepsilon_t \tag{2}$$

Where, $LnFDI_t$ is the logarithm of FDI and $LnGDP_t$ is the logarithm of GDP. In Eq. (2), the coefficients for independent variables are measuring as $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ and β_7; ε_t is an error term. According to the hypothesis (H_1, H_2, H_3, H_4, H_5, H_6, H_7), the sign of coefficients β_1, β_2 and β_3 are presumed to be positive, while the sign of coefficients $\beta_4, \beta_5, \beta_6$ and β_7 are expected to be negative.

3.4. Methodology
3.4.1. Introduction to the Overall Model

There are several steps must be followed when establishing an econometric model on time series data. Firstly, unit root test must be conducted for checking stationary of the data. According to order of integration, different econometric model will be selected. Secondly, for finding out the optimum lag numbers of the variables, the VAR Lag Selection model will be performed. Then, appropriate cointegration model will be applied for exploring the relationships between dependent variable and independent variables. Finally, there are various diagnostic tests will be conducted for checking the stability of the model.

In this paper, Augmented Dickey–Fuller (ADF) Test is implemented for checking the stationary of the time series data. After verifying the stationary of the variables, ARDL bound test is applied for investigating the cointegration relationship between the dependent and independent variables (Figure 17). Then, unrestricted error correction model (UECM) is used to identify the speed of adjustment in the long-term. Finally, LM Test and Heteroskedasticity Test, CUSUM and CUSUM Square Test are conducted for checking model stability. All the empirical tests mentioned above are performed based on the Eviews10.
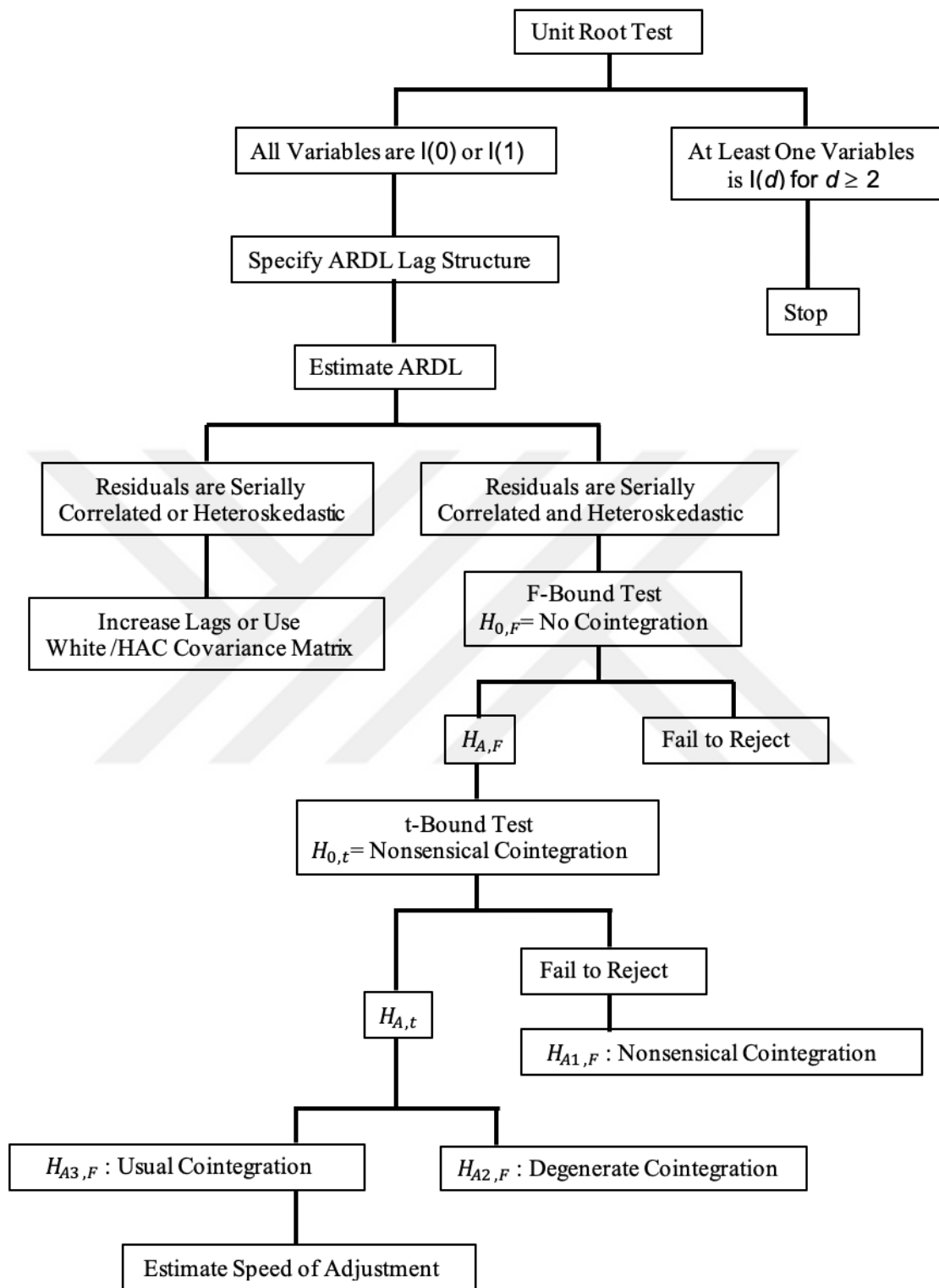
Figure 17: ARDL Bound Test Procedure

