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POLITICAL INSTABILITY AND ECONOMIC GROWTH IN TURKEY

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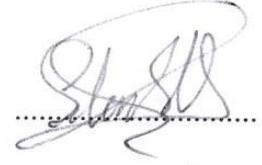
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POLITICAL INSTABILITY AND ECONOMIC GROWTH IN TURKEY
TÜRKİYE'DE POLİTİK İSTİKRARSIZLIK VE EKONOMİK BÜYÜME

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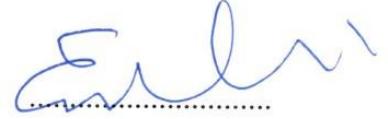
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ABSTRACT

This thesis investigates the relationship between political instability and Gross Domestic Product (GDP) growth rate (%) in Turkey from the first quarter of 1961 to the second quarter of 2017. Proxy variables are constructed which quantify political instability and examine the effect on GDP growth. The relationship between dependent variable and the political instability proxies are examined with the time series regression analyses. Autoregressive Conditionally Heteroscedastic (ARCH) method is used in order to model the heteroscedasticity and volatility effect. Using ARCH (1) model, a strong link is found among many of political instability variables and GDP growth rate of Turkey. According to the empirical results, coup d'états, attempts & memorandums, Cyprus operation & US embargo, ideological & denominational events, Gulf War I & Gulf War II and 1994, 2001 & 2008 economic crisis negatively affected the growth, while elections and regime change were beneficial to the growth. On the other hand, natural disasters and high casualty terrorist bombings had no significant effect on Turkey's economic growth.

Keywords: *Economic Growth, Political Instability, Time Series Regression, Autoregressive Conditional Heteroscedasticity, Economy of Turkey*

ÖZET

Bu çalışmada, politik istikrarsızlığın, Türkiye'nin Gayrisafi Yurtiçi Hâsıla (GSYH) büyüme oranı üzerindeki etkisi araştırılmıştır. Çalışmada bağımsız değişken olarak kullanılan GSYH büyüme oranı 1961 – 2016 yılları arasında çeyreklik dönemleri kapsamaktadır. Politik istikrarsızlığı ölçümlemek için ise, yine bu dönem arasında gerçekleşen ve Türkiye ekonomisini etkileyeceği düşünülen kukla (dummy) değişkenler oluşturulmuştur. Çalışmanın deneysel analizi zaman serisi regresyonu ile oluşturulan model ile test edilmiştir. Kullanılan değişkenlerde, değişken varyanslılık ve volatilité (oynaklık) tespit edilmesi sebebiyle Otoregresif Koşullu Değişen Varyans (ARCH) modeli uygun görülmüştür. ARCH(1) modeli kullanılarak elde edilen istatistiksel olarak anlamlı sonuçlar neticesinde, askeri darbe, askeri darbe girişimi ve askeri muhtıra, Kıbrıs Operasyonu ve Amerikan ambargosu, ideolojik ve mezhepsel olaylar, 1. ve 2. Körfez Harbi ve 1994, 2001 ve 2008 ekonomik krizlerinin Türkiye'nin GSYH büyüme oranı ile negatif ilişki içinde olduğu görülmüştür. Buna karşın, seçimler ve hükümet değişikliği değişkenlerinin, GSYH büyüme oranını üzerinde pozitif etkiye sahip olduğu gözlemlenmiştir. Doğal Afetler ve yüksek sayıda sivil ölüme neden olan terör saldırıları ile GSYH büyüme oranı arasında ise negatif bir ilişki tespit edilmiş, ancak sonucun istatistiksel olarak anlamlı olmadığı gözlemlenmiştir.

Anahtar Kelimeler: *Politik İstikrarsızlık, Ekonomik Büyüme, Zaman Serisi Regresyonu, Otoregresif Koşullu Değişen Varyans Modeli, Türkiye Ekonomisi*

INTRODUCTION

Political instability is one of the key and unignorable determinants of a nation's economic performance. Many economically developed countries have well-constructed and strong political institutions. Their political institutions quality is strongly promote long run sustainable economic growth. Political instability causes risk, and risk is one of the most important factors for a country's financial and economic performance. Therefore, determining the risk caused by political instability is a significant point to be able to understand country's economic conditions and constitute convenient future projections. "There are several reasons why political instability may affect economic growth. Most obviously, violent challenges to the regime may damage or destroy physical capital and affect production levels" Pin, R. J. A. (2008).

In political science, political instability is defined in many different ways. In the most general sense political instability is defined as the propensity of a government collapse. In addition, the incidence of political upheaval or violence in a society, like assassinations and demonstrations are mostly used to define political instability. But there are many more things that induce towards the destabilizing of the political conditions of a country, and more importantly even if there are some similarities between countries in terms of political or social structure, each country has its own political conditions and it is necessary to evaluate each of them separately.

In the global economy, countries' economic performance is deeply connected to the foreign investments. The economic uncertainties existing in the country and all the situations that impact on these uncertainties directly affect the investments. Increasing political tension raises the risk, causing investments to fall and the economic performance of the country to decline. In this thesis, the impact of political instability on Turkey's GDP growth is examined by using variables thought to cause and increase political instability.

Measuring political instability might be difficult because it can be unobservable directly. Political instability is a latent construct; therefore, to proxy for political instability, indicators have to be used that are observable Pin, R. J. A. (2008). Barro (1991) defined proxies as the sum of political revolutions, coup d'états and political assassinations. Aisen and Veiga (2005) defined proxies as the number of major government crisis and number of cabinet changes in order to measure political instability. In this study, political instability is also measured by defining proxies for each variable as the number of event occurred in the related period. However, some papers measure political instability by constructing indexes using discriminant analysis. Cukierman, Edwards and Tabellini (1992) and Alesina et al. (1996) used a different approach, as they add all political events and economic variables in a logit model for predicting the government change's probability and then they used that predicted probability as a dummy for political uncertainty. Also some researchers e.g. Morrison and Stevenson (1971), Hibbs (1973) and Perotti (1996) used principal component analysis to measure political instability.

The main hypothesis of this thesis is: the events that cause political instability have statistically significant negative effects on GDP growth of Turkey. This study covers over a span of 56 years from the first quarter of 1961 to the second quarter of 2017. Political instability dummies are created and used to measure the effect on economic growth. Those dummies are chosen from different fields according to Turkey's political conditions and thought to cause political instability. The dummies used in the thesis are as following; Coup D'états, Attempts & Memorandums, Elections, Government Change, Cyprus Operation and US Embargo, Gulf War I-II, Ideological & Denominational Events, Natural Disasters, High Casualty Terrorist Bombings, 1994, 2001 and 2008 Economic Crisis.

In the quantitative part of the study, a time series analysis is used for modelling the data. Autoregressive Conditionally Heteroscedastic (ARCH) method is used in order to model the heteroscedasticity and volatility effect. According to the empirical results, all political variables have statistically significant negative effects on the GDP except natural disasters and high casualty terrorist bombings.

Although natural disasters and high casualty terrorist bombings also have negative impact on GDP growth, the results are not statistically significant.

This thesis is constructed as follows. Section 2 investigates the literature related to this study. Section 3 briefly explains economic and politic developments of Turkey from the establishment of the Republic. In section 4, dependent and independent variables are briefly explained. In section 5 the quantitative methodology is discussed and the ARCH model is theoretically explained. Section 6 presents the empirical results of the ARCH model, and section 7 concludes.

SECTION ONE

LITERATURE REVIEW

The impacts of political instability on a country's economic performance are becoming an important research field in the world literature. But there is a limited research in Turkey on this field. However politics has always played an important role in Turkey and has led to the decisive influence in the formation of economic conjuncture. This study is constructed in order to fill the deficiency of literature and to observe the effects of political instability on the economy. Many research papers investigate the effect of political instability among countries, but in this study only Turkey is examined in order to evaluate on its own terms. Because political conditions may vary among countries.

ŞANLISOY, S., & Kök, R. (2013) examined the relationship between political stability and economic growth in Turkey between the years of 1987 - 2006. They defined the political instability by using an index (International Country Risk Guide) developed by Political Risk Services (PRS) Group. According to their single equation model, a negative relationship between political instability and economic growth was demonstrated.

Alesina et al. (1996) argued the relationship between political instability and per capita GDP growth in a sample of 113 countries between the years of 1950-1982. They defined political instability as the propensity of a government collapse. According to their empirical results in countries and time periods with a high propensity of government collapse, growth is significantly lower than otherwise.

Feng, Y. (1997) showed that democracy has a positive indirect effect upon growth through its impacts on the probabilities of both regime change and constitutional government change from one ruling party to another. Mo, P. H. (2001) argued the impact of corruption on economic growth with an ordinary least squares estimation. They found that a 1% increase in the corruption level reduces

the growth rate by about 0.72%. And also they showed that the most important channel through which corruption affects economic growth is political instability, which accounts for about 53% of the total effect.

Asteriou, D., & Price, S. (2001) investigated the influence of political instability on UK economic growth by constructing six political instability variables. They found a strong link between economic growth and political instability. According to the results obtained from GARCH-M models, negative effects of instability on growth were found.

Busse, M., & Hefeker, C. (2007) explored the relations among political risk, institution and foreign direct investment in a sample of 83 developing countries between the years of 1984 and 2003. According to their results government stability, internal and external conflict, corruption and ethnic tensions, law and order, democratic accountability of government, and quality of bureaucracy are highly significant determinants of foreign investment inflows. Pin, R. J. A. (2008) showed that longer political regimes caused deceleration in the growth rate. They also argued that regime changes¹ do not affect the acceleration of growth.

Aisen, A., & Veiga, F. J. (2013) empirically determined the effects of political instability on economic growth with panel data analyses in a sample of 169 countries. They found that higher political instability is associated with lower growth rates of GDP per capita. They also found that freedom and ethnic homogeneity have positive effect on growth. Georgiou, M. N.(2015) investigated the relationship between developed countries USA, European Union member states and Japan in terms of democracy, political instability and economic performance. They found that political stability in democratic regimes is related to economic stability and growth.

¹ Pin, R. J. A. (2008) is defined regime change as a three-unit change in Polity IV data in three years or less time period.

SECTION TWO

BRIEF OVERVIEW ON TURKEY'S ECONOMIC AND POLITIC DEVELOPMENT

At the end of the 19th century and the beginning of the 20th century, the Ottoman Empire was in a weak economic position. Domestic resources were insufficient in financing the wars they have participated in and Ottoman Empire was borrowed at very high rates. After years of war, many work areas were closed in the country, the working male population decreased and unemployment reached at high levels due to immigration. In this period, the Ottoman Empire was far from being self-sufficient economically. In this environment, Turkish War of Independence has started, and during the war, all natural, physical and human resources of the country were used and depleted. During the war that lasted four years, the country suffered from lack of resources in many fields. In the early 1920s, the Ottoman Empire was totally collapsed after the War of Independence. This collapse was followed by the establishment of the Republic of Turkey in 1923 under the leadership of Mustafa Kemal Atatürk.

2.1 EARLY YEARS OF MODERN TURKEY (1923 – 1938)

With the declaration of the Republic, it was emphasized that the newly founded state would follow a contemporary and secular way in accordance with the Western norms. Many reforms were made in the early years of Republic in social, cultural and economic fields. However, it was difficult to construct a new state which was destroyed economically and socially because of the war continued for years. In a word, the country had to be rebuilt en masse. In order to discuss the actions to be taken to re-establish and revive the economy and promote the trade activities, Izmir Economic Congress was organized between 17 February and 4

March 1923. Izmir Economic Congress was not only important for the determination of the economic policies in the early years of the Republic, but it also shaped the economic policies for the further years. 1135 people were attended to the Izmir Economic Congress, including representatives from farmers, merchants, industrialists and workers (Parasız, İ. 1998). In the Congress, a number of decisions were taken to determine the economic structure of the country and the direction of the economic policy to be implemented. These decisions aimed at establishing and improving the domestic industry, creating an economic system that prioritized private ownership and respect for property rights. Decisions taken at the Congress were gathered in two sections called "Misak-ı İktisadi" and "Principles Regarding Farmer, Merchant, Industrialist and Worker Groups".

A number of decisions from the first section (Misak-ı İktisadi) are as follows (Yavi, 2001, pp. 282- 283):

- Luxury imports would be avoided,
- Foreign capital would be allowed only if it contributes to economic development,
- Domestic production would be supported.

A number of decisions from the second section (Principles Regarding Farmer, Merchant, Industrialist and Worker Groups) are as follows (Yavi, 2001, p.283):

- Regie Company² will be liquidated,
- Tobacco farming and trade will be free. The exported tobacco must be cultivated, and the taxes will be deducted from the consumer,

² Regie Company is a French tobacco monopoly established to cover the foreign debts of the Ottoman Empire.

- Ashar³ will be abolished, and a new favourable tax system will be applied,
- Dividend tax will be converted into income tax,
- Agricultural Bank will be reorganized,
- An Industrial Bank will be established to give credit to industrialists,
- The Industrial Promotion Law will be made to meet current needs and will be extended for 25 years after five years,
- Cabotage will be provided in Turkish ports,
- Railways, ports and other transport infrastructures will be improved,
- Hours of labour will be rearranged and the people under the age of 18 will not be able to employed,
- The entire workforce will be entitled to labour-union.

In line with the decisions of the Izmir Economy Congress, Atatürk stated that, in principle, the private capital will be allowed, which can be beneficial to the economy. However, at that time the capital flow to developing countries from the developed countries was at a limited level.

