

2008 US CREDIT CRISIS VS TURKISH ECONOMY

EC470- TURKISH ECONOMY

Burak Saltoğlu

July 3, 2021

Abstract

In this paper, the 2008 Credit Crisis that started in the USA and affected the whole world has been examined. This crisis occurred in America, but it is unthinkable that it would not affect our country at a time when the world economies are so integrated. We analyze the effects of the crisis in the world and in our country. We hope that by examining our main reactions to this crisis, we will understand which policies were successful and which were not. The main purpose of our research is to understand the crisis correctly and analyze its effects on the Turkish economy. The analysis of the implemented policies, their comparative interpretation with the current political economy and possible alternative proposals will be other topics that I will focus on in the paper.

Muhammed Sami Taş- 2018300438

Büşra Karahan- 2016300123

Mehmet Çağdaş Akçakaya- 2015300102

Ali Çetin- 2014300072

OUTLINE – 2008 US CREDIT CRISIS VS TURKISH ECONOMY

I. INTRODUCTION – GENERAL OVERVIEW AND EFFECTS OF THE CRISIS

- A.** Overview of the 2008 US credit crisis and explanation of the general reasons
- B.** General effects of the crisis on the economies globally
- C.** Overview of the Turkish economy before the crisis

II. RESPONSES OF TURKEY AGAINST GLOBAL ECONOMIC CRISIS

- A.** Detailed analysis of monetary policies of the Central Bank
 - i. Unconventional monetary policies
 - ii. Improvement efforts/measures taken against the effects of the crisis
- B.** Fiscal policies of the Turkish government
- C.** Banking sector responses

III. COMPARISON

- A.** Comparison of applied economic policies with previous crisis periods
- B.** Policy responses comparison between Turkey and other developing countries about 2008 credit crises

IV. EVALUATION

- A.** Evaluation of the post-crisis period of Turkey
- B.** Main succesful and unsuccesful point in terms of masures taken during the crisis
- C.** Adaptation and interpretation of the applied policies for today's Turkey

V. Conclusion

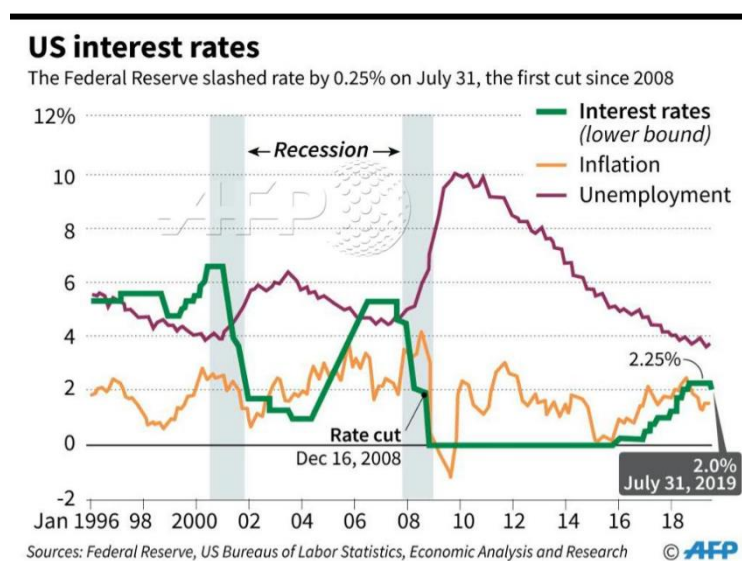
I. INTRODUCTION

A. Overview of the 2008 US credit crisis and explanation of the general reasons

The 2008 Global Economic Crisis (or the Great Recession) is the economic event that emerged in the last months of 2008 and adversely affected many countries. This crisis, the greatest economic devastation since second world war, is also the first serious global economic decline witnessed by modern world. The 2008 crisis, which initially emerged as a financial crisis only, later gradually spread to the real sectors, and turned into a global economic crisis.

Exactly when and why the 2008 Crisis began is still a matter of debate. According to many economists, it started with the failure to repay subprime mortgage loans in the USA in 2006, but for most economists, the real beginning of the credit crisis was in 2008 when Lehman Brothers, the 4th largest investment bank of the USA, went bankruptcy with 616 billion dollars debt. For this reason, the most correct statement is that the crisis has manifested itself since 2006, but the real collapse started with 2008.

Figure 1 (Federal Reserve)

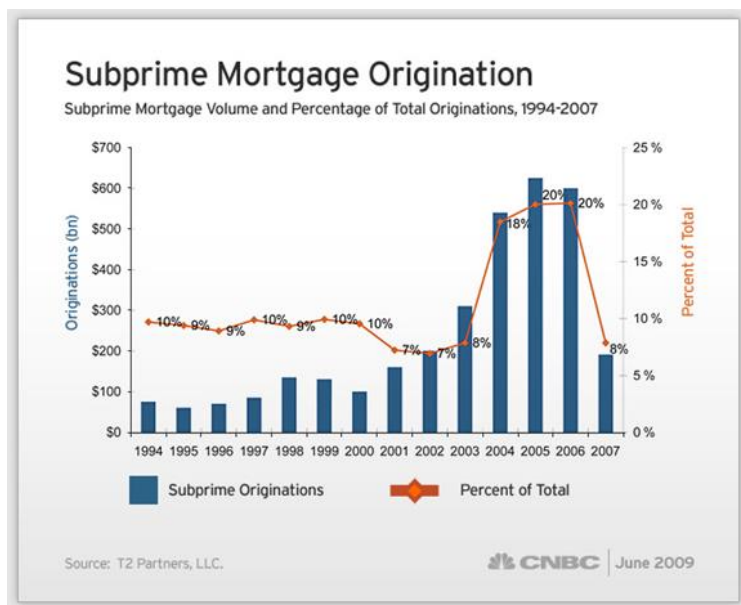


economy. These interest rate cuts have rapidly increased the use of housing loans. As a result,

A huge real estate and credit bubble are root of the global financial crisis. In the early 2000s, the FED significantly reduced interest rates in to get the US economy out of the recession. In this way, it is aimed to increase consumption and revitalize the

real estate prices have increased significantly, and people have begun to see real estate buying and selling as a very profitable investment. Thousands of people who want to take advantage of this opportunity have invested in the real estate sector by taking serious loans from banks. While most of the housing loans were given to people with high credit ratings (prime mortgages) in the early days. However, in time, there were no people who have a high credit rating. Therefore, loans started to be given to people with lower credit ratings (subprime

Figure 2 (T2 Partners, LLC)



mortgages) over time. In mid-2008, the volume of subprime mortgage loans exceeded 1.5 trillion US dollar. These people, who are currently not very reliable in paying their loans, have become unable to repay their loans as a result of the FED's increase in interest rates.

Most of the banks that gave mortgage loans in the pre-crisis period also arranged derivative financial instruments based on these loans. With the release of these derivative financial instruments, they were able to provide more funds to give people new loans. However, derivative transactions made on the basis of these loans and were not reliable enough because of subprime mortgages. This situation further increased the devastating effect of the 2008 crisis. Rating agencies, whose task is to objectively grade companies and these derivative instruments, were also influential in the formation of credit bubbles with their unrealistic ratings. The fact that the rating agencies were financed by the institutions, prevented them from making objective evaluations.

Figure 3 (BIS)

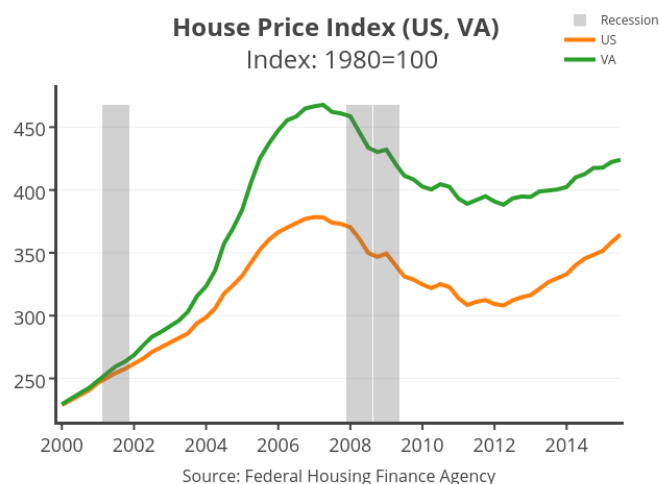


With derivative financial instruments, the mortgage lender banks have been able to transfer the risk of non-repayment of the credit to third parties. The credit institutions that transferred their risks, were able to take on much greater risks. They could give much more loans. With the help of these

new loans, the derivatives market naturally grew like an avalanche. The value of derivative instruments has exceeded the value of the real estate they are attached to.

