

The Examination Of The Macroeconomic Vulnerability In Argentina And Turkey And Study The Role Of IMF

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Argentina and Turkey during last decades were followed the IMF adjustment policy. The Turkish trade liberalization of the 1980s and Argentinean version of neo-liberalism in the 1990s both were initially considered as successful cases in emerging countries. But, these cases eventually were faced with worst crises in the beginning of the new millennium and then they have selected different ways versus the IMF. Argentina rejected the IMF policy after crisis but Turkey remained under the IMF's close supervision. Both countries claim that after crisis they achieved high macroeconomic performances. This study by using the Early Warning System (EWS) model examined the behaviour of macroeconomic indicators in both cases from the vulnerability and fragility viewpoints. The results of the study suggest that while Argentina properly improved its main macroeconomic indicators but Turkey has yet suffering from high vulnerability in the real sector as well as the external and banking sectors. The high real interest rate, the appreciation of the exchange rate and the free capital mobility are understood as the main reasons of the vulnerability in Turkey after crisis. As the emerging countries were faced with financial turmoil in 2006 the behaviour of essential indicators in both cases were retested in 2006 to boost the previous findings. The results confirm the high vulnerability of Turkey and the stability of Argentina in the critical period of May-June 2006. The study at the end confirms that the IMF's wrong policy has led the cases towards the macroeconomic vulnerability and crisis.

1. Introduction

The adjustment processes of Argentina and Turkey for a long time have been affected by the IMF policies. The Turkish trade liberalization of the 980s and Argentinean version of neo-liberalism in the 1990s both were initially considered as successful cases in emerging countries. But, these cases eventually were faced with worst crises in the beginning of the new millennium and then they have selected different ways about the IMF. Accordingly, Argentina from 2004 has broken its links with the IMF but Turkey has decided to remain under IMF's adjustment recommendations.

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Now after crisis both countries claim that they have followed successful policies and achieved high macroeconomic performances. This article aims to examine and compare the macroeconomic vulnerability in Argentina and Turkey before and after crisis. For this purpose the Early Warning System (EWS) has applied to study the behaviours of the essential macroeconomic indicators in a comparative method. Also in this study the role of the IMF in the causing of the vulnerability and crisis is considered. The following discussions of paper is organised in five sections. In Section 2 the methodology of study including the suggested model is explained. In sections 3 and 4 the behaviours of the leading macroeconomic indicators in Argentina and Turkey in different periods are considered and the results are compared. In Section 5 the role of IMF in causing of the macroeconomic vulnerability and crisis is studied. This study ends by a summing up and conclusion in Section 6.

2. Methodology Of The Study

In this section firstly the rational of study is considered and then the motivations and questions of the study are explained. The suggested model as well as its period of study and the mechanism of the evaluation is described at the end of this section. The descriptive statistics methods as well as the analytical and debate approaches are applied in this survey.

2.1. Logic Behind The Comparative Study

Since suitable results in the case study technically depends on the superiority of the selected case(s) and the method of analysing so in this section we aim to show that these cases can be appropriately studied in a comparative method. Argentina and Turkey for a long time have been involved in the IMF's liberalization process. As Önis (2006) argues there are significant similarities between Argentina and Turkey in years before, during and after the crisis. The similarities of the cases before crisis are introduced in the next section. However, in spite of these similarities a big dissimilarity happened between these two cases in recent period. Whilst from 2004 Argentina has broken its links with the IMF, Turkey has not changed its previous strategy in the following of the IMF's plan for adjustment. Since in the recent period the IMF is absent in Argentina so the role of IMF in making macroeconomic vulnerability can be realised by the comparing of Argentina with Turkey as well as the comparing of the recent period of Argentina with its pre crisis period. Accordingly it seems the above cases are justified to study in a comparative method and through this method unbiased results are expected.

2.2. The Motivations And Questions Of The Study

There are two important reasons to examine the macroeconomic vulnerability of Argentina and Turkey in a comparative method. Firstly it is claimed that both cases have properly recovered their macroeconomic indicators in recent years. Also, the IMF is blamed for causing vulnerability and crisis in both cases and it is believed that Turkey will again face a new crisis in near future due to the following of the IMF's policy. Two questions are asked here; initially, how are the current situations of these cases from vulnerability and sustainability aspects? And, in what manners the IMF helps the macroeconomic vulnerability and crisis in the cases?

2.3. Suggested Model

Argentina and Turkey have been faced with dramatic changes in macroeconomic indicators in the crisis years. Through the early warning system (EWS) model the critical points of these indicators are described and the current situations of each case can be compared with these points. In fact the EWS models try to identify the existence of vulnerability and crisis in the macroeconomic behaviours of cases over a period of time. There is a large variety of indicators which are used in the EWS. For instance, Kaminsky et al. (1998) list 105 indicators. These indicators are used to forecast and describe the crises and vulnerabilities. When the trends of indicators reaches to critical points they start to send red signal and warn authorities from the existence of vulnerability or expectation of crisis in a near future. Many people such as Eichengreen et al. (1995), Kaminsky et al. (1998), Demirgüç- Kunt and Detragiache (2005), Demirgüç- Kunt and Detragiache (1997), Edison (2003) Lestano and Kuper (2005) and Lestano and Kuper (2003) have been employed the EWS in their studies to forecast and describe the crises and vulnerabilities. There are some criticisms about the abilities of the EWS in predictions of crises. It is believed that in some cases this system could not predict the crisis. Nevertheless, as the current study mainly aims to describe and compare the behaviour of the indicators in different periods and different cases so the application of the EWS is logically qualified.

➤ The Theoretical Identification Of The Indicators Fluctuations

The EWS indicators are usually categorized in three main sectors; the external, financial and the real sectors. A brief list of these indicators which have been used in the current study has been provided in the Appendix. Since the recognition of the indicators behaviours is important issue so these factors are classified in some groups. There are some indicators such as the GDP per capita growth and saving rates and the ratio of bank reserves to bank assets send positive signals that the increasing of their value sends positive signals. However, the rising of some factors such as the inflation , unemployment and the ratio of budget deficit to GDP and the ratio of current account to GDP send warning signals. Finally, sometimes the positive or negative meanings of the factors changes are depended on some conditions. For example the growing of M1 and M2 and are considered as surplus liquidity which may lead to the speculative attacks and the currency crisis, Kamin et al (2001) and Lestano and Kuper (2003). Nevertheless, the liquidity shortage has negative effects on the real interest rate and it deteriorates the financial markets situations. For this reason it is necessary to test the ratio of M2 to reserves money. This ratio is called the multiplier of M2 and it measures the fragility of the banking system. If the multiplier of M2 dramatically raises it means the banks obligatory reserves have declined and so currency and banking crises are expected, Kaminsky and Reinhart (1996), Kaminsky et al. (1998), Edison (2003) and Lestano and Kuper (2003).

2.4. The Periods And The Mechanism Of Evaluation

The indicators in this study have applied in two monthly and yearly methods. In the monthly method, the situation of each variable and indicator is compared with the averages values of those indicators before and after crisis. In the yearly method, the annual changes of the factors have calculated for each case. The averages of changes in the macroeconomic indicators during 1997-1999 for Turkey and 1997-2000 for Argentina are used as benchmark to compare with the averages of the indicators in the recent period as well as the crisis time. The recent period for both cases is the period 2003-2006 and the crisis period for Turkey and Argentina are 2000-01 and 2001-02 respectively. The amplitudes of the indicators from their average trend help to distinguish the critical points and altitudes.