Another important event that affected the country's economy in the early periods of the Republic was the Lausanne Peace Treaty. This treaty affected Turkey not only politically, but also economically. The most important result from the economic aspect of the Lausanne Peace Treaty was the removal of capitulations. But also Turkey undertook the remaining debts of the Ottoman Empire according to the Treaty. However, because of the disputes between Turkey and creditors the agreement was signed on June 13, 1928. The Trade Agreement signed in addition to the Lausanne Peace Treaty, blocked the economic policies of Turkey for five years, and with a few exceptions it was lifted the export and import bans and guaranteed that it wouldn't apply new bans on import and export. Additionally, according to the Trade Agreement customs, tariffs would not be changed for five

³ Ashar is the tax received from the villagers at the rate of 10% for the agricultural products they produce.

years. Also according to the agreement Turkey was obliged to keep customs tariffs on goods imported from the U.K., France, Italy, Japan, Greece, Yugoslavia and Romania at the same level of 1916 Ottoman tariffs.

In the early years of the Republic, several banks were established such as “Türkiye İş Bankası”, “Türkiye Sanayi ve Maden Bankası”, “Türkiye Sanayi Kredi Bankası”, “Emlak ve Eytam Bankası” and “T.C. Merkez Bankası” (Central Bank of the Republic of Turkey) for financing commercial and industrial fields due to the decisions of the Izmir Economic Congress. Also, Ziraat Bankası (Agricultural Bank) was reorganized. In the first years of the Republic, foreign trade in the country's national income had a considerable share, and outward-looking economic policies led to opening six international banks (Paçacı, C., 1998, p. 3400).

Also considerable economic activities were carried out in transportation. Transportation network was highly important both economically and militarily. During the Ottoman period, the operation of the railroads was dominated by foreign companies. In 1924, the law on the nationalization of railways was accepted in the National Assembly. Then, in the following years, the railways were extended throughout the country. Another important breakthrough was made in the marine transportation. Again, during the Ottoman period, the operation of the maritime sector was mostly dominated by foreign companies. In 1926, the Cabotage Law was enacted and the development of Turkish maritime trade and transportation was ensured. In addition, there have also been developments in the aviation industry, and an aircraft factory was opened in Kayseri in 1926.

Between the years of 1923 – 1929, Turkish economy was stimulated by the new policies. However, in 1929 a global economic crisis called “Great Depression” occurred, which negatively affected the newly formed and developed Turkish economy. The Great Depression was the greatest crisis of the global economy since capitalism emerged. The first important effect of the crisis was devaluation of lira. Then more importantly, the prices of exported goods fell rapidly and this price reduction had a significant negative impact on the trade balance. Especially, the

prices of agricultural commodities fell catastrophically, and it caused a significant decline in agricultural production.

Table 2.1 Foreign Trade Indicators between 1923 – 1929 (Thousand Turkish Lira)

| Years | Export | Import | Foreign Trade Balance | Foreign Trade Volume |
|-------|---------|---------|-----------------------|----------------------|
| 1923 | 84,651 | 144,784 | -60,138 | 224,440 |
| 1924 | 158,868 | 193,611 | -34,793 | 352,479 |
| 1925 | 192,428 | 241,615 | -49,141 | 434,843 |
| 1926 | 186,423 | 234,700 | -48,277 | 421,123 |
| 1927 | 158,421 | 211,398 | -52,977 | 369,069 |
| 1928 | 173,537 | 223,532 | -49,995 | 397,069 |
| 1929 | 152,214 | 256,296 | -101,082 | 411,510 |

Source: Ticaret Bakanlığı ve 50 Yıl, 1974, p., 48

At the beginning of 1930, some precautions were taken against the Great Depression. The first aim of these precautions was to balance public expenditures in accordance with public revenues. The second aim was to narrow the foreign trade deficit by limiting imported products. The statist policies were applied in the following period in order to reinvigorate and expand the economy. The first attempts for the statist policies were the First Five-Year Industry Plan which was developed by the Soviet specialists in and promoted by the Soviet Union. This statist industrial plan entered into force on April 17, 1934. The main purpose of the plan was the implementation of an effective industrialization policy for the development of Turkey's economy. The First Five-Year Industry Plan covered only the industrial sector, not the agricultural and services sector.

The five industrial sectors that were to be established with the First Five-Year Industrial Plan are as below (Sevgi, 1994, p. 51):

- Weaving Sector (Cotton, Hemp, Wool)
- Mining Sector (Iron-Steel, Sulphur, Copper)
- Paper Sector (Cellulose)
- Chemical Sector (Rayon, Phosphoric Acid, Superphosphate, Lime Paste, Match)
- Stone and Soil Sector (Glass, Cement, Ceramic)

The main objectives of the First Five-Year Industry Plan were as follows (İnan, 1972, p. 20):

- Industry branches, where the main raw materials are grown in the country, or can be supplied in a short time, were prioritized,
- These factories will be built by the state, as large capital and technical equipment will be needed,
- The production capacities of the factories to be established will be positively correlated with the need and consumption.

It was planned to establish 20 factories with an investment of 43 million liras in the above mentioned industrial branches. The financing of these factories were covered by Sümerbank and Türkiye İş Bankası. During the financing of the state industrialization process, the domestic and external debt burden was not increased and a stable monetary policy was followed and a deficit financing model was not preferred. The main source of financing was taxation on consumption goods.

Before the end of the First Five-Year Industrial Plan, the preparations for the Second Five-Year Industrial Plan were started after 1936. The Second Five-Year Industry Plan gave priority to the production of intermediate goods and investment goods, contrary to the first plan. In addition, it gave priority to the infrastructural developments such as electrification, mining and ports. However, the Second Five-Year Industrial Plan was not applied due to World War II.

One of the most important developments in terms of monetary policy in this period was the establishment of the Central Bank of the Republic of Turkey on 11

June 1930 in accordance with the law no. 1715. The functions of the bank were expanded to provide financing for public institutions with a law amendment in 1938. As a result of the statist policy implemented in terms of economic development, important state banks founded between the years of 1929-1938. When the existence of the local banking system was over, the number and the efficiency of the state banks were increasing. In this period, 21 local, 2 state and 9 foreign banks were closed.

Due to the decrease in tax revenues after the Great Depression of 1929, the Economic Depression Tax was introduced in 1931, the Equalisation Tax was introduced in 1933 and the Air Force Aid Tax was introduced in 1936. These new taxes were collected from working class and income taxpayers.

The most important development in the agricultural sector was the establishment of the Soil Products Office that was established in 1932 as an affiliate of the Agricultural Bank (Ziraat Bankası), and it became an independent public institution in 1938. Public entrepreneurship in the field of mining has gained momentum in this period with the establishment of the Mineral Research and Exploration Institute and Etibank in 1935. As a first step, French and German partnership's authorization of operating coal and copper mines was cancelled in 1936. Later, with the expropriations, production and exploration of mines, especially chromium and iron were expanded.

Table 2.2 shows the gross domestic product (GDP) of Turkey between the years of 1923 – 1938. The values in the table are the real GDP and inflation adjusted. According to the table, a considerable increase appears on the value of GDP. During this period, GDP was only decreased in 1927, 1932 and 1935 compared to the previous year. Despite the Great Depression, the GDP was markedly increased in the fifteen-year period following to the foundation of the Republic of Turkey.

Table 2.2 Gross Domestic Product, 1923 – 1938 (In purchasers' value and in constant prices)

| Years | Value (Million Lira) | Growth Rate (%) | Value (Million Dollar) |
|-------|----------------------|-----------------|------------------------|
| 1923 | 2 959 | - | - |
| 1924 | 3 392 | 14.8 | - |
| 1925 | 3 817 | 12.9 | - |
| 1926 | 4 512 | 18.2 | - |
| 1927 | 3 937 | -12.7 | 13 554 |
| 1928 | 4 362 | 10.8 | 13 843 |
| 1929 | 5 301 | 21.5 | 14 138 |
| 1930 | 5 431 | 2.5 | 14 440 |
| 1931 | 5 877 | 8.2 | 14 748 |
| 1932 | 5 253 | -10.6 | 15 062 |
| 1933 | 6 065 | 15.5 | 15 383 |
| 1934 | 6 447 | 6.3 | 15 711 |
| 1935 | 6 252 | -3.0 | 16 046 |
| 1936 | 7 694 | 23.1 | 16 352 |
| 1937 | 7 811 | 1.5 | 16 637 |
| 1938 | 8 550 | 9.5 | 16 926 |

Source: Turkish Statistical Institute

2.2 ECONOMIC SITUATION AND POLICIES DURING THE WORLD WAR II (1939 – 1945)

Newly founded Republic of Turkey faced another exogenous shock during 1939 – 1945 due to the World War II. Although Turkey did not participated in World War II, it was substantially affected by the economic and political consequences. During the war period, extraordinary laws have been legislated and very important political decisions were made.

In the next 8 years after the Great Depression, Turkey took considerable steps for economic progress with the statist industrialization, and many economic reforms were developed under the leadership of Atatürk. But however, with the death of Atatürk in 1938 and the beginning of World War II in 1939, the economy was severely weakened and these policies began to fail. Despite the policy of not participating in the war, the developments during the war never provided a guarantee for this and resulted in an increase in the defence spending due to the position of being poised for battle. To be able to cover the defence expenses, Turkey started to coining. Nascent Republic was really inexperienced to manage the war economy and as a consequence of coining, inflation started increase rapidly. Besides, the state and the private sector investments declined and almost halted. In addition, due to the fact that most of the working population was called up, production in agriculture and industry was decreased and consumption expenditures were increased rapidly. In this period, the import was nearly halted, and the stock of goods was decreased respectively. Also, the total supply remained considerably below the total demand, and this caused a panic across the country. Due to the demand and supply gap and famine, the prices were increased rapidly.

Turkey's GDP data between the years of 1939 – 1950 are given in the Table 2.3. The values in the table are the real GDP and inflation adjusted. According to the table, during the war period the Turkey economy was mostly in the recession and the value of the GDP were averagely around 7 million lira. As it is seen on the table, after the end of the year the GDP growth has started to increase and it has reached at 37.133 million lira in 1948.

Table 2.3 Gross Domestic Product, 1939 – 1950 (In purchasers' value and in constant prices)

| Years | Value (Million Lira) | Growth Rate (%) | Value (Million Dollar) |
|-------------|----------------------|-----------------|------------------------|
| 1939 | 9 139 | 6.9 | 17 429 |
| 1940 | 8 702 | -4.8 | 17 728 |
| 1941 | 7 800 | -10.4 | 17 952 |

| | | | |
|-------------|--------|-------|--------|
| 1942 | 8 230 | 5.5 | 18 143 |
| 1943 | 7 424 | -9.8 | 18 337 |
| 1944 | 7 047 | -5.1 | 18 532 |
| 1945 | 5 970 | -15.3 | 18 729 |
| 1946 | 7 885 | 32.1 | 19 074 |
| 1947 | 8 212 | 4.1 | 19 493 |
| 1948 | 37 133 | - | 19 922 |
| 1949 | 35 282 | -5.0 | 20 359 |
| 1950 | 38 598 | 9.4 | 20 807 |

Source: Turkish Statistical Institute

Due to the emerging developments, some critical and extraordinary injunctions were taken to manage the war period and keep safe the economy from the losses caused by the war. On 18 January 1940, Turkish Security Law has gotten through and on 26 January 1940 it has entered into. The Turkish Security Law contained 70 articles and the first article was defining the Law in general. According to the first article, in case of exceptional situations such as partial or full mobilization, the Council of Ministers had possession of special authorities and powers. Some of the articles of the law that contain these special powers and authorities are as follows:

- The government was entitled to control industrial and mining companies to produce as much as meet the public and national security requirements. And for this purpose, the government could provide credits, materials, workers and skilled workers to the companies.
- The government was entitled to buy the produced goods by adding a certain amount of profit margin, or could confiscate by paying the price of the goods.
- The government was entitled to confiscate to flour mills and industrial and mining corporations.

- The government also had the power to impose various restrictions on exports and imports.
- Workers, technicians, engineers, specialists and other officials assigned by the government cannot leave their place of work without a valid excuse.
- If the owners of industry and mining companies do not fulfil the regulations required by the government, various penalties, including confiscation of the companies, could be implemented.
- To prevent uncontrolled price increases, the government made it compulsory to bill sales above 100 kuruş.

In 1941, the violence of World War II was escalating and its economic effects on Turkey were going from bad to worse. While the country was struggling with famine and poverty, inflation continued to increase. Even the most basic necessities of the people have become unattainable. Therefore, the government tightened the Turkish Security Law executions and rigid practices implemented. The government had also power on the policies of sales and production and was entitled to direct intervention. Developing price policies that are incompatible with these laws was strictly prohibited, and also stockpile was forbidden to do.

Meanwhile, the Prime Minister Refik Saydam died on 8 July 1942, Şükrü Saraçoğlu became the Prime Minister and the new government was formed. The new government carried out a new policy based on “market place economy” instead “statist economy”. Government control over food and agricultural products was minimized. However, the private sector took advantage of it, and again, prices increased rapidly. In line with these developments, the government needed new legislative regulations immediately.

At the beginning of November 1942, Property Tax Law entered into force to prevent opportunism over the prices. According to Prime Minister Şükrü Saraçoğlu and Finance Minister Fuat Ağralı, the main objectives of the new law were, to recall money from the market for struggling with hyperinflation, to collect

tax from those who have made a lot of money by taking advantage of the war and to increase the public revenues. This law was applied with harsh conditions. Firstly, some commissions were founded in the city centres to detect peoples' wealth and income for calculating the tax amount that must be paid. Muslims and non-Muslims were taxed at different rates. The main reason of this was that most of the commercial activities were held by non-Muslims and minorities. However, improper practices caused negative reactions and were interpreted as an evacuation policy against non-Muslims and minorities. The law obliged to pay tax debts within 15 days. In case of non-redemption of tax liabilities, it was collected through levying estates and assets. If this was not possible, debt was collected through the practice of "paying debtors by working physically". According to the consequences of this law enforcement, tax amount of 314,920,940 Lira were collected from 114,368 taxpayers with rate of 74% payment (Kafaoğlu, 2002, p. 63). At the same time, there has been a noticeable decrease in the method of financing the economy by printing money. According to the balance sheet of the year 1942 budget, a total amount of 913,751,349 Lira was spent in that year. One-third of these expenditures were made with the money collected by the way of "Property Tax Law".