Figure 4 (Federal Housing Finance Agency)

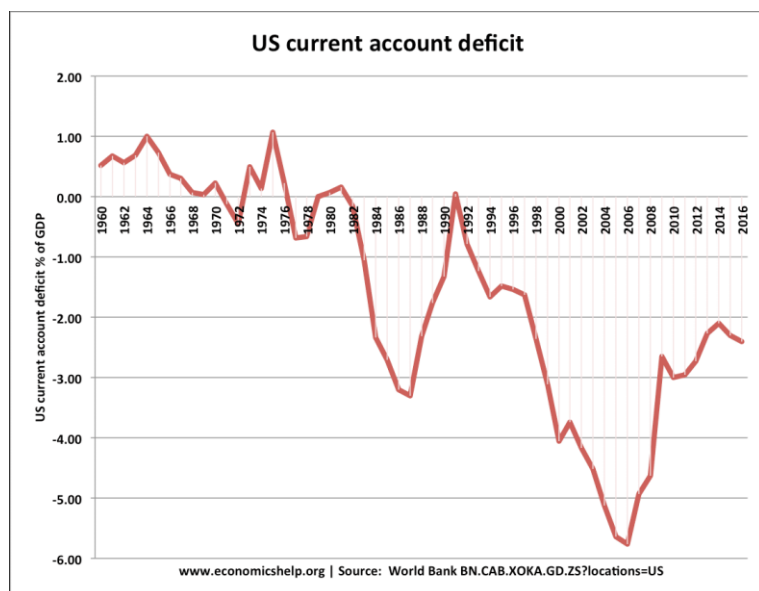
Housing prices in the USA, which reached the top point in 2007, started to fall seriously after this year. Even if people who buy a house with a loan sold their house in order to pay off their mortgage loans, the income that came from this sale was not enough to pay off



their debts. Besides, from the point of view of banks, the income from the sale of the houses foreclosed by the banks was not enough to close the loans they gave. This situation increased the number of unpaid loans in banks and caused banks faced liquidity and financing problems. With the beginning of the crisis, a lot of people who have deposits in banks wanted to withdraw their money as soon as possible (the bank run), and this attitude put banks in a very difficult

situation too. Due to the reasons explained above, 158-year-old Lehman Brothers (the bank where derivative products are collected the most) faced the danger of bankruptcy. Lehman Brothers went bankrupt on September 15, 2008. Government and FED's announcement that they would not bail out the bank. However, the debris left behind by this situation was big enough to change the minds of the US government and the FED. Many large and well-established American companies were at risk of going bankrupt. To prevent this national bankrupt trend, the US government passed an 850-billion-dollar bailout package from the US Senate and released to the market.

Figure 5 (World Bank)



Another reason of crisis was that the US economy was running a serious current account deficit. The increasing investment demand in the country could not be met by domestic savings. In the growing US economy, imports increased significantly with increasing demand. This led to a rapid increase in the current account deficit. The current account deficit, which was given at very serious rates, made the US economy more vulnerable against to the crises. For this reason, the 2008 crisis was much more likely to occur in the USA than in other developed countries.

The biggest difference of the 2008 Credit Crisis from other crises was that it was the first major crisis to occur on a global scale. The main reason for this situation is that capitalism has become such a global system for the first time in the world. The Great Depression of 1929, which is the most compared to the 2008 crisis, emerged as a crisis of capitalism. The socialist

economies that existed at that time were not seriously affected like the 2008 crisis. Therefore, the 1929 crisis is not as global a crisis as the 2008 crisis.

B. General effects of the crisis on the economies globally

Since the American economy was big enough to affect the world economy, this crisis has adversely affected all around the world economies. Especially in the economies of developed and developing countries, the growth rate decreased. Even in some countries, contractions were experienced. A serious contraction occurred in the world trade volume (especially in the last quarter of 2008) too. Especially the imports and exports of North American and European countries, which were severely affected by the crisis, decreased. This has affected developing countries whose trading partners have mostly developed countries, very seriously. Export-based growth countries were most affected by this trade contraction. The reason for this decrease in exports is the serious contraction in demand due to the crisis.

Figure 6 (World Bank)



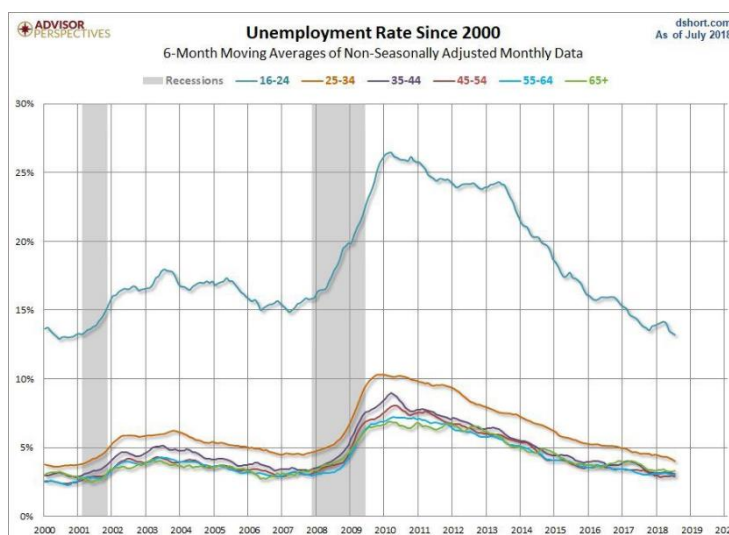
In addition, the increase in consumer prices, that can be named as the inflation rate, also increases considerably. Inflation values in both developed and developing countries increased significantly compared to the 2

years before the crisis. While the average inflation values in developing countries were 5.4% in 2006, which increased to 6.4% in 2007 and 9.3% in 2008. The countries whose currency depreciated the most are countries with high current account deficits and low growth. Crude oil prices also increased by 49% between 2006 and 2008. This situation is a serious financial loss

especially for countries like Turkey that import their energy from other countries to a large extent. The uncertainty that increased with the crisis narrowed the credit channels and the real sector entered into a cash shortage.

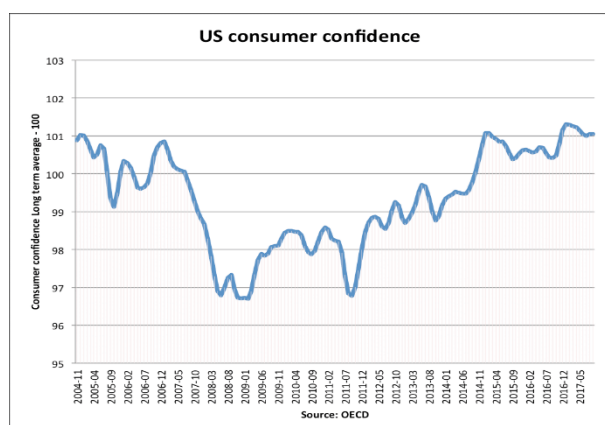
Figure 7 (Advisor Perspective)

The severe recession in the world has greatly reduced the industrial production. Industrial production of both developed and developing countries has declined to lower levels than ever before in the last decade. In these countries, which started to minimize



economically, unemployment increased seriously. The main reason for this situation is the low consumption level because of the crisis. The increase in unemployment affected the domestic demand and the economic crisis started to deepen by showing a chain reaction. For example, while unemployment rates in our country were 9.9% in the pre-crisis period and rose to 16.1% in February 2009.

Figure 8 (OECD)

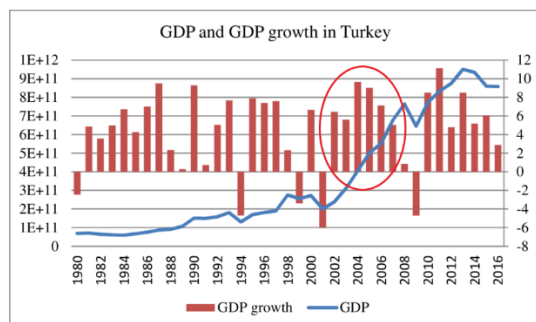


Household and real sector confidence indices dropped very sharply. The liquidity problem that emerged due to the credit crisis and the confidence problems reduced the amount of FDI and portfolio investments. Private sector-sourced capital inflows to emerging market economies were 1.2 trillion

dollars in 2007, and this amount decreased to 0.4 trillion dollars in 2009. One of the main problems in the emerging market was this serious decline.