Source: http://blog.eviews.com/2017/05/autoregressive-distributed-lag-

3.4.2. ARDL Bound Test

Pesaran (1997) and Pesaran et al (2001) developed the autoregressive distributed lag (ARDL) approach for estimating cointegration of variables. There are several advantages of using ARDL method. One of these advantages is that the variables within the model can be stationary at the same level or mixture of I(0) and I(1), but no variables can be integrated at I(3). Moreover, the ARDL approach is relatively more efficient to estimate the cointegration in the case of small and finite sample data sizes. However, other Cointegration approach such as Johansen Co-integration test demand for all the variables in the model must be at the same order of integration.

Basically, the estimation of the long-run relationships among the variables with ARDL bound test approach involves two steps. The first step is to estimate Long -run Coefficient and Bound Test for cointegration. The second step is to run ECM model to estimate the short-run relationship, if it is appropriate. In particular, if Y_t is the dependent variable and X_t is an explanatory variable (independent variable), a general ARDL (p, q) model is given by:

$$\Delta Y_t = \alpha_0 + C_0 t + \sum_{i=1}^{p} \beta_i \Delta Y_{t-i} + \sum_{j=0}^{q} \gamma_j \Delta X_{t-j} + \delta_1 Y_{t-1} + \delta_2 X_{t-1} + \in_t \qquad (3)$$

Where ΔY_t and ΔX_t are the differences of Y_t and X_t; p and q are the respective lags: i=1, 2, …, p; q=1, 2, …, q; t indicates the time periods t=1, 2, …, T; the coefficients α_0, C_0 are the drift and trend coefficients respectively and $\in_t$ is the white noise error. The coefficients β_i and γ_j for all j corresponds to the short-run relationship while the δ_j corresponds to the long-run relationship.

Therefore, in this study, the following Eq. (4) is specified on the base of the general ARDL (p, q) model Eq. (3) for exploring the dynamic relationship between dependent variable LnFDI and independent variables LnGDP, GDPG, TRAOP, REEXCH, INF, INT and UNEM.

$$\Delta \text{LnFDI}_t = \alpha_0 + \alpha_1 t + \sum_{i=1}^{p} \alpha_{2i} \, \Delta \text{Ln} FDI_{t-i} + \sum_{i=0}^{q_1} \alpha_{3i} \, \Delta \text{LnGDP}_{t-i} +$$

$$\sum_{i=0}^{q_2} \alpha_{4i} \, \Delta \text{GDPG}_{t-i} + \sum_{i=0}^{q_3} \alpha_{5i} \, \Delta \text{TRAOP}_{t-i} + \sum_{i=0}^{q_4} \alpha_{6i} \, \Delta \text{REEXCH}_{t-i} +$$