Finding of these critical points allow inspecting the current situations of each case from the vulnerability and sustainability view points. If the indicators in the current period are dramatically changed or have high fluctuations those are considered as unusual events and consequently are suspected as signs of the vulnerability in each case. The used variables and indicators are briefly described at the end of the study.

3. The Behaviours Of Macroeconomic Indicators In Argentina And Turkey In A Comparative Study

By using the early warning system model and testing the behaviour of leading macroeconomic indicators the following results have been achieved.

3.1. The Similarities In Argentina And Turkey Before Crisis And The Crisis Time

There are some significant similarities in Argentina and Turkey before crisis. Both cases were followed almost the same exchange rate system under the IMF supervision and their economic growths were based on the short run capital inflows. These features along with the dollarization and weakness of the banking system against external shocks leaded these countries to the biggest crisis in their contemporary history.

- 1) Argentina and Turkey were suffering from the current account and trade deficits and the balance of payments were worsening (Figures 26-30).¹
- 2) Both countries were faced with the mounting of the external debt and the debt service ratio was deteriorating (Figures 31 and 34).
- 3) The exchange rates of both countries have been overvalued before crisis (Figure 24).
- 4) The international reserves of the cases were worsening (Figure 30)
- 5) The governments of these countries had budget deficit (Figure 9).
- 6) In both countries in crisis year the ratio of domestic credit to GDP dramatically increased but the ratio of domestic credit in the private sector to GDP was diminishing (Figures 12-13).
- 7) The ratio of government's investment expenditure to government's interest payment expenditure in both cases was low and worsening (Figure 53).
- 8) In Argentina and Turkey the unemployment rate was increasing (Figure 7).
- 9) In both countries the domestic saving and investment as per cent of GDP were diminishing (Figure 2 and 6).
- 10) The ratio of bank reserves to bank assets was very low in these cases (Figure 14-15)
- 11) The interest rate on foreign deposit in both cases before crisis was rising (Figure 23).
- 12) Both countries were faced with quick short capital outflows in the crisis year (Figure 32).

According to the above figures both cases faced with deep weaknesses in the external sector as well as the banking system. The wrong exchange rate system beside high interest rate to attract the foreign capital altogether leded to the appreciation of the exchange rate. These factors usually cause the hot money which makes fragility in both external and banking sectors. Both cases due to this fragility faced with high

¹) All figures are presented at the end of the paper.

speculators attacks and the results were the dramatic devaluation of the exchange rate the capital outflows and the financial crisis.

3.2. The Differences In Cases After Crisis

After crisis these countries have followed different adjustment policies and accordingly experienced different results. The details of their performances in this period are shortly compared as follows:

- a) Although the GDP growth in Argentina has instantly positive trend but it has been slightly fluctuated in Turkey. Also, the ratio of domestic saving to the GDP in Argentina has rapidly risen up, but in Turkey it has almost negative trend (Figures 1-3).
- b) The real interest rate quickly decreased in Argentina but in Turkey it noticeably increased. As a result the investment growth rate has faced with high fluctuation and negative trend in Turkey whereas Argentina has got positive trend in the investment. Also In Argentina the unemployment rate after crisis has approximately halved but in Turkey it has doubled (Figures 4-7).
- c) The government of Argentina solved its budget deficit but Turkey's budget deficit was deteriorated in some years and yet Turkey is suffering from budget deficit. Also, the ratio of government's investment expenditure to total expenditure has improved and increased in Argentina but it has decreased and deteriorated in Turkey. Furthermore, the ratio of the primary surplus budget to GNP in Argentina has been around 3.5% but in Turkey it was more than 6%. In addition, the public investment in Argentina has dramatically increased but in Turkey it has negative trend. Finally the domestic credit growth of Argentina has been so lower than Turkey's case. It means Argentina followed the fiscal expansionary as well as tightening monetary policy has extended the economy's capacity but Turkey by following the contractionary policy has damaged the capital formation in the public sector (Figures 8-13).
- d) In Argentina the banking system ratios such as the ratio of banks reserves to banks assets, the banks reserves to the banks foreign assets and the ratio of the banks assets to banks liabilities have dramatically improved but in Turkey they have remained almost unchanged. Also, the multiplier of M2 in Argentina has dramatically decreased but in Turkey this ratio has obviously increased. Furthermore, in Argentina the foreign liabilities of the banks have quickly declined but in Turkey they have increased and also the amount of foreign currency deposit in Turkey has dramatically risen. Finally, the interest rate on dollar deposits in Turkey has been much more than Argentina's case. Hence, in Argentina's banking system has improved but in Turkey it has worsen. It means the banking system of Turkey is yet vulnerable and fragile against the external shocks (Figures 14-23).
- e) The real exchange rate in Argentina has considerably declined but in Turkey it has significantly increased as a result the ratio of the current account to GDP has speedily deteriorated in Turkey but in Argentina it has properly improved. Also, while the international reserves in Turkey have increased more than Argentina's case, however the external debt of Turkey has rapidly mounted but Argentina has cut its external debts. The short term debt as well as the short term interest

payment and the official disbursed debt in Argentina have quickly declined but in Turkey they have dramatically increased. These figures show that Turkey's external sector after crisis has been deteriorated and Argentina has obviously improved it (Figures 24-36).

Based on the above figures, Turkey after crisis is still suffering from the high vulnerability in the external sector. Also, the banking system of Turkey has been left in the vulnerable condition. Additionally, in spite of the high fiscal contractionary by Turkish government the budget deficit has not been solved after crisis. As a whole and in a comparative method it is suggested that Argentina after crisis in the absence of the IMF policy has had better performances than Turkey. However, in order to boost and prove this claim the behaviour of some essential indicators is retested in the critical period of May- June 2006.

4. The Behaviour Of The Macroeconomic Indicators In The May – June 2006 Turmoil

In 2006 the emerging countries were faced with turbulences in markets prices. This period is a very suitable opportunity to test the macroeconomic vulnerability of our emerging cases. By comparing the behaviours of some essential indicators the following results are reported.

- In Turkey the exchange rate was depreciated around 20% in May-June, IMF (2007). But in Argentina it has almost been unchanged at the same period (Figures 37-38).
- The consumer price index in Turkey has rapidly responded to the new condition and it suddenly increased in May 2006 and dramatically fluctuated after this month until the end of year. In May 2006 the annual inflation became 9.86% which was noticeably higher than target path, Yilmaz (2006). In Argentina case the consumer price index interestingly decreased and had slow swings till the end of 2006 (Figure 39).
- The fluctuations of the stock market's index in Turkey have been much more than Argentina's one in 2006 (Figures 40-42).
- By the depreciation of the lira the trend of Turkey's import faced with downward trend while the export growth rate was simultaneously increased (Figures 43-44). But in Argentina due to the exchange rate stability the foreign trade followed its normal trend (Figures 45-46).
- While Turkey's international reserves suddenly decreased in May –June (Figure 47) but Argentina's international reserves has not significantly changed in this period (Figure 48).
- The ratio of M2 to the international reserves after turmoil noticeably increases in Turkey but the negative trend of this ratio continued in Argentina (Figures 49-50).
- The nominal interest rates of Turkey after May were suddenly increased. For instance, the 3 month deposit interest rate from 18.2% in May reached to 23.74% in June. However, in Argentina the changes in the interest rates at the same time have been very slight. For instance, the deposit rate from 6.56% in May reaches to 6.61% in June (Figure 51).