C. Overview of the Turkish economy before the crisis

Figure 9 (World Bank)

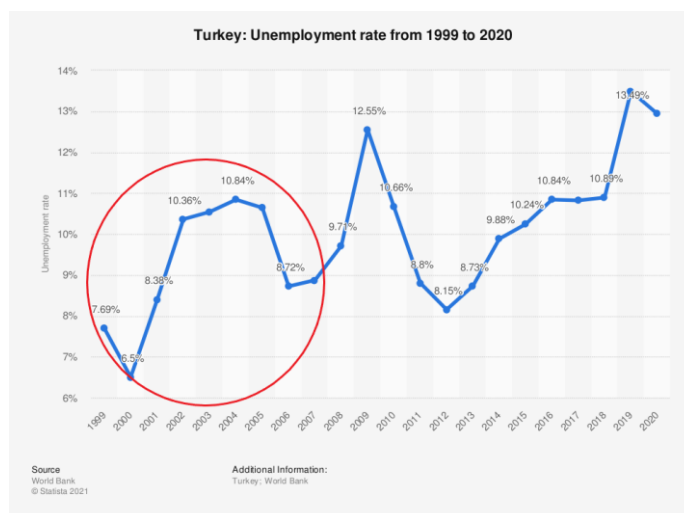


The political stability in Turkey from 2003 to 2008, the monetary and fiscal policies implemented very carefully and successfully, the legal and structural reforms carried out, and the positive expectations in the international markets led to the

formation of the macroeconomic order quite successfully. Between 2003 and 2007, the annual growth average in our country was around 6.9%. Annual inflation decreased from 39 percent to 8.4 percent. When the inflation rates since the establishment of Turkey are examined, it can be understood that 8.4 percent is quite success for Turkey. With the decisions taken after the 2001 Banking Crisis, the banking sector was built on solid foundations. Banks were prevented from taking great risks, and the risk was reduced as much as possible with the reserve limits and various protective laws. The financial system has been kept under control in accordance with international criteria.

Figure 10 (World Bank)

The banking sector, which meticulously applies the Basel criteria, has made significant progress in financial stability. In this way, the devastating effects of the 2008 crisis could not cause a serious collapse in the banking sector. In addition, the



average unemployment level in Turkey for 2006 and 2007 decreased to 9.9%. This indicates that the effects of the great recession experienced after the 2001 banking crisis have disappeared.

II. RESPONSES OF TURKEY AGAINST GLOBAL ECONOMIC CRISIS

Like many developing countries, the 2008 crisis hit Turkey in many different areas. The process, which began in mid-2008 and lasted until the end of 2009, was the most difficult process for Turkey during the 2008 US credit crisis. From the point of view of Turkey, this crisis mainly resulted from unprecedented foreign demand shock which starting from US mortgage crisis. The process in the contraction in GDP, and internal and external demand called recession from 2008 to 2009 according to Turkey. Due to existing of unprecedented foreign demand shock, there was first severe collapse in export side, then growth followed it. The crisis brought about the decline in investment and stock prices, currency depreciation and fall in the liquidity for banking sector. In addition, the crises led to the rising of risk premium which cause the business and consumer confidence adversely. Also, net capital outflow forced the Turkey to implement counter-cycle policies since contraction in financial flows, production or growth weakened the Turkey's credit conditions. In addition, unemployment rate reached to 14 percent in 2009. These news brought the new policies like counter-cycle responses to stimulate the economy and weaken the effects of crisis.

a) Detailed analysis of monetary policies of the Central Bank

During the crisis, Central Bank of Turkey aimed to control inflation, to provide adequate liquidity for private sector and meet the shortage of foreign exchange demand. Among them, the central bank's least focus was on inflation suppression. Inflation was not seen as much of a threat to the central bank during this crisis. The reasons for this are falling aggregate demand

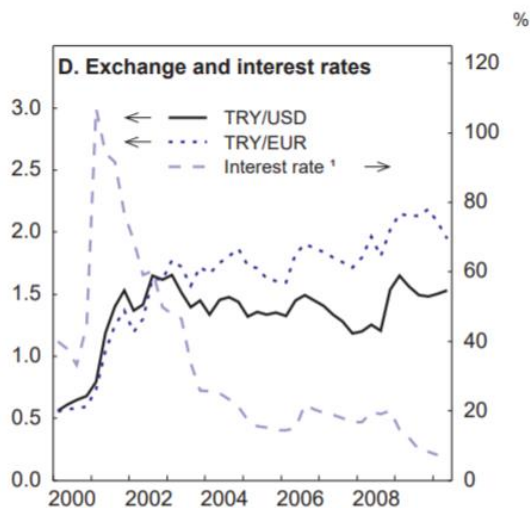
and rising oil prices in the world. In addition, the central bank has applied expansionary monetary policies to be non-conventional, especially to control the foreign exchange rate and meet the market's foreign exchange demand. We can examine them under three headings which are interest rate responses, foreign exchange interventions and other liquidity-boosting measures.

a.1) Interest Rate Response

The central bank pursued two different interest rate policies from mid-2007 to late 2009. It initially increased policy interest rates using traditional monetary policies from mid-2007 to July 2008. The main purpose of doing so is to suppress rising inflation expectations. However, when examining Turkey's responses to this crisis, we generally consider the process from mid-2008 to the last quarter of 2009. Thus, starting from November 2008 until September 2009, Central Bank constantly implemented a policy of very sharp interest rate cuts. It cut interest rates to 16.75 percent from 7.25 percent to provide adequate liquidity for private sector, to boost the economy, and to ease the credit conditions for banks and public without hesitations about rising inflation rate. To summarize;

- Policy interest rate was decreased from 16.75% to 7.25% in about eleven months.

Figure 11 (OECD 2010)



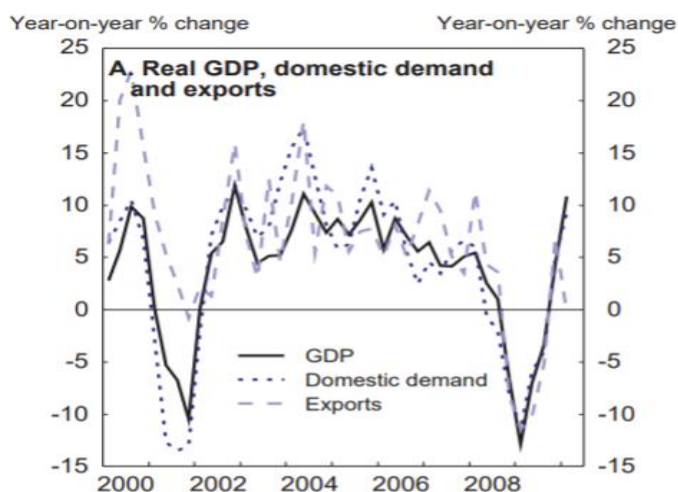
Source:OECD

a.2) Other Liquidity-boosting Measures

In order for firms and banks to reach sufficient liquidity, some measures were taken to increase the amount of money in the market. As an example of these measures, the TL required reserve ratio was reduced from 6% to 5 % in October 2009 to provide adequate liquidity and to ease lending conditions for firms and banks. To support and provide liquidity, one week repo auctions began to be implemented. Also, by Central Bank, interest payments on Turkish Liras required reserves were risen. Export rediscount credits were introduced to support export firms. In this process, to be able to provide more credits for export firms, upper limit of export rediscount credits was enhanced from 500 million dollars to 2.5 billion dollars. In summary;

- Required reserve ratio for Turkish Liras was decreased from 6% to 5%,
- One week repo auctions were started,
- The increase in interest payments for Turkish Liras,
- Export rediscount credits injected,
- Upper limit of export rediscount credits were widen from 0.5 billion dollars to 2.5 billion dollars.

Figure 12 (OECD 2010)



Source: OECD

a.3) Foreign Exchange Interventions

The main goal of the central bank's intervention in foreign exchange is to reduce the volatility of foreign exchange and provide foreign exchange liquidity for the private sector. First, foreign exchange purchase auctions were reduced or even brought to a standstill in the third and fourth quarters of 2008. However, FX selling auctions were boosted. The amount of FX selling auctions held was increased 20 times in mid-2009 compared to the end of 2008. The maturity of foreign exchange lending to banks has been expanded, it is extended from 1 week to 3 months. The interest rate on FX lending has been significantly reduced. And the FX required reserve ratio was reduced, as was the case with the TL. To summarize;

- Foreign exchange purchase auctions were decreased,
- Foreign exchange selling auctions were increased,
- Maturity of foreign exchange lending were expanded from 1 week to 3 months,
- A reduction in interest rate and an increase in interest payments on foreign exchange lending,
- The decrease in the foreign exchange required reserve ratio from 11% to 9%.

b) Fiscal Policies of the Turkish Government

At the time of the 2008 crisis, declining consumption was threatening companies and also unemployment rate. After the mortgage crisis has begun, investment rates declined, and unemployment began to rise further globally. To mitigate their impact, Turkish government announced a comprehensive package of fiscal measures in March 2009. This package covered some tax reliefs, some tax exemptions, tax arrangements and adding some taxes on a special consumption set. On the other hand, among the goals of this package were to provide some concessions and incentives to the private sector, reduce the unemployment or prevent