$$\sum_{i=0}^{q_5} \alpha_{7i} \, \Delta \text{INF}_{t-i} + \sum_{i=0}^{q_6} \alpha_{8i} \, \Delta \text{INT}_{t-i} + \sum_{i=0}^{q_7} \alpha_{9i} \, \Delta \text{UNEM}_{t-i} + \alpha_{10} LnFDI_{t-1} +$$

$$\alpha_{11} LnGDP_{t-1} + \alpha_{12} GDPG_{t-1} + \alpha_{13} TRAOP_{t-1} + \alpha_{14} REEXCH_{t-1} + \alpha_{15} INF_{t-1} +$$

$$\alpha_{16} INT_{t-1} + \alpha_{17} UNEM_{t-1} + \mu_t \tag{4}$$

Where ΔLnFDI_t, $\Delta \text{LnGDP}_{t-i}$, ΔGDPG_{t-i}, $\Delta \text{TRAOP}_{t-i}$, $\Delta \text{REEXCH}_{t-i}$, ΔINF_{t-i}, ΔINT_{t-i} and ΔUNEM_{t-i} represent their respective difference values. While $\alpha_2, \alpha_3, \alpha_4, \alpha_5, \alpha_6, \alpha_7, \alpha_8$ and α_9 denote short-run dynamic relationships; α_{10}, α_{11}, α_{12}, α_{13}, α_{14}, α_{15}, α_{16} and α_{17} represent long-run dynamic relationships; p is the lag period of the dependent variable; $q_1, q_2, q_3, q_4, q_5, q_6$ and q_7 are the lag period of the independent variables, respectively. While μ_t is an error term.

3.5. Model Tests
3.5.1. Descriptive Statistics Summary

The results of descriptive statistics are presented in Table 11. The probability values of the JB test of GDP, TRAOP, REEXCH, INF and INT are statistically insignificant at 5% level, meaning that all these variables are normally distributed. While the probability values of the JB test of FDI, GDPG and UNEM are statistically significant at 5% level, meaning that all these variables are not normally distributed.

Table 11: Descriptive Statistics Summary

	FDI	GDP	GDPG	TRAOP	REEXCH	INF	INT	UNEM
Mean	2803.385	1447237.	5.561054	0.056328	107.7379	199.8737	5.107164	10.05192
Median	2241.000	1404526.	6.237727	0.056692	108.9150	188.5433	4.629615	9.983333
Maximum	8279.000	2016423.	11.49193	0.079176	127.7000	324.3300	8.203846	14.53333
Minimum	364.0000	1056844.	-12.52644	0.040417	85.18000	114.6033	3.544615	7.700000
Std. Dev.	1699.120	289141.5	4.542296	0.008942	9.922570	59.23476	1.210243	1.451532
Skewness	1.132323	0.398281	-1.710779	0.321451	-0.180875	0.382043	0.668186	0.896196
Kurtosis	4.253804	1.802020	7.025235	2.378198	2.431844	2.062320	2.251178	3.642454
Jarque-Bera	14.51807	4.484277	60.47076	1.733246	0.982940	3.169986	5.084349	7.855072
Probability of JB	0.000704	0.106231	0.000000	0.420369	0.611726	0.204949	0.078695	0.019692
Sum	145776.0	75256343	289.1748	2.929060	5602.370	10393.43	265.5725	522.7000
Sum Sq. Dev.	1.47E+08	4.26E+12	1052.255	0.004078	5021.327	178946.6	74.69907	107.4543
Observations	52	52	52	52	52	52	52	52

3.5.2. Unit Root Test for Stationary

ADF test is performed for testing whether there is a unit root of the variables. The test results are presented in Table 12. According to the ADF test results, only *LnFDI* is stationary at level, which means *LnFDI* is integrated at I(0). However, *LnGDP*, *GDPG*, *TRAOP*, *REEXCH*, *INF*, *INT* and *UNEM* are stationary at first difference I(1), meaning that these variables are integrated at I(1). The ADF test results show that all variables are integrated at I(0) or I(1), no one is I(2). Therefore, the ARDL bound test is an appropriate technique for this empirical study.