- The multiplier of the M2 of Turkey in May – June 2006 was quickly jumped up (Figure 18). But as Argentina after crisis has already improved its bank reserves positions as well as the multiplier of the M2 (Figure 17) so the banking system of this country properly passed this critical period.
- IMF (2007) reports the turbulence halted the de-dollarization process in the banking system and the share of foreign currency in total deposits significantly increased in Turkey.

The above results indicate that while Turkey's main price indicators in 2006 especially in the turbulence period of May- June were faced with high functions and instability but Argentina passed this period smoothly. Also, the turmoil of May – June 2006 sends this signal that the fragility has remained in Turkey's economy and banking system after crisis. In addition, the suitable macroeconomic performance of Argentina has been due to the adoption of new adjustment policies after crisis. These policies have obviously been versus the IMF's orthodoxy adjustment policy and they need to be separately studied. However, it can be said that Argentina by adoption of fiscal expansionary policy and some control policies such as the managed exchange rate policy has been successful in removing and reducing of vulnerable reasons in Argentina.

5. The Role Of IMF In The Causing Of The Vulnerability And Crisis

Argentina ratified the Articles of Agreement of the IMF in September 1956 and the IMF's first stabilization programme was formulated and agreed in 1958, Conklin and Davidson (1986). From this time until 2004 Argentina has been supported by the IMF. In some years especially in 1991- 2001 this support was outstanding. In this period Argentina under close supervision of the IMF was followed the pegged exchange rate system which was called Convertibility Plan (CP). There are different opinions about the effectiveness of the CP programme in Argentina. While some people such as Meltzer (2002) and Edwards (1999) support this policy in making economic growth and stability but many others like Stiglitz (2002a and 2002b), Weisbrot et al. (2002), Perry and Servén (2002) Beanfort Wijnbolds (2003), Kitano (2005) and Arazo et al. (2006) criticized the CP and the IMF due to the austerity, liberalisation, external debt and vulnerability natures of the exchange rate policy.

Turkey's economy from 1948 has engaged with IMF programmes, Evrensel (2004). Historically, the macroeconomic instability of Turkey has increased in the 1990s by the following of the capital liberalisation. To solve the maladjustment problems Turkey adopted a new IMF stabilisation programme from 1999. Many studies such as Yeldan (2006), Ozkan (2005), Voyvoda and Yeldan (2005), Çapoğlu (2004), and Yeldan (2001) criticised the IMF due to the adoption of the wrong exchange rate policy, short term capital flows and the contractionary policy in Turkey. According to Yeldan (2006) the improvements in Turkey by the IMF before and after crisis have been fragile, and he concludes that the IMF programme has leded Turkish economy and financial system towards vulnerability and crisis. The topics of the IMF's role in making macroeconomic vulnerability and crisis in both cases are shortly outlined as follows.

➤ The Capital Liberalism And The Rising Of The Interest Rate

The instability in the emerging countries such as Argentina and Turkey in the 1990s has been accompanied by the free capital mobility, Arazo et al. (2006), Voyvoda and Yeldan (2005) and Yeldan (2001). The current empirical study found that when the cases have been strongly supported by the IMF, 1991-2001 in Argentina and 1999-2006 in Turkey, the real interest rate in both cases have been increased (Figure 5). This policy have been accompanied by the rising of the capital inflows especially the short term capital (Figures 32 and 54), the reduction of the investment indicators (Figures 6) and increasing of the unemployment (Figure 7). Also, by this policy the local currency of the cases have been appreciated and it led to the rising of the hot money process therefore the cases were become much vulnerable to international shocks. Additionally, both the non- tax and tax revenues of government reduced and the ownership of the government's assets has transferred to the foreigners through the privatisation.

From these viewpoints, the IMF policy leads countries to the macroeconomic vulnerability through the capital liberalism and high real interest rate, and as Voyvoda and Yeldan (2005) argue the IMF's programmes cause the jobless– growth model and the speculative-led conditions. The free capital mobility and easy access to the IMF's loans can make a kind of guarantee through the IMF and encouraged countries to postpone the necessary reforms in their own policies. Woods (2006) verifies this hypothesis in Argentina and Turkey. Also, the free capital mobility makes paradoxes in the IMF's adjustment main aims such as the balance of payments and government budget balance. Through the appreciation of the exchange rate the foreign payment situation is deteriorated and by the liberalisation the government loses its tax revenue. In addition by the capital liberalisation the external volatility is transmitted to the domestic economy and it volatiles the macroeconomic. Also, the government loses its intervention role in the adjustment process due to the losing of the independency in the monetary policy. From this viewpoint while the rising of real interest rate is in the favourite of the capital liberalisation but it has had a negative effect on domestic investment and the unemployment in Turkey after crisis.

➤ **The Adoption Of Wrong Exchange Rate Policy**

The IMF was adopted almost the same pigging exchange system for Argentina and Turkey in the 1990s. This fixed exchanged rate system has been one of the main reasons of crisis in these countries, Çapoğlu (2004) Weisbrot and Baker (2002) Perry and Servén (2002) and Yeldan (2001). This system obviously led currencies of these cases towards the high appreciation (Figures 24-25). The rising of interest rate from one side and the appreciation of the exchange rate encouraged the 'hot money' problem in these cases. This process made doubt about the real value of the exchange rate and pushed the interest rate to high and it increased the government's budget deficit. The deterioration of the trade balance and the balance of payments (Figures 26-28) along with the rising of the interest payments of government as well as increasing of debt have been the side effects of the IMF's wrong exchange rate policy in these cases. As the IMF was already implemented the fix exchange rate system in the South East Asian countries and realized the difficulties of this system in their financial crisis in 1997, so the big question is that why the IMF encouraged the Central Bank of Turkey (CBT) to adopt this wrong policy in the stabilisation programme of 1999-2002 in Turkey ?

➤ **The Emphasising On Contractionary Policy**

The IMF orthodoxy approach strongly urged its members to follow the fiscal and monetary contractionary policy. However in an economic downturn, such as Argentina's situation before crisis, the cutting of expenditures makes matter worse in tax revenue, employment and confidence in the economy, Stiglitz (2002a and 2002b). The IMF's staffs like Singh (cited in Cibils et al. 2002) believe that the root cause Argentina's crisis is the government budget deficit.² This idea is partially supported by some people such as Cerro and Meloni (2003) and Amado et al. (2005). However, many studies such as Cibils et al. (2002) and Perry and Servén (2002) argue that the budget deficit in Argentina was not because of the fiscal profligacy of government. They show that the budget deficit in Argentina was due to increasing of the interest payments and decreasing of the tax revenues, after high recession and depression which started from 1998.

