

# **Impact of Foreign Direct Investment, Financial Development and Stock Market on Economic Growth: The Case of Turkey**

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## ABSTRACT

The purpose of this study is to investigate the relationship between foreign direct investment, financial development and stock market towards economic growth in Turkey. Various tests are applied in order to indicate the connection in between , Johansen co-integration test made on non-stationary variables indicate that there is a co-integrating vector as well as there might be a long term relationship among foreign direct investment, financial development, stock market and the dependent variable GDP concerning error correction model estimation.

It is found that there is a long run equilibrium relationship among the variables. In long term, foreign direct investment and financial development are statistically significant at  $\alpha=0.10$ . Which means that foreign direct investment and financial development have a positive impact on gross domestic product. Moreover, SM has a negative impact on GDP in Turkey for the long run.

**Keywords:** foreign direct investment, financial development, stock market and gross domestic product.

## ÖZ

Bu çalışmanın amacı, Türkiye'deki doğrudan yabancı yatırımlar, finansal gelişme, hisse senedi piyasası ve ekonomik büyüme arasındaki uzun dönemli denge ilişkisini incelemektir. Uzun dönemli denge ilişkisini göstermek için durağan olmayan değişkenler üzerinde Johansen eş bütünleşme testi uygulanmıştır. Johansen eş bütünleşme testi sonuçlarına göre doğrudan yabancı yatırımlar, finansal gelişme, hisse senedi piyasası ve ekonomik büyüme arasında uzun dönemli bir ilişki olduğu kanıtlanmıştır.

Hata düzeltme modeli sonuçlarına göre uzun vadede doğrudan yabancı yatırımlar ve finansal gelişme değişkenleri  $\alpha = 0.10$ 'da istatistiksel olarak anlamlıdır. Bu sonuçlara göre doğrudan yabancı yatırımların ve finansal gelişmenin gayri safi yurtiçi hasıla üzerinde pozitif bir etki yarattığı bulunmuştur. Bunun yanında hisse senedi piyasasının uzun vadede ekonomik büyüme üzerinde olumsuz bir etkisi olduğu bulunmuştur.

**Anahtar Kelimeler:** doğrudan yabancı yatırım, finansal gelişme, hisse senedi piyasası, ekonomik büyüme.

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## **LIST OF ABBREVIATIONS**

ARIM	Auto Regressive Integrated Moving Average Models
ECM	Error Correction Model
ECT	Error Correction Term
FD	Financial Development
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GND	Gross National Product
IMF	International Monetary Fund
LR	Likelihood Ratio
ML	Maximum Likelihood
OECD	Organization for Economic Co-operation and Development
SM	Stock Market
VARM	Vector Auto Regressive Model
VECM	Vector Error Correction Model

# Chapter 1

## INTRODUCTION

All over the world, emerging countries are evolving tremendously as shown by their economic growth, which is considered a major factor in the measurement of a country's wealth. Very often researchers examine emerging economies by looking at their gross domestic product (GDP), they also stress on how the growth rate of the real per capita GDP is in a way connected with initial human capital. Koopmans (1965) indicate that there is a reciprocal connection between the beginning status per person income and the per capita growth rate of a country. Romer (1990) underlines the importance of human capital as a major contributor in economic growth since it creates commodity or design that are basic to technological progress. Nelson & Phelps (1966) mention that commodities or design that are found in some other places have been assimilated effortlessly by a country with the help of a sizeable human capital stock. Becker, Murphy and Tamura (1990) presume that the extra satisfaction that could be derived from human capital would lead to a growth in the rate of return on human capital above some level.

Some economic variables such as foreign direct investment (FDI), financial development and stock market development play a major role in economic growth. Studies have shown that FDI inflows, domestic credit by financial sector and stock market capitalization to GDP, have an influence on economic growth which is why it is crucial to understand the relationship among them.

Foreign direct investment (FDI) plays a major role in economic growth as described by different authors. Aitken & Harrison (1999) state that, FDI has a minor impact on productivity as provided by the end result since productivity is increased within plants that collect the investment thus leading to decrease in the output of individual domestic plants. Carkovic & Levine (2003) discovered that FDI provide a small assistance in the exogenous of a positive impact on economic growth. Goldsmith (1969), Mckinnon & show (1973) demonstrate that there is an increase in economic growth if financial markets provide a proper outcome by ensuring that transactions are running at a lower cost and that the project which gets a higher return is assigned with the capital.

Borensztein et al. (1998) collected FDI data from collection from 69 developing countries that were industrialised, there study asserts that the location of technology and the increase of growth is enabled by FDI. According to King & Levine (1993), Levine et al. (2000) the financial system plays a bigger role in productivity growth and development. Harrison (1994) conducted a study in Morocco and Venezuela, which demonstrating that firms using equity contribution have a higher productivity level compared to domestic firms as well as a higher productivity growth.

The effect of FDI on economic growth is also demonstrated through the study of Balasubraymanyam et al. (1999) that was conducted using cross sectional data comprising a sample of 46 developing countries with an annual frequency over the period 1970-85; the results observed concluded using that the magnitude of the domestic market, the local producers' competitive environment and human capital had a major impact on growth production. Borensztein, Gregorio, & Lee (1995) state that, FDI can expand the size of economic growth with the help of an

endogenous growth model that would influence the technological dispersal rate for the entertaining country starting from the industrialized world.

FDI does not only influence the firm collecting foreign capital, it also enhance the productivity of all firms (Rappaport, 2000). At the firm-level, various research conducted do not approve the overall opinion of FDI boosting economic growth (Mansfield & Romeo, 1980). By applying aggregate FDI flows for a broad cross section of countries it has been shown that FDI mostly induces economic growth areas that are particularly and usually proposed in favourable position (Gregorio, 1992).

Borensztein et al. (1998) indicate that when the human resources of a country are educated, FDI overflows are properly utilized which leads to an increase in economic growth. Other authors such as Blomstrom et al. (1994) did not confirm the importance of education, however, they indicate that the adequacy of the country's richness adequacy leads to a positive impact of FDI on economic growth. Alfaro et al. (2000) discovered there is an impact of positive growth when economies have enough developed financial markets. Salisu et al. (1996) emphasize that there will be a positive growth with FDI when trade between countries is invited. Openness is usually important for economic growth as proposed by other researchers; this perceived less directly than FDI inflows (Bekaert et al., 2001).

Financial development is also known to influence economic growth. Demetriades (1996) proposed that the relationship between financial development and economic growth is usually established through financial institutions essence and performance as well as policies followed in each country. Wurgler (2000) demonstrated that the

occurring investment is appropriately administered even if financial development does not result into excessive investment which enhances economic growth. Schumpeter (1912) noticed that distinguishing and providing the source of funds to entrepreneurs allows them to adequately execute innovative products and production processes with the help of banks that accomplish their task and encourage creativity in technology.

Goldsmith (1969) and Mckinnon (1973) carried out studies with results showing that a small number of countries portrayed a relationship between financial and economic development. On the contrary, few authors such as Robinson (1952) do not support claim that economic growth is proceeded by financial development. Bagehot (1873) and Schumpeter (1912) demonstrate that banks can maintain their operation by encouraging creativity and ascertaining growth in the long-run by determining and financing investments productivity. Robinson (1952) demonstrate that banks are complement when it comes to economic growth. King & Levine (1993) mentions that economic growth future rates, capital assembly and productivity enhancement are better anticipated through the level of financial intermediary.

Among the factors that impact economic growth is stock market development. Levine (1991) and Bancivenga et al. (1995) showed a model where investors can simply trade their shares in the project if they require their savings before the project comes to an end, this is known as liquid stock markets and it is a way of diminishing deterrent investment in long duration projects. Smith & Obstfeld (1994) argue that a safe portfolio is where the earnings on investments are increased due to the sharing of risk internationally by combininnng stock market in order to boost

economic growth. That being said, some authors are of the opinion that shareholders' incentive is minimized due to additional liquidity acquired through supervising managers expensive services (Bhide et al., 1993). Levine (1993) studies the outcome of stock market by examining banking and growth to incorporate its measures.

Levine (1991) and Bancivenga et al. (1995) anticipate theoretically the strong and positive relationship among stock market liquidity and faster growth, productivity enhancement and capital collection. Investment and resource allotment are not delayed by stock return variation according to the evidence (Bradford, Andrei, Summers, & Waldman, 1989). In terms of speed of anticipation Kunt & Maksimovic (1996) indicate individual institutions feature are less anticipated in their growth than institutions in countries with a superior operation of their banks and equity markets. Rajan & Zingales (1998) demonstrate that countries with financial market growth tend to often depend on external finance.

Atje & Jovanovic (1998) show cross-country research of stock markets and economic growth. According to Levine & Zervos (1998), stock markets and banks issue different services, however whether it is stock market liquidity or banking development, they both positively enhance the anticipation of growth, capital accumulation and productivity enhancement. Holmstrom & Tirole (1993) claim that data for firms and corporate governance enhancement are obtained when investors incentives grow because of liquid stock markets. Devereux & Smith (1994) highlight that saving rates and economic growth are influenced when internally combining stock markets through greater risk sharing.

Vishny (1990) propose that simplifying counter productive corporate takeovers can end-up harming economic growth through stock market development. Jensen & Murphy (1990) demonstrate that the principal agent problem are reduced by productive stock markets. Vishny et al. (1986) claim that higher stock market development induces ownership disperse which delays corporate governance efficiency. Shleifer & Summers (1988) indicate that by minimizing alteration in holdings and management, stock market development can encourage prosperity by easing acquisition.

Turkey has one of the fastest evolving economic growth when compared to other emerging countries due to the favourable change in its FDI inflows, its considerable financial development and evolving stock market, that is why: Turkey is preferred country for demonstrating the dynamic contribution of FDI inflows, domestic credit by financial sector on market capitalization (Altug, Filiztken, & Pamuk, 2008). According to Altug et al (2008), Turkey has the fastest growing economy compared to other countries within the same size and income and its attachment to conduct a state development orientation or its encouragement of import replacement industrialisation. Pamuk (2008) claims that the most dominant evolution in Turkey happened during the modern Turkish period where there was growth in cultivable lands with automation of agriculture that started in the 1950's. Turkey attracts foreign investors, stock markets and financial development (Kaya, Bektas , & Feridun, 2015). According to Erdal et al. (2002) Turkey's economy is evolving fastly because of higher return expectations of the foreigners from their investments. The aim of my thesis is to investigate the long run equilibrium relationship among



FDI, financial development, stock market development and economic growth in Turkey for the period of 1989-2015.

In order to investigate the long run equilibrium relationship between economic growth, FDI, financial development and stock market development, Zivot Andrews (1992) unit root tests, Johansen-Juselius cointegration (1990) test, vector error correction model and Granger causality test will be applied.

The remaining chapters will proceed as follows: chapter 2 provides verifiable empirical literature, chapter 3 gives information about the financial system of Turkey, chapter 4 elaborates on the data and methodology, chapter 5 demonstrates the empirical results, and chapter 6 denotes the conclusion and policy implications.

## **Chapter 2**

### **LITERATURE REVIEW**

#### **2.1 The relationship between economic growth and stock market development**

A various amount of studies argue that stock market development usually increases economic growth. Greenwood and Smith (1997) demonstrate that the progress of investment in most advantageous technologies is assisted by the diminishing of cost in assembling savings due to abundance generated from the stock market. Bancivenga et al. (1996) and Levine (1991) assert that stock market exchangeability is important for economic growth. According to North (1991), economic growth rises with the help of stock exchange formation by decreasing the cost of exchange ownership rights in firms. If the stock market is efficiently developed, savings will be boosted thus ensuring suitable productive investments through capital apportionment which will result into long run growth (Nowbutsing, 2011).