Table 12: Augmented Dickey–Fuller (ADF) Test Results

Variable		Level I(0)			First Difference I(1)			Order of Integration
		Intercept	Intercept and Trend	None	Intercept	Intercept and Trend	None	
LnFDI	t-Statistic	-5.83·	-5.88·	0.09	-11.75·	-11.76·	-11.85·	
	Critical Value	-3.57·	-4.15·	-1.61···	-3.57·	-4.15·	-2.61·	I(0)
	Prob.	0.00	0.00	0.71	0.00	0.00	0.00	
LnGDP	t-Statistic	0.27	-1.67	4.39	-6.13·	-6.10·	-4.75·	
	Critical Value	-3.57···	-3.18***	-2.61·	-3.57·	-4.15·	-2.61·	I(1)
	Prob.	0.97	0.75	1.00	0.00	0.00	0.00	
GDPG	t-Statistic	-2.74···	-2.72	-1.55	-6.17·	-6.10·	-6.24·	
	Critical Value	-2.60···	-3.18···	-1.61···	-3.57·	-4.15·	-2.61·	I(1)
	Prob.	0.07	0.23	0.11	0.00	0.00	0.00	
TRAOP	t-Statistic	-2.67···	-2.67	-0.08	-7.84·	-7.85·	-7.91·	
	Critical Value	-2.60···	-3.18···	-1.61···	-3.57·	-4.15·	-2.61·	I(1)
	Prob.	0.09	0.25	0.65	0.00	0.00	0.00	
REEXCH	t-Statistic	-1.50	-3.27···	-0.72	-7.36·	-7.38·	-7.37·	
	Critical Value	-2.60···	-3.18···	-1.61···	-3.57·	-4.15·	-2.61·	I(1)
	Prob.	0.53	0.08	0.40	0.00	0.00	0.00	
INF	t-Statistic	3.68	3.39	11.69	2.10	-8.13·	2.72	
	Critical Value	-3.57·	-4.16·	-2.61·	-2.60···	-4.15·	-2.62·	I(1)
	Prob.	1.00	1.00	1.00	1.00	0.00	1.00	
INT	t-Statistic	-1.78	-3.38···	-0.77	-6.14·	-6.08·	-6.19·	
	Critical Value	-2.60···	-3.18···	-1.61···	-3.57···	-4.15·	-2.61·	I(1)
	Prob.	0.38	0.07	0.38	0.00	0.00	0.00	
UNEM	t-Statistic	-2.35	-2.27	0.03	-3.49··	-3.38···	-3.53·	
	Critical Value	-2.60···	-3.18···	-1.61···	-2.93··	-3.18···	-2.61·	I(1)
	Prob.	0.16	0.44	0.69	0.01	0.07	0.00	

Note: *, ** and *** denote the rejection of the unit root hypothesis at the 1% level 5% level and 10% level of significance, respectively.

3.5.3. Lag Order Selection

Before staring the ARDL bound test, the lag order p and q_i ($i = 1, 2, 3, 4, 5, 6, 7, 8$) of the variables must be determined according to Akaike Information Criterion (AIC) or Schwarz Information Criterion (SIC). AIC and SIC values are obtained by using standard VAR model. The estimation results of the standard VAR model present in the Table 13. In this paper, AIC is used to determine the lag orders of the variables, and the optimum lags for the model is 4.

Table 13: The Results of Standard VAR Model

Lag	LogL	LR	FPE	AIC	SIC	HQ
0	-14.04572	NA	0.150106	0.938116	1.253034*	1.056622
1	-13.76124	0.460007	0.154970	0.968563	1.322847	1.101883
2	-13.20581	0.874502	0.158216	0.987481	1.381130	1.135614
3	-12.17054	1.585949	0.158333	0.985980	1.418994	1.148926
4	-8.260646	5.823249*	0.140272*	0.862155*	1.334533	1.039914*
5	-8.068408	0.278133	0.145649	0.896528	1.408271	1.089100