The imposing of the contractionary policy in the recession period is defiantly mistake. By looking to the figures it is clear that the budget deficit of Argentina has not been very high. For instance, in 2001 when the ratio of the budget deficit to GDP in Argentina gets worse it is around 3.7%. This proportion is normal for many countries and it can be compared with Turkey's ratio which at the same time was 16% (Figure 9). In addition, if a country such as Argentina faces recession (Figure 1) the imposing of the IMF contractionary policy only would deteriorate the economic conditions. It is important to notice that the IMF for both Turkey and Argentina with different budget deficit situation and different economic situation prescribed the same medicine of the fiscal contractionary policy. This policy leads to lessen the economic activities through the reduction of the public investment and the private sector's investment due to the rising of the interest rate. The final result of this policy would be the increasing of the unemployment which is seen in Turkey at the moment and in Argentina before crisis.

➤ **The Liquidity Problem And The Fault Of IMF In Suitable Responds**

The IMF is blamed for delaying in the releasing of Turkey's crisis in 2000-1, Ozkan et al.(2006) Alper (2001). Also, the IMF is criticised due its contractionary fiscal policy in Argentina when this country was engaged with the economic recession Stiglitz (2002a and 2002b), Cibils et al. (2002) and Perry and Servén (2002). The reason of financial crisis from the viewpoints of the New is related to the shortage of liquidity and the pessimism idea about to the real value of the exchange rate in near future. As Kregel (1998) discusses the IMF's conditionality policy for solution of crisis through rising of the interest rate only deteriorates the positions of firms in the crisis. It is because in the crisis period firms and banks are usually suffered from the liquidity problem and they engage with the stock shortage and the decision of IMF magnifies the financial fragility of firms and prolongs debt problem and raises the cost of crisis. Additionally, the rising of interest rate increases the debt payment and it is inconsistent with the IMF debt reduction policy, Charusheela (2005). This process ends by a higher depreciation and inflation, deeper debt problem and increasing of the unemployment and the economic recession.

Also, the IMF's reaction to the liquidity shortage from the time viewpoint is a problematical issue. For instance the IMF injected around \$30 billions to Turkey's foreign accounts and the international reserves from December 2000 whereas Turkey was already involved in financial from October 2000. As the IMF has had enough experiences about financial crises in the emerging country in the late 1990s and as IMF after their crises introduced new facilities such as Supplemental Reserve Facility

²) Anoop Singh was the IMF's Director of Special operation in 2002.

(SRF) in 1997 and Contingent Credit Lines (CCL) in 1999 to prevent and protect against the future crisis, so why the financial supports of the IMF from Turkey in 2000-01 were happened by high delay.

➤ **Focusing On The Balance Of Payments**

The IMF programmes in Turkey has accompanied by improvement in the balance of payment in Turkey after crisis, however at the same time this country has faced with difficulties in its current account and trade balance, (Figures 26-28). The improvement of the balance of payments has been due to the capital inflows and access to the international credits as well as the rising of the international reserves. Accordingly, by inflowing of the foreign capital and boosting of the international reserves the exchange rate overvalued and the trade balance as well as the current account was worsened. Therefore, if even by the IMF programme the balance of payments is improved due to the capital inflows and the foreign deposits but it does not mean that the trade and the current account situations are recovered at the same time. Turkey and Argentina were before crisis experienced the same problem in trade balance due to the high appreciation of exchange rate, Alper (2001), Yeldan (2001), Weisbrot and Baker (2002) Perry and Servén (2002), Yeldan (2006) and Ozkan (2005).

➤ **The Mistaking In Debt Forecasting And Financial Supporting**

While crisis in Argentina was accompanied by the rising of interest payment (Figure 33) and the ratios of the external debts (Figures 31, 33 and 34) but the IMF had big mistakes in the expectation of debts in Argentina and Turkey. For instance, the IMF in its EFF programme in Argentina in 1998 had expected that the ratio of the debt to GDP in 2001 would reach to 35% but in fact this ratio in 2001 was 63%. Even the IMF's SBA programme in Argentina in 2000 could not forecast properly and its estimation was around 47% for 2001. The similar mistake in forecasting is seen for Turkey's case, IMF (2002). The high external debts and the wrong forecasting of the IMF leded Argentina to critical conditions and liquidity shortage in the late of the 1990s. The increasing of debt and shortage of liquidity were almost ignored in the IMF policy. The IMF would be able to solve these countries' liquidities problems if its expectations was fitting. For instance, Bleaney (2004) argues if the IMF was refused to lend considerable money to Argentina, the exchange rate system would be collapsed earlier than 2002 and the horrific consequences would be prevented.

➤ **The Fault Of The IMF In Supervision Because Of Political Pressures**

It is discussed that the policy of the US treasury and the political relations of countries with the US are important factors in degree of conditionality on the IMF's facilities. For example, Barro and Lee (2001) examine the effects of political issues and the vote power of members on the IMF's conditionality and indicate that the political relationships between borrower country and the US is the significant factor in the determination of the IMF conditionality in that country. Dreher and Jensen (2003) support their claims and find that the closer US allies receive IMF loan with fewer conditions. The similar results was achieved by Thacker (1999) and according to this study shifting towards the US within international organisations such as the United Nations can significantly increase the chance of country in access the IMF's loans and credits.

Evidences of this study support the above arguments and the IMF has ignored to follow its own policies and criteria in Argentina and Turkey. For instance, Argentina since 1993 was not run more than 1 % GDP primary surplus policy and the IMF was supported Argentina, IMF (2002). Indeed, Argentina's reform package had not been qualified to receive the IMF's financial supports. However, the IMF under pressure of the US confirmed Argentina's reform policy in the beginning of the 1990s, Cavallo (2004). Also Stiles (1987) indicates that the Argentine authorities from 1982 to 1988 have intentionally used a bargaining policy with the IMF. Furthermore, Evrensel (2004) shows that on average Turkey was allowed to enter into a new IMF programme, while its macroeconomic condition was worsened. Accordingly, it seems the IMF's conditionality has not really imposed on Turkey. For instance, the supply of domestic credit to the private sector in Turkey has dramatically increased after crisis and the ratio of the domestic credit to GDP has remained unchanged at high level (Figures 12-13 and 52). Also, after crisis the multiplier of M2 has remarkably enlarged in Turkey (Figure 18). Hence, the Turkish banking system follow low level reservation policy while the regulation of banking system was deeply emphasised in the new adjustment programme of the IMF in Turkey in 2002.

6. The Summing Up And Conclusion

It was discussed that Argentina and Turkey were faced with crisis when they were supported by the IMF. After crisis Argentina rejected the IMF's approach of adjustment and followed different policy but Turkey remained under close supervision of the IMF. By using the early warning system (EWS) method the macroeconomic vulnerability of both cases were tested and compared over the before and after their crisis periods. The results suggest that Turkey, in spite of the high economic growth and controlling of the inflation rate, has not been able to solve its macroeconomic vulnerabilities. The existence of high unemployment, appreciation of the exchange rate, high current account deficits, fragility in the banking system and rising of the external debt are the most important signs of macroeconomic vulnerability in Turkey. But Argentina has improved all the above issues. This country by lowering of the interest rate and increasing of the investment in both private and public sectors could halve the unemployment after crisis. Also, achieving to the surpluses in the current account as well as the government budget, improvement in the banking sector indicators and the reduction of the external debt are some other signs of Argentine successes.