Economic growth is influenced by the stock market as shown by different empirical studies. Economic growth is anticipated to increase by means of stock exchanges via the enhancement of financial asset liquidity, creation of a variety of effortless global risk for investors, a push to reach reasonable investment resolutions through saving-surplus units based on accessible data, the obligation of corporate managers to perform conscientiously for their shareholders in order to ensure interests and the conveyance of more savings to corporations (Tachiwou, 2010). As stated by

Levine(1991) and Bencivenga et al. (1996), stock exchanges are on the magnitude of current actual asset investments between common stock financing , leading to a favourable role in liquidity. According to Tachiwou (2010), the better the assignment of funds between corporations is, the better the investment decisions by investors will be resulting to an increase in the economic growth rate. All obtainable data are already represented in well organised capital market prices and it limits the expensive requirement and difficulties experienced in acquiring additional information (Stiglitz, 1994). Greenwood & Smith (1996) demonstrate that investments are easily disbursed on the most creative technologies due to stock markets; this reduces the costs of assembling savings. According to Obstfield (1994), ressource allotment are ameliorated through international risk apportionment between internationally combined stock markets. Bancivenga et al. (1996) and Levine(1991) denote that inspite of profitable investments demanding long run dedication to capital, savers prefer to not renounce their savings predominance for long periods; on the other hand, stock market liquidity,the capacity of dealing equity straight forwardly is important in economic growth.

Still Kyle (1984) insist that, by examining a firm prior to the information of getting broadly accessible, an investor can benefit from it. Demirguc-Kunt & Levine (1996) indicate that there might be discouragement of growth via three methods because of the elevation in liquidity; in the first place, income and interchange effects decrease saving rates; second,significant stock market liquidity may lower saving rates due to the ambivalent risk effects on savings by decreasing the investment related risks; lastly, investor myopia is stimulated by stock market liquidity, there is a negative impact on corporate governance as well as economic growth.

Amaral & Quintin ( 2007) verified the distinction in the quantity of financial intermediation on output and productivity in the case of an active general equilibrium model and it was declared that creating capital productivity and making some of the greatest application of direct capital helps the stock market development raise the economic growth. Other empirical studies like that of Holmstrom & Tirole ( 1993) ensure that the liquidity of the market provide the amount of data ,the stock price can accommodate. Paudel (2005) stated that stock market enable firms to achieve much required capital rapidly through the liquidity account and also simplify the issuance of capital, investment and economic growth. Nowbutsing & Odit (2009) discovered that the economic growth of Mauritius both in the short and long run is positively influenced by the stock market development.

Nazil et al. (2010) present a connection which is positive and significant between the stock market quantity and liquidity with economic growth in Pakistan. Hassan & Kamal (2010) have studied long-run reactions between stock market development and economic growth in the economy of Bangladesh and realized that there is a long-run equilibrium relationship between stock market development and economic growth.

## **2.2 Relationship between joint venture and economic development**

Various researchers studied the relationship between joint venture and economic development. Findlay (1978) proposed that the rate of economic growth in the country concerned is boosted by foreign direct investment through a contagion effect from the more improved technology and management execution employed by foreign firms. Levine & Renelt (1992) demonstrate a vast relationship between economic growth, FDI and human capital.

The Obstfeld (1994) model indicate that higher growth is stimulated by international financial incorporation leading to higher risk bonds been obtained for a country. Batiz & Romer (1991) show that international trade in goods and services are instructed through the basic method of international trade in order to gain more opportunities and growth influence. Nelson & Phelps (1966) introduced the human capital stock of a country through a model with the purpose of showing the rate of total factor growth.

A country benefits from what FDI brings along which among many include knowledge spillovers, human capital stock etc. These are advantageous thus making foreign direct investment a favourable economic activity (Borensztein et al., 1998). Shaw (1992) demonstrate that a part of growth experience usually comes from technical progress accounts. Wang & Blomstrom (1992) recognise that economic growth is enhanced through FDI imported skills which boost marginal productivity of the capital stock in the host countries.

### **2.3 Relationship between financial development and economic growth**

In different studies conducted by researchers demonstrating how economic growth goes hand in hand with financial development, Patrick (1966) suggest a hypothesis of development which encourages enhancing financial development to boost real capital evolution during the beginning stages of economic growth. Lucas (1988) sides most economists in highlighting that financial factors are important for economic growth.

Saving rates decreases associated with higher liquidity flows, this model displays physical capital externalities (Japelli & Pagano, 1994). It is also known that it is wise for financial markets to promote a portfolio for projects with a greater expected returns in order to reduce risk expansion (Obstfeld M. , Financial development and economic growth:views and agenda, 1994). According to Greenwood & Jovanovic (1990), in order to choose the firms and managers effectively, several firms and entrepreneurs will request capital, financial intermediaries and markets that are more experienced at selecting for the purpose of enhancing capital allocation and rapid growth.

Furthermore, the resource allocation are ameliorated significantly due to the improved information on firms with connection to economic growth (Merton, 1987). Carosso mentions that the (1970) history of investment in America is a way to depict and to present means applied by investment banks to increase capital which leads to economic growth. According to McKinnon (1973), to boost economic growth, the financial system is important for better functioning of technology and adequately assembling projects resources.

## Chapter 3

# INFROMATION ABOUT TURKISH FINANCIAL SYSTEM

### 3.1 Brief information about Turkey and its economic background

Turkey is a a nation situated on both sides of Europe and western Asia, it has a culture related to ancient Greek, Persian, Roman, Byzantine and Ottoman empires. As of 2016, its population is estimated to about 79.51million, having Ankara as capital and the Turkish lira as its currency. The Turkish republic was founded on October 29, 1923 with Mustafa Kemal Atatürk as the first president.

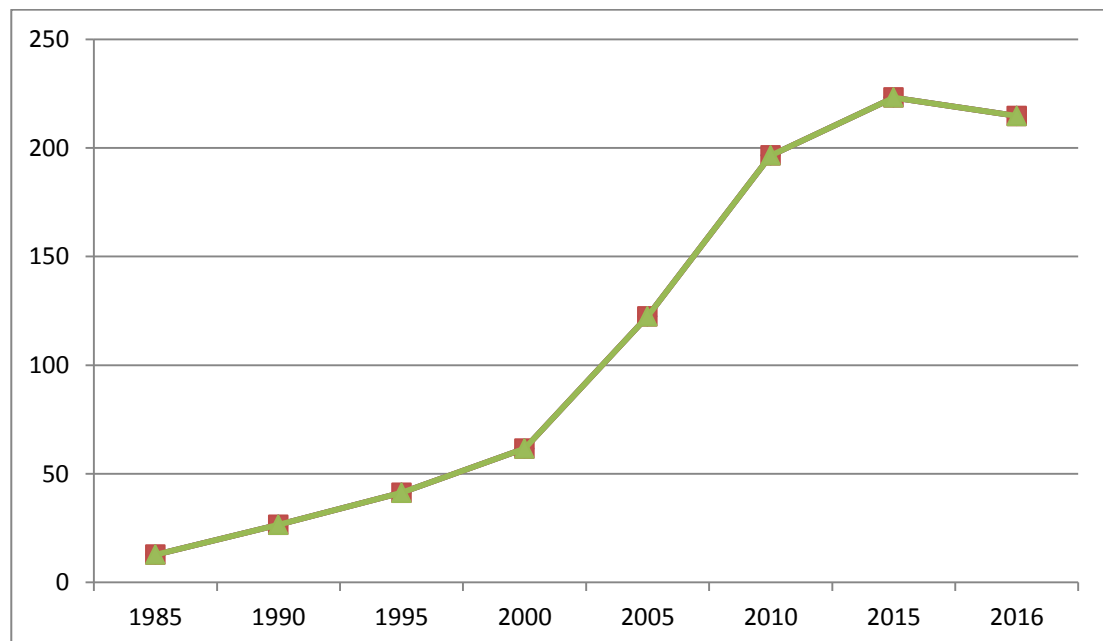


Figure 3.1: Import of goods and services (currency us \$), 1985-2016.

Source:The World Bank

Turkey witnessed some financial crises in 1959,1969,the 1970's,1994,2000-2001, however this did not prevent it to recover and now it is known to occupy the 17<sup>th</sup> position in the world's economy. Since then Turkey has encountered a persistent shortfall during 2011 in foreign trade implying that Turkey spent more on importation than what it gained from exportation. As shown in figure 3.1, The imports had a cost of USD223.15 billions in 2015; which increased at a greater rate in 2010 with a value of 196.45 billion dollars and later declined to 214.64 billion dollars in 2016.

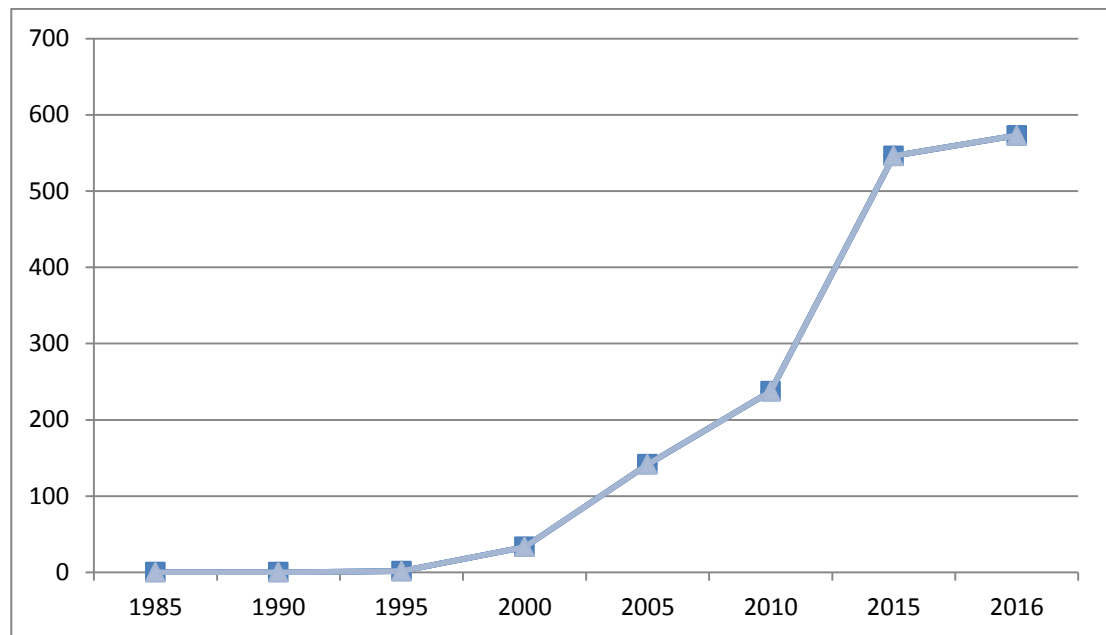


Figure 3.2: Export of goods and services (current LCU), 1985-2016  
Source:World Bank national accounts data and OECD national accounts data files

By contrast, figure 3.2 indicate that exports was less compared to the total imports of LCU 1.54 billion in 1995,where it kept rising until in 2016 reaching LCU 572.97 billion which shows that Turkey's export has increased over the years.