However, there have been some political, social and cultural consequences of this law. In 1943, particularly some minorities and non-Muslims sold their homes and offices in order to be able to pay the tax liabilities. Many minority citizens migrated and between the years of 1945 – 1950, migration rate increased almost 50%. It also negatively affected the economy due to the decreasing production as a consequence of closing up the businesses. Especially after the non-Muslim merchants took down the shutters who were effectively operating in the fields of commerce, import and export; again the prices started to increase. All of these developments led to non-Muslims, and others who were negatively affected from the "Property Tax Law", carried out policies against the CHP in the coming years. This situation also strengthened the Democrat Party in the coming years, and played a role in the Justice Party's coming to power, as those groups supported the Democrat Party and worked for its success. Also this situation has been one of the

most important factors leading to end of “statism”. “Property Tax Law” was officially abolished on March 15, 1944.

2.3 POST-WORLD WAR II ERA ECONOMIC AND POLITIC SITUATION (1945 – 1950)

There have been benefits that Turkey was not participated in the World War II, or in other words, the negative effects of the War were limited. Particularly agricultural and industrial sectors were the one most negatively affected by the War. Decreasing production and increasing domestic demand, caused hyperinflation and this led to famine. On the other hand, foreign trade was increased in this period. But after the War, this situation changed because almost all countries in Europe, which were the Turkey’s most important trade partners, joined the War, and their economies have collapsed. In this period, due to the great rise of the United States, Turkey started to carry out the US-based policies both in economics and politics. So, in the post-World War II era, close relations with the USA were established, and in almost every field the effects of the USA were seen.

After the War, debates on “statism” have been continued and opponent voices have started to increase in the National Assembly. Some members of the National Assembly such as Adnan Menderes, Emin Sazak, Fuat Köprülü, Celal Bayar and Refik Koraltan opposed to the statist policies and alleged that the statist policies caused famine and poverty throughout the country. These members resigned from the Republican People's Party and founded the Democrat Party on 7 January 1946. In the general elections held in July 1946, the Democrat Party won 62 deputies, which legally started the multi-party era in the country.

In this period, on the one hand, Soviet pressures were continuing to allow Russian shipping to flow freely through the Turkish Straits and tensions arose between two countries as Turkish government did not accept Soviet government request. On the other hand, Turkey was strengthening its relations with the West. Turkey became a member of the International Monetary Fund (IMF) in 1947 and

Turkey received military and \$100 million financial aid from the USA as part of Truman Doctrine.

2.4 DEMOCRAT PARTY ERA (1950 – 1960)

Despite warm relationships between the US and financial support, Republican People's Party(RPP) were losing power against Democrat Party, in context of rising domestic dissatisfaction due to the statist policies. Meanwhile, general elections were held on 14 May 1950, and the newly formed Democratic Party (DP) won a landslide victory as receiving 53.4% of the votes and gained 408 seats in the National Assembly against the RPP's 69.

“Democrats had been the most vocal supporters of free-market economics since 1946 and that they implemented liberalization policies with vigour once they were in office” (Zürcher, p. 224, 2004).Democrat Party's economic policies are as given below according to their government programme (Takım & Esen, pp. 10-14, 2011):

- In order for the capital to operate safely within the economic system, private enterprise and public enterprise must be in compliance.
- The market must not be intervened, except a compulsory situation. In this context, the most important task of the government is to prevent the factors that remove or restrict the competition.
- Rather than investing limited resources in the agricultural sector, all incentives and subsidies should be made to improve the farmer's production, such as mechanization, improvement of credit conditions, establishment of sample farms, improvement of plant and animal breeds.
- As the majority of the population are making their livings from agriculture, the agriculture is supposed to be the corner stone of the economics, and the costs of agricultural products should be reduced and domestic and foreign market conditions should be improved.

- The main objective of fiscal policies should be to prepare a balanced budget.
- Current expenditures should not be financed by borrowing.
- Long-term borrowing should be promoted in order to increase production.
- Tax should be collected according to peoples' income and there shouldn't be tax addition in order to increase public revenues.

As it is mentioned in the economic programme of DP, agricultural sector was one of the mostly promoted sectors in that period. The cultivation areas, which were 14,542 hectares in 1950, reached 23,264 hectares in 1960, when public agricultural lands were distributed to 18,000 families and cultivated. In 1950, 60% of the total agricultural production was from plant production, and 37% from animal production. With modernization and the support of the United States, the number of tractors has increased from 16,585 to 42,135 in 10 years. Between the years of 1950-1960 plant-food usage increased four times, wheat production increased from 4.000.000 tons to 8.500.000 tons and beetroot production increased from 850.000 tons to 4.500.000 tons (Takım, pp.168, 2012). As a result, DP's agricultural policies played an important role in the economic development of the country in that period.

During the Democratic Party period, especially mining, sugar, cement, woven, iron and copper production increased in the industrial sector. Fixed capital investments have been increased from 1 billion lira in 1950 to 8 billion lira in 1960. The share of total investments in GDP during Democratic Party period was 9.6% in 1950, 14.3% in 1955 and 16% in 1960 despite the decreasing growth trend. Turkey's industry has been growth at the average rate of 10% between the years of 1950 – 1957 (Takım, pp.168, 2012). However, foreign exchange bottleneck increased especially between 1954 and 1957 and as a precaution the government limited the import. Thus, DP intervened the market and restricted the liberalization for the first time after they founded. The decrease in imports correspondingly

affected imports of intermediary and investment goods in the industry and therefore industrial production decreased.

Between the years of 1950 – 1960, Turkey was growth with the average rate of 6.7% (see Table 2.4) with a major contribution of agricultural production. While the average growth rate was around 11% between 1950 and 1953, the economy has been faced with foreign exchange stringency, and the GDP growth rate plunge to below zero in 1954. But however, as it is seen on the Table 3.4, the real value of GDP hasn't decreased significantly. So, according to the table, it can be said that the effect of foreign exchange stringency was limited on economic growth.

Table 2.4 Gross Domestic Product, 1950 – 1960 (In purchasers' value and in constant prices)

| Years | Value (Million Lira) | Growth Rate (%) | Value (Million Dollar) |
|-------------|----------------------|-----------------|------------------------|
| 1950 | 38 598 | 9.4 | 20 807 |
| 1951 | 43 536 | 12.8 | 21 351 |
| 1952 | 48 739 | 12.0 | 21 952 |
| 1953 | 54 210 | 11.2 | 22 569 |
| 1954 | 52 655 | -2.9 | 23 204 |
| 1955 | 56 912 | 8.1 | 23 857 |
| 1956 | 58 763 | 3.3 | 24 540 |
| 1957 | 63 417 | 7.9 | 25 250 |
| 1958 | 66 308 | 4.6 | 25 981 |
| 1959 | 69 373 | 4.6 | 26 733 |
| 1960 | 71 391 | 2.9 | 27 506 |

Source: TURKSTAT

Another important point on the DP's monetary policies was that, 10% of the total bank credits were given to the public sector, and 90% of the total bank credits were given to the private sector between the years of 1950 – 1953. And in the period of 1954-1960, the share of the public sector in the bank credits increased to 20%, and the share of the private sector decreased to 80% (Takım, p. 172, 2012).

In the Democratic Party period, liberal economic policies were followed; foreign capital and the private sector were supported. But however, liberalist policies have been interrupted due to the internal and external factors. Therefore, the statist effect has been started to emerge particularly from 1954. As a result of this, the government has had to followed mixed economy policies after this period.

2.5 NEW ERA: NEW CONSTITUTION, “PLANNED ECONOMY” AND DEBT CRISES (1961 – 1980)

In 1960, DP was overthrown by a military coup and modern Turkey has firstly experienced military intervention since the Republic was founded. “Military rule was transitional and ended quickly after the adoption of a socially progressive constitution in 1961, which provided more checks and balances in the overall political process” (Celâsun & Rodrik, p. 621, 1989). National Unity Committee, which carried out the military coup of 1960, made a new constitution in 1961 and conducted a constitution referendum. The new constitution entered into force by accepting 61% of the votes. After the constitution referendum, on 15 December 1961 general elections were held, and again, the country has started governing by civilians. According to the elections’ result, RPP won 173 of the 450 seats, and Justice Party (JP) won 158 of the 450 seats, which was newly founded as a continuation of DP.

In the 1960s, the economy was governed by five-year development plans. These five-year plans have been organized at the macroeconomic level. Industry sector has chosen as the targeted sector in all five-year plans and import-substitution industrialization based policies have been applied. Between the years of 1960 – 1980, in terms of product the industrial goods with high added value, many factories established in various cities.

In the planned economy period, industry sector growth rapidly compared the other major sectors due to the followed projections and investments. But

however, the targeted growth rate was not achieved for all major sectors during these periods (see Table 2.5 and Table 2.6).

Table 2.5 Agriculture, Industry and Services Sectors Growth Rates Target and Realization in I. – II. Plan Periods (Annual Average % Changes)

| | I. Plan (1963 - 1967) | | II. Plan (1968 - 1972) | |
|-------------|-----------------------|-------------|------------------------|-------------|
| | Target | Realization | Target | Realization |
| Agriculture | 4.2 | 3 | 4.1 | 1.8 |
| Industry | 12.3 | 10.9 | 12 | 9.1 |
| Services | 6.8 | 7.2 | 6.3 | - |

Source: Ministry of Development, TURKSTAT

Table 2.6 Agriculture, Industry and Services Sectors Growth Rates Target and Realization in III. - IV. Plan Periods (Annual Average % Changes)

| | III. (1973 - 1977) | | IV. Plan (1979 - 1980) | |
|-------------|--------------------|-------------|------------------------|-------------|
| | Target | Realization | Target | Realization |
| Agriculture | 3.7 | 1.2 | 5.3 | 0.3 |
| Industry | 11.2 | 8.8 | 9.9 | 2.4 |
| Services | 7.7 | 7.3 | 8.5 | 2.6 |

Source: Ministry of Development, TURKSTAT

Especially, between 1960 and 1972 were the years of rapid growth with the average growth rate of 6%. Turkey has been faced some serious economic problems between the years of 1970 – 1979 due to the internal and external developments such as oil shock, Cyprus Operation and US embargo i.e. In this period, real sector production was doubled. But at the same time, deterioration of the international terms of trade due to the global recession decreased Turkey's export while import continued to increase. Rapid growth policies have been maintained without taking necessary measures against these negative developments. Investments in both public and private sector have been continued. High growth rates were largely provided by foreign debt. In 1975 foreign exchange reserves were depleted. As the value of the Turkish lira continued to increase, the ratio of external debt to GDP

increased from 9% to 24%. When foreign banks stopped giving credit, a huge liquidity problem arose in 1978. Between 1978 and 1979, the growth started decreasing rapidly and inflation reached unprecedented astronomic levels (around 100%). The growth of agricultural, services and industry sectors significantly decreased in the years 1978 and 1979 (see Table 2.6). Also overall growth rate has been also rapidly decreased and plunged below zero in these years (see Table 2.7).

Table 2.7 Gross Domestic Product, 1960 – 1980 (In purchasers' value and in constant prices)

| Years | Value (Million Lira) | Growth Rate (%) | Value (Million Dollar) |
|-------------|----------------------|-----------------|------------------------|
| 1960 | 71 391 | 2.9 | 27 506 |
| 1961 | 72 619 | 1.7 | 28 227 |
| 1962 | 77 030 | 6.1 | 28 931 |
| 1963 | 84 291 | 9.4 | 29 652 |
| 1964 | 87 782 | 4.1 | 30 391 |
| 1965 | 90 078 | 2.6 | 31 149 |
| 1966 | 100 629 | 11.7 | 31 936 |
| 1967 | 105 159 | 4.5 | 32 750 |
| 1968 | 31 425 049 | - | 33 585 |
| 1969 | 32 707 548 | 4.1 | 34 442 |
| 1970 | 33 765 132 | 3.2 | 35 321 |
| 1971 | 35 644 700 | 5.6 | 36 215 |
| 1972 | 38 291 639 | 7.4 | 37 132 |
| 1973 | 39 540 780 | 3.3 | 38 072 |
| 1974 | 41 752 876 | 5.6 | 39 036 |
| 1975 | 44 748 268 | 7.2 | 40 078 |
| 1976 | 49 429 503 | 10.5 | 40 915 |
| 1977 | 51 113 351 | 3.4 | 41 768 |
| 1978 | 51 881 586 | 1.5 | 42 640 |
| 1979 | 51 557 767 | -0.6 | 43 530 |
| 1980 | 50 295 991 | -2.4 | 44 438 |

Source: TURKSTAT

As a result of these developments, Prime Minister Süleyman Demirel and his government declared a new stability program on 24 January 1980. The main content and decisions of this program can be summarized as below:

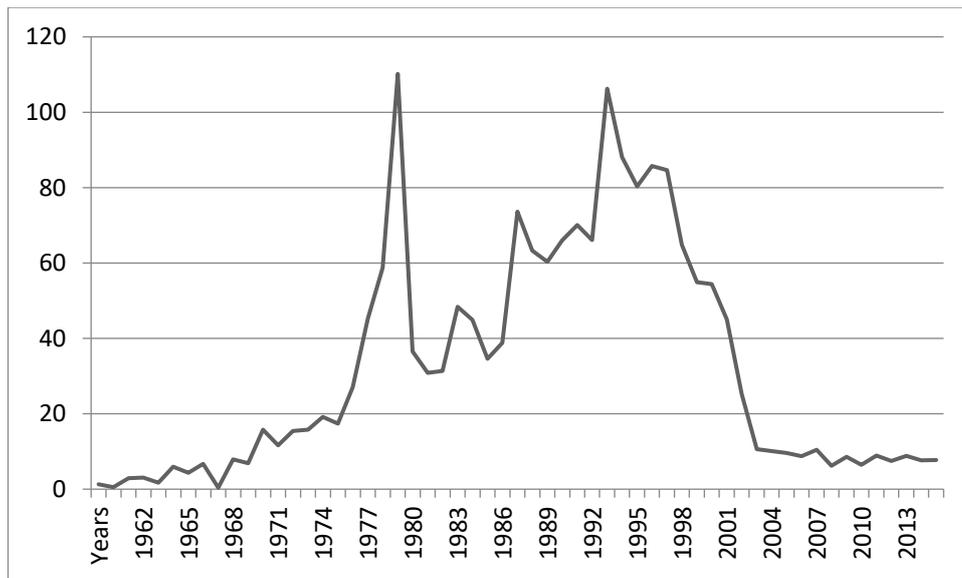
- Turkish Lira devaluated at the rate of 32.7%, and the exchange rate would be announced daily.
- Measures would be taken to limit the impact and the share of the state on the economy. Prices would be formed according to supply and demand without any intervention.
- The public share in the economy would be reduced and the private sector would be encouraged.
- Subsidies have been removed except fertilizer, energy and transportation.
- Foreign trade was liberalized and foreign capital investments were encouraged.
- Export was encouraged with tax refund, low interest loan, customs exemption and some other incentives.