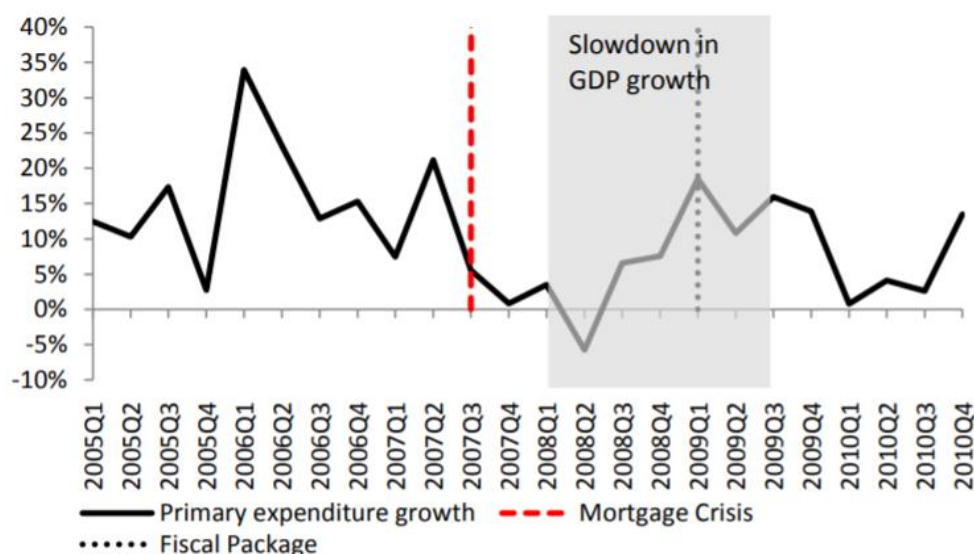
unemployment from rising, and prevent a recession in capital accounts on especially foreign assets.

However, in terms of presenting and implementing these financial packages, we can say that Turkey was delayed. Although developed countries have announced financial packages that are very large and have a large amount of spending since the second quarter of 2008, Turkey has prepared a package in March 2009 that is less comprehensive and less costly than the packages announced by developed countries. The package included some measures taken in revenue and expenditure sides. For the period of 2008-2010, the amount of these measures is estimated to approximately 1.8 percent of GDP. In Turkey, the real government primary expenditures on average were less than the average of OECD countries and it is located on the end of order in terms of the amount of real government primary expenditures when comparing it with developing countries'. As seen in figure, growth rate of real government expenditures was higher than the growth rate of previous years. However, it is less than the OECD countries' average. So, inevitably, the government budget deficit has increased by 4.2% of GDP in the period of 2008-2010.

Figure 13

Quarterly Real Government Primary Expenditure

(growth rate from the same quarter in previous year)



Source: *Quarterly Real Government Primary Expenditure (growth rate from the same quarter in previous year)*. From "The impacts of the global crisis on the Turkish economy, and policy responses," by H. Comert and M.S. Colak, 2016, In *The Global South after the Crisis*. Edward Elgar Publishing.

As fiscal policy responses, tax policies included the reduction in value added taxes (VAT) and special consumption taxes to encourage people to consume and to make the investments while the consumption and investment growth was triggering to decline during the crises. In addition, government offered some incentives for private sector to protect them against bankruptcy, to lighten their burdens on payments to employees, to provide to reach more suitable borrowing process, and to encourage them to make the investments. To reach these targets, government offered interest rate subsidies to private sector and the Treasury decided to pay the share of employers in employees' social security payments. Nevertheless, in order to reduce unemployment and ensure the continuity of the labor force in the economy, some exemptions were introduced on employees for social security payments. About 200 thousand people were temporarily employed in the public sector and it was decided that the allowances of part-time

employees would be covered by Turkish Employment Organization. In addition, in order to reduce the recession in capital accounts and to reach global capital more and more effectively, tax relief on credits was introduced on resources obtained by foreigners, and some tax exemptions were introduced on foreign assets committed to transferring their assets to Turkey. On the other hand, it was decided to issue some tax amnesty for people who declare their all-unrecorded assets. Beside these responses, government declared guarantees and insurance scheme will be implemented via Credit and Guarantee Fund to ease the lending for private sector, especially small and medium scale enterprises.

In summary;

- The reduction in value added taxes,
- The reduction in special consumption taxes,
- Interest rate subsidies for private sector,
- Payments on employees' social security payments by Treasury,
- Exemptions for workers in the social security payments,
- About 200 thousand people temporarily were employed in public sector,
- Payments on allowance of part-time employees by Turkish Employment Organization,
- Tax amnesty for declared all unrecorded assets,
- Tax immunity for foreign assets, provided that these foreign assets are be transferred to Turkey,
- Guarantees and insurance plan will be issued by Credit and Guarantee Fund.

Table 1 (OECD 2010)

Billion TRY unless stated otherwise	2008	2009	2010	2008–10
Revenue measures	0.0	4.1	1.8	5.9
Personal income taxes ¹	0.0	–0.5	–0.7	–1.1
Corporate taxes	0.0	0.7	1.2	1.9
Indirect taxes	0.0	2.6	0.1	2.7
Other	0.0	1.3	1.1	2.4
Expenditure measures	7.9	17.2	21.1	46.2
Government investment	5.1	6.4	6.1	17.6
Government consumption	0.9	2.5	5.3	8.7
Contributions to social security funds	0.0	4.6	5.5	10.2
Transfers to households	0.0	0.1	0.1	0.2
Transfers to business	0.0	0.5	0.5	1.0
Transfers to sub-national governments	1.3	2.5	3.1	7.0
Other	0.5	0.5	0.5	1.5
Revenue and expenditure measures	7.9	21.3	22.9	52.1
<i>% of GDP in a given year or period</i>	<i>0.8</i>	<i>2.2</i>	<i>2.2</i>	<i>1.8</i>
Measures with no direct or immediate impact on finances	1.5	11.3	0.0	12.8
Guarantee and insurance schemes for financial institutions	0.0	6.8	0.0	6.8
Loans to enterprises	1.5	4.5	0.0	6.0
Total	9.4	32.6	22.9	64.9
<i>% of GDP in a given year or period</i>	<i>1.0</i>	<i>3.4</i>	<i>2.2</i>	<i>2.2</i>

1. Negative figures associated with personal income taxes reflect additional revenues generated by the voluntary disclosure, tax peace and asset repatriation programme.

Source: SPO (2009b), Pre-Accession Economic Programme 2009.

Source: OECD

C. Banking Sector Responses

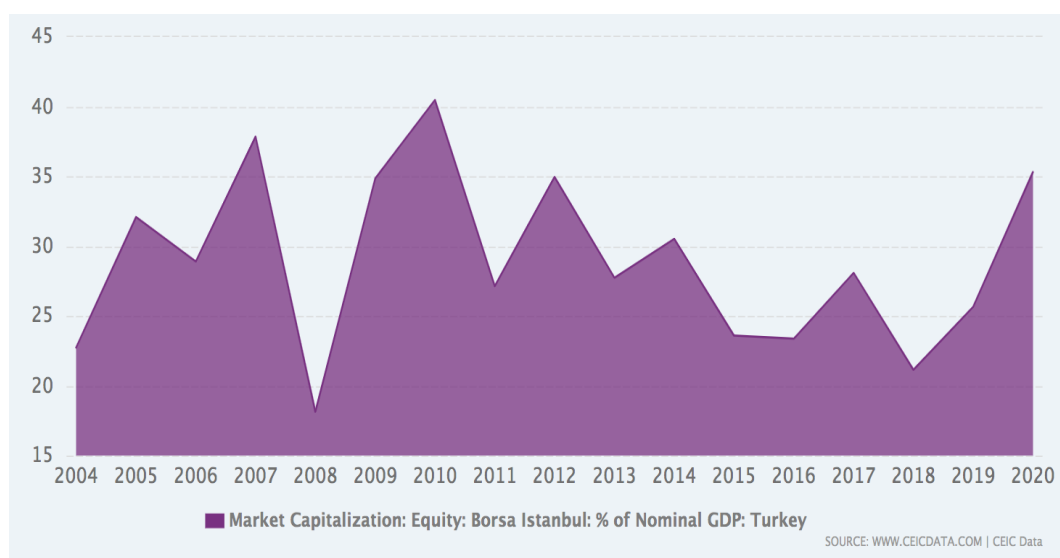
2008 US credit crisis has affected various markets all around the world. Some of the effects were devastating, and some of them were not. When we consider for banking sector, the crisis has created different outcomes for different banking sector structures. In Turkey's case, the impact of 2008 crisis on banking sector were not as crucial as most of the world. The reason behind this is that Turkish banking sector is reinforced after 2001 crisis. With its legal base and auditing system, Turkish banking sector was one of the sectors around the world which are affected slightly by 2008 US credit crunch. This development of Turkish banking sector includes:

- Reinforcing of regulatory and supervisory units

- Strengthening of capital/fund structures of banks
- Abolishment of possible problematic banks
- Macropolicies applied by CBRT

Turkish banking sector was acting precautiously on credits after crucial results of 2001 crisis. Therefore, overall open positions and deficits were not as much as previous crisis. This situation has helped Turkey about dealing with 2008 crisis and improve it's banking sector. Yet, this doesn't mean that Turkey has not affected from US credit crunch when we consider for it's banking sector. In third quarter of the year 2008, profitability performance of Turkish banking sector has started to decrease. The most dominant factor on this fall is that banks cannot collect their receivables on time. On the last months of 2008, due to problems of global financial system and their influences on world' economies, banks have to deal with the shortage problem of foreign currency resource and it's funding. On Turkey's case, devaluation of Turkish Lira and loss of value on stocks have led to a diminishment on demand of financial assets. At the end of 2008, marketcap of financial institutions has decreased to 45 billions of US Dollars.