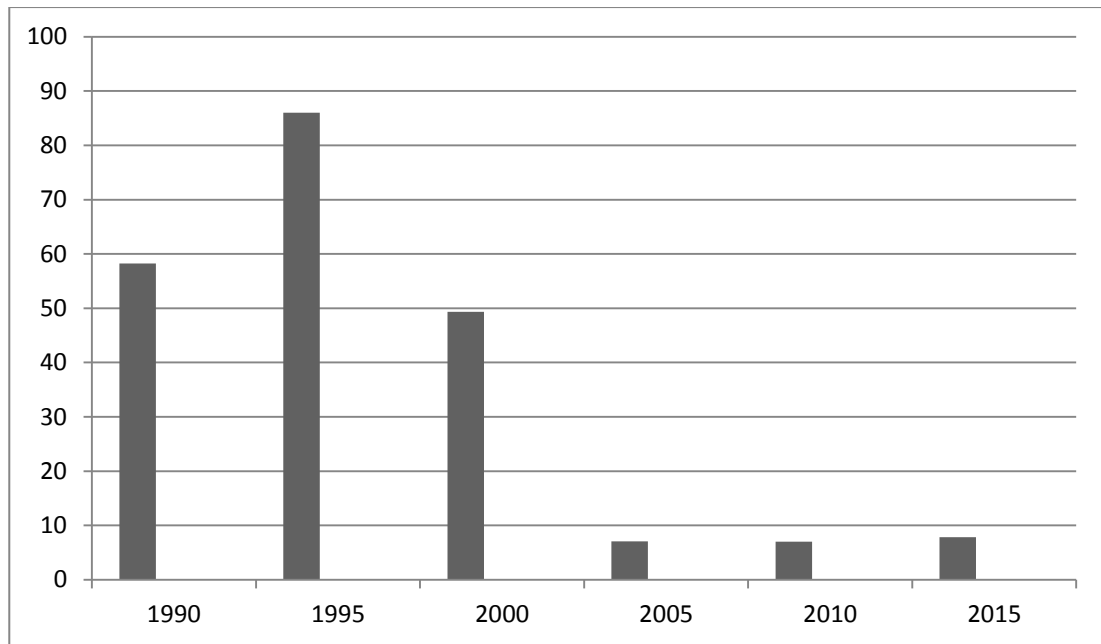


Figure 3.3: Inflation, GDP deflator (annual %), 1990-2015  
source:The World Bank

Turkey obtained USD 20 billion from automotive industry, USD 16.3 billion from chemical and manufactured products and USD 16.2 billion from textile and clothing. As shown in figure 3.3, in the 2000s, inflation fell and rose at 7.01% in 2010 up to 2015 where it was elevated to 7.83%

Turkey proved its ability to recover quickly from its financial crises by reducing its public expenditures to 14.7% of the GDP and increasing its revenue of the central government to 22.5% of GDP ,as provided in the OECD report .Turkey decided to divert its attention to the consumer society because it was more noticeable, The resolution was advantageous when you considering the level of consumption which generated economic growth and nourished the middle class; on the other hand it was also advantageous since it constantly decreased foreign trade surplus.

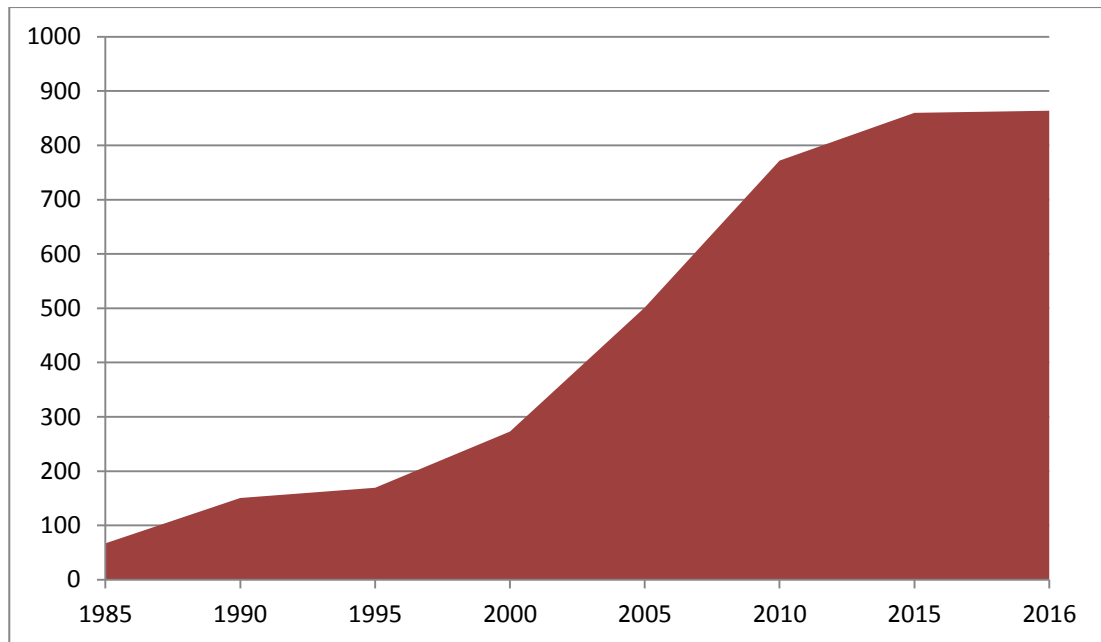


Figure 3.4: GDP (currency US\$), 1985-2016

Source: World Bank national accounts data and OECD national accounts data files

As described in the world bank annual report of 2016 Turkey's economic growth has been decreasing from 6.1% in 2015 to 2.1% in 2016 due to the business and consumer belief influence from the coup attempt in July 2016 and the 36% annual fall in tourism revenue, The previous events stressed the Turkish lira there by limiting the growth of local credit resulting to a decline in interest rate consequentially.

It was also demonstrated in the report of global competitiveness that Turkey global position fell to 55<sup>th</sup> from 2016 to 2017 as compared to its 51<sup>st</sup> place from 2015 to 2016. It is also known that some other factors that affect the economic growth are the current war in Syria and lack off economic boost in Europe.

Turkey's GDP as shown in figure 3.4 above in 2016 was \$863.71 billion, in balance with \$771.88 billion in 2010 and \$501.42 billion in 2005. The GDP was evaluated at

\$9,950 per capita in 2015 and is expected to increase by 35% in 2018 and 3.7% in 2019 as forecasted by the world bank.

### 3.2 Turkey's foreign direct investment

It has been proven in a number of studies that FDI is among the cause of growth for different nations. According to Erdal et al.(2002), host countries for FDI are impacted by it in different ways, since it provides employment, income, prices, exports, imports, economic growth, balance of payments and it contributes to the interest of the country's beneficiary.

As also mentioned by Erdal et al. (2002), the Turkish government introduced different methods to improve the state economy in 1980 with the following objectives; reducing the state interference in another's affairs, a free market initiation, combine the economy with the global economic system.

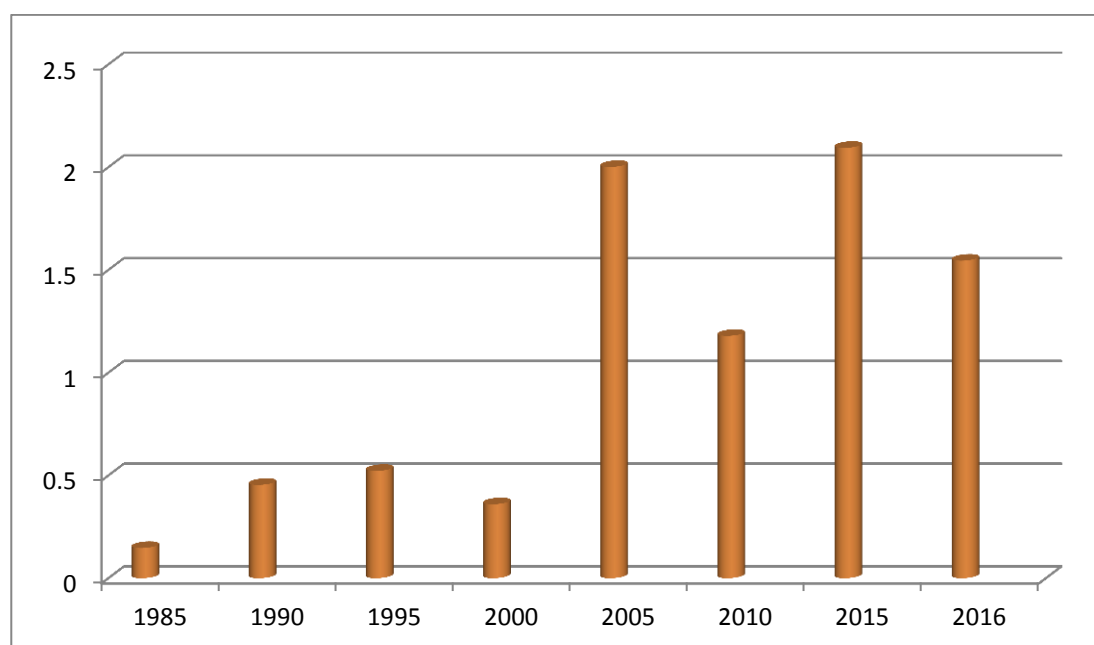


Figure 3.5: Foreign Direct investment, net inflows (% of GDP), 1985-2016  
Source: International Monetary Fund, International Financial Statistics and Balance of payments Databases, world Bank, International Debt statistics and OECD GDP estimates.

Turkey found its advancement mainly through FDI, this has progressed rapidly since the 1980's due to the import substitution (IS) which is a policy of replacing foreign import with domestic production as a result, Turkey's FDI has suffered (Balasubramanyam, Locational determinants of foreign direct investment in an emerging market economy: evidence from Turkey, 1996). The policy of IS ended up changing Turkey to an outward oriented economy which gave a boost to export development and it encouraged foreign investors (Erdal & Tatoglu, 2002). According to figure 3.5 shown above FDI has fluctuated over the years, in 2005; it increased to 2.001%, in 2010 declined to 1.179%, elevated in 2015 to 2.094% and fell to 1.545% in 2016.

Since then, foreign investors have developed an interest and contributed a great deal in the economy of Turkey through the liberal foreign investment and privatization policies which started to display its outcome (Erdal et al., 2002). As mentioned by Berköz (2001), in Turkey the first documentation of foreign investments happened towards the constitutional reform in Ottoman Empire.

As the time passed foreigners developed an interest in the mines that were in various regions of the empire, which is where they decided to invest in (Atbasog, 1973). Between 1951 and 1960 Turkey was able to receive only 30 million dollars from foreign investors due to the economic instability at the time, acting as a barrier to investment (Sönmez, 1996).

Turkey changed direction at the start of 1960s, towards investing in durable goods like appliances and automobiles (Berköz, 2001). The records show that 80.3% of the total foreign investment in Turkey were situated in the city of Istanbul at the end of

1964 (Sönmez, 1996). As Kazgan (1996) concluded, Turkey has managed its economy in order to see its objective towards the world's economy as well as implementing its operation in a way that enables them to compete with other semi-industrialized countries moving in similar direction concerning foreign trade.

According to Balkir (1996), from 1980 to 1990, Turkey reached 6.2 billion dollars in total foreign direct investment. During these years manufacturing backbone of importation replaced foreign investment in the direction of a service sector which provided excessive profit margins and involve proportionately low investments because of the simplicity of constraint in the post of 1980s (Balk, 1996).

According to Eraydin (1992), in 1979 the GNP foreign purchase share amounted to 4.71% while foreign acquisition in that year totalled 16.23%, by 1987 these rates elevated to 14.94% and 20.96% respectively. It was noted that the method to ensure efficiency growth is through foreign investment and foreign competition, which is also advantageous because it results in the enhancement of resources distribution (Balk, 1996).