2.6 GLOBALIZATION PROCESS; TRANSITION TO FREE MARKET ECONOMY (1981 – 2016)

Compared to the economic policies observed in 1960, 1980's economic policies pushed industrialization into the background. In this process (also called as “neoliberal model”) development strategies were shifted from industrialization to an economy model based on exports of lower added value products, which would provide foreign currency entry. One of the main targets of the 24 January stabilization program was to integrate the economy into the international markets and the globalizing world. But, after this period the budget deficit started to increase, and increasing budget deficit caused the inflation to increase, and increasing inflation caused the interest rates to increase and again this caused public debt to increase in a vicious circle. The rapid rise of the inflation in this period can

be shown in Figure 2.1. At the beginning of 1990s, public debts have reached at the dangerous levels and in 1994 economic crisis has been occurred. 1994 crisis have been explained in the next section in details.

Figure 2.1 Inflation (%) Between 1960 and 2016



After the 1994 crisis, the problematic economy was tried to dodged by some “save the day” interventions and debts received from International Monetary Fund (IMF). However, in the beginning of the 2000s alarm bells started to ring again and two crises have been burst on November 2000 and on February 2001. February 2001 crisis is also known as the biggest economic crisis of the Republic of Turkey until that day, and it is detailed explained in the next section.

Since the end of 2002, in the last 14 years, Turkey's economy has been shaped by the policies of the Justice and Development Party (AKP). The economic policies were the primary elements of the AKP's government programme in the first periods of their ruler-ship. The main economic indicators are displayed in Table 2.8, and according to the table, Turkey's GDP has been increased by around 3.5 times and per capita income has been increased by around 3 times in fourteen

years. In the same period, average inflation was approximately 10%, which was significantly low compared to the previous period. However, the unemployment rate was increased compared to the past. In addition that, Turkey's debt stock has increased from 366 billion Lira to 2,953 billion Lira in the last 14 years. Also the government has acquired \$ 60 billion financial resources by privatization. In spite of that, treasury's external debt increased by more than 300%, and public sector's debt increased by around %2000 between 2002 and 2016.

Table 2.8 Main Economic Indicators Between 2002 and 2016

| | GDP (Billion US Dollar) | Per Capita GDP (USD) | GDP Growth (%) | Inflation (%) |
|------|-------------------------|----------------------|----------------|---------------|
| 2002 | 238.42 | 3.492 | 6.43 | 44.96 |
| 2003 | 311.82 | 4.565 | 5.6 | 25.30 |
| 2004 | 404.78 | 5.775 | 9.64 | 10.58 |
| 2005 | 501.41 | 7.036 | 9.01 | 10.14 |
| 2006 | 552.48 | 7.597 | 7.11 | 9.60 |
| 2007 | 675.77 | 9.247 | 5.03 | 8.76 |
| 2008 | 764.33 | 10.444 | 0.85 | 10.44 |
| 2009 | 644.96 | 8.561 | -4.7 | 6.25 |
| 2010 | 771.87 | 10.079 | 8.48 | 8.57 |
| 2011 | 832.54 | 10.444 | 11.13 | 6.47 |
| 2012 | 873.98 | 10.497 | 4.79 | 8.89 |
| 2013 | 950.6 | 10.822 | 8.49 | 7.49 |
| 2014 | 934.16 | 10.404 | 5.2 | 8.85 |
| 2015 | 859.79 | 10.877 | 6,1 | 7.67 |
| 2016 | 863.71 | 10.8 | 2.9 | 7.78 |

Source: World Bank, Turkstat

SECTION THREE

DESCRIPTION OF THE DATA

3.1 DEPENDENT VARIABLES

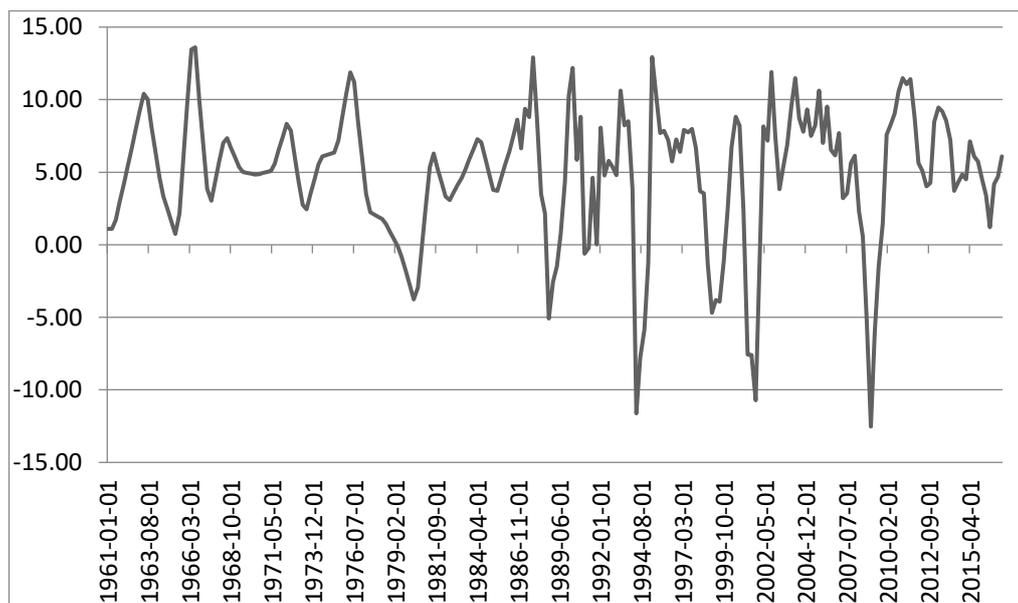
In this thesis, GDP growth rate or in other words economic growth rate is used as the dependent variable which is one of the primary economic indicators to gauge the health and the performance of a country's economy. GDP growth rate is the percentage (%) change in country's gross domestic product (GDP) from one period to the next. The GDP represents the total monetary value of all goods and services produced over a period of time in the country, and it indicates the size of the economy. Mainly, GDP growth is driven by personal consumption, business investment, government spending and net trade. The basic notation of the GDP growth rate is as following:

$$(GDP\text{GrowthRate } \%)_t = \frac{(GDP)_t}{(GDP)_{t-1}} \times 100 \quad (3.1)$$

Growth rate is a useful and important economic indicator which needs to be interpreted rigorously. It must be interpreted by taking into consideration the country's economic conditions and development level. For example, while the developed countries' economies are growing by on an average rate of 2%, the developing countries' economies are growing averagely 5%. This does not mean that developing countries economically outperform in comparison with developed countries. And too high levels of growth are not necessarily a good thing, but sustainable growth is necessary to balance everything especially for a stable inflation rate. Also governments don't want all growth to be from the demand side, and they want a mixture of short run demand fueled growth and long run supply that growth, and that provides sustainable growth without too much inflation. Negative growth rate refers to a contraction in a country's economy, and in other words, it indicates that the economy is entered recession.

Figure 3.1 shows the Turkey's seasonally adjusted quarterly GDP growth rate on the same period of the previous year between the years of 1961-2017. The data is from Organization for Economic Co-operation and Development (OECD). According to the chart, the rate growth has been reached an all-time high of 13.61 percent in the second quarter of 1966 and a record low of -12.53 percent in the first quarter of 2009. Turkey's economy has been entered recession seven times between the years of 1961 and 2017. As is seen from the chart, Turkey's growth rate is very volatile and not sustainable. And the main purpose of this thesis is to examine the impact of political instability on this volatility.

Figure 3. 1 Growth Rate (%) on the same period of the previous year in Turkey since 1961



3.2 INDEPENDENT VARIABLES

Political instability can be explained in various ways depending on the country's regime, socioeconomic status, religion, geopolitical position and so on. In this thesis, twelve dummy variables, which are thought to best explain the

political instability and are thought to affect the Turkish economy, were created and used. Brief explanations of those proxies are as follows.

3.2.1 Government Change

“Government Change” is a dummy variable for government changes from one party to another. In Turkey politics, after the transition to a multi-party system, governments have been changed many times not only by the reason of elections, but also by reason of disagreements between coalition governments and because of coup d’états. This dummy variable includes all governmental changes in Turkey between 1961 – 2017.

3.2.2 Elections

“Elections” is a dummy variable including general elections, local elections and constitutional referendums between the years of 1961 – 2017. In Turkey, general and local elections usually held in March every four years. Between 1961 and 1974, fifteen general elections were held in Turkey. After the 1960 coup d’état, the country was governed by military until 1961 October general election. According to the results of overall general elections, government was changed from one party to another seven times.

3.2.3 Coup D’états, Attempts & Memorandums

This dummy is created in order to demonstrate the impact of coup d’état, attempts and military memorandums on economic growth of Turkey.

In Turkish political history, the military has always been an effected and a powerful complexion. For example, in the Ottoman Empire, the military played a key role as the territories was expanding by the power of army. In the last days of

the empire, the army also played an important role in the establishment of modern Turkey. After the establishment of the Republic of Turkey in 1923, the army remained outside politics until 1960. And in 1960 the first military coup in modern Turkey took place and the armed forces took over administration throughout the country. The 1960 coup was overthrown the Democratic Party government, who had been in power for 10 years and was the first government to be elected after the transition to the multi-party system. Prime Minister Adnan Menderes was executed with two other ministers. President Celal Bayar was also sentenced to death but he wasn't executed because of his old age. After the coup, the country was ruled by military government until October 1961. This was the first coup of the modern Turkey, and further military interventions occurred in the following years.

In 1971, a new military intervention emerged which was also known as "coup by memorandum". The army remained behind the scenes, instead of seizing the power. An important reason for the 1971 coup was the 1961 constitution, which guaranteed political rights (Momayezi 1998, pp. 7-8). In 1969, a new government was not formed because no party gained the majority. This caused a chaos all over the country and many different groups have taken advantage of the weakness of the legislation and took to the streets. Economic recession, violence and instability spread rapidly across the country. In March 1971, commander of the Turkish Armed Forces Memduh Tagmac, commander of the Turkish Land Forces Faruk Gurler and commander of the Turkish Naval Forces Celal Eyiceoglu signed an ultimatum to force to resign the current government. This was the second successful coup in the history of the Republic of Turkey.

In the late 1970's, violence was escalated over the country. Political killings, tensions between left-right, ideological, ethnic and denominational conflicts formed a basis for military to take an action. On September 1980, once again military has announced that they seized the power under the leadership of Kenan Evren who was the Chief of General Staff. As in 1971 coup, the Prime Minister was Suleyman Demirel, but this time he and the government were not forced to resign, the military overthrown the government, abolished the Turkish National Assembly and

abrogated the 1961 constitution, which was amended in 1971. 1980 coup inflicted a deep wound in Turkish democracy. The consequences were devastating. As a result of the military court's judgments, death penalty was requested for 7 thousand people and 517 people were sentenced to death. 50 of them were executed. 650 thousand people were taken into custody. More than one and a half million people were blacklisted. 171 people died by torture. One of the coup's most harmful effects was on the economy. On the day of the coup, inflation galloped to three digits, unemployment increased rapidly and also foreign trade deficit went up. In 1982 constitutional referendum was held. The new constitution was formed by the military government, and after the referendum Kenan Evren was elected as President of Turkey on 7 November 1982 with the 90% approval of the new constitution, and he served as President until 1989.

In the 1990's ascending violence, terror and unsteady political environment again formed a basis for military to take an action. The Welfare Party (RP) under the leadership of Necmettin Erbakan became the first party in the 1995 general elections. In 1996, the coalition between Motherland Party (ANAP) and True Path Party (DYP) was abolished, because the coalition government could not reach requisite number of confidence vote (273) in Turkish National Assembly. Thereupon, a new coalition established between RP and DYP, which is also called REFAH-YOL coalition. REFAH-YOL coalition received vote of confidence after the voting in National Assembly on July 8, 1996. After the establishment of the REFAH-YOL coalition, some events in this period are thought to have accelerated the military intervention. The National Security Council (NSC) meeting on February 28 1997 lasted 9 hours. The NSC emphasized that secularism is the assurance of democracy and law of the Republic of Turkey. Advisory jurisdiction was declared to the government by commanders. After the memorandum, Prime Minister Necmettin Erbakan resigned, and the REFAH-YOL coalition ended. This memorandum is also called as "Post-modern coup" in Turkey.