Furthermore, Turkey's macroeconomic indicators have noticeably fluctuated in May-Jun. It means Turkey's fragility has remained unchanged after crisis. Also, according to this study the IMF has been in charge of the macroeconomic vulnerability and financial crisis in Argentina and Turkey. This responsibility is realised through the increasing of the interest rate, encouraging of the capital mobility, the appreciation of the exchange rate and easing of the liquidity shortage as well as the hot money. In this study the capital liberalisation has originally found as the main reason of the paradoxes in the IMF programmes. Also, in this research the capital liberalisation has recognised as the main reason of the vulnerability and crisis in Argentina and Turkey. For this reason Argentina after crisis decided to impose restrictions on the capital flows. The free capital mobility and easy access to the IMF's loans can make a kind of guarantee through the IMF and encouraged countries to postpone the necessary reforms in their own policies.

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Table I The description of the variables and indexes that have applied in the Study

| Indicator and code | Definition | Source of Data |
|---|--|--|
| <p>The External Sector:</p> <p>1-The current account</p> <p>-Real Exchange Rate</p> <p>-Export Growth</p> <p>-Import Growth</p> <p>-Ratio of the Current Account to GDP</p> <p>2- The capital account</p> <p>-The Foreign Exchange Reserves</p> <p>-Ratio of M2 to the foreign reserves</p> | <p>The nominal exchange rate multiply ratio of the domestic prices index and the foreign Consumer Prices Index (US CPI).</p> <p>The current account divided by the GDP.</p> <p>Ratio of (base money + quasi money) to the international reserves.</p> | <p>IFS-AE & IFS-64</p> <p>IFS-70.D IFS-71.D</p> <p>IFS-78AL and IFS-99B</p> <p>IFS-1LD</p> <p>IFS-35L & IFS-11</p> |
| <p>The Financial Sector:</p> <p>1-The Fiscal Situation</p> <p>-Ratio of the fiscal balance to The GDP (FBR)</p> <p>2-The Monetary Situation</p> <p>-Multiplier of M2 (MM2)</p> <p>-Ratio of domestic credit to the GDP</p> <p>-Domestic real interest (DRI)</p> <p>-Ratio of the bank's resaves to the bank's assets(RRA)</p> <p>-Commercial bank deposits (CBD)</p> | <p>The budget balance of government divided by the GDP.</p> <p>The ratio of M2 to the reserve money</p> <p>The domestic credit divided by GDP</p> <p>The deposit rate(3 month time) deflated by the inflation rate</p> <p>The amounts of the bank's reserves divided by the bank assets.</p> <p>The demand, saving, time and foreign currency deposits deflated by inflation</p> | <p>IFS-80 & IFS-99B</p> <p>IFS-35L & IFS-14 IFS-32 & IFS-99B</p> <p>IFS-60L & IFS-64</p> <p>IFS—20, IFS-21 & IFS-22a to 22f</p> <p>IFS-24, IFS-25 & IFS-64</p> |

| | | |
|---|---|---|
| | rate. | |
| The real sector: -Real GDP growth (RGDP) -Unemployment Rate (UR) -Domestic savings growth (DSg) -Share Price Index changes (SPI) - Investment growth (Ilg) - Ratio of the external debt to the export (RXD) - Share of short term debt from total debt (SSD) | The GDP that deflated by the inflation rate. The GDP minus the public and private consumptions. The changing in the stock prices The gross fixed capital formation | IFS-99B & IFS-64 IFS-67 R IFS-91F, IFS-96F & IFS-99B IFS-62 IFS-93E World Bank World Bank |

The data of two first sectors in the Table I are monthly and quarterly, but in the third sectors those data which are collected from the WB and WCO are annually

Paper's Figures

The Used Abbreviations in the Source of Data:

ARG. Argentina **CBRT:** Central Bank of the Republic of Turkey **IFS:** International Financial Statistics (IFS)

MECON: Ministerio de Economía y Producción República Argentina (Ministry of Economy and Production)

TUR. Turkey **TT:** Turkish Treasury **WB:** World Bank **WCO:** World Competitiveness Online

Figure 1



Figure 2

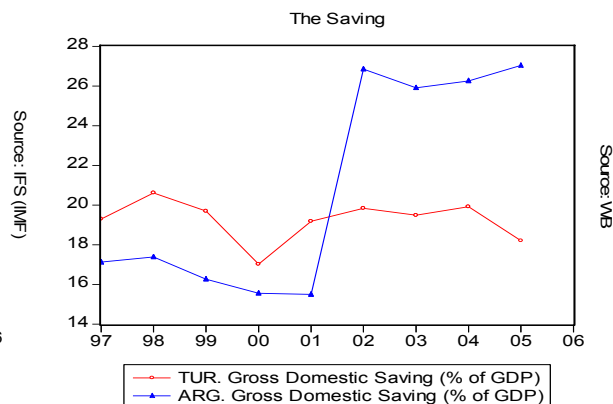


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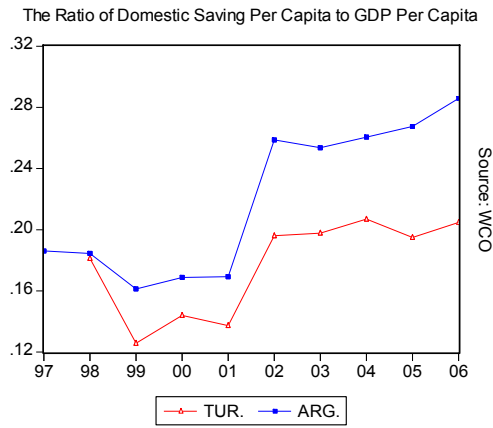


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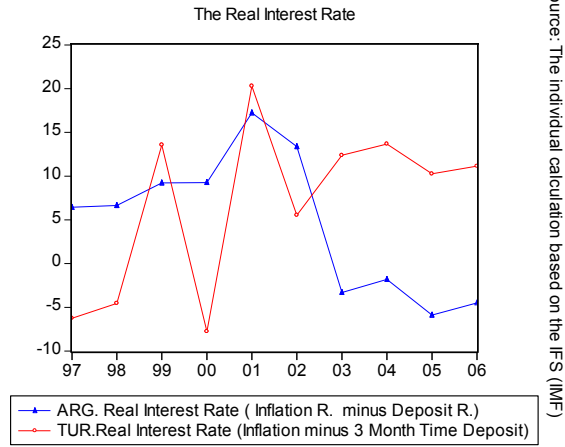


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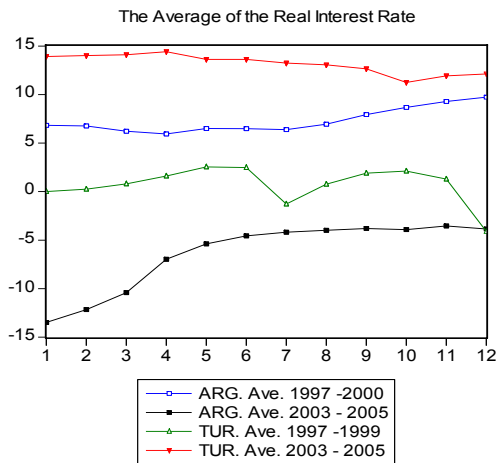