According to Kazgan (1996), it was shown that the government was conclusive in orienting abroad because of the government performance towards encouraging free border trade with adjoining countries and through foreign banks assistance to launch branches in the countries.

### **3.3 Turkey's stock market development**

Istanbul stock exchange launched in 1986 and was established due to the Turkish economy liberalization which started with the execution of an IMF-prompted structural assimilation program in 1980 (Feridun, M., Swahney, B., Jalil, & A.,

2009). Various options in the broad literature were available as a result of restrictions on abolition of international capital transation (Feridun, M., Swahney, B., Jalil, & A., 2009). By contrast The Turkish economy is unprotected against national attacks because of financial liberalization (Katricioglu & Feridun, 2010).

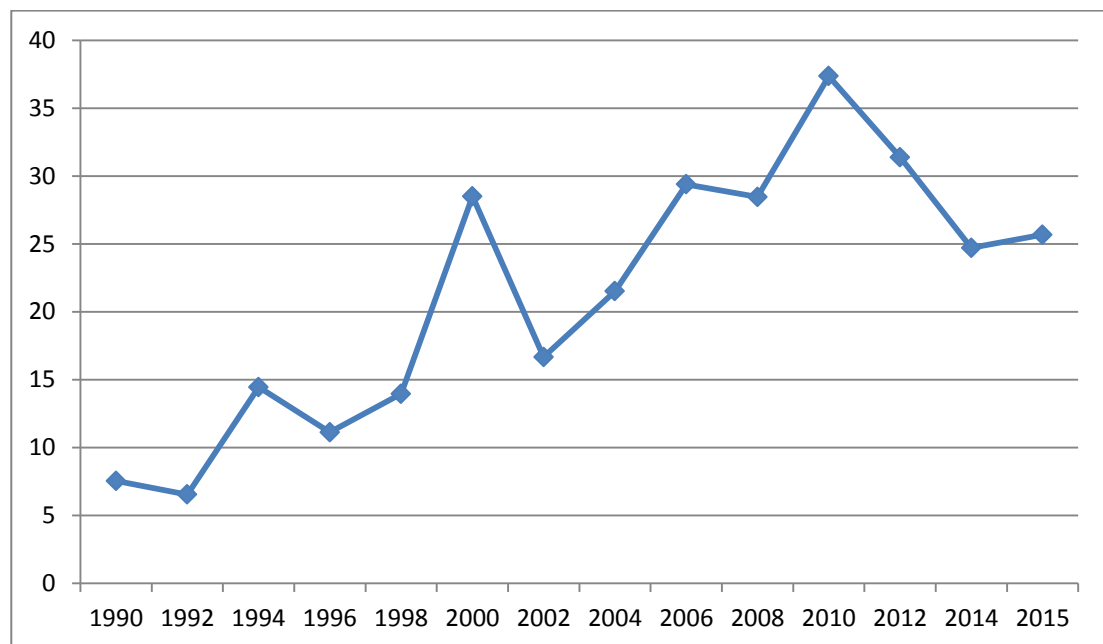


Figure 3.6: Stock market capitalization to GDP (%) for Turkey, 1990-2015  
Source:FRED.economic data/ST.Louis FED

As demonstrated in figure 3.6, The curve shows that there have been a change in the public's opinion in Turkey about stock market,since in 1990 it was only valued at 7.54%,in 2010 it hit a pic at 37.35 and decreased to 31.38% in 2012; it kept falling in 2014 to 24.70% and increased to 25.67% in 2015.Studies made by different authors tried to find out the real connection between stock market development and long-run economic growth (Levine et al, 1996).

Stock market furnishes services and increase economic growth as stated by an increasing literature (Levine & Zervos 1996). Greenwood & Smith (1996)

demonstrate how stock market is important the reduction in cost of assembling savings and the presence of efficient technology. Kyle (1984) and Holmstrom & Tirole (1993) denote that in order to obtain data for firms improve corporate governance are achievable when liquid stock markets boost payment for investors. Obstfeld (1994) argue that the way to enhance resource allotment and to boost the rate of economic growth is by international risk sharing through internationally integrated stock markets.

### **3.4 Financial development of Turkey**

Patrick (1996) demonstrate a perspective on the financial services market by relying on the enhancement of the real output and as well as profit-oriented agriculture innovation and other existing sectors as the two available causal connection between financial development and economic growth.

Hermes (1944) state that financial development induce economic growth through financial relaxation theory and the enhancement of new theories. Muride & Eng (1994) identifies on the contrary that there is a reciprocal relationship between financial development and economic growth through multiple endogeneous growth models. For the research made in Turkey Unalmis (2002) describes a bi-directional impact in the long-run but assist for providing role in short-run.

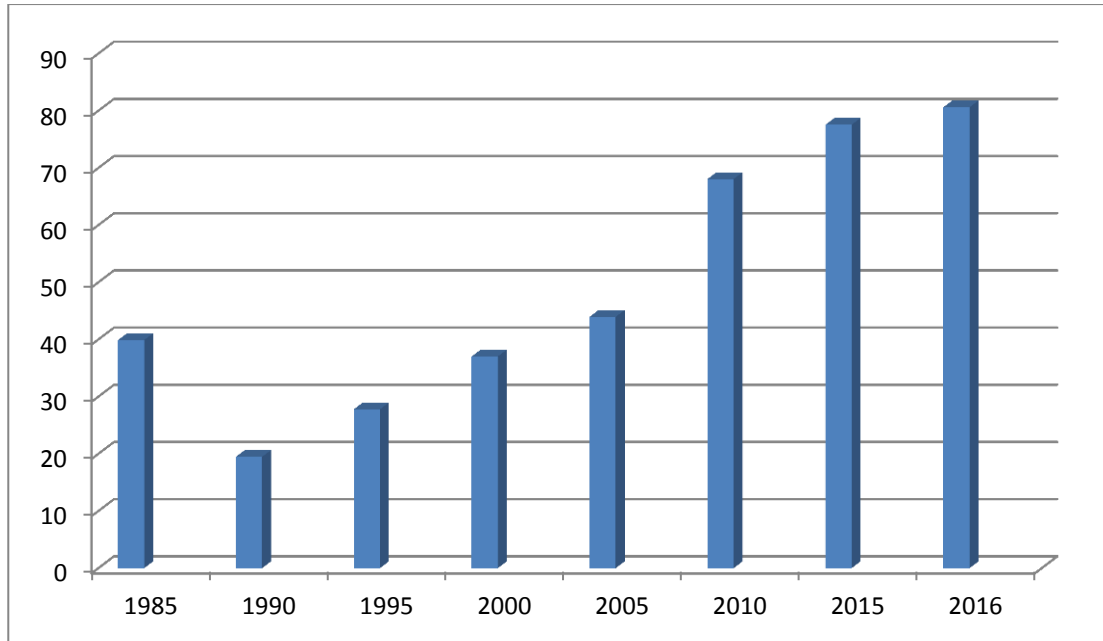


Figure 3.7: Domestic credit by financial sector (%GDP), 1985-2016

Source: International monetary fund, International financial statistics and data files and World Bank and OECD GDP estimates

The curve in figure 3.7 above demonstrate that Turkey is developing financially based on domestic credit, here we are talking about the financial sector which includes monetary authorities, deposit money banks and other financial corporations whose data are easily accessible in Turkey. The column chart in figure 3.7 above shows that domestic credit by financial sector has been increasing in 2010 at 68.05% in 2015 it was 77.54% and in 2016 it elevated to 80.60%.



## Chapter 4

### DATA AND METHODOLOGY

#### 4.1 Data category and origin

In this thesis, the data used start from 1989 to 2015 annually, the variables used are GDP constant 2010 US \$, domestic credit by financial sector (% of GDP), market capitalization of listed domestic companies (% of GDP) and FDI inflows (% of GDP). Data of this thesis were obtained from World Bank (2018) and Federal Reserve Economic Data (FRED) (2018).

#### 4.2 Methodology

In this thesis, the type of analysis that are undertaken are Zivot Andrews (1992) unit root test to find out whether the variables have a unit root under one structural break.

Johansen co-integration test is applied, to estimate the overall connection among the dependent and independent variables. In addition, misconception rectifiable model is applied to determine the long period coefficients and mistake adjustment term. Lastly Granger causality test under Block exogeneity wald approach is applied to determine causal relationship among variables.

##### 4.2.1 Empirical model

In this thesis FDI, FD and SM are used as determinants of GDP in Turkey. Below, the functional relationship of this study is indicated;

$$ED=f(FDI, FD, SM) \quad (1)$$

Where economic development(ED) is a function of foreign direct investment (FDI), financial development (FD), as well as stock market (SM).

The identification(1) of the functional relationship is determined in logarithm shape in the next style to show economic development effects;

$$\text{LnGDP} = \beta_0 + \beta_1 \text{LnFDI} + \beta_2 \text{LnFD} + \beta_3 \text{LnSM} + \mu_t \quad (2)$$

This regression model is demonstrated at period t, if we estimate the above equation lnGDP represent the natural log of GDP, lnFDI shows the natural log of foreign direct investment, lnFD represents the natural log of financial development, lnSM indicate the natural log of stock market capitalization and  $\mu$  is the error term.  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  provide the elasticity of FDI, FD, and SM respectively in the long run.

#### **4.2.2 Unit root tests**

In this thesis, we use Zivot Andrews unit root tests (1992) to demonstrate if there is a co-integration between variables under the existence of a structural break in the series.

Perron (1997) indicate that there is a structural break among the series that proves that the variables are non- stationary in otherwords there is a unit root. Perron (1989) test uses the time of break as exogenous, it has received a lot of criticism. Zivot & Andrews (1992) moreover started a unit root tests that examine the break point ( $T_B$ ) as endogenous called Perron unit root tests.

The following regression is applied to find out the unit root as opposed to the trend stationarity method alternative that shows a structural break in both slope and intercept.

$$Y_t = \alpha + \beta DU_t + \gamma DT_t + \delta y_{t-1} + \sum_{j=1}^t c_j \Delta y_{t-1} + e_t \quad (3)$$

Where  $DU_t$  and  $DT$  are dummy variables for a mean shift and a trend shift respectively;  $DU_t=1$  if  $t>T_B$ , 0 otherwise  $DT= t-T_B$  if  $t>T_B$ , 0 otherwise. The break point is determined by the ordinary least squares for  $t=2, \dots, T-1$ . Thus (T-2) regression are run and the break point is discovered by the minimum t statistics on the coefficient of the auto regressive variable. The asymptotic critical values for t (Altinay & Karagol, 2004).

#### 4.2.3 Cointegration tests

The concept of cointegration was first introduced by (Granger, 1981,1983 and Weiss, 1983) and studied furthermore by (Engle & Granger, 1987). The system mostly used for cointegration systems was influenced by Johansen 1988 and 1991 (Cheung & Lai, 1993). According to Phillips (1991), The ML (maximum likelihood) estimator was found to be overly stable shared symmetrically, median disinterested asymptotically as well as the usage of an optimal theory of inference was discovered after reviewing the diffusion properties of the cointegrating vectors ML estimator.

According to Johansen (1991), cointegration and its robustness to lag length discription and abnormal errors are tried out with LR(likelihood ratio). Johansen (1988) form a vector of autoregressive model lacking a continuous term, acquired with LR cointegration test. Johansen (1991) indicates that both the LR test statistic and its asymptotic distribution are changed when a continuous term is included in the model.