On April 12, 2007 at midnight, General Staff of the Republic of Turkey published a memorandum (also known as "e-memorandum") on it's website just

before the Turkish presidential election. One of the candidates of the election Abdullah Gul, would most likely to be elected. The presidential palace was one of the most important symbols of the country's secular system; therefore, Abdullah Gul's political background and his wife's Islamic headscarf caused concerns on his presidency. The e-memorandum had a broad repercussion in both domestic and foreign press. European Union (EU) warned Turkey's military not to interfere in politics. United States of America (USA) was not strict like EU, but they also said that they fully support Turkish democracy and its constitutional processes. Aftermath Abdullah Gul was not elected as the President on the first voting as he couldn't reach 367 votes which was the minimum number of votes to be able to elected according to Turkish constitution. All parties in National Assembly except Justice and Development Party (AKP) boycotted the election and they called for general election. Then, after the first round of election, Republican People's Party (CHP) applied to the Constitutional Court as the absolute majority vote could not be satisfied. On 1 May, 2007 Constitutional Court decided to cancel the 1st round of the presidential election. Hereupon, Prime Minister Recep Tayyip Erdogan announced that immediate general election will be held on 24 June or 1 July. In the general elections, AKP gained 341 seats and the Nationalist Movement Party (MHP) gained 71 seats. This time MHP did not boycott the election and Abdullah Gul was elected as the eleventh President of the Republic of Turkey. Additionally, in order to prevent military interventions on presidential elections, a referendum was held for constitutional amendment. According to the new constitution, President would directly be elected by public instead National Assembly, and the term of office would be decreased to 5 years instead of 7 years. The new constitution was accepted according to the result of referendum with 68% approval rate.

In July 15, 2016 a group of soldiers who defined themselves in the Turkish Armed Forces as "Peace at Home Council" (Yurtta Sulh Konseyi) attempted a coup d'état against state institutions, including the government and President Recep Tayyip Erdogan. Coup was announced on state television (TRT) via live broadcast, and published on the Turkish Armed Forces's website. According to the declaration, the reasons of the coup the Council referred were erosion of secularism,

eliminated democracy, derogated human rights, and Turkey's loss of reputation in the international arena. During that time, a group of soldiers captured and pedestrianised Bosphorus Bridge and Fatih Sultan Mehmet Bridge with tanks. The Council member soldiers killed many civilian people during the public resistance against them in the Bosphorus Bridge. That is why Bosphorus Bridge became a symbolic place after the coup attempt was failed and its name has been changed as "15 Temmuz Şehitler Köprüsü". During the coup attempt, the armed forces targeted to seize some key and strategic state institutions in Istanbul and Ankara. They bombed Turkish Parliament, Presidential Palace, National Intelligence Agency (MIT) and Security General Directorate. Chief of General Staff Hulusi Akar, Commander of the Land Forces Salih Zeki Colak, Commander of Air Forces Abidin Unal and Commander of the Gendarmerie Forces Galip Mendi were taken hostage by putschists. A group of pro-coup soldiers attempted a failed assassination against the President Recep Tayyip Erdogan in Marmaris, where Erdogan was staying there in a hotel for holiday with his family. Towards the morning of July 16, the attempt widely repelled, by the police forces, loyal armed forces and civil resistance. During the coup attempt, 180 civilians, 62 polices, 6 loyal soldiers and almost 100 putschists killed. At about two thousand people wounded. Country-wide state of emergence has been announced by the National Assembly. Thousands of soldiers and officers detained. Extensive investigation has been started by judiciary against the Gulenist Terrorist Organization/Parallel State Structure (FETO-PSS) which has organized the coup attempt in the military and planned to seize the administrative power over the country. FETO-PSS not only structured in the military, they also have had organizations in state institutions and very importantly in jurisdiction. Throughout the investigations against FETO/PSS, at least 100,000 people have been arrested or lost their jobs on accusations of connections to FETO-PSS. 15 July, 2016 coup attempt is the first military coup attempt 36 years after the September 12, 1980 military coup.

3.2.4 Ideological and Denominational Events

This dummy is created in order to demonstrate the impact of important ideological and denominational events on economic growth of Turkey covering past 56 years.

In Istanbul, 1 May Labour Day was firstly celebrated in 1912. In May 1923, 1 May was legally declared as Labour Day, however one year later mass celebrations were banned by the government and with the law introduced in 1925, the celebration of the Labour Day was completely banned. Despite the rising labour movement in republic period, 1 May could not celebrate for a long time. In 1976, Confederation of Progressive Trade Unions of Turkey (DISK) has organized a demonstration in Taksim Square to celebrate the Labour Day, and around 200 thousand people attended. In May 1, 1977 DISK has again organized a demonstration in Taksim Square to celebrate the Labour Day, but this time 500 thousand people joined according to estimates. Before the celebration, DISK and Istanbul Security Directorate (EGM) have agreed on safety precautions. DISK was responsible for the internal security while EGM was responsible for the external security threats. At the end of DISK chairman Kemal Turkler's speech, gunshots were heard around the square. People were panicked and dispersed around. While people were running away, security forces intervened to the crowd with blast bombs, panzers and pressurized water. Then people turned through the nearest exit (Kazancı Yokusu) from the square, unfortunately there was a truck blocked the exit. 28 people have died in stampede, 5 people died by gunshots and 1 person crushed and died under the panzer. After the tragic event, the Taksim Square became a symbolic place for Labour Day in Turkey in the following years. The event is called in Turkey as "Kanlı 1 Mayıs" (Bloody 1 May) or "1 Mayıs Katliami" (1 May Massacre).

In December 1978, an assault occurred in the city of Kahramanmaraş against Alevi citizens, resulted in the death of more than a hundred Alevi citizens. The tensions between Sunni and Alevi people were high and a bomb attack to Çiçek Cinema increased the level of tensions, because there was a majority of

Sunni and right-winger in the cinema at that moment. Then rumours spread around the city that left-wingers and Alevis had thrown the bomb. In 21st December two left-winger teacher were killed at their home. Next day, at the funeral of the teachers, conflicts emerged between leftists and rightists, and three people died in conflicts. In the following days, groups of aggressors have attacked homes and on the neighbourhoods where Alevi citizens live in the majority. As a result of the events, over 100 people died, hundreds of people wounded, hundreds of houses and shops of Alevi citizens destroyed. Between the years of 1978-1980 similar event have been occurred in Çorum and Fatsa. This events also initiated the 1980 military coup.

In 1993, people with the majority of Alevis had gathered in Sivas for cultural festival. The festival was organized by Pir Sultan Abdal Cultural Association. One of the participants of the festival was Aziz Nesin, who was an atheist novelist, had notoriety amongst religious Sunnis, and hated amongst radical islamists. As a part of the organization, people firstly gathered in the Cultural Center, and the first events have started there as some group of people attacked the participations of the conference with stones and sticks. The events were calmed down by police intervention. Then the angry crowd got information that Aziz Nesin was in Madımak Hotel then gathered in front of the hotel and started to shout slogans against secularism and alevis, and they were also shouting provocative slogans to set the hotel on fire. Then the hotel was set on fire, and mostly Alevi intellectuals, musicians and artists 35 people and two hotel employees were killed.

One of the most important ideological events in recent years in Turkey is Gezi Park protests, which is the most widespread anti-government protests in more than ten years in cities across Turkey. It started as a small sit-in by a group of environmentalist activists to stop the government from turning Gezi Park into a shopping mall based on the old Ottoman artillery barracks. But then it's became a countrywide outcry, after the police intervention. Police forces preferred employing harsh and ruthless methods towards them by even attempting to burn the protestors' tents down. Gökay, B., & Xypolia, I. (Eds.). (2013). Excessive usage of violence by

police forces attracted some of the protestors to violently react to it which caused to rethink the legitimacy of this political sphere. Gökay, B., & Xypolia, I. (Eds.). (2013).

Building an artillery barracks on the Park was only one reason of the protests. Demonstrators largely believe that the AK Party government and Prime Minister Erdogan in particular represents a threat to their liberties that they tend to associate with identity and belonging, Tastan, C. (2013). On the following days of May 28 2013, protests increased and turned into demonstrations against the AK Party government. The Taksim Square and Taksim Gezi Park were the main centres of the protests. Crowds not only gathered in Istanbul but also in many other Turkish cities such as the capital, Ankara. Various of non-governmental organizations, political parties, actors, musicians, and intellectuals supported and attended the protests but also some anarchist groups and provocateurs took place on the protests. According to Tastan, C. (2013) the majority of Gezi Park protesters identified as Republican People's Party (CHP voters), the rate of nearly 50 percent of all participants. And he argued that, 30 percent of the participants a portion of the rest of the protesters (around 30 percent of the participants) consists of radical people who do not put any trust in political institutions, and therefore do not support any political party.

The economic implications of the protests are also very notable. The stock market went down by more than 10 per cent after the Prime Minister Erdogan's stern dismissal of the protesters and their demands. The benchmark interest rate spiked by more than 2 per cent and the default insurance premiums on the Turkish debt went up by more than 60 basis points to 183, Gökay, B., & Xypolia, I. Eds. (2013).

Gezi Park protests might be evaluated as a new concept of social movement. Especially, the Y generation which are described as less politic and even apolitic by many, were the majority of the participants and also they had a great importance during the protest by their great using the social media and technology. Social media had an important contribution as the people quickly interacted and gathered via

social media. Tufekci, Z. (2014) is analyzed the most used hashtags⁴ in Twitter through the demonstration, and found a steep rise in activity on May 30th when the protests began, dropping off by June.

3.2.5 1994 Economic Crisis

This dummy variable is created in order to demonstrate the impact of the 1994 crisis on Turkey's GDP. At the beginning of 1994, the biggest current account deficit and public deficit were occurred in Turkish economy until that date. And the huge amount of deficit was indicated dangerous level of macroeconomic instability. It was seen that, the current economy was not sustainable in the medium and the long term with the current economic structure and policies.

Public deficit was not only the reason of the macroeconomic instability, but also the result of the macroeconomic instability. Increasing public deficit was increased the public's internal and external debt and caused interest rates to move at very high levels. It was also caused constriction on real sector and led to an artificial growth of the finance sector. Lacks of effective tax system, undisciplined public expenditures, magnitude of the informal economy, inefficient capital accumulation were the primary reasons of large public deficit (Dönek, 1999, s.41). The increase in the wages of public sector workers in 1989-1991 was also a significant reason of large public deficit.

Ratio of public debt to gross domestic product fell from 8.8% in 1980 to 4% in 1981. The ratio was between 3.5% - 6% from 1981 to 1988 and was 4.8% in 1988. The ratio was increased since this date, and reached 12.1% in 1993. Increased deficit in the public sector was subsidized mostly through domestic borrowing. Because the international financial organizations were limited the debt amount due to the unstable and fragile outlook of the Turkish economy. Between the years of

⁴ During Gezi Protests period the most used hashtags were: #occupygezi, #occupygeziparki, #direngeziparki, #direnankara, #direngeziparki

1980 and 2000, the consolidated budget and the public sector balance was always deficit in Turkey, and in the second half of the 1990s, the deficit was increased. As it is seen in the table (3.1) the rate of financing through domestic borrowing is surpassed 100% in 1994 and between 1997-1999. After the 5 April decisions, interest rate of domestic borrowing was significantly increased and borrowing terms were shortened. In addition to high public deficit, big amount of public debt was putting pressure on financial markets, caused nominal and real interest rates to rise with volatile and high inflation. This situation resulted in an increase in the interest rate of government debt securities and a rapid increase in domestic debt stock after 1994.

Table 3. 1 The Share Of Consolidated Budget Deficits Financing Methods In Total Financing

| Year | External Borrowing/ Financing | Internal Borrowing/ Financing | Short-term Borrowing/ Financing |
|------|----------------------------------|----------------------------------|------------------------------------|
| 1980 | 11.84 | 17.76 | 67.76 |
| 1981 | 67.96 | 94.48 | 107.73 |
| 1982 | -7.23 | 51.20 | 19.28 |
| 1983 | -49.15 | 39.08 | 39.63 |
| 1984 | 32.47 | 41.05 | 18.53 |
| 1985 | -25.14 | 80.84 | 29.46 |
| 1986 | -0.38 | 71.36 | 16.02 |
| 1987 | -10.36 | 70.50 | 13.84 |
| 1988 | 4.47 | 71.61 | 17.13 |
| 1989 | -4.97 | 85.71 | 5.61 |
| 1990 | 0.30 | 72.14 | 2.42 |
| 1991 | 5.75 | 45.08 | 32.07 |
| 1992 | 6.79 | 66.26 | 29.26 |
| 1993 | 16.70 | 41.53 | 42.04 |

| | | | |
|------|--------|--------|-------|
| 1994 | -44.22 | 114.45 | 34.13 |
| 1995 | -27.02 | 96.05 | 32.16 |
| 1996 | -10.60 | 84.11 | 18.06 |
| 1997 | -20.14 | 112.84 | 0.00 |
| 1998 | -27.18 | 120.49 | 0.00 |
| 1999 | 5.04 | 106.75 | 0.00 |
| 2000 | 20.99 | 73.33 | 0.00 |
| 2001 | -13.85 | 73.30 | 0.00 |

Source: Undersecretariat of Treasury

As a consequence of high inflation, Turkish Lira was valued. While exports were almost stopped, imports were rapidly increased and financing imports with short-term foreign debts caused an unsustainable situation. Because while creditors were doubtful about their debts would not be paid, debtors were expected devaluation. This expectation slowed down exports, and speeded up imports. As the debt repayment pressure had started rapidly increasing, the economic crisis began (Kazgan, 2002a, s. 277-278).