* indicates lag order selected by the criterion

3.5.4. ARDL Bound Test

According to the results of AIC for top 20 ARDL models shown in Figure 18, the determined lag orders of the variables are as follows: $p = 4$, $q_1 = 4$, $q_2 = 4$, $q_3 = 4$, $q_4 = 4$, $q_5 = 2$, $q_6 = 1$, $q_7 = 4$, and the best model is ARDL $(4, 4, 4, 4, 4, 2, 1, 4)$. Thus, the UECM can be specified as Eq. (5):

$$\Delta \text{FDI}_t = \alpha_0 + \alpha_1 t + \sum_{i=1}^{4} \alpha_{2i} \Delta FDI_{t-i} + \sum_{i=0}^{4} \alpha_{3i} \Delta \text{GDP}_{t-i} + \sum_{i=0}^{4} \alpha_{4i} \Delta \text{GDPG}_{t-i} +$$

$$\sum_{i=0}^{4} \alpha_{5i} \Delta \text{TRAOP}_{t-i} + \sum_{i=0}^{4} \alpha_{6i} \Delta \text{REEXCH}_{t-i} + \sum_{i=0}^{2} \alpha_{7i} \Delta \text{INF}_{t-i} +$$

$$\sum_{i=0}^{1} \alpha_{8i} \Delta \text{INT}_{t-i} + \sum_{i=0}^{4} \alpha_{9i} \Delta \text{UNEM}_{t-i} + \alpha_{10} LnFDI_{t-1} + \alpha_{11} LnGDP_{t-1} +$$

$$\alpha_{12} GDPG_{t-1} + \alpha_{13} TRAOP_{t-1} + \alpha_{14} REEXCH_{t-1} + \alpha_{15} INF_{t-1} + \alpha_{16} INT_{t-1} +$$

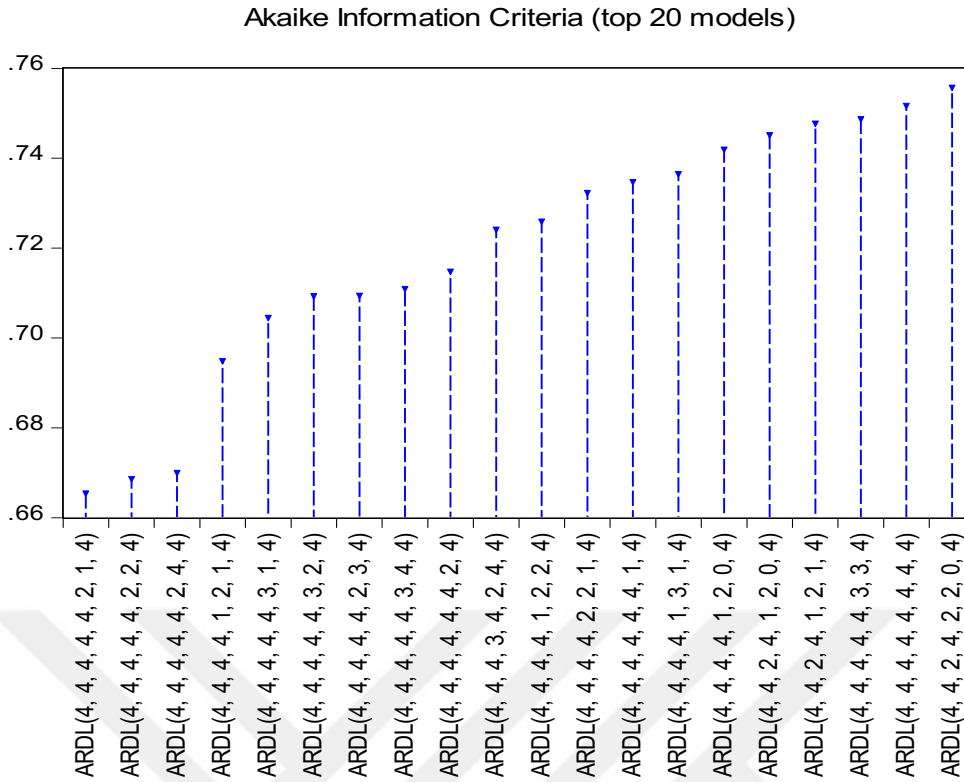$$\alpha_{17} UNEM_{t-1} + \mu_t \tag{5}$$

Figure 18: Akaike Information Criteria for the Top 20 ARDL Models

As shown in the Table 14, both of the F-statistic (7.07) and t-statistic (6.50) absolute values are greater than the upper bound I(1) absolute values of F-bounds (4.26) and t-Bounds (5.19) tests. As the absolute values of F-statistic and t-statistic exceed the absolute critical values of the upper bound I(1), then the null hypothesis can be rejected, meaning that there is a cointegration relationship between the variables.