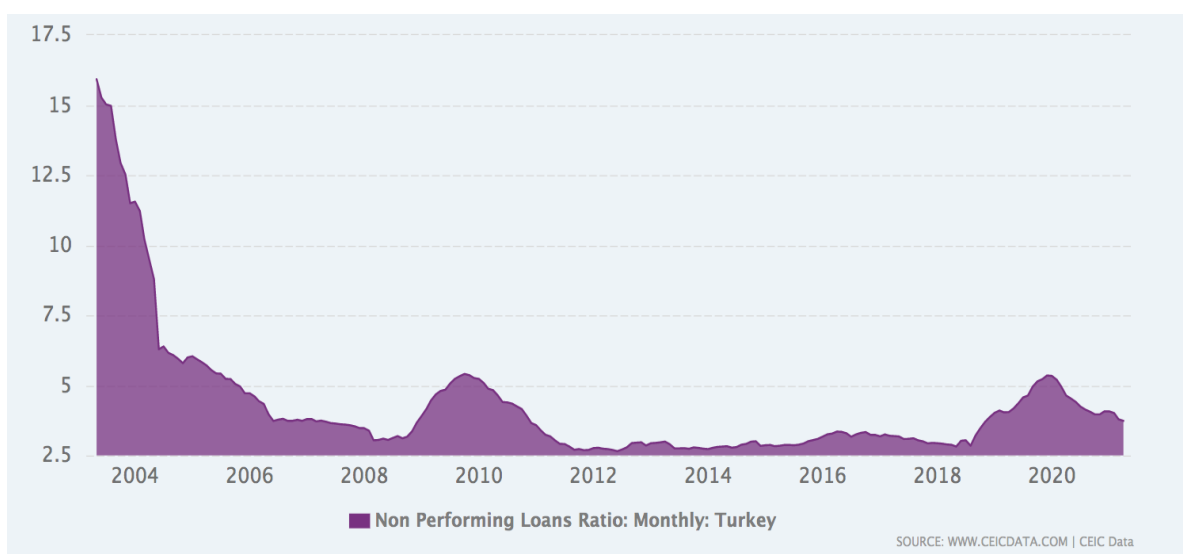
Figure 14



Source: CEICDATA

Another important impact of 2008 crisis on Turkey is that due to shortage of liquidity, excess borrowing has occurred. As a result, the usage of credit cards is expanded and people have become obliged to deal with more debts. This situation can be observable in bank credits as well. The percentage of non-performing loans has started to increase after 2008 US credit crisis. As a result, the amount of assets which are obtained by banks due to non-performing loans has started to increase largely

Figure 15



Source: CEICDATA

While such impacts and incidents have becoming observable, Turkish banking sector responded in various ways for avoiding and dealing with effects of US credit crunch, Some measures are taken by Turkish banking sector:

- Turkish Banking Regulation and Supervision Agency (BDDK) has made a regulation which requires banks not to distribute their profits in the year of 2008.
- Turkish Banking Regulation and Supervision Agency (BDDK) has made a regulation which warns banks to be careful of the effects of latest increases on interest rates.

- With regulations of credits by BDDK, it has become more possible that current smooth credits can be restructured.
- Central Bank of Republic of Turkey (CBRT) has declined required reserve ratio of banks. According to this regulation, CBRT has not changed required ratios of liabilities of banks that are arranged by Turkish Lira, and ratio is remained as 6%. On the other hand, required ratio of liabilities of banks that are arranged by foreign reserves, has declined from 11% to 9%. It is expected that such a regulation can provide additional 2,5 billions of US dollars liquidity to Turkish banking sector.
- After the latest unfavourable incidents and effects of 2008 crisis over Turkish banking sector, banks have tended to increase their liquid assets in terms of foreign currency and protect the quality of credits. With such alterations, credit standards have improved. In this period of time, the resources which are obtained from abroad have declined and funds from 'repo' and foreign currency deposits have diminished.
- In the light of preventing the density on financial circumstances, short-term future interest rates have declined 175 basis points in November and December.
- With additional funding of markets, the necessary liquidity is provided and overnight interest rates are determined by consideration of CBRT's borrowing rate. It means that it is wanted that overnight interest rates will be in similar levels with CBRT's borrowing rate.
- Throughout the crisis period, several measure packages have been announced for protecting the economy. Especially, one of the packages includes regulations about Turkish banking sector. According to this package, an institution, which is called Credit Guarantee Fund (Kredi Garanti Fonu), is established and it will reorganize the flow of credits between private sector and banking system. Turkish Treasury will contribute 1

billion of Turkish Liras to this institution. The expected impact of such a contribution is 10 times higher because of banking system's multiplier ratio.

- Credit Guarantee Fund will be carry the risk of credits which is used by KOBİ's (Small and Medium Sized Businesses) in a ratio of 60%. By this way, banks will take on only 40% of the credit risk which are used by KOBİ's.

As a result, it can be said that 2008 US Credit Crunch has expanded through banking systems. Many global institutions and banks have become obliged to deal with major problems, yet Turkish banking sector was not affected that much. On the origin of this situation, the role of reinforcement of banking sector after 2001 crisis was crucial. Besides, regulations which are made by BDDK and CBRT have provide convenient circumstances for banks during 2008 crisis. But this situation does not mean that US credit crunch did not affect Turkey. The impact of crisis on reel sector were more powerful, this situation has also created an impact on Turkish banking sector. Non-performing loans have increased in large numbers in a short period of time, which cause banks to obtain new assets due to this default credits, as well as additional liabilities and credits that are used by reel sector.

III. COMPARISON

A. Comparison of applied economic policies with previous crisis periods

The instabilities that emerged in the Turkish economy right after the Second World War were tried to be eliminated with the 1946 devaluation. Instability has continued with a cyclical fluctuation until today. It is not a coincidence that there was a ten-year time frame between the economic stabilization decisions of 1958, 1970 and 1980. The economic crises, which started to be experienced more frequently after 1980, brought great costs to the economy, and inflation accelerated as a result of these crises, which took place on Turkey's economic agenda for years.

All Republican governments that came to power after 1946 aimed to ensure stability in the economy and to realize a stable economic growth. The stability decisions they had put into effect for this purpose lost their effect after a while and everything had to be started again. This period is the lost years for the Turkish economy. Finally, with the great support given by the IMF to the Program, which was announced on April 14, 2001, inflation decreased to single digits.

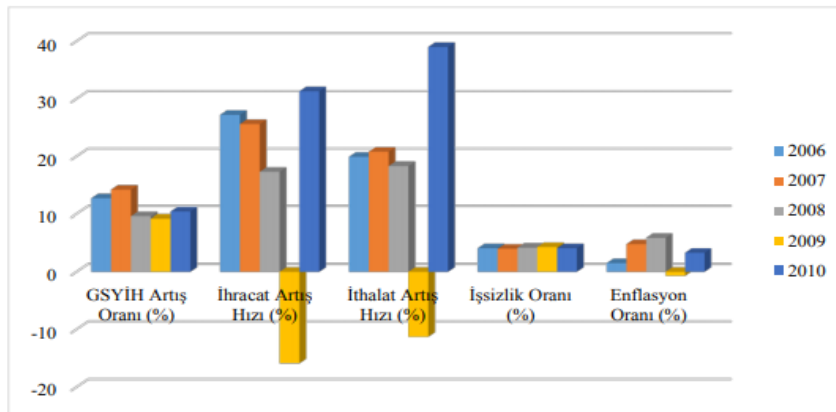
In the first months of 2001, Turkey faced perhaps the most important crisis in its history. The adaptation program, which started to be implemented after 1999, is a well-prepared program that has begun to yield positive results on macroeconomic obstacles. The lack of political determination, which was the main factor in the emergence of the crisis, also showed itself during the measures taken against the crisis. This situation has caused Turkey to face its economic and political realities.