Table 3. 2 Pre-Crisis Economic Indicators

| | 1990 | 1991 | 1992 | 1993 | 1994 |
|--|-----------|-----------|-----------|-----------|-----------|
| M2 Money Supply (Million \$) | 27,991.00 | 28,774.00 | 33,418.00 | 36,171.00 | 28,897.00 |
| PublicSectorBorrowingRequirement / GDP | 3.6 | 3.7 | 6.1 | 4.8 | 5.3 |
| CBRT Foreign Exchange Reserve (Million \$) | 5,758.50 | 4,812.90 | 6,106.60 | 6,277.20 | 6,905.90 |
| GovernmentDebtStock / GDP | 14.4 | 15.39 | 17.6 | 17.89 | 20.56 |
| ShortTermCapital / GDP | 1.97 | -1.99 | 0.87 | 1.69 | -3.93 |
| CapitalMovements / GDP | 2.65 | -1.58 | 2.27 | 4.95 | -3.21 |
| CurrentAccountsDeficit / GDP | -1.72 | 0.17 | -0.59 | -3.77 | 2.02 |

| | | | | | |
|------------------------|-------|-------|-------|-------|--------|
| Real Interest Rate (%) | -4.6 | 8.1 | 9.6 | 13 | 28.2 |
| GDP Growth (%) | 9.37 | 0.35 | 6.4 | 8.14 | -6.09 |
| Inflation (%) | 54.67 | 58.16 | 65.53 | 64.02 | 118.47 |

Source: CBRT, Turkstat, World Bank

Özatay (1999, s.8-12) outlined the most important factors caused the crisis as below:

- In 1993, both the public sector and the domestic debt stock to GDP ratio were very high.
- The real cost of domestic borrowing was high.
- In 1993, the current account deficit was the highest level reached during the 1990s.
- Turkish Lira was very valuable
- The credits extended by commercial banks to GDP ratio was increasing.
- Before the 1994 crisis, the ratio of total foreign currency debt to total debt of local banks increased rapidly.

To prevent the speculative attacks on the Turkish Lira, the CBRT intervened in the foreign exchange market. During the intervention, CBRT lost more than half of its foreign currency reserves. Despite all these interventions, in the first quarter of 1994, the Turkish Lira lost 70% of its value against the US Dollar. In addition that, overnight interest rates were around 70% before the crisis, reached 700% level during the crisis which have never seen before (Özatay, 1995, s.109; 1999, s.20;). As a consequence, the economy shrunk by 6%. The inflation rate was 65% in the period 1988 - 1993, then it reached 130% in 1994 after the crisis. As a result of the crisis reflected in the real sector, the economy has shrunk, wages have decreased and unemployment has increased.

3.2.6 2001 Economic Crisis

In the 2001 crisis, political tension played an important role in addition to macro-economic and financial problems. 2001 crisis is also known as the severest crisis occurred in the Republic of Turkey until that date.

The first impact of the crisis appeared in November 2000. In 2000 public sector borrowing requirement, public debt to GNP ratio, current account deficit, inflation level and liabilities of financial sector to official reserves ratio were all high. At the beginning of 2000, Turkey started IMF's supported program which addressed to macroeconomic imbalances and succeeded to extent in reversing this negative trend (Özatay and Sak, 2001).

On November 2000, CBRT has increased interest rates to very high levels, lost foreign exchange reserves and borrowed \$7.5 billion from IMF to prevent speculative attacks on the currency. However, after these interventions the CBRT's intervention tools against further speculative attacks, was greatly reduced. Three months later on February 19, 2001, a quarrel between the Prime Minister and the President initiated a second speculative attack, and this time the currency crisis began.

On 21 February 2001, overnight interest rate on the interbank money market rose to 6200%, with an average of 4018.6%. The Central Bank foreign exchange reserve, which was \$ 27.94 billion on February 16, went down to \$ 22.58 billion on February 23. In the November 2000 crisis, the speculative attacks on the currency was limited to foreigners, but in February 2001 crisis, especially domestic banks has also attacked to the currency. On 21 February 2001, CBRT decided to adopt floating exchange rates. On February 19, the exchange rate of \$1 was 686,500, while on February 23, 920,000, on February 28 was 960,000. So the exchange rate increased 40% within ten days.

Table 3. 3 Pre-Crisis Economic Indicators

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|--|-------|-------|-------|-------|-------|------|
| Real GDP (%) | 7.1 | 8.3 | 3.9 | -6.1 | 6.3 | -9.4 |
| Inflation (%) | 79.8 | 99.1 | 69.7 | 68.8 | 39 | 68.5 |
| M2 Money Supply (%) | 109.7 | 84 | 79.4 | 101.5 | 42.5 | 80.1 |
| CurrentAccountBalance (Billion \$) | -2.4 | -2.6 | 2 | -1.4 | -9.8 | 3.3 |
| TradeBalance (Billion \$) | -10.6 | -15.4 | -14.2 | -10 | -22.4 | -4.8 |
| CBRT Foreign Exchange Reserve (Billion \$) | 16.3 | 18.4 | 19.7 | 23.2 | 22.2 | 18.8 |

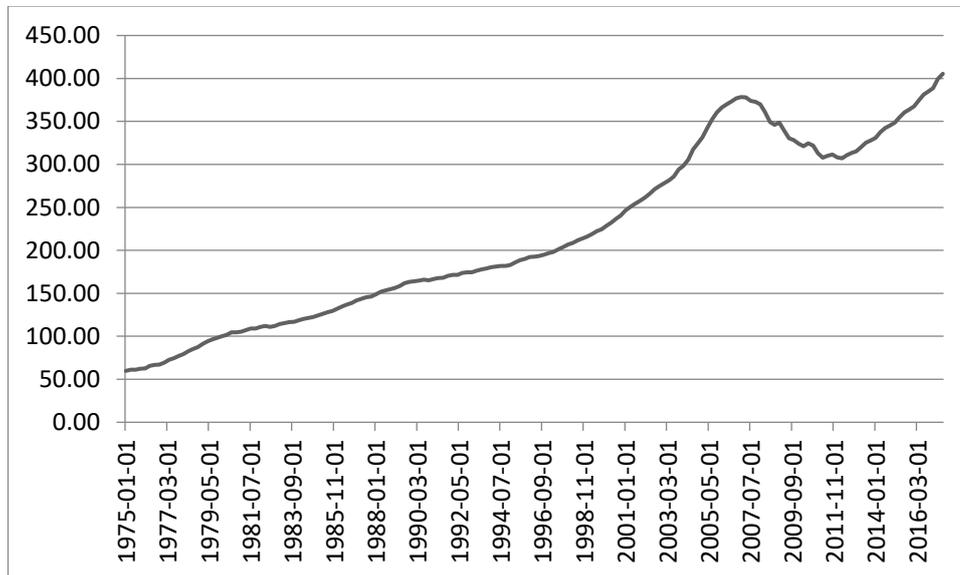
Source: CBRT, Turkstat

3.2.7 2008 Economic Crisis

The reason of the global financial turbulence in the world during 2007-2008 is the mortgage crisis started in August 2007 in the US. This crisis is also known as “subprime mortgage crisis”.

From 2000 to the beginning of 2006, liquidity in the financial market continuously increased. As a consequence of the liquidity excess, banks provided extensive amount of loans, especially the mortgage loans. The mortgage loans (subprime mortgage loans) even were given to the people who hadn't have a job, or a regular income. Those credits also known as NINJA (No income, no job, no asset) had led to a rapid increase in housing prices. This rapid increase caused repayment problems and people started fail to pay their credit debts. This time number of houses in the banks started to increase due to the default credits, and the prices declined rapidly. Therewith, the people who were continuing to pay their credit debts, gave up to pay their loans and sent the keys of their houses to the banks (jungle mail), because the current price of their houses remained below the net present value of the remaining loan payments of the houses. And another important thing is the loan repayments were sold to the other financial institutions by the banks. For this reason, losses have spread from one financial institution to another like domino stones and have led to the bankruptcy of cornerstone institutions.

Figure 3. 2 House Price Index for the United States



The mortgage crisis became a global crisis and spread all over the world rapidly. 2008 crisis is also negatively affected developing countries' economies including Turkey. As it is seen in table 3.4, Turkey and other developing countries were entered the economic recession as a consequent of the mortgage crisis. As an average, the world economy has shrunk by 1.73%.

Table 3. 4 GDP Growth Rates Of 10 Developing Countries And World Average

| | 2007 | 2008 | 2009 |
|---------|------|------|--------|
| Turkey | 5.03 | 0.85 | -4.7 |
| Ukraine | 7.9 | 2.3 | -14.84 |
| Russia | 8.53 | 5.24 | -7.82 |
| Kuwait | 5.99 | 2.48 | -7.07 |
| Croatia | 5.15 | 2.05 | -6.94 |
| Hungary | 0.45 | 0.89 | -6.76 |
| Romania | 6.86 | 8.45 | -7.06 |

| | | | |
|----------|------|------|-------|
| Bulgaria | 7.67 | 5.65 | -4.22 |
| Brazil | 6.07 | 5.09 | -0.12 |
| Mexico | 3.2 | 1.4 | -4.7 |
| World | 4.25 | 1.82 | -1.73 |

Source: World Bank

It appears that the uncertainty environment caused by the global financial crisis has led to a decrease in investment and consumption expenditures in addition to the tightening financial conditions on a global scale and a sharp contraction in domestic demand due to the effect of the increasing saving trend. Along with the increasing problems in the global economy, Turkey's economic growth started slowing down in the second quarter of 2008. In the last quarter of 2008 and the first quarter of 2009, the recession in the economy deepened. It can be said that the main reason of the contraction in the economic activity in the last quarter of 2008 and afterwards is the downsizing in the export-based industrial sector. This has led to a historic rise in unemployment rates due to the significant increase in the labour force participation rate. In particular, in the third and fourth quarters of 2008 and in the first quarter of 2009, negative outlook of the labour market has risen compared to the previous period due to the worsening economic activities. The total unemployment rate rose by 4.2% percentage year on year to 16.1% in the first quarter. Due to the demand uncertainty caused by global economic problems, companies reduced their productive activities. Low capacity utilization, low investment expectations prevented recovery in the labour market. All the negativities that have taken place in the labour market have put downward pressure on the total wage income in economy as a whole.

At the end of 2008 and in the first quarter of 2009, it is observed that the economic recession has become widespread on a global scale and the recessions in commodity prices have caused a significant decline in global inflation. In this period, the downward trend of the developed countries' consumer price inflation became more evident, and the inflation rates of developing countries also

experienced a rapid decline. The consumer price index (CPI) increased from 8.4% in 2007 to 10.1% at the end of 2008. In the second quarter of 2009, CPI increased 0.77% and declined 2.16% compared to the first quarter, and decreased to 5.73% on an annual basis.

In general, 2008 mortgage crisis affected mostly the developed countries, and its effect continues until today in developed countries. Developed economies such as US, European Union (EU) and Japan have started at large scale of quantitative easing programs, to stimulate the economy and increase the inflation. US has ended the quantitative easing as FED started to raise the short-term interest rates in 2016. After the first shock of the crisis, Turkey and the other developing countries took some advantages in the upcoming years as the hot money entered into the emerging markets, from developed markets because of the higher interest rates.

3.2.8 Cyprus Operation & US Embargo

After the July 15, 1974 Cypriot coup d'état that was supported by Greek government, Turkish Armed Forces was started the first military operation on 20 July 1974 in the Cyprus Island. The news that a coup was made in Cyprus was learned by the Turkish Foreign Ministry on the morning of July 15, 1974, with a coded message sent by the Turkish Embassy in Nicosia. Turkish government evaluated that military intervention is needed due to the situations in Cyprus. And second operation was started on 14 August 1974, and resulted as the Turkish military controlled 37% of the island, including Northern Nicosia.

In 1983 the Turkish Cypriot assembly declared the Northern Cyprus as an independent country and called Turkish Republic of Northern Cyprus. After the declaration, Great Britain convened a meeting of the United Nations Security Council to condemn the declaration as “legally invalid”. Also after the operation, the US applied an arms embargo on Turkey between the years of 1975 - 1978.

3.2.9 Gulf War I-II

The first Gulf War, also known as “Operation Desert Shield”, was started shortly after the end of the Iran-Iraq War, when Iraq invaded Kuwait on August 2, 1990. Iraq’s invasion of Kuwait caused international reactions, and as a result of these reactions the United Nations’ Security Council declared some economic sanctions against Iraq. US President George H. W. Bush has sent US troops to Saudi Arabia, and called on the other countries to send military forces to the region. And the second largest military coalition force was emerged after the World War II. The coalition with 37 countries including the UK, France, Saudi Arabia, Syria and Egypt and led by the US, was fought against Iraq. The war has resulted as the victory of the coalition forces.

The second Gulf War was started on March 2003, as a coalition of countries, especially the US and the UK invaded Iraq. Most of the Iraqi military was quickly defeated and Baghdad was occupied on 9 April. The Gulf War II lasted only three weeks and ended with Saddam Hussein’s overthrow.

3.2.10 Natural Disasters

Between the years of 1961 and 2017 three devastated earthquakes happened in Turkey. On 17 August 1999 an earthquake occurred with the moment magnitude of 7.6 in Gölcük, Kocaeli. The earthquake was lasted for 37 seconds. More than 17,000 people died, and half a million people became homeless. Estimated cost of the total damage was around \$5 billion. The August 17 earthquake was felt in the entire Marmara Region, from Ankara to Izmir. According to official reports, 17,480 people died and 23,781 people injured. 285.211 houses and 42.902 workplaces were damaged.

On 12 November 1999 an earthquake occurred with the moment magnitude of 7.2 in Düzce. The earthquake was lasted for 30 seconds. More than 800 people

died, and around 5,000 people wounded. Thousands of houses and workplaces were destroyed or damaged.