Table 14: F-Bounds and t-Bound Test Results

F-Bound Test Statistic	Value	Signif.	Lower Bound I(0)	Upper Bound I(1)
F-statistic	7.065052	10%	2.03	3.13
k	7	5%	2.32	3.5
		2.5%	2.6	3.84
		1%	2.96	4.26
t-Bound Test Statistic	**Value**	**Signif.**	**Lower Bound I(0)**	**Upper Bound I(1)**
t-statistic	-6.504995	10%	-2.57	-4.23
		5%	-2.86	-4.57
		2.5%	-3.13	-4.85
		1%	-3.43	-5.19

3.5.5. Estimated Long-run Effects for ARDL (4, 4, 4, 4, 4, 2, 1, 4) Model

After determining the cointegration relationships between the dependent variable and independent variables through the ARDL (4, 4, 4, 4, 4, 2, 1, 4) bound test, the long-run elasticity is estimated by Eq. (6) as follows:

$$\Delta\text{FDI}_t = \alpha_0 + \alpha_1 t + \sum_{i=1}^{4}\alpha_{2i}\,\Delta FDI_{t-i} + \sum_{i=0}^{4}\alpha_{3i}\,\Delta\text{GDP}_{t-i} + \sum_{i=0}^{4}\alpha_{4i}\,\Delta\text{GDPG}_{t-i} +$$

$$\sum_{i=0}^{4}\alpha_{5i}\,\Delta\text{TRAOP}_{t-i} + \sum_{i=0}^{4}\alpha_{6i}\,\Delta\text{REEXCH}_{t-i} + \sum_{i=0}^{2}\alpha_{7i}\,\Delta\text{INF}_{t-i} +$$

$$\sum_{i=0}^{1}\alpha_{8i}\,\Delta\text{INT}_{t-i} + \sum_{i=0}^{4}\alpha_{9i}\,\Delta\text{UNEM}_{t-i} + \mu_t \tag{6}$$

The results of estimated long-run effects of ARDL (4, 4, 4, 4, 4, 2, 1, 4) are shown in Table 15. According to the estimated results, the coefficients of LnGDP, GDPG, TRAOP, INT and UNEM are positive and statistically significant, meaning that these variables positively impact on LnFDI in the long term. However, the estimated coefficient of INF is negative and statistically significant. The coefficient of REEXCH is negative and statistically insignificant. These results imply that there is long-run negative relationship between LnFDI and INF. While REEXCH has no impact on LnFDI in the long term. Specifically, 1% increase in LnGDP, GDPG, TRAOP, INT and UNEM leads to about 14.79%, 0.58%, 33.50%, 0.34% and 0.14% increase in LnFDI in the long term, respectively. Whereas, 1% increase in INF leads to about 0.04% decrease in LnFDI in the long run.

Table 15: Long-run Coefficients Using ARDL (4, 4, 4, 4, 4, 2, 1, 4) Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LnGDP	14.78506	1.238414	11.93871	0.0000
GDPG	0.581713	0.249749	2.329190	0.0366
TRAOP	33.50395	4.180278	8.014765	0.0000
REEXCH	-0.010201	0.008745	-1.166527	0.2644
INF	-0.044687	0.004414	-10.12298	0.0000
INT	0.336734	0.041224	8.168337	0.0000
UNEM	0.142460	0.046996	3.031294	0.0096

3.5.6. Error Correction Model for ARDL (4, 4, 4, 4, 4, 2, 1, 4) Model

The error correction model (ECM) is performed for examining the short-run elasticity between the variables by Eq. (7) as follows:

$$\Delta\text{FDI}_t = \alpha_0 + \alpha_1 t + \sum_{i=1}^{4} \alpha_{2i}\,\Delta FDI_{t-i} + \sum_{i=0}^{4} \alpha_{3i}\,\Delta\text{GDP}_{t-i} + \sum_{i=0}^{4} \alpha_{4i}\,\Delta\text{GDPG}_{t-i} +$$

$$\sum_{i=0}^{4} \alpha_{5i}\,\Delta\text{TRAOP}_{t-i} + \sum_{i=0}^{4} \alpha_{6i}\,\Delta\text{REEXCH}_{t-i} + \sum_{i=0}^{2} \alpha_{7i}\,\Delta\text{INF}_{t-i} +$$

$$\sum_{i=0}^{1} \alpha_{8i}\,\Delta\text{INT}_{t-i} + \sum_{i=0}^{4} \alpha_{9i}\,\Delta\text{UNEM}_{t-i} + \lambda ECT_{t-1} + \mu_t \qquad (7)$$