Below is a general VAR model with Gaussian errors formulated in the error correction form

$$\Delta x_t = \sum_{i=1}^{k-1} \Delta x_{t-i} + \Pi x_{t-k} + \Phi D_t + \mu + \varepsilon_t \quad (5)$$

Where D are seasonal dummies orthogonal to constant term. Further,  $\varepsilon_t$  ( $t=1, \dots, T$ ) are independent P dimensional Gaussian variables which mean zero and variance matrix  $\Delta$ . The first k data points  $X_1-K, \dots, x_0$  are considered fixed and the likelihood function is calculated for given values of these. The parameters  $\Gamma, \dots, \Gamma_{k-1}, \Phi, \mu, \Delta$  are assumed to vary without restrictions and we formulate the hypothesis of interest as restrictions on  $\Pi$  (Johansen, 1991).

#### 4.2.4 Error correction model

After cointegration test, we apply the error correction model in order to find if there is a long run or a short run relation between GDP and explanatory variables in Turkey.

If  $GDP_t$  shows the index of gross domestic product and  $FDI_t$  illustrate the index of foreign direct investment then the following error correction model will be estimated.

$$\Delta GDP_t = \alpha u_{t-1} + B \Delta FDI_t + \sum_{i=1}^m \delta_i \Delta FDI_{t-i} + B \Delta FD_t + \sum_{i=1}^m \delta_i \Delta FD_{t-i} + B \Delta SM_t + \sum_{i=1}^m \delta_i \Delta SM_{t-i} + \sum_{j=1}^n \theta_j \Delta GDP_{t-j} + e_t \quad (6)$$

Where sufficient lagged differences will be included to ascertain  $e_t$  is white noise. The indicative error correction model (ECM) would demonstrate the modification in one variable to the modification in another variable. Previous equilibrium errors and to previous modification in both variables (Ghosh, 1993).

#### 4.2.5 Granger causality test

In this thesis we use Granger causality test to determine the causality relationship among variables concerned. Cointegration relationship is identified through

applying Granger causality test with the help of the Vector Error Correction (VEC) (Katrıcıoğlu, 2007).

It has been known that there is a relationship between Granger causality and cointegration as indicated by (Granger, 1988). There is a long period balance association in cointegration. The analysis role is demonstrating the connection that exist among two items during a temporary duration and is applied to find the speed in values of short term period approach with an aim to long-run equilibrium measures.

Granger view both the manageable provenience trial and the mistake alteration mechanism together, they are comprised of original cointegration models remainings for examining augmented simple causality tests with the help of error correction models. The equation below display the error correction mechanism:

$$\Delta \ln Y_t = C_0 + \sum_{i=1}^K B_i \Delta \ln Y_{t-1} + \sum_{i=1}^k \alpha_i \Delta \ln X_{t-i} + \phi_i \text{ECT}_{t-1} + u_t \quad (7)$$

$$\Delta \ln X_t = C_0 + \sum_{i=1}^k \gamma_i \Delta \ln X_{t-1} + \sum_{i=1}^k \zeta_i \Delta \ln Y_{t-1} + \phi_i \text{ECT}_{t-1} + \varepsilon_t \quad (8)$$

Where X and Y are contemplated and  $\phi_i$  and  $\phi_i$  are the coefficients of  $\text{ECT}_{t-1}$  that shows the error correction term in both models,  $\Delta$  shows first difference of the variables. In equation (7), X (independent variable) Granger creates Y (dependent variable) if  $\phi_i$  is statistically significant. In equation (8), Y (independent variable) Granger influence X (dependent variable) if  $\phi_i$  is statistically significant. The intersected null hypothesis  $\alpha_i, \zeta_i = 0$ , is tested through F enumeration and error correction coefficient importance is estimated by applying t test.

## Chapter 5

### EMPIRICAL RESULT

#### 5.1 Unit root test for stationarity

As mentioned in chapter 4, whether the variables are stationary is investigated with the use of Zivot Andrews's unit root test (1992).

Table 5.1: Unit root tests

	Statistics (level)			statistics (first difference)			conclusion
	ZA <sub>b</sub>	ZA <sub>t</sub>	ZA <sub>i</sub>	ZA <sub>b</sub>	ZA <sub>t</sub>	ZA <sub>i</sub>	
LNGDP	-3.696	-3.25	-3.375	-5.489*	-5.283*	-5.5608*	I (1)
Break year	2001	2003	1999	2008	2010	1998	
Lag length	0	0	0	0	0	0	
LNFDI	-5.045	-3.085	-4.562	-6.243*	-5.679*	-6.390*	I (1)
Break year	2005	2008	2005	2008	2006	2007	
Lag length	0	0	0	0	0	0	
LNFD	-4.687	-6.235*	-4.740	-5.237*	-4.647*	-5.285*	I (1)
Break year	2003	2012	2003	2008	2005	2003	
Lag length	0	9	0	2	2	2	
LNSM	-2.321	-2.414	-1.632	-7.129*	-6.599*	-6.583*	I (1)
Break year	2010	2011	2011	2005	1996	2007	
Lag length	5	5	5	1	1	4	

Notes: GDP is a short form of gross domestic product, FDI represents foreign direct investment, FD is foreign direct investment and stock market is replaced by SM. ZA<sub>b</sub> shows a model with a break in both a trend and intercept, ZA<sub>t</sub> represents a model with a break in trend while ZA<sub>i</sub> is a model with a break in the intercept, \*, represents

the rejection of the null hypothesis at five percent level of significance. Unit root test is performed in E-VIEWS 7.

Table 1 illustrates the results of unit root test under one systematic fragment in the series. The results of unit root tests show that  $\ln\text{GDP}$ ,  $\ln\text{FDI}$ ,  $\ln\text{FD}$  and  $\ln\text{SM}$  have unit roots under one structural break at level form which means we do not reject the null hypothesis therefore they are not stationary at their level form, At first difference form all variables become stationary. As a conclusion, Zivot and Andrews (1992) unit root tests show that the independent variable  $\ln\text{SM}$ ,  $\ln\text{FDI}$ ,  $\ln\text{FD}$  and the dependent variable  $\ln\text{GDP}$  are affiliated of order one,  $I(1)$ .

## **5.2 Co-integration analysis**

The co-integration analysis is conducted with the help of Johansen co-integration test made on non-stationary variable which are FDI, financial development, stock market and GDP as the dependent variable. All the time series variables are integrated of order 1.

Johansen co-integration test result table below shows the result. Firstly the beginning hypothesis demonstrate that no existence of combined vectors available in all items, next second hypothesis shows that the number of affiliated angles are at most one, the third alternative hypothesis illustrate that vectors are less or no more than two and lastly the alternative hypothesis indicate that co-integrating vectors are at most three.

Considering the test results, the null hypothesis in trace statistics is higher than critical value at alpha 5 per cent, hence we reject the null hypothesis of there is no

co-integrating vector. This implies that there is a co-integrating vector as well as there is a long-term relationship among FDI, financial development, stock market and the economic growth.

Table 5.2: Johansen combination trials

Postulated no of $CE_{(S)}$	Eigen values	Trace statistics	5% critical values	1% critical value
None*	0.223960	53.93037	47.21	54.46
At most 1	0.134900	27.30751	29.68	35.65
At most 2	0.108405	12.09200	15.41	20.04
At most 3	0.000419	0.043955	3.76	6.65

Note: \*; denotes rejection of the hypothesis at the 5% level of significance.

### 5.3 Level coefficients and error correction model estimation

After completing the amalgamation of analysis, we find a long-term relation between GDP and explanatory variables from the long run, short run coefficients and ECT of the estimated model in the equation estimated by ECM. Table 5.3 demonstrates the ECM results. In this thesis, several lag levels were used. Table 5.3 shows different short-term coefficients like small period coefficient of foreign



investment inflows which is not statistically appropriate at all  $\alpha$  levels. We also see the short-term coefficients of FD which are not statistically significant.

The short-term coefficients of FD are not statistically significant in general but only at lag2, the short term effect of FD on GDP is statistically significant at  $\alpha=0.05$ . The interpretation is such that if FD increases by 1% GDP of Turkey diminishes by 0.0008% in the short term. Concerning SM, short-term effect of SM on GDP is statistically significant at  $\alpha=0.05$  and we find that when SM is elevated by 1%, Turkey's wealth gets higher by 0.0012% for a small period. Chart 5.3 indicate that ECT is 2.8192% negative and econometrically remarkable at  $\alpha=0.001$ . The one of 0.028192 indicates for few periods values of growth converge to its permanent equilibrium level by 2.8192% speed of adjustment every year by the contribution of FDI, FD as well as SM.

As shown in the figure, when FDI is boosted by 1%, the development of the host country is increased by 0.193% in vaster period and it is statistically significant at  $\alpha=0.10$ . In the presence of an expansion in foreign investment by 1%, GDP increases by 0.982% and it is statistically significant at  $\alpha=0.10$ . On the other hand, if SM rises by 1%, the growth rate will fall by 0.367% for a vast period which is not mathematically reliable.

Table 5.3: Long run coefficients of Error correction model

Long run coefficients	
Cointegrating Eq:	CointEq1
LNSM(-1)	0.367218 (0.11105) [ 3.30674]

LNFD(-1)	-0.981843 (0.15826) [-6.20408]
LNFDI(-1)	-0.193363 (0.05719) [-3.38117]
C	-6.139210

Table 5.4: Short run coefficients of error correction model

<u>Error</u>	<u>D(LNGDP)</u>
CointEq1	-0.028192 (0.00813) [-3.46670]
D(LNGDP(-1))	0.491586 (0.12360) [ 3.97727]
D(LNGDP(-2))	0.078439 (0.12308) [ 0.63728]
D(LNSM(-1))	0.003332 (0.01645) [ 0.20262]
D(LNSM(-2))	0.001182 (0.01607) [ 0.07354]
D(LNFD(-1))	-0.004578 (0.04913) [-0.09319]
D(LNFD(-2))	-0.000768 (0.04842) [-0.01587]
D(LNFDI(-1))	0.009068 (0.00975) [ 0.92989]
D(LNFDI(-2))	-0.002757

	(0.00951)
	[-0.28987]
C	0.001159
	(0.00050)
	[ 2.33865]
<hr/>	
R-squared	0.374476
Adj. R-squared	0.315216
S.E. equation	0.003304
F-statistic	6.319180
Akaike AIC	-8.497067
Schwarz SC	-8.244309
<hr/>	

## 5.4 Granger causality tests

After running the correlation and ECM analysis in E-views, the provenience test is used under VECM. Table 5.5 demonstrate Granger causality outcome under Block Exogeneity Wald approach.

Table 5.5: Granger causality under Block Exogeneity Wald approach

Dependent variable:		D(LNGDP)	
Excluded	Chi-sq	df	Prob.
D(LNSM)	4.214858	4	0.3777
D(LNFD)	10.65359	4	0.0307
D(LNFDI)	9.178088	4	0.0568
All	17.24121	12	0.1407

Dependent variable: D(LNSM)

Excluded	Chi-sq	df	Prob.
D(LNGDP)	1.048514	4	0.9024
D(LNFD)	4.633479	4	0.3270
D(LNFDI)	8.716116	4	0.0686
All	11.98444	12	0.4469

Dependent variable: D(LNFD)

Excluded	Chi-sq	df	Prob.
D(LNGDP)	0.390840	4	0.9832
D(LNSM)	6.434692	4	0.1690
D(LNFDI)	0.899396	4	0.9246
All	8.350758	12	0.7572

Dependent variable:		D(LNFDI)	
Excluded	Chi-sq	df	Prob.
D(LNGDP)	19.41147	4	0.0007
D(LNSM)	9.830134	4	0.0434
D(LNFD)	11.36816	4	0.0227
All	40.70504	12	0.0001

Among the above tables illustrating the Granger causality test results, the first section (table 5.5) shows whether all the independent variables (SM, FD and FDI) can predict GDP or not in Turkey.