In October 2011 two earthquakes occurred in eastern Turkey near the city of Van. The first earthquake occurred on 23 October, with the moment magnitude of 7.1. More than 600 people died, and more than 4,000 people injured. At least 2,000 buildings destroyed, and 10,000 building damaged. On 9 November 2011, another earthquake occurred in the same region, with the moment magnitude of 5.4. According to Deputy Prime Minister Beşir Atalay's declaration, 5 people died in the collapse of several hotels, and totally 25 buildings destroyed.

3.2.11 High Casualty Terrorist Bombings

This dummy variable is created in order to demonstrate the impact of high casualty terrorist bombing attacks on economic growth of Turkey. High casualty terrorist bombings are defined as the terrorist attacks against civilians which caused at least 10 civilian deaths.

Terrorism was started in the late 1960s and particularly increased since the beginning of the 1990s in Turkey. "From 1984 to 2000, an estimated 30,000 to 35,000 Turkish citizens were killed by a nearly continuous stream of terrorism-related events" (Rodoplu, et al. ,2003). Radical Islamic terrorist group Hizballah, leftist Revalutionary People's Liberation Party/Front (DHKP/C) and Kurdistan Workers' Party (PKK) were the most influential terrorist organizations in the last 40 years. Also an another radical Islamic terrorist group Islamic State of Iraq and Syria (ISIS) attacked several times some cities of Turkey with suicide bombers and armed assaults in 2015 and 2016. "Turkey is one of the countries hardest hit by terrorism during the past two decades, experiencing a nearly continuous stream of low or multiple casualty terrorist attacks from three major types of terrorist groups" (Rodoplu, et al., 2003).

SECTION FOUR

METHODOLOGY

In this section, the quantitative methods used in the thesis are briefly explained. Through this section, it is explained how the data collected and generated, and how the data were analysed. Also the model statistical model used in this thesis is theoretically explained. GDP Growth Rate is chosen as the dependent variable, which is Turkey's seasonally adjusted quarterly GDP growth rate on the same period of the previous year between the years of 1961-2017. The data is from OECD.

Dummy variables are created as explanatory, in order to explain political instability. For determining and measuring the effects of the political instability proxies (except "government change"), the dummy take the value of "1" (number of observations) if the observation has the attribute, and "0" if the observation has not. To be able to define the government change variable properly, "1" is given for the period of the first government, and added "1", each time when the government is changed.

In the first stage of the analysis, Augmented Dickey Fuller (ADF) Unit Root Test is applied for each variables, in order to test the variables' stationary. Said and Dickey (1984) augment the basic autoregressive unit root test to accommodate general ARMA(p, q) models with unknown orders and their test is referred to as the Augmented Dickey Fuller (ADF) test. Suppose an Auto Regressive (AR (p)) time series model,

$$y_t = \sum_{i=1}^p a_i y_{t-i} + \varepsilon_t \quad (4.1)$$

where $z=1$ is a root,

$$1 - \sum_{i=1}^p a_i z^i = 0 \quad (4.2)$$

$$1 = \sum a_i \quad (4.3)$$

Suppose $a(L)$ is factored as the equation 4.4 with the equation 4.5.

$$1 - \sum^p a_i L^i = (1 - L) * b(L) \quad (4.4)$$

$$b(L) = 1 - \sum_{i=1}^{p-1} \beta_i L^i \quad (4.5)$$

The model can be written as the equation 4.6. In order to see if the series has a unit root, it should be tested whether $\rho = 1$ or not in the equation 4.7.

$$\Delta y_t = \sum_{i=1}^{p-1} \beta_i \Delta y_{t-i} + \varepsilon_t \quad (4.6)$$

$$y_t = \rho y_{t-1} + \sum_{i=1}^{p-1} \beta_i \Delta y_{t-i} + \varepsilon_t \quad (4.7)$$

The hypothesis of the ADF Unit Root Test is as below:

$H_0: \rho = 1$ (The series has a unitroot (non-stationary))

$H_a: \rho \neq 1$ (The series has not a unitroot (stationary)).

Statistical time series models are not appropriate to use if the series is non-stationary or in the other word if the series has a trend. In the analyses the ADF test is applied to all series used in the model, and if the series is non-stationary, then

transformations such as log and difference is used in order to make the series stationary.

ADF test is a good method to test to determine whether the structure of the series is linear autoregressive or not. But the series might have volatility, and ADF is not an efficient method to test whether the series has volatility or not. There are several methods for modelling volatility in literature such as; Geometric Brownian Motion Model, Poisson Jump Diffusion Model, Stochastic Volatility Models, ARCH/GARCH etc. To be able to model volatility, Autoregressive Conditionally Heteroscedastic (ARCH) model is used in the analysis which is the most proper one for the data set of this thesis. ARCH model firstly introduced by Engle (1982), and then generalised by Bollerslev and Taylor (1986), and the generalization was called Generalized Autoregressive Conditionally Heteroscedastic (GARCH).

Many time series models are using under the assumption of constant variance. However constant variance is a very difficult assumption, especially for financial data. Engle (1982) has firstly discussed that constant variance assumption unobtainable in the time series analysis, and he introduced Autoregressive Conditional Heteroscedasticity for modelling heteroscedasticity. The conditional variance in the model depends on the square values of the error terms and the conditional delayed variances. Stochastic process denoted as below where ε_t is the error term and the mean is zero. $Z_t \approx N(0,1)$ indicates the white noise and h_t indicates the conditional variance of ε_t .

$$\varepsilon_t = Z_t \sqrt{h_t} \tag{4.8}$$

The ARCH model, allows the change of variance of the error term as a function of the square of the previous error terms by abandoning the constant variance assumption in the traditional time series model. One way of modelling the volatility observed in the time series is to define an independent variable associated with volatility and estimate the volatility through this variable. Volatility is modelled by defining an independent variable in below equation where X_t is defined as an independent variable and ε_{t+1} is the error term with the variance of σ^2 .

$$Y_{t+1} = \varepsilon_{t+1}X_t \quad (4.9)$$

If X takes a constant value independently of time, $\{Y_t\}$ series become a white noise process with constant variance. Besides the conditional variance of Y_{t+1} which is shown in equation (4.10), is not independent of the actual value of X_t . In this case, the greater X_t , the greater conditional variance of Y_{t+1} .

$$Var\langle Y_{t+1}|X_t \rangle = X_t^2 \sigma^2 \quad (4.10)$$

In addition that, if the sequential values of the $\{X_t\}$ series are positive inter-correlated, $\{Y_t\}$ series will be positive inter-correlated too. In this way, $\{X_t\}$ series will help the volatility in the $\{Y_t\}$ series. But this approach supposes a specific reason for heteroscedasticity by choosing only an independent variable from variety of independent variables to describe the volatility of the dependent variable, which might not be possible at all times. Engle (1982) showed that it is possible to simultaneously model the mean and variance of any series.

To define ARCH model, a stationary autoregressive model is estimated as below.

$$y_t = \alpha_0 + \alpha_1 y_{t-1} + \varepsilon_t \quad (4.11)$$

In this case, conditional estimate of y_{t+1} is,

$$E_t(y_{t+1}) = \alpha_0 + \alpha_1 y_t \quad (4.12)$$

If the conditional mean is used to estimate y_{t+1} , then the variance of error of estimation is defined as,

$$E_t[(y_{t+1} - \alpha_0 - \alpha_1 y_t)^2] = E_t(\varepsilon_{t+1}^2) = \sigma^2 \quad (4.13)$$

On the other hand, unconditional estimate and variance of y_{t+1} are shown as below:

$$E(y_{t+1}) = \alpha_0 / (1 - \alpha_1) \quad (4.14)$$

$$E\left\{\left[y_{t+1} - \frac{\alpha_0}{1-\alpha_1}\right]^2\right\} = E[(\varepsilon_{t+1}\alpha_1\varepsilon_1 + \alpha_1^2\varepsilon_{t-1}^2 + \dots)^2] = \sigma^2 / (1 - \alpha_1^2) \quad (4.15)$$

As it is seen above, unconditional estimate has bigger variance than conditional estimate. Thereby, conditional estimate is preferred because it has a smaller *variance*. Similarly, if the series of $\{\varepsilon_t\}$ is heteroscedastic, autoregressive–moving-average (ARMA) model can be used to estimate the continuing volatility in the same direction of the variance. As an example, let's suppose that $\{\hat{\varepsilon}_t\}$ is a series of the below model.

$$y_t = \alpha_0 + \alpha_1 y_{t-1} + \varepsilon_t \quad (4.16)$$

Then the conditional variance of y_{t+1} is,

$$Var\langle y_{t+1} | y_t \rangle = E_t[(y_{t+1} - \alpha_0 - \alpha_1 y_t)^2] = E_t \varepsilon_{t+1}^2 \quad (4.17)$$

It is necessary to establish a structure in which the conditional variance in equation (10) is not constant but changes over time. Square of the estimated residuals is defined as AR(p) process as below, where v_t is a white noise process.

$$\hat{\varepsilon}_t^2 = \alpha_0 + \alpha_1 \hat{\varepsilon}_{t-1}^2 + \alpha_2 \hat{\varepsilon}_{t-2}^2 + \dots + \alpha_p \hat{\varepsilon}_{t-p}^2 + v_t \quad (4.18)$$

If the parameters other than the constants in the model were zero, then the estimated variance was equal to the constant α_0 . In other cases, the conditional variance of y_t will be determined autoregressive process of equation (10). In this regard, conditional variance of the next period is estimated using autoregressive process as shown below equation. Therefore, the equation (4.19) is called the ARCH(p) model.

$$E_t \hat{\varepsilon}_{t+1}^2 = \alpha_0 + \alpha_1 \hat{\varepsilon}_t^2 + \alpha_2 \hat{\varepsilon}_{t-1}^2 + \dots + \alpha_p \hat{\varepsilon}_{t+1-p}^2 \quad (4.19)$$

Equation (4.18) can be also written as below by defining v_t as a multiplicative error term instead linear defining, where v_t is a white noise process and its variance is equal to 1. And v_t and ε_{t-1} are independent. Also α_0 and α_1 take constant values under the limitation of $\alpha_0 > 0$, $0 < \alpha_1 < 1$.

$$\varepsilon_t = v_t \sqrt{\alpha_0 + \alpha_1 \varepsilon_{t-1}^2} \quad (4.20)$$

While $E v_t = 0$; expected value of ε_t is as below.

$$E\varepsilon_t = E\left[v_t\sqrt{\alpha_0 + \alpha_1\varepsilon_{t-1}^2}\right] = Ev_tE\sqrt{\alpha_0 + \alpha_1\varepsilon_{t-1}^2} = 0 \quad (4.21)$$

And the variance of ε_t is as below.

$$E\varepsilon_t^2 = E[v_t^2(\alpha_0 + \alpha_1\varepsilon_{t-1}^2)] = Ev_t^2E(\alpha_0 + \alpha_1\varepsilon_{t-1}^2) \quad (4.22)$$

In above equation, the variance of v_t is equal to 1 and unconditional variances of ε_t and ε_{t-1} are equal, and therefore the unconditional variance is as given below.

$$E\varepsilon_t^2 = \alpha_0/(1 - \alpha_1) \quad (4.23)$$

Conditional expectation of ε_t is equal to zero, because v_t and ε_{t-1} are independent, and the expected value of v_t is equal to 0.

$$E(\varepsilon_t|\varepsilon_{t-1}, \varepsilon_{t-2}, \dots) = Ev_tE\sqrt{\alpha_0 + \alpha_1\varepsilon_{t-1}^2} = 0 \quad (4.24)$$

And the conditional variance of ε_t is as given below.

$$E(\varepsilon_t^2|\varepsilon_{t-1}, \varepsilon_{t-2}, \dots) = \alpha_0 + \alpha_1\varepsilon_{t-1}^2 \quad (4.25)$$

There is an error structure in the ARCH model in which the conditional and unconditional averages are equal to zero. Also $\{\varepsilon_t\}$ series are not independent because, they are related through thesecond moments of the error terms. The conditional variance is an autoregressive process that occurs from conditional heteroscedastic errors.

$\{Y_t\}$ series and its conditional mean and variance are as given below.

$$y_t = \alpha_0 + \alpha_1y_{t-1} + \varepsilon_t \quad (4.26)$$

$$E_{t-1}y_t = \alpha_0 + \alpha_1y_{t-1} \quad (4.27)$$

$$\begin{aligned} \text{Var}((y_t)|y_{t-1}, y_{t-2}, \dots) &= E_{t-1}(y_t - \alpha_0 - \alpha_1y_{t-1})^2 \\ &= E_{t-1}(\varepsilon_t)^2 \\ &= \alpha_0 + \alpha_1(\varepsilon_{t-1})^2 \end{aligned} \quad (4.28)$$

Conditional variance of y_t can not be smaller than α_0 , because α_1 and $(\varepsilon_{t-1})^2$ are positive. After the equation (x) is solved, below equation is obtained.

$$y_t = \frac{a_0}{1-a_1} + \sum_{i=0}^{\infty} a_1^i \varepsilon_{t-i} \quad (4.29)$$

Since the expected value of ε_t is zero for all t values, the unconditional expectation of y_t is;

$$E y_t = a_0 / (1 - a_1) \quad (4.30)$$

Since $E \varepsilon_t \varepsilon_{t-i} = 0$ for all i values except zero, the unconditional variance of y_t is;

$$\text{Var}(y_t) = \sum_{i=0}^{\infty} a_1^{2i} \text{var}(\varepsilon_{t-i}) \quad (4.31)$$

While the unconditional variance of ε_t is constant,

$$\text{Var}(y_t) = \left[\frac{\alpha_0}{1-\alpha_1} \right] \left[\frac{1}{1-\alpha_1^2} \right] \quad (4.32)$$

It is obvious that the variance of the series y_t is an increasing relationship with the absolute value of the parameters α_1 and a_1 . Therefore, ARCH process is a convenient method for modelling the volatility in a univariate structure.