B. Policy responses comparison between Turkey and other developing countries

about 2008 credit crises

Figure 16

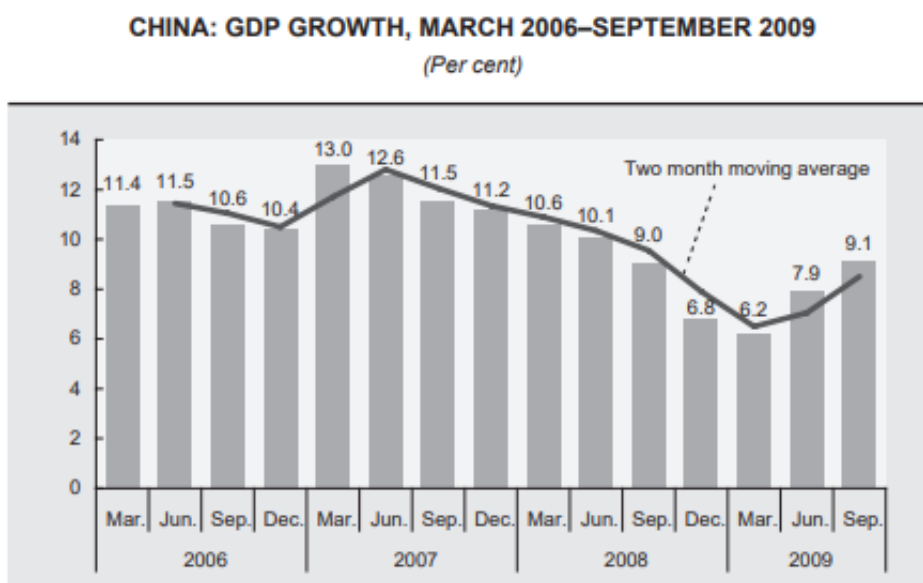
Grafik-5: Çin Ekonomisi Temel Göstergeler (2006 - 2010)



Kaynak: <http://www.sbb.gov.tr> sitesindeki verilerden derlenmiştir. (Erişim: Nisan 2019)

The rate of increase in exports decreased by 15.88% in 2009, when the crisis deepened, and increased by 31.33% in 2010 by making a new leap. The Chinese economy grew by an average of 10% between 2005 and 2010.

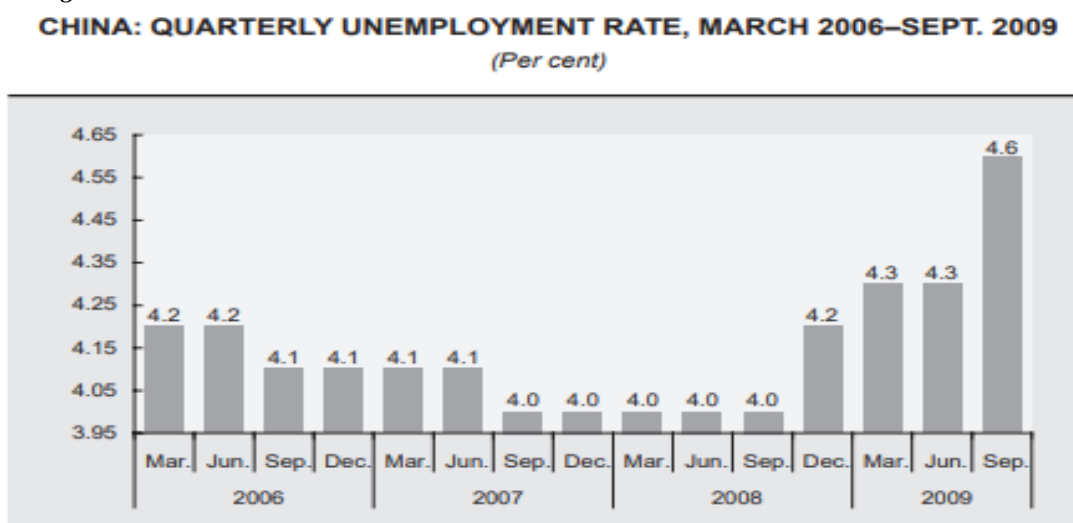
Figure 17



Source: National Bureau of Statistics of China (www.stats.gov.cn).

In March 2009, GDP growth rate of China decreased to **6.1%** which is 10-year low.

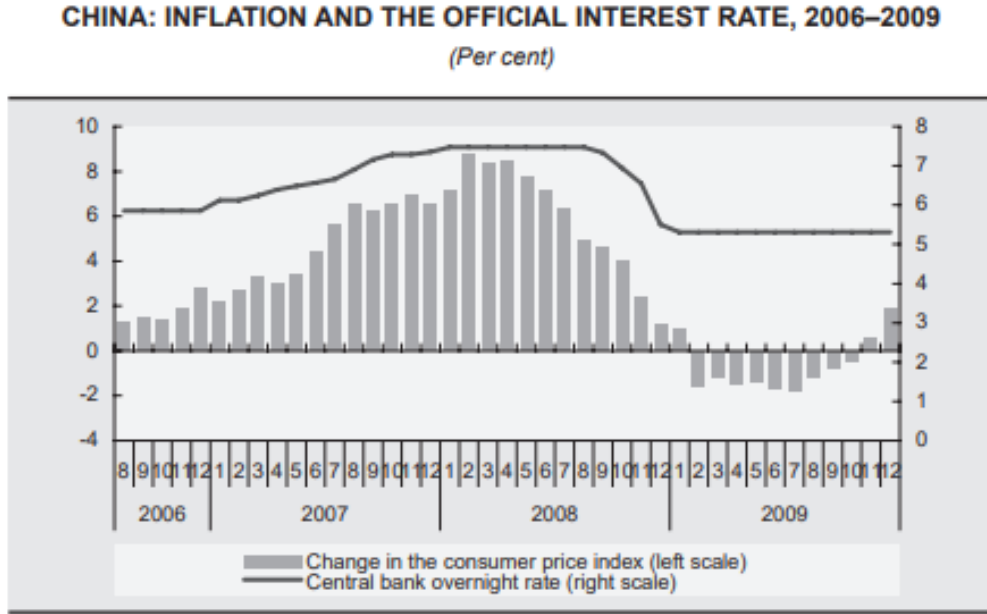
Figure 18



Source: National Bureau of Statistics of China (www.stats.gov.cn).

The urban “registered” unemployment rate fell steadily after 2002, reaching its lowest rate of 4% in the 3rd quarter of 2007 before rising to **4.6%** in September 2009.

Figure 19

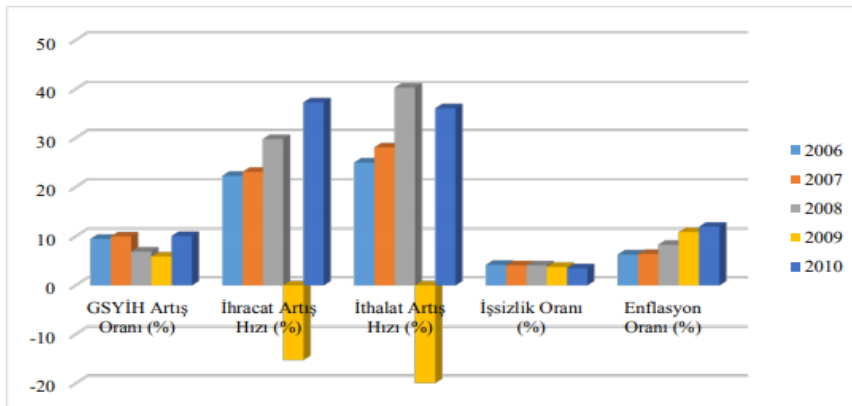


Source: <http://www.tradingeconomics.com>.

To cope with the high price volatility, China increased its overnight interest rates multiple times from September 2006 to January 2008. Then, from September to December 2008, interest rates were cut multiple times.

Figure 20

Grafik-4: Hindistan Ekonomisi Temel Göstergeler (2006 - 2010)

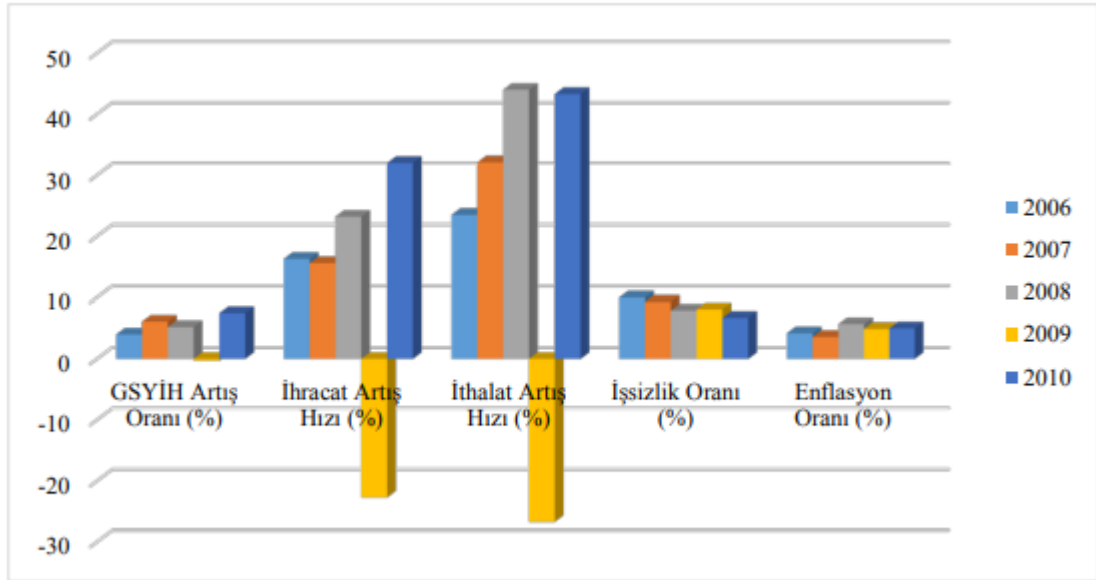


Kaynak: <http://www.sbb.gov.tr> sitesindeki verilerden derlenmiştir. (Erişim: Nisan 2019)

The main effects of the 2008 crisis on the Indian economy; information technologies, investment, exports, unemployment, foreign capital, exchange rate and stock market. In 2010, it increased its GDP by close to 10%. Inflation is also seen to increase from year to year.