Taking into account the first line of the dependent variable LNGDP, we find that for both LNFD and LNFDI; we reject the null hypothesis at 5% which bring us to a conclusion that both LNFD and LNFDI contribute to the state of GDP fluctuation in Turkey. As for the second table, the dependent variable is LNSM, only LNFDI is found to affect LNSM since the null hypothesis is rejected at 10%. Lastly the dependent variable LNFDI has a causality relationship with all three independent variables LNGDP, LNSM, and LNFD since the null hypothesis is rejected at 5% for all variables. As a conclusion some of the lagged coefficients of the dependent variables are driven by some of the lagged independent coefficients in Turkey.

## Chapter 6

### CONCLUSION AND POLICY IMPLICATIONS

#### 6.1 Conclusion

The objective of this thesis was to identify the possible existence of an economic growth due to movements in FDI, FD, and SM in Turkey. Turkey is known to have an emerging market economy and it is reasonable to say that the services provided by FDI inflows, domestic credit, financial sector and market capitalization have participated in the GDP growth rate of Turkey after evaluating all possible aspect in this study by referring to different authors and performing tests. As demonstrated in chapter 5 of empirical results above, there might be a long-term relationship among FDI, FD, SM and GDP. With ECT; short term values of growth rate converge to its constant symmetry level every year as per the contribution of FDI, FD and SM. Based on long term coefficients in the ECM of the estimated model, FDI has a positive impact on GDP since when FDI and GDP share a positive relationship. FD is a proxy of domestic credit and has also a positive impact on GDP but concerning the long-term equilibrium relation between SM and GDP, SM has a negative impact on GDP. This result shows that Turkey is not a stock market based economy; it is a bank based economy. According to the Granger causality test, used under VECM; it was found that the GDP in Turkey is FD and FDI driven implying that when FD and FDI increase, Turkey's GDP is boosted. To sum up, FDI, FD and SM influence have an influence on the GDP growth rate depending on their stated level in Turkey.

## **6.2 Policy implications**

Turkey has gained more praise due to its recovery from its set of financial crises that marked the period of 1959 to 2001 rewarding it with a 17<sup>th</sup> position in world's economy. As stated in chapter 3; Turkey was able to recover quickly from its financial crises by reducing its public expenditures of GDP and increasing its revenue of the central government, which was the best resolution considering the consumption which generated economic growth and nourished the middle class. On the other hand, these economic modifications were advantageous since it constantly decreased foreign trade surplus. However, in this thesis we are looking at how other factors such as FDI, FD, and SM affect GDP in Turkey. Based on our research we understand that the country's policy on these factors must be evaluated in order to increase the GDP growth rate as per its implication in Turkey. With reference to this study, policy purpose is suggested for the long run. Given that Turkey is a bank based economy, policy makers we firmly believe that Turkey should have a stable environment with regards to banking growth and financial development. By doing so, they can attract more FDI investors to boost the economy. This study recommends the previous economic actions with the unique objective to keep a sound economy in order to enhance economic growth and the wealth of Turkey.

## REFERENCES

- Aitken, B. J., & Harrison, A. (1999). FDI and economic growth:the role of local financial markets. *journal of international economics*,64,1, 89-112.
- Alfaro, L., Chanda, A., Ozcan, S. K., & Sayek, S. (2002). FDI and economic growth:the role of local financial markets. *Havard business school*, 01-083.
- Alfaro, L., Chanda, A., Ozcan, S. K., & Sayek, S. (2004). FDI and economic growth: the role of local financial markets. *Journal of international economics*,64,1, 89-112.
- Altinay, G., & Karagol, E. (2004). Structural break ,unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Altug, S. G., Filiztken, A., & Pamuk, S. (2008). Source of long-term economic growth for Turkey,1880-2005. *European review of economic history*.12,3, 393-430.
- Atbasog, E. C. (1973). locational determinants in foreign direct investment in an emerging market economy:evidence from Turkey. *Multinational business review*,10,1, 1-7.
- Atje, R., & Jovanovic, B. (1998). Stock markets, banks and economic growth. *The American economic review*,88,3, 537-558.

- Bagehot, W. (1873). Stock markets, banks and economic growth. *The american economic review*,88,3, 537-558.
- Balasubramanyam, V. N. (1996). Locational determinants of foreign direct investment in an emerging market economy:evidence from Turkey. *Multinational business review*,10,1, 1-7.
- Balasubramanyam, V. N., Salisu, M., & Dapsford, D. (1996). Does foreign direct investment accelerate economic growth? *Journal of international economics*, 1-23.
- Balasubramanyam, V. N., Salisu, M., & Sapsford, D. (1999). Causality tests for cross country panels: a new look at FDI and economic growth in developing countries. *Oxford bulletin of economics and statistics*,63,2, 153-171.
- Balk, B. M. (1996). The international location of foreign investors in Turkey. *European planning studies*,33,1-2, 57-76.
- Bancivenga, v. R., & Smith, B. D. (1995). stock markets, banks and economic growth. *The american economic review*,88,3, 537-558.
- Batiz, R., & Romer, P. M. (1991). FDI and economic growth: the role of local financial markets. *Journal of international economics*,64,1, 89-112.
- Becker, G. S., Murphy, K. M., & Tamura, R. (1990). Economic growth in a cross section of countries. *The quaterly journal of economics*,106,2, 407-443.



- Bekaert, G., Campbell, R. H., & Lundbald, C. (2001). *Does foreign direct investment accelerate economic growth?* Minnesota: University of Minnesota.
- Bhide, A. (1993). stock markets, banks, and economic growth. *The american economic review*,88,3, 537-558.
- Borensztein, E., Gregorio, J. D., & Lee, J. W. (1995). Causality tests for cross country panels: a new look at FDI and economic growth in developing countries. *oxford bulletin of economics and statistics*,63,2, 153-171.
- Borensztein, E., Gregorio, J. D., & Lee, J. W. (1998). FDI and economic growth:the role of local financial markets. *journal of international economics*,64,1, 89-112.
- Borensztein, E., Gregorio, Lee, & J. (1998). How does foreign investment affect growth? *Journal of international economics*,45,1, 115-135.
- Bradford, J. D., Andrei, S., Summers, L. H., & Waldman, R. J. (1989). stock markets, banks, and economic growth. *The American economic review*,88,3, 537-558.
- carkovic , M., & Levine R. (2003). FDI and economic growth: the role of local financial markets. *journal of international economics*,64,1, 89-112.

- Carosso, V. (1970). Financial development and economic growth:views and agenda. *Journal of economic literature*,35,2, 688-726.
- Cheung, Y. W., & Lai, k. S. (1993). Finite sample sizes of johansen's likelihood ratio's test for cointegration. *oxford bulletin of economics and statistics*,55,3, 0305-9049.
- Demetriades, P. (1996). Financial development and economic growth and economic growth: Assessing the evidence. *The economic journal*,107,442, 783-799.
- Devereux, M. B., & Smith, W. G. (1994). Stock market development and long run growth. *The world bank economic review*,10,2, 323-339.
- Edrington, C. S. (1979). Hedging with stock index futures estimation and forecasting with error correction model. *The journal of future markets*,13,7, 743-752.
- Engle, R. F., & Granger, C. (1987). estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregressive model. *the econometric society*,59,6, 1551-1580.
- Erdal, F., & Tatoglu, E. (2002). Locational determinants of foreign direct investment in an emerging market economy:evidence from Turkey. *Multinational business review*,10,1, 1-7.

- Feridun, M., Swahney, B., Jalil, & A. (2009). stock market and banking sector development in Turkey:do they have the same impact on economic growth. *Economic research*,24,4, 65-74.
- Findlay, R. (1978). How does foreign direct investment affect economic growth. *Journal of international economics*,45,1, 115-135.
- Fuller, W. A. (1979). Structural break,unit root, and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Fung, M. K. (2014). Impact of financial intermediation development on economic growth. *International journal of economic and business review*,2,12, 2347-9671.
- Ghosh, A. (1993). Hedging with stock index futures estimation and forecasting with error correction model. *The journal of future markets*,13,7, 743-752.
- Goldsmith, P. D. (1969). FDI and economic growth: the role of local financial markets. *Journal of international economics*,64,1, 89-112.
- Goldsmith, P. D. (1969). Finance and growth:schmupeter might be right. *the quartely journal of economics*,3,1, 717-737.
- Granger, C. (1969). WIENER GRANGER casuality: a well established methodology. *economic dynamics and control*,58,2, 323-329.

Granger, C. (1981,1983). estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregressive models. *The econometric society*,59,6, 1551-1580.

Granger, C. (1988). Some recent developments in a concept of causality. *Journal of economics*,39,1-2, 199-211.

Greenwood, J., & Jovanovic, B. (1990). Financial development and economic growth: views and agenda. *Journal of economic literature*,35,2, 688-726.

Greenwood, J., & Smith, B. D. (1996). stock market development and long run growth. *The world bank economic review*,10,2, 323-339.

Gregorio, J. (1992). *Does foreign direct investment accelerate economic growth?* Minnesota: University of Minnesota.

Harrison, A. (1994). Causality tests for cross country panels:a new look at FDI and economic growth in developing countries. *Oxford bulletin of economics and statics*,63,2, 153-171.

Hermes, N. (1944). Financial development and economic growth in Turkey:further evidence on the causality issue. *Economic research paper*, 1-21.

Holmstrom, B., & Tirole, J. (1993). stock market development and long run growth. *The world bank economic review*,10,2, 323-339.

- Holmstrom, B., & Tirole, J. (1993). stock market development and long run growth. *The world bank economic review*,10,2, 323-339.
- Japelli, T., & Pagano, M. (1994). Financial development and economic growth: views and agenda. *journal of economic literature*,35,2, 688-726.
- Jensen, M. C., & Kevin, J. (1990). stock market development and long run growth. *The world bank economic review*,10.2, 323-339.
- Johansen, M. C. (1988). finite sample sizes of johansen's likelihood ratio tests for cointegration. *Oxford bulletin of economics and statistics*,55,3, 305-9049.
- Johansen, M. C. (1991). Finite sample sizes of Johansen's likelihood ratio tests for cointegration. *Oxford bulletin of economics and statistics*,55,3, 305-9049.
- Johansen, S. (1960). Hedging with stock index futures estimation and forecasting with error correction model. *The journal of future markets*,13,7, 743-752.
- Johansen, S. (1991). estimation and hypothesis testing cointegration vectors in Gaussian vector autoregressive models. *the econometric society*,59,6, 1551-1580.
- Katricicoglu, S. T., & Kahyalar, N. (2007). Financial development, trade and growth triangle :the case of India. *International journal of social economics*,34,9, 586-598.

- Katircioglu, S., & Feridun, M. (2010). Stock market and banking sector development in Turkey:do they have the same impact on economic growth. *economic research*,24,4, 65-74.
- Kaya, E., Bektas , E., & Feridun, M. (2015). Stock market development and banking sector development in Turkey:do they have the same impact on economic growth? *Economic research*,24,4, 65-74.
- King , R., & Levine, R. (1993). stock markets, banks and economic growth. *The american economic review*,88,3, 537-558.
- King, R., & Levine, R. (1993). FDI and economic growth:the role of local financial markets. *Journal of international economics*,64,1, 89-112.
- Koopmans, T. C. (1965). Economic growth in a cross section of countries. *The quartely journal of economics*,106,2, 407-443.
- Koopmans, T. C., & Bayar, Y. (1965). Economic growth in a cross section of countries. *The quartely journal of economics*,106,2, 407-443.
- KrkosKa, L. (2001). Impact of FDI on stock market development: the case of Pakistan. *International research journal of finance and economics*, 1-24.
- Kunt, D. A., & Maksimovic, V. (1996). stock markets, banks and economic growth. *The american economic review*,88,3, 537-558.