Where, λ in Eq. (7) is the estimated coefficient of the error correction term (ECT), which denotes the speed of adjustment. ECT determines the adjustment speed of disequilibrium in the long-term. According to the estimated results presented in Table 16, the coefficient of the ECT is negative and statistically significant. The estimated coefficient of ECT is -0.775, indicating that almost 78% of the disequilibrium from the previous year's shocks adjusted back to the long-term equilibrium in the current year.

Table 16: Error Correction Model (ECM) Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LnFDI(-1))	-0.519953	0.127722	-4.070983	0.0002
D(LnGDP(-1))	7.257588	4.978648	1.457743	0.1533
D(GDPG(-1))	-0.011072	0.037934	-0.291862	0.7720
D(TRAOP(-1))	38.44565	21.06644	1.824971	0.0761
D(REEXCH(-1))	-0.020711	0.016245	-1.274918	0.2103
D(INF(-1))	-0.047976	0.026634	-1.801318	0.0798
C	0.122538	0.138531	0.884557	0.3821
ECT(-1)	-0.775331	0.256851	-3.018598	0.0046
R-squared	0.588977	F-statistic	5.891024	
Durbin-Watson stat	1.795473	Prob. (F-statistic)	0.000045	

3.5.7. Diagnostic Tests

Various diagnostic tests are employed to measure the reliability of the estimation results and the stability of estimation model. Firstly, the Jarque-Bera Normality Test is employed to check the normality of the residuals, and the Breusch-Godfrey LM test is implemented for determining the existance of the autocorrelation. The R^2-statics with insignificant probability

indicates that the residuals are normally distributed and there is no serial correlation in the time series residuals. Then, the Breusch-Pagan-Godfrey Heteroskedasticity test is conducted to measure the Heteroskedasticity of the residuals. The R^2-statics is insignificant, meaning that the residuals are Heteroskedastic. The test results are presented in Table 17.

Table 17: Diagnostic Tests Results for Short-run ARDL (4, 4, 4, 4, 4, 2, 1, 4) Model

Test	Obs*R-squared	Probability
Jarque-Bera Normality Test	0.314953	0.8543
Breusch-Godfrey Serial Correlation LM Test	5.112647	0.2759
Autoregressive Conditional Heteroskedasticity (ARCH) Test	1.024698	0.3114

Finally, the stability of the ECM for the ARDL (4, 4, 4, 4, 4, 2, 1, 4) model estimation is checked by employing the cumulative sum (CUSUM) and the cumulative sum of squares (CUSUM Square) of tests. The plots of these to tests are shown in the Figure 19, respectively. As shown in the plots, the graphics are moving inside the critical boundaries of 5% significance level. Thus, the empirical evidences from CUSUM and CUSUM Square tests support that the estimated coefficients of the short-run ARDL (4, 4, 4, 4, 4, 2, 1, 4) model display parameter stability.
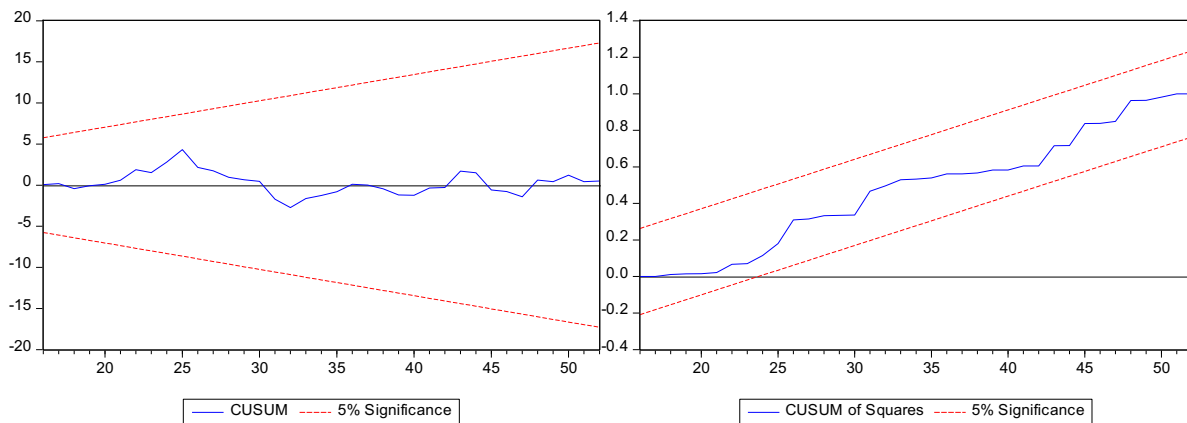