Figure 21

Grafik-1: Brezilya Ekonomisi Temel Göstergeler (2006 - 2010)



Kaynak: <http://www.sbb.gov.tr> sitesindeki verilerden derlenmiştir. (Erişim: Nisan 2019)

Brazil, like other developing countries, was adversely affected by the 2008 crisis. Although the Brazilian economy felt the negativities of the crisis in areas such as foreign trade, foreign investments and the banking sector, these effects were limited compared to many countries.

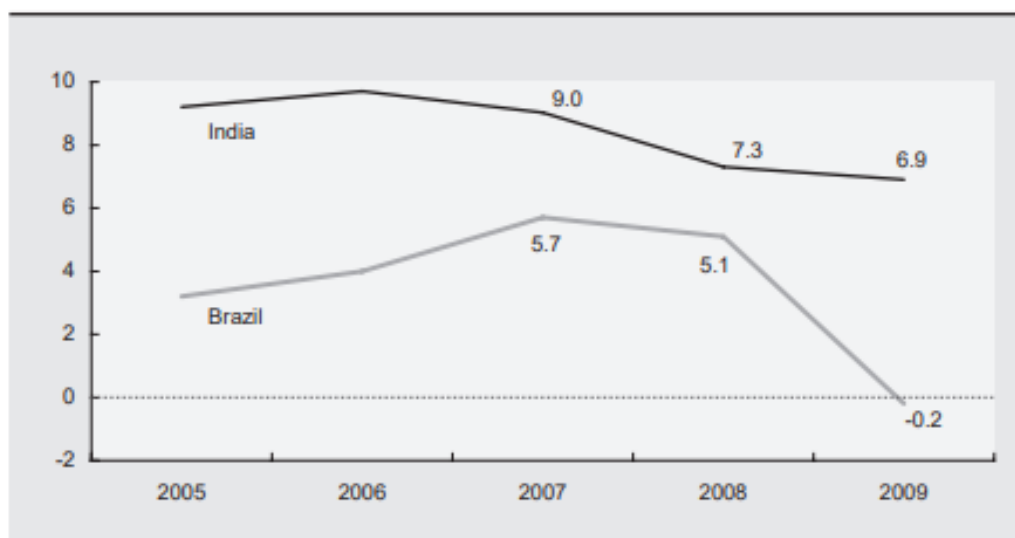
Brazilian economy grew by 4% in the 5-year period between 2003 and 2008. In this period; The Brazilian economy performed well, with high levels of export growth along with investments.

Unemployment rate, which was 7.9% in 2008, rose to 8.1% in 2009 and was 6.7% in 2010.

In the country, which experienced a contraction in GDP growth rate in 2009, no significant change was observed in unemployment rates and inflation rates as a natural result of the stability in investments.

Figure 22

BRAZIL AND INDIA: REAL GDP GROWTH RATES, 2005–2009
(Per cent)

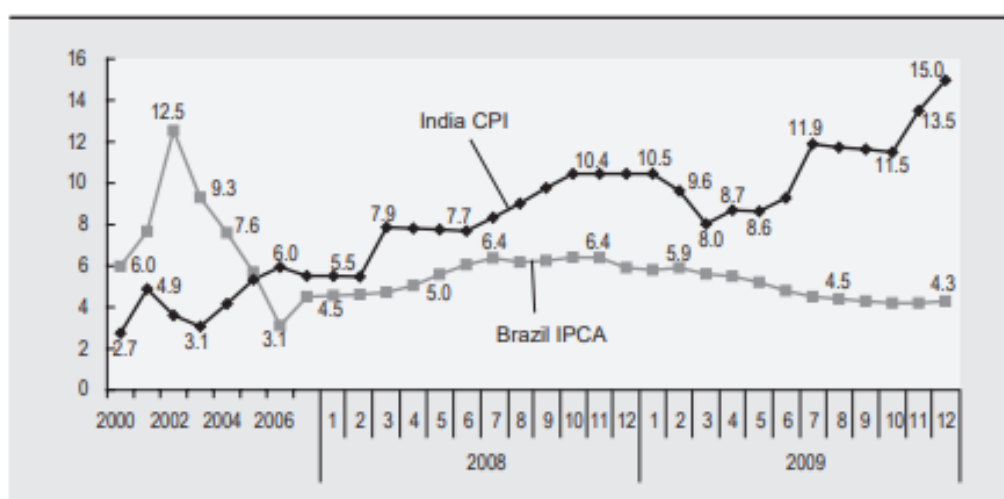


Source: Instituto Brasileiro de Geografia e Estatística; and Reserve Bank of India.

Unlike Brazil, which fell into recession in 2009, India was the second least adversely affected country by the global crisis, after China.

Figure 23

BRAZIL AND INDIA: CONSUMER PRICE INFLATION, 2000–2009
(Per cent)



Source: Central Bank of Brazil; and Reserve Bank of India.

Inflation in India was initially lower than in Brazil, but steadily increased after 2003. Brazil, on the other hand, managed to rapidly reduce its consumer price index. In the second half of 2008, the consumer price index in India reached alarming levels in a country where inflation has remained historically low.

IV. EVALUATION

a) Evaluation of the post-crisis period of Turkey

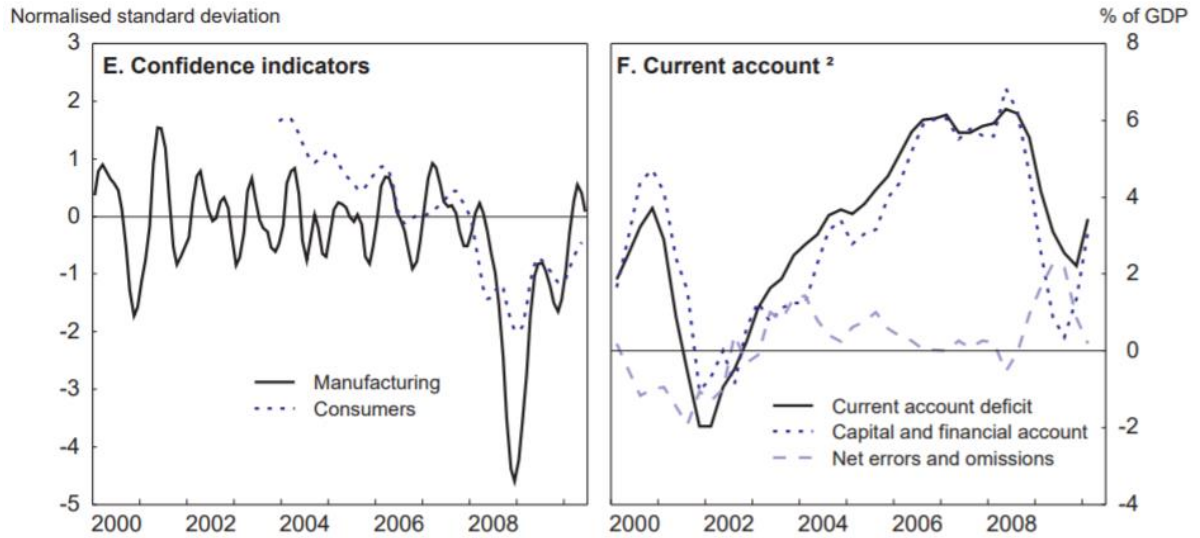
First of all, it should be said that the 2008 Global economic crisis was felt relatively little in our country. Despite the serious banking crises in North America and Europe, which were at the center of the crisis, the banking sector of our country managed to survive as a result of the measures taken after 2001. This is very important because banking sector finance a lot of domestic sectors. Of course, the decrease in demand due to the crisis and the decrease in trade revenues also affected our country. The increase observed in Turkey's production capacity from year to year has decreased and existing capacity of manufacturing has been affected badly. Especially with 2010, many action plans were prepared and put into practice with medium-term programs, and the pre-crisis emerging market and macroeconomic data trend were followed. Unemployment, which increased with the crisis, decreased again in the recovery process, and our export and tourism incomes started to return to normal levels. After several unsuccessful years, our GDP growth rates have reached pre-crisis positive levels. In the rebuilding of lost customer confidence, much faster recovery was observed compared to the countries that have overcome the crisis severely. Especially the economic success between 2010-2013 is quite dazzling. In particular, the budget deficit observed in 2009 returned to normal in 2010. In conclusion, it can be said that the effects of the 2008 World Financial Crisis deepened in 2009, but the recovery started in 2010. Turkey has managed to overcome this crisis in the lightest way possible. In terms of social policy, the unexpectedly successful result was achieved.