- Kyle, A. S. (1984). Stock market development and long run growth. *The world bank economic review*,10,2, 323-339.
- Lee, J., & Strazicich, M. C. (2001). Structural break,unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Levine, R. (1991). stock market, banks and economic growth. *The american economic review*,88,3, 537-558.
- Levine, R. (1993). stock markets, banks and economic growth. *The american economic review*,88,3, 537-558.
- Levine, R. (1996). Stock market development and financial intermediaries:stylized facts. *The world bank economic review*,10,2, 291-321.
- Levine, R., & Renelt, D. (1992). How does foreign direct investment affect economic growth. *Journal of international economics*,45,1, 115-135.
- Levine, R., & Zervos, S. (1996). stock market development and long run growth. *The world bank economic review*,10,2, 323-339.
- Levine, R., & Zervos, S. (1998). FDI and economic growth:the role of local financial markets. *Journal of international economics*,64,1, 89-112.

- Levine, R., Alfaro, L., Chanda, A., Ozcan, S. K., & Sayek, S. (2000). FDI and economic growth:the role of local financial markets. *Journal of international economics*,64,1, 89-112.
- Lucas, R. E. (1988). Financial development and economic growth :views and agenda. *Journal of economic literature*,35,2, 688-726.
- Mansfield, E., & Romeo, A. (1980). Does foreign direct investment accelerate economic growth. *Journal of international economics*, 1-23.
- Mckinnon, R. I. (1973). FDI and economic growth :the role of local financial markets. *journal of international economics*,64,1, 89-112.
- Mckinnon, R. I. (1973). Finance and growth:schumpeter might be right. *The quaterly journal of economics*,3,1, 717-737.
- Mckinnon, R. I. (1973). Financial development and economic growth:views and agenda. *journal of economic literature*,35,2, 688-726.
- Merton, R. C. (1987). Financial development and economic growth:views and agenda. *Journal of economic literature*,35,2, 688-726.
- Muride, V., & Eng, F. S. (1994). Financial development and economic growth in Turkey:further evidence on the causality issue. *Economic research paper*,00,27, 1-21.



- Nelson, R. R., & Phelps, E. S. (1966). Economic growth in a cross section of countries. *The quarterly journal of economics*,106,2, 407-443.
- Nelson, R. R., & Phelps, E. S. (1966). Economic growth in a cross section of countries. *The quarterly journal of economics*,106,2, 407-443.
- Nelson, R. R., & Phelps, E. S. (1966). FDI and economic growth:the role of local financial markets. *Journal of internation economics*,64,1, 89-112.
- Nowbutsing, B. M. (2011). stock market development and economic growth: the case of Mauritius. *International business and economic research journal*,8,2, 1-12.
- Obstfeld, M. (1994). FDI and economic growth:the role of local financial markets. *Journal of international economics*,64,1, 89-112.
- Obstfeld, M. (1994). Financial development and economic growth:views and agenda. *Journal of economic literature*,35,2, 688-726.
- Obstfeld, M. (1994). stock market and long run growth. *The world bank economic review*,10,2, 323-339.
- Pamuk, S. (2008). Source of long-term economic growth for Turkey,1880-2005. *European review of economic history*,12,3, 393-430.

- Patrick, H. T. (1966). financial development and growth:A re-examination using a panel Granger causality test. *HAL*, 1-31.
- Patrick, H. T. (1966). The direction of causality between financial development and economic growth. *Journal of development economics*,72,1, 321-334.
- Patrick, H. T. (1996). Financial development and economic growth in Turkey :further evidence on the causality issue. *Economic research paper*,00,27, 1-21.
- Perron, P. (1988). Structural break, unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Perron, P. (1989). Structural break, unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Perron, P. (1997). Structural break, unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Phillips, P. C. (1991). finite sample sizes of johansen's likelihood ratio tests for cointegration. *oxford bulletin of economics and statistics*,55,3, 305-9049.
- Rajan, R. G., & Zingales, L. (1998). Stock markets, banks and economic growth. *The american economic review*,88,3, 537-558.

- Rappaport, J. (2000). Does foreign direct investment accelerate economic growth?  
*Journal of international economics*, 1-23.
- Robert, D. G. (2008). impact of FDI on stock market development: the case of  
Pakistan. *International research journal of finance and economics*, 1-24.
- Robinson, J. (1952). Finance and growth:schumpeter might be right. *the quartely  
journal of economics*,108,3, 717-737.
- Robinson, J. (1952). stock markets,banks and economic growth. *The american  
economic review*,88,3, 537-558.
- Romer, P. (1990). Economic growth in a cross section countries. *The quartely  
journal of economics*,106,2, 407-443.
- Schmepeter, J. A. (1912). Financial development and economic growth:views and  
agenda. *journal of economic literature*,35,2, 688-726.
- Schumpeter, J. A. (1912). Stock markets, banks and economic growth. *the american  
economic review*,88,3, 537-558.
- Shaw, G. K. (1992). Foreign direct investment and growth in EP and IS countries.  
*The economic journal*,106,434, 92-105.
- Shleifer, A., & Summers, L. (1986). Stock market development and long run  
growth. *The world bank economic review*,10,2, 323-339.

- Smith, A., & Obstfeld, M. (1994). stock markets, banks and economic growth. *The american economic review*,88,3, 537-558.
- Sönmez, M. (1996). the interregional location of foreign investors in Turkey. *European planning studies*,9,8, 979-994.
- Stein, J. C. (1961). Hedging with stock index futures estimation and forecasting with error correction model. *The journal of future markets*,13,7, 743-752.
- Stiglitz, j. E. (1994). stock market development and economic growth:the case of west african mpnetary union. *international journal of economics and finance*,2,3, 1-7.
- Tachiwou, A. M. (2010). stock market development and economic growth:the case of west African monetary union. *international journal of economics and finance*,2,3, 1-7.
- Torre, A. (2007). Impact of FDI on stock market development: the case of Pakistan. *Internation research journal of finance and economics*, 1-24.
- Unalmis, D. (2011). Economic growth and financial development in Turkey:new evidence. *applied economic letters*,18,6, 595-600.
- Vishny. (1990). Stock market developmet and long run growth. *The world bank economic review*,10,2, 323-339.

- vishny, R. W., Levine, R., & Zervos, S. (1986). stock market development and long run growth. *The world bank economic review*,10,2, 323-339.
- Wang, S. L., & Blomstrom, M. (1992). Foreign direct investment and growth in EP and IS countries. *The economic journal*,106,434, 92-105.
- Weber, C. E. (2001). Structural break, unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Weiss, M. A. (1983). estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregressive models. *the econometric society*,59,6, 1551-1580.
- Wurgler, J. (2000). FDI and economic growth: the role of local financial markets. *Journal of international economics*,64,1, 89-112.
- Yartey, C. A. (2008). Impact of FDI on stock market development :the case of Pakistan. *International research journal of finance and economics*, 1-24.
- Zivot, E., & Andrews, D. (1992). Structural break, unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Zivot, E., & Andrews, D. (1992). Structural break, unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.

- Aitken, B. J., & Harrison, A. (1999). FDI and economic growth:the role of local financial markets. *journal of international economics*,64,1, 89-112.
- Alfaro, L., Chanda, A., Ozcan, S. K., & Sayek, S. (2002). FDI and economic growth:the role of local financial markets. *Havard business school*, 01-083.
- Alfaro, L., Chanda, A., Ozcan, S. K., & Sayek, S. (2004). FDI and economic growth: the role of local financial markets. *Journal of international economics*,64,1, 89-112.
- Altinay, G., & Karagol, E. (2004). Structural break ,unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Altug, S. G., Filiztken, A., & Pamuk, S. (2008). Source of long-term economic growth for Turkey,1880-2005. *European review of economic history*.12,3, 393-430.
- Atbasog, E. C. (1973). locational determinants in foreign direct investment in an emerging market economy:evidence from Turkey. *Multinational business review*,10,1, 1-7.
- Atje, R., & Jovanovic, B. (1998). Stock markets, banks and economic growth. *The American economic review*,88,3, 537-558.

- Bagehot, W. (1873). Stock markets, banks and economic growth. *The american economic review*,88,3, 537-558.
- Balasubramanyam, V. N. (1996). Locational determinants of foreign direct investment in an emerging market economy:evidence from Turkey. *Multinational business review*,10,1, 1-7.
- Balasubramanyam, V. N., Salisu, M., & Dapsford, D. (1996). Does foreign direct investment accelerate economic growth? *Journal of international economics*, 1-23.
- Balasubramanyam, V. N., Salisu, M., & Sapsford, D. (1999). Causality tests for cross country panels: a new look at FDI and economic growth in developing countries. *Oxford bulletin of economics and statistics*,63,2, 153-171.
- Balk, B. M. (1996). The international location of foreign investors in Turkey. *European planning studies*,33,1-2, 57-76.
- Bancivenga, v. R., & Smith, B. D. (1995). stock markets, banks and economic growth. *The american economic review*,88,3, 537-558.
- Batiz, R., & Romer, P. M. (1991). FDI and economic growth: the role of local financial markets. *Journal of international economics*,64,1, 89-112.
- Becker, G. S., Murphy, K. M., & Tamura, R. (1990). Economic growth in a cross section of countries. *The quaterly journal of economics*,106,2, 407-443.

- Bekaert, G., Campbell, R. H., & Lundbald, C. (2001). *Does foreign direct investment accelerate economic growth?* Minnesota: University of Minnesota.
- Bhide, A. (1993). stock markets, banks, and economic growth. *The american economic review*,88,3, 537-558.
- Borensztein, E., Gregorio, J. D., & Lee, J. W. (1995). Causality tests for cross country panels: a new look at FDI and economic growth in developing countries. *oxford bulletin of economics and statistics*,63,2, 153-171.
- Borensztein, E., Gregorio, J. D., & Lee, J. W. (1998). FDI and economic growth:the role of local financial markets. *journal of international economics*,64,1, 89-112.
- Borensztein, E., Gregorio, Lee, & J. (1998). How does foreign investment affect growth? *Journal of international economics*,45,1, 115-135.
- Bradford, J. D., Andrei, S., Summers, L. H., & Waldman, R. J. (1989). stock markets, banks, and economic growth. *The American economic review*,88,3, 537-558.
- carkovic , M., & Levine R. (2003). FDI and economic growth: the role of local financial markets. *journal of international economics*,64,1, 89-112.



- Carosso, V. (1970). Financial development and economic growth:views and agenda. *Journal of economic literature*,35,2, 688-726.
- Cheung, Y. W., & Lai, k. S. (1993). Finite sample sizes of johansen's likelihood ratio's test for cointegration. *oxford bulletin of economics and statistics*,55,3, 0305-9049.
- Demetriades, P. (1996). Financial development and economic growth and economic growth: Assessing the evidence. *The economic journal*,107,442, 783-799.
- Devereux, M. B., & Smith, W. G. (1994). Stock market development and long run growth. *The world bank economic review*,10,2, 323-339.
- Edrington, C. S. (1979). Hedging with stock index futures estimation and forecasting with error correction model. *The journal of future markets*,13,7, 743-752.
- Engle, R. F., & Granger, C. (1987). estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregressive model. *the econometric society*,59,6, 1551-1580.
- Erdal, F., & Tatoglu, E. (2002). Locational determinants of foreign direct investment in an emerging market economy:evidence from Turkey. *Multinational business review*,10,1, 1-7.