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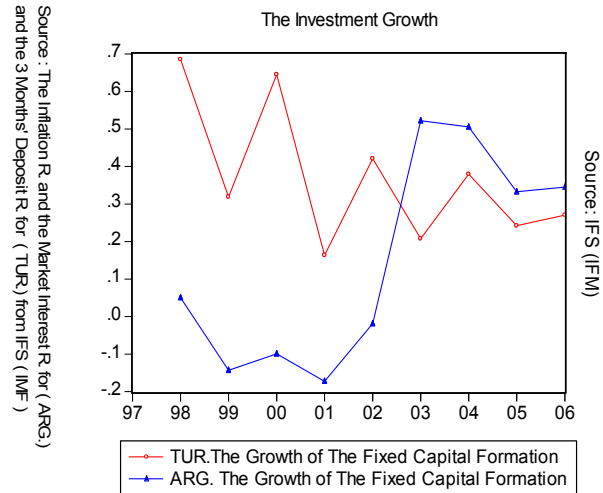


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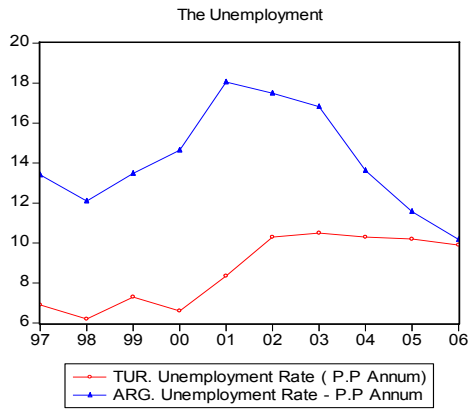


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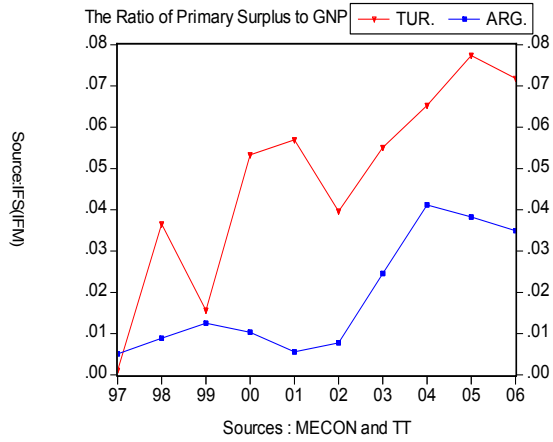


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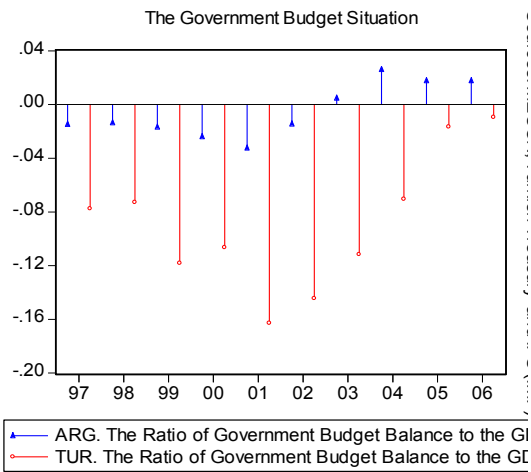


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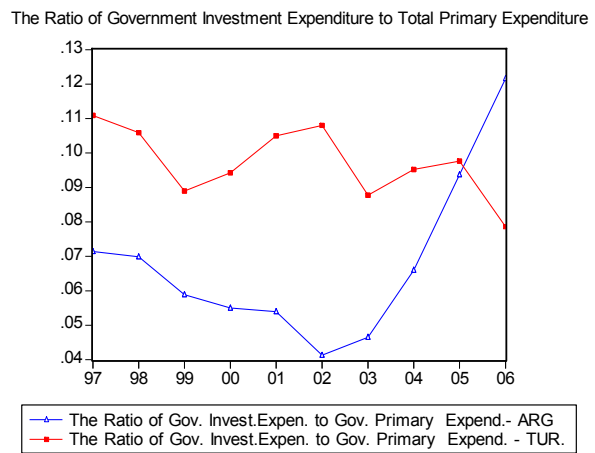


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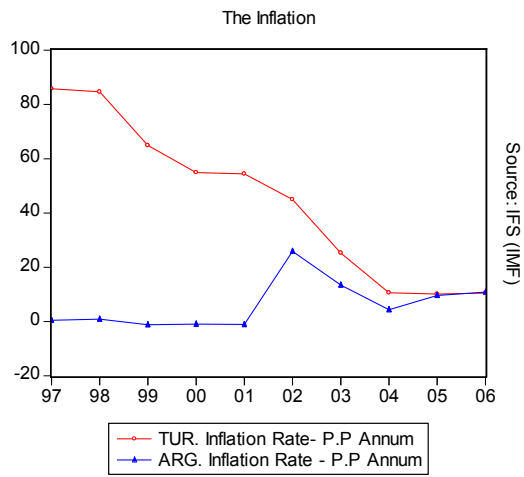


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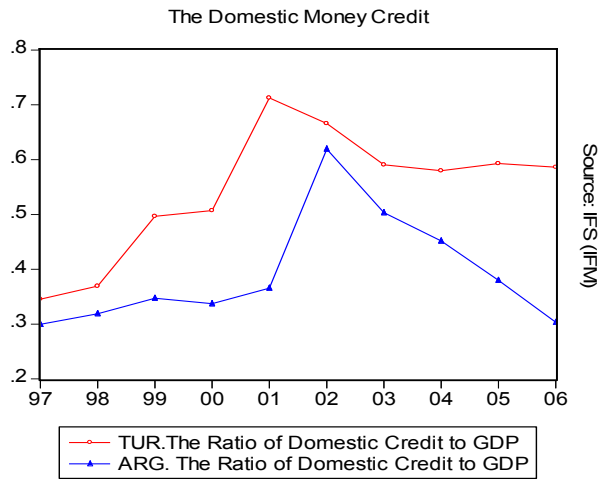


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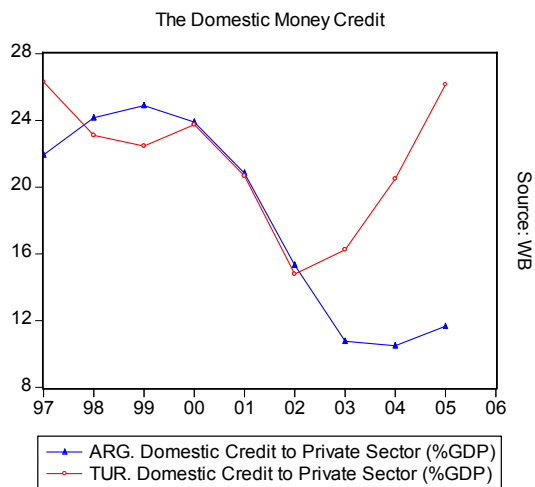