Figure 19: CUSUM and CUSUM Square Test Results for ARDL (4, 4, 4, 4, 4, 2, 1, 4)

4. CONCLUSION

As the literature reviews mentioned, there are several determinants of FDI, which are economic size and growth, trade openness, exchange rate, inflation rate, unemployment rate, human capital, political stability, corruption, intellectual property right protection, culture similarity and geographic distance. This study attempted to analyze the impacts of the macroeconomic determinants of inward FDI in Turkey. The purpose of this study stems from a certain hypothesis (H_1, H_2, H_3, H_4, H_5, H_6, H_7) derived from the literature. The ARDL bound test approach and unrestricted error correction model (UECM) are conducted to test the hypothesis and find out the cointegration relationships between the FDI and its various macroeconomic determinants in the long-term, using the quarterly time series data over the period of 2005Q1-2017Q4. According to the empirical tests results, the hypothesis H_1, H_2, H_3 and H_5 are accepted, meaning that the GDP, GDP growth rate and trade openness positively impact on FDI in the long-term. However, the inflation rate has a negative effect on FDI inflows in Turkey. The hypothesis H_4, H_6 and H_7 are rejected, indicating that the real effective exchange rate has no impact on FDI inflows, while the interest rate and the unemployment rate have a statistically positive effect on FDI inflows in the long-term.

In accordance with the study results of Sevda (2006) and Talat (2008) mentioned in the literature reviews, GDP and GDP growth rate, as a proxy to market size and economic growth, are the important macroeconomic determinants that influence the inward FDI in Turkey. For investors (MNEs) high investment return is one of the main objectives that drives them to conduct FDI in foreign market. High investment return refers to high profit. Big market with higher purchasing power and increasing market demand are essential to achieve high investment return. Increasing economic growth involves strong potential market demand. High GDP growth rate indicates growing market size and higher living standard within host country, which attract more FDI inflows. Besides, High degree of the trade openness in host country means faster development in domestic market and trade favorable incentives, which are essential to export-oriented FDI inflows. Trade openness also can be seen as an indicator of how the country is willing to be part of the global economy. The more open and liberal the country economy is to the world, the more they will involve the global economy. Other macroeconomic factors such as exchange rate, inflation, interest rate and unemployment rate also play a significant part in attracting global FDI into Turkey. All these macroeconomic indicators reflect how healthy and stable the economic development within Turkey. Foreign

investors make their investment decision based on the future return picture formed by these macroeconomic indicators.

Therefore, Turkey needs to carry out more liberal and business-friendly policies to integrate into global economy and to attract more FDI inflows into the country. These incentives should concentrate on stabilizing the exchange rate and decreasing the inflation rate within the country. In terms of interest rate and unemployment rate, it is expected that both of the indicators negatively affect FDI inflows in Turkey. However, the study findings show that these two factors have a statistically positive effect on FDI inflows. On the one hand, high interest rate meanes high investment cost, which make local investors stop investing domestic market or decreasing investment in local market. This would create an opportunity for foreign investor. MNEs will bring need capital into the host county for filling this gap. On the other hand, lower unemployment rate in the host country may reduce the investment cost of MNEs through providing them a cheaper laborforce. So, the government needs to lead the banking and finance system to perform the FDI friendly incentives. Educating the unemployed workers in order to provide the foreign investors an experienced and skilled worker is an effective way to create a business-friendly environment for attracting FDI into Turkey.

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RESUME

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