- Feridun, M., Swahney, B., Jalil, & A. (2009). stock market and banking sector development in Turkey:do they have the same impact on economic growth. *Economic research*,24,4, 65-74.
- Findlay, R. (1978). How does foreign direct investment affect economic growth. *Journal of international economics*,45,1, 115-135.
- Fuller, W. A. (1979). Structural break,unit root, and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Fung, M. K. (2014). Impact of financial intermediation development on economic growth. *International journal of economic and business review*,2,12, 2347-9671.
- Ghosh, A. (1993). Hedging with stock index futures estimation and forecasting with error correction model. *The journal of future markets*,13,7, 743-752.
- Goldsmith, P. D. (1969). FDI and economic growth: the role of local financial markets. *Journal of international economics*,64,1, 89-112.
- Goldsmith, P. D. (1969). Finance and growth:schmupeter might be right. *the quartely journal of economics*,3,1, 717-737.
- Granger, C. (1969). WIENER GRANGER casuality: a well established methodology. *economic dynamics and control*,58,2, 323-329.

- Granger, C. (1981,1983). estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregressive models. *The econometric society*,59,6, 1551-1580.
- Granger, C. (1988). Some recent developments in a concept of causality. *Journal of economics*,39,1-2, 199-211.
- Greenwood, J., & Jovanovic, B. (1990). Financial development and economic growth: views and agenda. *Journal of economic literature*,35,2, 688-726.
- Greenwood, J., & Smith, B. D. (1996). stock market development and long run growth. *The world bank economic review*,10,2, 323-339.
- Gregorio, J. (1992). *Does foreign direct investment accelerate economic growth?* Minnesota: University of Minnesota.
- Harrison, A. (1994). Causality tests for cross country panels:a new look at FDI and economic growth in developing countries. *Oxford bulletin of economics and statics*,63,2, 153-171.
- Hermes, N. (1944). Financial development and economic growth in Turkey:further evidence on the causality issue. *Economic research paper*, 1-21.
- Holmstrom, B., & Tirole, J. (1993). stock market development and long run growth. *The world bank economic review*,10,2, 323-339.

- Holmstrom, B., & Tirole, J. (1993). stock market development and long run growth. *The world bank economic review*,10,2, 323-339.
- Japelli, T., & Pagano, M. (1994). Financial development and economic growth: views and agenda. *journal of economic literature*,35,2, 688-726.
- Jensen, M. C., & Kevin, J. (1990). stock market development and long run growth. *The world bank economic review*,10.2, 323-339.
- Johansen, M. C. (1988). finite sample sizes of johansen's likelihood ratio tests for cointegration. *Oxford bulletin of economics and statistics*,55,3, 305-9049.
- Johansen, M. C. (1991). Finite sample sizes of Johansen's likelihood ratio tests for cointegration. *Oxford bulletin of economics and statistics*,55,3, 305-9049.
- Johansen, S. (1960). Hedging with stock index futures estimation and forecasting with error correction model. *The journal of future markets*,13,7, 743-752.
- Johansen, S. (1991). estimation and hypothesis testing cointegration vectors in Gaussian vector autoregressive models. *the econometric society*,59,6, 1551-1580.
- Katriccioglu, S. T., & Kahyalar, N. (2007). Financial development, trade and growth triangle :the case of India. *International journal of social economics*,34,9, 586-598.

- Katircioglu, S., & Feridun, M. (2010). Stock market and banking sector development in Turkey:do they have the same impact on economic growth. *economic research*,24,4, 65-74.
- Kaya, E., Bektas , E., & Feridun, M. (2015). Stock market development and banking sector development in Turkey:do they have the same impact on economic growth? *Economic research*,24,4, 65-74.
- King , R., & Levine, R. (1993). stock markets, banks and economic growth. *The american economic review*,88,3, 537-558.
- King, R., & Levine, R. (1993). FDI and economic growth:the role of local financial markets. *Journal of international economics*,64,1, 89-112.
- Koopmans, T. C. (1965). Economic growth in a cross section of countries. *The quartely journal of economics*,106,2, 407-443.
- Koopmans, T. C., & Bayar, Y. (1965). Economic growth in a cross section of countries. *The quartely journal of economics*,106,2, 407-443.
- KrkosKa, L. (2001). Impact of FDI on stock market development: the case of Pakistan. *International research journal of finance and economics*, 1-24.
- Kunt, D. A., & Maksimovic, V. (1996). stock markets, banks and economic growth. *The american economic review*,88,3, 537-558.

- Kyle, A. S. (1984). Stock market development and long run growth. *The world bank economic review*,10,2, 323-339.
- Lee, J., & Strazicich, M. C. (2001). Structural break,unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Levine, R. (1991). stock market, banks and economic growth. *The american economic review*,88,3, 537-558.
- Levine, R. (1993). stock markets, banks and economic growth. *The american economic review*,88,3, 537-558.
- Levine, R. (1996). Stock market development and financial intermediaries:stylized facts. *The world bank economic review*,10,2, 291-321.
- Levine, R., & Renelt, D. (1992). How does foreign direct investment affect economic growth. *Journal of international economics*,45,1, 115-135.
- Levine, R., & Zervos, S. (1996). stock market development and long run growth. *The world bank economic review*,10,2, 323-339.
- Levine, R., & Zervos, S. (1998). FDI and economic growth:the role of local financial markets. *Journal of international economics*,64,1, 89-112.

- Levine, R., Alfaro, L., Chanda, A., Ozcan, S. K., & Sayek, S. (2000). FDI and economic growth:the role of local financial markets. *Journal of international economics*,64,1, 89-112.
- Lucas, R. E. (1988). Financial development and economic growth :views and agenda. *Journal of economic literature*,35,2, 688-726.
- Mansfield, E., & Romeo, A. (1980). Does foreign direct investment accelerate economic growth. *Journal of international economics*, 1-23.
- Mckinnon, R. I. (1973). FDI and economic growth :the role of local financial markets. *journal of international economics*,64,1, 89-112.
- Mckinnon, R. I. (1973). Finance and growth:schumpeter might be right. *The quaterly journal of economics*,3,1, 717-737.
- Mckinnon, R. I. (1973). Financial development and economic growth:views and agenda. *journal of economic literature*,35,2, 688-726.
- Merton, R. C. (1987). Financial development and economic growth:views and agenda. *Journal of economic literature*,35,2, 688-726.
- Muride, V., & Eng, F. S. (1994). Financial development and economic growth in Turkey:further evidence on the causality issue. *Economic research paper*,00,27, 1-21.

- Nelson, R. R., & Phelps, E. S. (1966). Economic growth in a cross section of countries. *The quarterly journal of economics*,106,2, 407-443.
- Nelson, R. R., & Phelps, E. S. (1966). Economic growth in a cross section of countries. *The quarterly journal of economics*,106,2, 407-443.
- Nelson, R. R., & Phelps, E. S. (1966). FDI and economic growth:the role of local financial markets. *Journal of internation economics*,64,1, 89-112.
- Nowbutsing, B. M. (2011). stock market development and economic growth: the case of Mauritius. *International business and economic research journal*,8,2, 1-12.
- Obstfeld, M. (1994). FDI and economic growth:the role of local financial markets. *Journal of international economics*,64,1, 89-112.
- Obstfeld, M. (1994). Financial development and economic growth:views and agenda. *Journal of economic literature*,35,2, 688-726.
- Obstfeld, M. (1994). stock market and long run growth. *The world bank economic review*,10,2, 323-339.
- Pamuk, S. (2008). Source of long-term economic growth for Turkey,1880-2005. *European review of economic history*,12,3, 393-430.



- Patrick, H. T. (1966). financial development and growth:A re-examination using a panel Granger causality test. *HAL*, 1-31.
- Patrick, H. T. (1966). The direction of causality between financial development and economic growth. *Journal of development economics*,72,1, 321-334.
- Patrick, H. T. (1996). Financial development and economic growth in Turkey :further evidence on the causality issue. *Economic research paper*,00,27, 1-21.
- Perron, P. (1988). Structural break, unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Perron, P. (1989). Structural break, unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Perron, P. (1997). Structural break, unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Phillips, P. C. (1991). finite sample sizes of johansen's likelihood ratio tests for cointegration. *oxford bulletin of economics and statistics*,55,3, 305-9049.
- Rajan, R. G., & Zingales, L. (1998). Stock markets, banks and economic growth. *The american economic review*,88,3, 537-558.

- Rappaport, J. (2000). Does foreign direct investment accelerate economic growth?  
*Journal of international economics*, 1-23.
- Robert, D. G. (2008). impact of FDI on stock market development: the case of  
Pakistan. *International research journal of finance and economics*, 1-24.
- Robinson, J. (1952). Finance and growth:schumpeter might be right. *the quartely  
journal of economics*,108,3, 717-737.
- Robinson, J. (1952). stock markets,banks and economic growth. *The american  
economic review*,88,3, 537-558.
- Romer, P. (1990). Economic growth in a cross section countries. *The quartely  
journal of economics*,106,2, 407-443.
- Schmepeter, J. A. (1912). Financial development and economic growth:views and  
agenda. *journal of economic literature*,35,2, 688-726.
- Schumpeter, J. A. (1912). Stock markets, banks and economic growth. *the american  
economic review*,88,3, 537-558.
- Shaw, G. K. (1992). Foreign direct investment and growth in EP and IS countries.  
*The economic journal*,106,434, 92-105.
- Shleifer, A., & Summers, L. (1986). Stock market development and long run  
growth. *The world bank economic review*,10,2, 323-339.

- Smith, A., & Obstfeld, M. (1994). stock markets, banks and economic growth. *The american economic review*,88,3, 537-558.
- Sönmez, M. (1996). the interregional location of foreign investors in Turkey. *European planning studies*,9,8, 979-994.
- Stein, J. C. (1961). Hedging with stock index futures estimation and forecasting with error correction model. *The journal of future markets*,13,7, 743-752.
- Stiglitz, j. E. (1994). stock market development and economic growth:the case of west african mpnetary union. *international journal of economics and finance*,2,3, 1-7.
- Tachiwou, A. M. (2010). stock market development and economic growth:the case of west African monetary union. *international journal of economics and finance*,2,3, 1-7.
- Torre, A. (2007). Impact of FDI on stock market development: the case of Pakistan. *Internation research journal of finance and economics*, 1-24.
- Unalmis, D. (2011). Economic growth and financial development in Turkey:new evidence. *applied economic letters*,18,6, 595-600.
- Vishny. (1990). Stock market developmet and long run growth. *The world bank economic review*,10,2, 323-339.

- vishny, R. W., Levine, R., & Zervos, S. (1986). stock market development and long run growth. *The world bank economic review*,10,2, 323-339.
- Wang, S. L., & Blomstrom, M. (1992). Foreign direct investment and growth in EP and IS countries. *The economic journal*,106,434, 92-105.
- Weber, C. E. (2001). Structural break, unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Weiss, M. A. (1983). estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregressive models. *the econometric society*,59,6, 1551-1580.
- Wurgler, J. (2000). FDI and economic growth: the role of local financial markets. *Journal of international economics*,64,1, 89-112.
- Yartey, C. A. (2008). Impact of FDI on stock market development :the case of Pakistan. *International research journal of finance and economics*, 1-24.
- Zivot, E., & Andrews, D. (1992). Structural break, unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.
- Zivot, E., & Andrews, D. (1992). Structural break, unit root and the causality between energy consumption and GDP in Turkey. *Energy economics*,26,6, 985-994.