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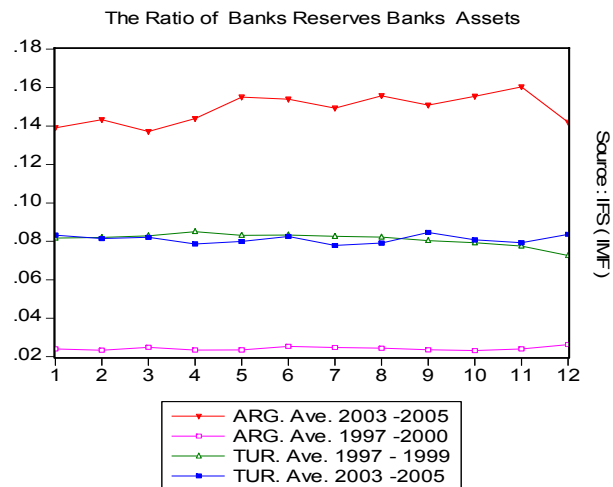


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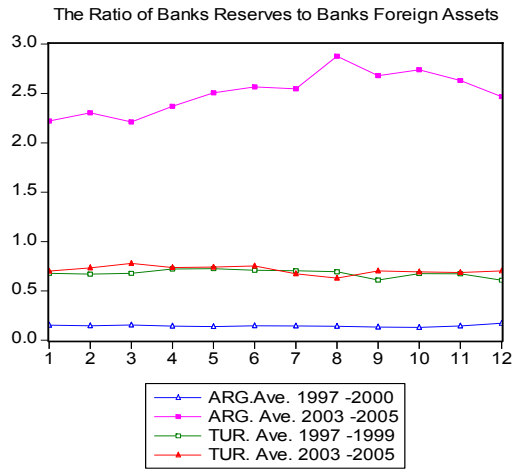


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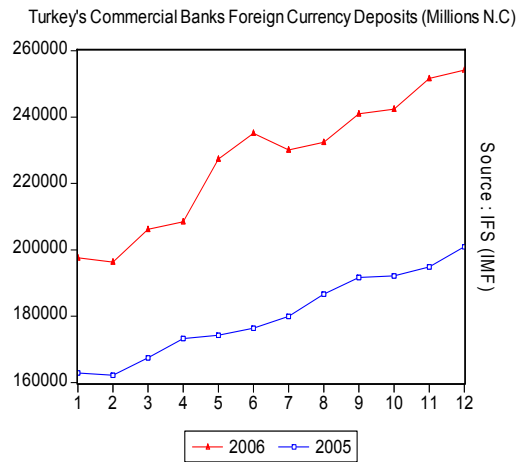


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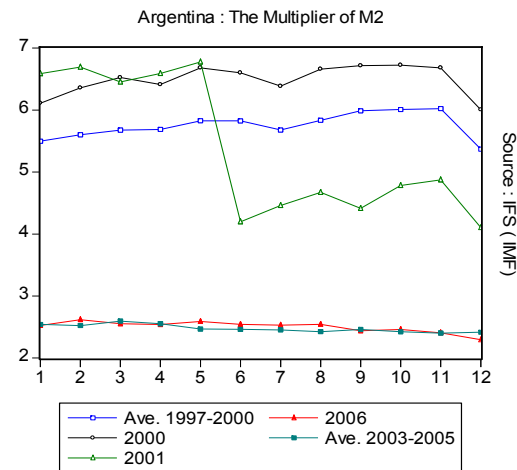


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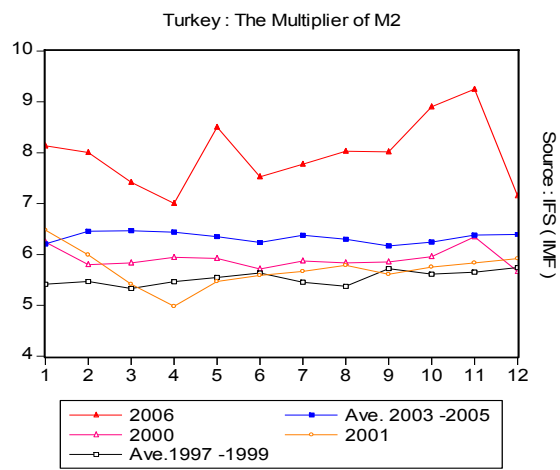


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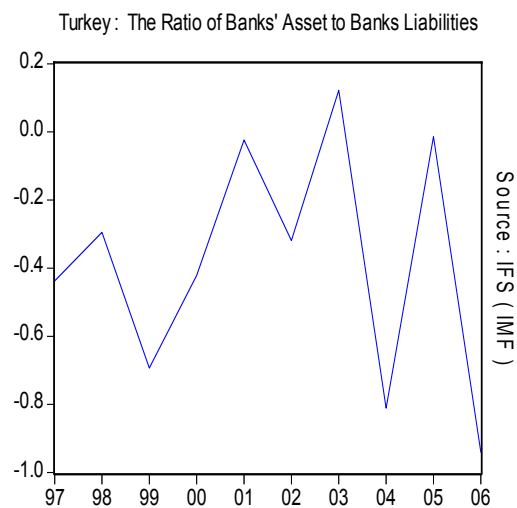


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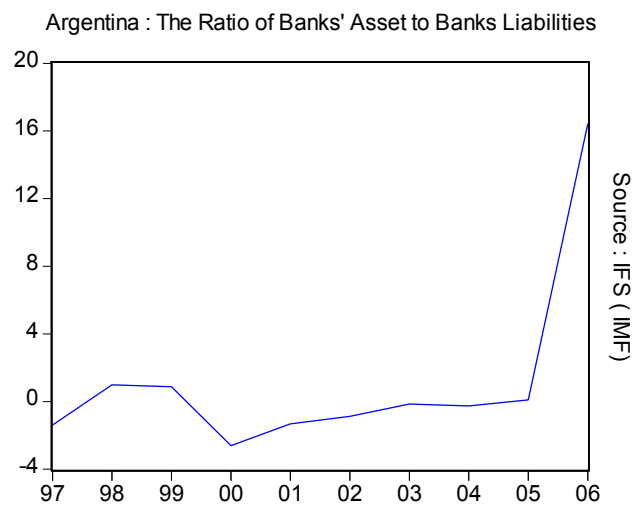


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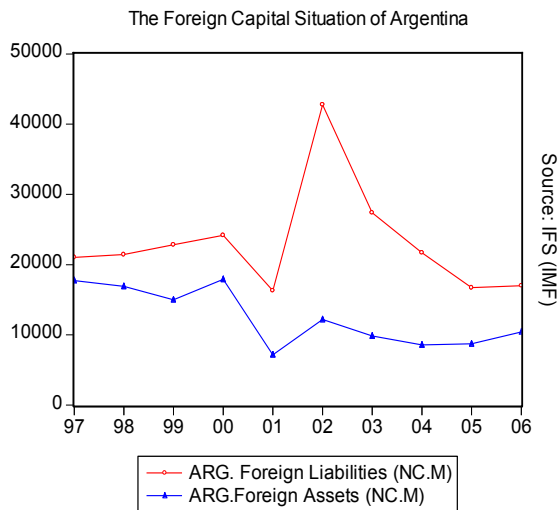