b) Main succesful and unsuccesful point in terms of masures taken during the crisis

It is not possible to determine Turkey's policy responses in the crisis process as completely successful or unsuccessful. Although developed countries began to provide fiscal policy responses to the crisis in mid-2008, Turkey was only able to announce a financial package in March 2009. On the other hand, in order to liquidity the market, such packages have been put into effect by all countries of the world to facilitate loan borrowing as well as. The amount of real government primary expenditures costs of Turkey was relatively low. So, it was below he G20 countries average. Furthermore, the average cost of Turkey's fiscal measures is 1.2% of its own GDP, while the average of developing countries among the G20 countries is 2.4%. In addition, the banking sector and real sector regulations organized by Turkey for consumer confidence were not sufficient and could not be restored after the crisis. We can say that Turkey's these policy responses during the crisis were unsuccessful.

Turkey's government budget deficit was 4.2% of its GDP after the crisis, while the OECD average was 6.3%. In addition, FX interventions prevented volatility in FX and prevented FX from triggering inflation as seen in figure 24. On the other hand, interest rate cuts, the start of one-week repo auctions, the expansion of maturity of lending have led to a revival of consumption and investment in Turkey. This has also had an increasing effect on the real GDP after the crisis. On the other hand, some attempts were made to control the current account deficit by injecting export rediscount credits into the market and increasing its upper limit. We can say that Turkey's these actions and policy responses during the crisis were successful.

Figure 24 (OECD 2010)



Source: OECD

c) Adaptation and interpretation of the applied policies for today's Turkey

Outlook for Today's Turkey:

The Turkish economy has entered 2021 with low growth, decline in GDP and per capita income, high inflation, high unemployment, high budget deficit, high current account deficit, high external debt burden, high risk premium, high interest, high exchange rate. In addition, there is an increase in social and political problems compared to previous years.

On the other hand; Despite the negative epidemic environment, the production effort of the private sector continues.

Result:

Considering most indicators, it cannot be said that there is a clear divergence from the 2008 crisis outlook. In this context, the points that can be suggested are also similar. Especially when we focus on the unemployment rate, it is seen that there is a similar view with the crisis periods.

V. Conclusion

People have a tendency about maximizing their consumption. This situation can be observed in 2008 US credit crunch as well. Increased demand on credits and rising non-performing loans ratio (especially due to mortgages in US) has ended up with the collapse of almost entire financial markets. It was inevitable that such an enormous incident will affect Turkish economy. After 2001 crisis, Turkish banking sector has reinforced banking system ; therefore our banking sector was affected relatively weaker than most of the world. Yet, due to our economic structure which is dependent on exports and foreign currency flow, Turkey's real sector has affected relatively more than Turkish banking sector. As a result, default rate of Turkish businesses have enhanced and public has increased it's amount of debt. Of course, performance of Turkey against 2008 crisis could be better, but Turkey has also similar performance when we consider with developing countries. Yet Turkey's main success was relatively quicker recovery period when we compare with developing countries. Therefore, it can be said that Turkey has succeed to be affected relatively less than other countries.

References:

- Rawdanowicz, Ł. (2010), "The 2008-09 Crisis in Turkey: Performance, Policy Responses and Challenges for Sustaining the Recovery", OECD Economics Department Working Papers, No. 819, OECD Publishing, Paris https://www.oecd-ilibrary.org/economics/the-2008-09-crisis-in-turkey_5km36j7d320s-en;jsessionid=v8xExD0FTO3JItQEvVcS5RVY.ip-10-240-5-180
- Polat, Mehmet Ali. (2018), 'Küresel Finans Krizinin Nedenleri', Al-Farabi Uluslararası Sosyal Bilimler Dergisi, Cilt 2, Sayı 1, Sayfa 177-195 <https://dergipark.org.tr/tr/download/article-file/460647>
- Engin, Cem. Göllüce, Esra. (2016), 2008 Küresel Finans Krizi ve Türkiye Üzerine Yansımaları, Kahramanmaraş Sütçü İmam Üniversitesi İktisadi ve İdari Bilimler Dergisi, Cilt 6, Sayı 1 Sayfa 27-40. <http://iibfdergisi.ksu.edu.tr/tr/download/article-file/227173>
- Cömert, Hasan, and Erinç Yeldan. "A Tale of Three Crises Made in Turkey: 1994, 2001 and 2008–09 1." The Political Economy of Financial Transformation in Turkey, 2018, 88–107. <https://erc.metu.edu.tr/en/system/files/menu/series18/1809.pdf>
- Kaderli, Yusuf, and Hatice Küçükkaya. "Comperative Study of Develeopments Experienced in the Economy of Turkey After 2008 World Financial Crisis with Some Countries." Pamukkale Üniversitesi Sosyal Bilimler Enstitüsü Dergisi no. 12, 2012. <https://dergipark.org.tr/tr/download/article-file/411241>
- Fred Moseley. "The US Economic Crisis: Causes and Solutions." MARXISM 21 6, no. 1 (2009): 296–317. <https://www.razonyrevolucion.org/ceics/english/mosley20081.pdf>

- Bosworth, Barry, and Aaron Flaaen. “America’s Financial Crisis: The End of an Era.” *The Global Financial Crisis and Asia*, 2012, 37–62.
<https://core.ac.uk/download/pdf/6270288.pdf>
- Allen, Franklin. Carletti, Elena. (2009). ‘An Overview of the Crisis: Causes, Consequences and Solutions’, University of Pennsylvania and European University Institute. <http://apps.eui.eu/Personal/Carletti/IRF-Overview-Allen-Carletti-26Nov09-final.pdf>
- Eğilmez, Mahfi, “2008 Krizi Üzerine”, İTK 120 (Accesed July03, 2021),
<https://iktisatvetoplum.com/2008-krizi-uzerine-mahfi-egilmez-itd-120/>
- GÖÇER, İsmet, ÖZDEMİR, Abdullah ,” 2008 KÜRESEL KRİZİNİN YAYILMA SÜRECİ VE ETKİLERİ: SEÇİLMİŞ ÜLKELER İÇİN EKONOMETRİK BİR ANALİZ”, 2012, <https://www.acarindex.com/dosyalar/makale/acarindex-1423867054.pdf>
- EVLİYAOĞLU, Tamer,2010, “2008 KRİZİ SONRASI YENİDEN YAPILANAN DÜNYA EKONOMİSİ”, <http://nek.istanbul.edu.tr:4444/ekos/TEZ/46842.pdf>
- Yıldırım,Süreyya, 2010, *Sosya,l ve Ekonomik Araştırmalar Dergisi* 12 (18): 47-55, 2010 ISSN: 1309 – 9132, “2008 Yılı Küresel Ekonomi Krizinin Dünya ve Türkiye Ekonomisine Etkileri”, <http://dergi.kmu.edu.tr/userfiles/file/haziran2010/69-83.pdf>
- Arslan Coşkun, Özge, and Mehmet Hasan Eken. “2001 Ve 2008 Krizlerinin Türk Bankacılık Sektörüne Etkilerinin Karşılaştırılması.” *Maliye Finans Yazıları*, 104, 2015, 105–30. <https://doi.org/https://dergipark.org.tr/tr/download/article-file/412417#:~:text=2008%20Krizi%20bankacılık%20sektörü%20karlılığı,13.096%20milyar%20dolar%20kara%20ulaşmıştır>.
- Erdönmez, Pelin Ataman. “Küresel Kriz Ve Ülkeler Tarafından Alınan Önlemler Kronolojisi .” *Bankacılar Dergisi*, 68, 2009.

https://doi.org/https://www.tbb.org.tr/Dosyalar/Arastirma_ve_Raporlar/kuresel_kriz.pdf.

- Karaca, Coşkun. “Uygulanan Para Ve Maliye Politikaları Açısından Geçmiş Krizler Ve 2008 Küresel Ekonomik Krizin Karşılaştırmalı Analizi.” *Çankırı Karatekin Üniversitesi SBE Dergisi*, 5(1). 263–86.

<https://doi.org/https://dergipark.org.tr/en/download/article-file/253905>.