In the ARCH (p) model, the conditional variance is defined as the linear function of squared error terms of the previous period. Equation (4.33) shows the mean equation, and equation (4.34) shows the variance equation.

$$R_t = X_t \delta + \varepsilon_t \quad (4.33)$$

$$\sigma_t^2 = \omega + \sum_{i=1}^p \alpha_i \varepsilon_{t-i}^2 \quad (4.34)$$

For this model to be defined and the conditional variance to have a positive value, the parameters in the model must satisfy the following conditions, $\omega > 0$ and $\alpha_1 \geq 0, \dots, \alpha_p \geq 0$.

ARCH(p) model in the equation (4.34) can be written as below under the definition of $v_t \equiv \varepsilon_t^2 - \sigma_t^2$.

$$\varepsilon_t^2 = \omega + \sum_{i=1}^p \alpha_i \varepsilon_{t-i}^2 + v_t \quad (4.35)$$

Since $E_{t-1}(v_t) = 0$, the model is equal to an AR (p) model containing squares of error terms. In this case, unconditional variance is,

$$Var(\varepsilon_t) = \sigma^2 = \omega / (1 - \alpha_1 - \dots - \alpha_p) \quad (4.36)$$

In the autoregressive conditional covariance process covariance will be stationary only if the sum of positive autoregressive parameters is smaller than one.

In this thesis, ARCH (1) process is used for modelling the data which is given useful statistical results. The ARCH (1) model exhibits constant unconditional variance, and non-constant conditional variance. Consider the following model, where $\sqrt{(\omega + \alpha\varepsilon_{t-1}^2)}$ is the conditional standard deviation also can be defined as $\sqrt{E(\varepsilon_t^2 | \varepsilon_{t-1}^2, \varepsilon_{t-2}^2, \dots)}$.

$$y_t = \mu + \varepsilon_t \quad (4.37)$$

$$\varepsilon_t = u_t \sqrt{(\omega + \alpha\varepsilon_{t-1}^2)}, \quad u_t \sim IIN(0,1), \quad \omega > 0, \alpha > 0 \quad (4.38)$$

As found from the below equation, the conditional expectation of ε_t is equal to zero. Since $u_t \sim IIN(0,1)$, $E(u_t | \varepsilon_{t-1}) = E(u_t) = 0$.

$$E(\varepsilon_t | \varepsilon_{t-1}) = E(u_t | \varepsilon_{t-1}) \sqrt{(\omega + \alpha\varepsilon_{t-1}^2)} = 0 \quad (4.39)$$

The conditional variance is as given below. Since $u_t \sim IIN(0,1)$, $E(u_t^2 | \varepsilon_{t-1}) = E(u_t^2) = 1$.

$$Var(\varepsilon_t | \varepsilon_{t-1}) = E(u_t^2 | \varepsilon_{t-1}) (\omega + \alpha\varepsilon_{t-1}^2) = (\omega + \alpha\varepsilon_{t-1}^2) \quad (4.40)$$

Correspondingly, the conditional mean and variance of y_t are given below.

$$E(y_t | y_{t-1}) = \mu \quad (4.41)$$

$$Var(y_t | y_{t-1}) = (\omega + \alpha\varepsilon_{t-1}^2) \quad (4.42)$$

As it is seen above, the conditional variance of y_t is time varying, and also the unconditional variance is time invariant whenever ε_t^2 and the process is stationary since $Var(\varepsilon_t) = E(\varepsilon_t^2) = E(\omega + \alpha\varepsilon_{t-1}^2) = \omega + \alpha E(\varepsilon_{t-1}^2)$.

$$\text{Var}(y_t) = \text{Var}(\varepsilon_t) = \omega/(1 - \alpha) \quad (4.43)$$

SECTION FIVE

EMPRICAL RESULTS

In the previous section, the methodology of the model used in this study is theoretically explained and all steps followed exhaustively explained. In this section, the empirical results obtained from the model used in the study are displayed and interpreted.

The descriptive statistics are presented in Table 5.1 for entire sample. The observations in the sample are quarterly and cover between the years of 1961 – 2016.

Table 5. 1 Summary Statistics

| Variables | N | Mean | STD | Max | Min |
|--------------------------------------|----------|-------------|------------|------------|------------|
| GDP Growth (%) | 226 | 4.8268 | 4.50275 | 13.61 | -12.53 |
| Coup d'états, Attempts & Memorandums | 226 | 0.02 | 0.132 | 1 | 0 |
| Crisis 1994 | 226 | 0.01 | 0.115 | 1 | 0 |
| Crisis 2001 | 226 | 0.02 | 0.147 | 1 | 0 |
| Crisis 2008 | 226 | 0.02 | 0.147 | 1 | 0 |
| Elections | 226 | 0.15 | 0.382 | 2 | 0 |
| Cyprus Operation & US Embargo | 226 | 0.08 | 0.271 | 1 | 0 |
| Gulf War I-II | 226 | 0.02 | 0.147 | 1 | 0 |
| Ideological & Denominational Events | 226 | 0.04 | 0.227 | 2 | 0 |
| Natural Disasters | 226 | 0.01 | 0.115 | 1 | 0 |
| High Casualty Terrorist Bombings | 226 | 0.07 | 0.305 | 2 | 0 |
| Government Change | 226 | 14.7212 | 6.9925 | 22 | 1 |

In Table 5.2, Augmented Dickey-Fullers (ADF) Unit Root Test results are displayed. Before modelling a time series data, it is needed to determine whether the time series is stationary or not. In the literature, the time series analysis models are not suitable for non-stationary data, and stationarity is an important assumption. The hypothesis of the ADF test is as given below.

H_0 : The series has a unit root (non-stationary)

H_a : The series has not a unit root (stationary)

According to the results in Table 5.2, H_0 is rejected for all variables except “government change” at 1% significance level. H_0 can not reject for both “government change” and “Cyprus Operation & US Embargo” at 5% significance level. Due to the ADF test results, logarithmic (LN) transformation is applied to “government change” in order to transform into a stationary variable. As it is seen in the Table 5.3, “government change” variable become stationary after the LN transformation.

Table 5. 2 Augmented Dickey-Fuller Unit Root Test Results

| Variable | t-Statistic | 5% Critical Value | 10% Critical Value | P-Value |
|-------------------------------------|-------------|-------------------|--------------------|---------|
| GDP Growth (%) | -3.8761 | -2.8746 | -2.5738 | 0.0026 |
| Coup d'états, attempts & Memorandum | -15.2059 | -2.8742 | -2.5736 | 0.0000 |
| Crisis 1994 | -4.4813 | -2.8745 | -2.5737 | 0.0003 |
| Crisis 2001 | -3.9991 | -2.8744 | -2.5737 | 0.0017 |
| Crisis 2008 | -3.9991 | -2.8744 | -2.5737 | 0.0017 |
| Elections | -15.2330 | -2.8742 | -2.5736 | 0.0000 |
| Cyprus Operation & US Embargo | -2.6349 | -2.8742 | -2.5736 | 0.0875 |
| Gulf War I-II | -7.5725 | -2.8742 | -2.5736 | 0.0000 |
| Ideological & Denominational Events | -10.8655 | -2.8742 | -2.5736 | 0.0000 |
| Natural Disasters | -10.6666 | -2.8742 | -2.5736 | 0.0000 |
| High Casualty Terrorist Bombings | -6.1203 | -2.8742 | -2.5736 | 0.0000 |
| Government Change | -2.4747 | -2.8742 | -2.5735 | 0.1230 |

Table 5. 3 ADF Results for LN(Government Change)

| Variable | t-Statistic | 5% Critical Value | 10% Critical Value | P-Value |
|-----------------------|-------------|-------------------|--------------------|---------|
| LN(Government Change) | -3.8844 | -2.8750 | -2.5740 | 0.0026 |

ADF test is a sufficient method to determine whether the structure of the series is linear autoregressive or not. However, before deciding which model to use, the ARCH effect needs to be investigated.

ADF test is a sufficient method to determine whether the structure of the series is linear autoregressive or not. However, before deciding which model to use, the ARCH effect needs to be investigated. In order to detect heteroscedasticity of residuals, Bruesch-Pagan Test and White Test are used. The White Test was developed by White, (1980), and Bruesch-Pagan Test was developed by Breusch and Pagan, 1979 and both tests widely use particularly in econometrics. The hypothesis for both Bruesch-Pagan Test and White Test is given below:

H₀: The variance of residuals is constant (Homoscedasticity)

H_a: The variance of residuals is not constant (Heteroscedasticity)

According to the tests' results in Table 6.4 H₀ is rejected, and heteroscedasticity exists.

Table 5. 4 Heteroscedasticity Test Results

| | Probability F | Probability Chi-Square |
|--------------------|---------------|------------------------|
| Bruesch-Pagan Test | 0.0000 | 0.0000 |
| White Test | 0.0009 | 0.0035 |

In order to eliminate heteroscedasticity, ARCH model is preferred and used. In the model, the GDP growth rate is modelled as an ARCH (1) process together with political instability proxies. ARCH(1) model summary is displayed in Table 5.5. According to Table 5.5, R-square of the model is 0.6443, which means that the

coefficient of GDP growth rate is determined with the rate of 64.43% with the independent variables used in the model. Durbin-Watson statistic is calculated as 1.8493, which means that the error terms are not auto-correlated.

Table 5. 5 Model Summary

| R-squared | Adj. R-squared | S.E. of regression | Durbin-Watson | Akaike info criter |
|-----------|----------------|--------------------|---------------|--------------------|
| 0.6443 | 0.6241 | 2.7622 | 1.8493 | 4.5768 |

The mean equations results of the ARCH(1) model are displayed in Table 5.6. According to the results, Coup D'états, Attempts & Memorandums, Cyprus Operation & US Embargo, Ideological & Denominational Events, Gulf War I & Gulf War II and 1994, 2001 & 2008 Economic Crisis showed negative and significant relationship with the GDP growth. However, Government Change and Elections showed positive and significant relation with the GDP growth. The relationship between Natural Disaster and High Casualty Terrorist Bombings with the GDP growth is negative but statistically insignificant. Also as it is seen from the variance equation in Table 5.7, the ARCH effect is significant and can influence the volatility of the dependent variable (GDP growth).

Table 5. 6 ARCH(1) Mean Equation Results

| Variable | Coefficient | Standard Error | z-Statistic | p-value |
|-------------------------------------|-------------|----------------|-------------|-----------|
| Constant | 0.3028 | 0.4774 | 0.6343 | 0.5258 |
| Coup d'état, Attempts & Memorandum | -1.0677 | 0.6220 | -1.7166 | 0.0861*** |
| Crisis 1994 | -8.6793 | 0.8203 | -10.5800 | 0.0000* |
| Crisis 2001 | -3.4184 | 0.3634 | -9.4045 | 0.0000* |
| Crisis 2008 | -4.3723 | 1.5223 | -2.8720 | 0.0041** |
| Elections | 0.5037 | 0.2402 | 2.0971 | 0.0360** |
| Cyprus Operation & US Embargo | -1.0595 | 0.4547 | -2.3300 | 0.0198** |
| Gulf War I-II | -2.3658 | 0.7753 | -3.0512 | 0.0023* |
| Ideological & Denominational Events | -1.2553 | 0.4317 | -2.9077 | 0.0036* |

| | | | | |
|----------------------------------|---------|--------|---------|---------|
| Natural Disasters | -0.8488 | 1.0156 | -0.8557 | 0.4033 |
| High Casualty Terrorist Bombings | -0.4698 | 0.3571 | -1.3156 | 0.1883 |
| LN(Government Change) | 0.4300 | 0.1651 | 2.6038 | 0.0092* |

Table 5. 7 ARCH(1) Variance Equation Results

| Variable | Coefficient | Standard Error | z-Statistic | p-value |
|---------------------------|--------------------|-----------------------|--------------------|----------------|
| Constant | 1.4495 | 0.2102 | 6.8940 | 0.0000 |
| Residual(-1) ² | 1.3556 | 0.2326 | 5.8190 | 0.0000* |

*Significant at 1% significance level

**Significant at 5% significance level

***Significant at 10% significance level

CONCLUSION

This thesis analyse the relation between political instability and GDP growth in Turkey between the years of 1961 – 2016. To define political instability and measure its effect, eleven proxies have been constructed from different fields according to Turkey's political conditions and thought to cause political instability. These proxies are chosen from the events that occurred in the past 55 years.

As it is explained through the Section 3, many economic policies have been applied to reinvigorate, stimulate or improve the economy in Turkey in the past years. For example, in the planned economy period (between 1963 and 1980), industry sector grown rapidly compared the other major sectors due to the followed projections and investments. However, the targeted growth rate was not achieved for all major sectors during these periods. But in this period, political polarization, ideological and denominational conflicts and other social, cultural and political tension were increased, and all of these events were reflected and perceived in almost every field in the country. Therefore, the reason why these economic targets could not be achieved might or might not be the failure of these projections, but it might be the socio-political conjunctures and events. In this thesis, these questions are being researched.

According to the empirical results of the ARCH(1) model, it is found that coup d'états, attempts & memorandums, Cyprus Operation & US embargo, ideological & denominational events, Gulf War I & Gulf War II and 1994, 2001 & 2008 economic crisis have significant negative impact on GDP growth of Turkey. On the other hand, government change and elections showed positive and significant relation with the GDP growth. Also, the relationship between natural disaster and high casualty terrorist bombings with the GDP growth is negative but statistically insignificant.

In general, it can be concluded that, political instability reduces Turkey's growth rate according to the robust empirical results. Turkey is a developing

country and has an emerging market. Emerging market economies are generally more fragile, compared to developed economies, and they are more sensible to internal and external political developments. For instance, political instability and unrest might reduce the foreign investments, and also it might cause high and undesirable fluctuation on the currency. These developments might damage the overall economy and growth with knock-on effect.

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