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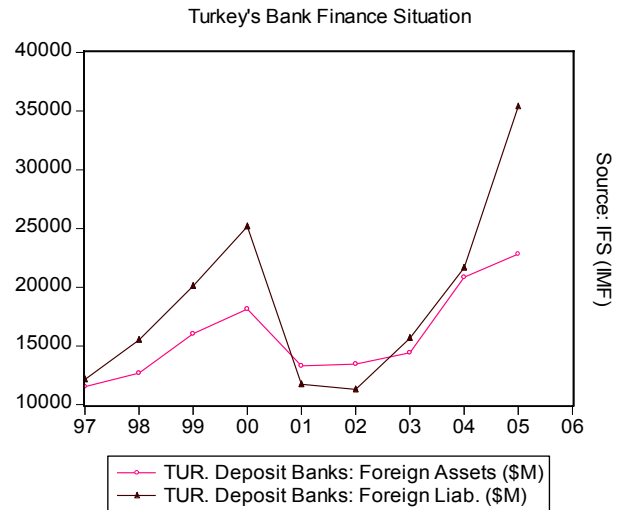


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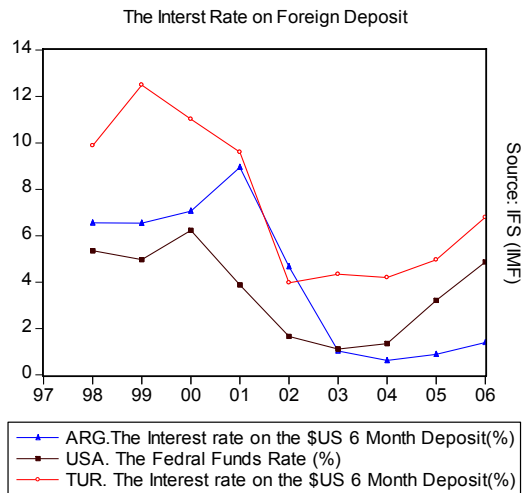


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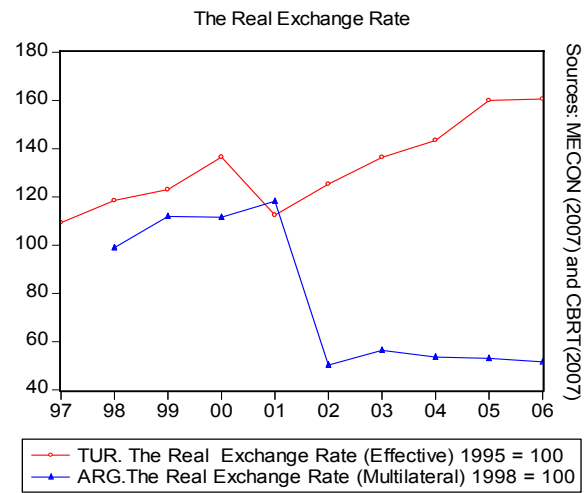


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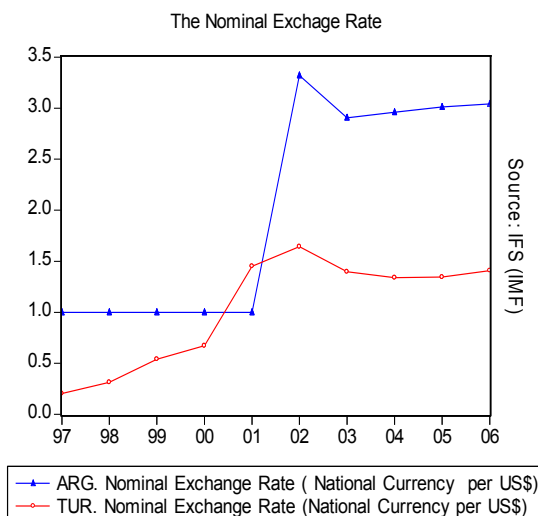


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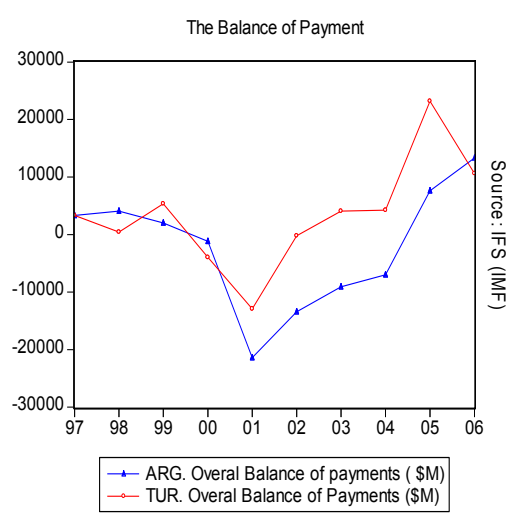


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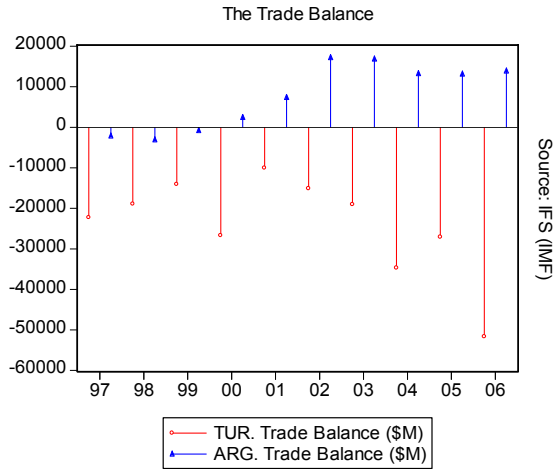


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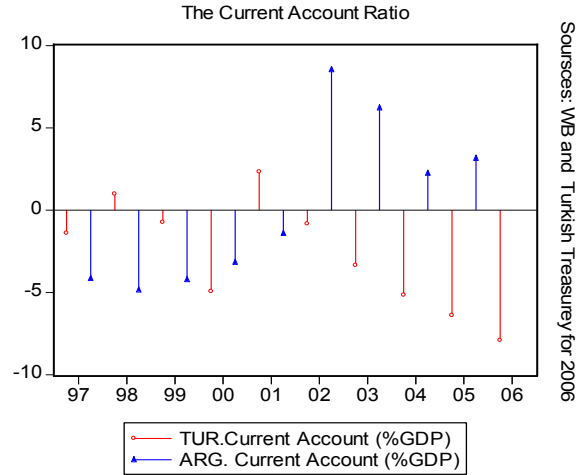


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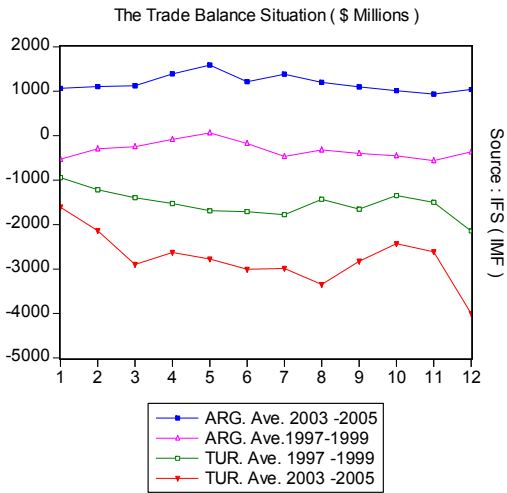


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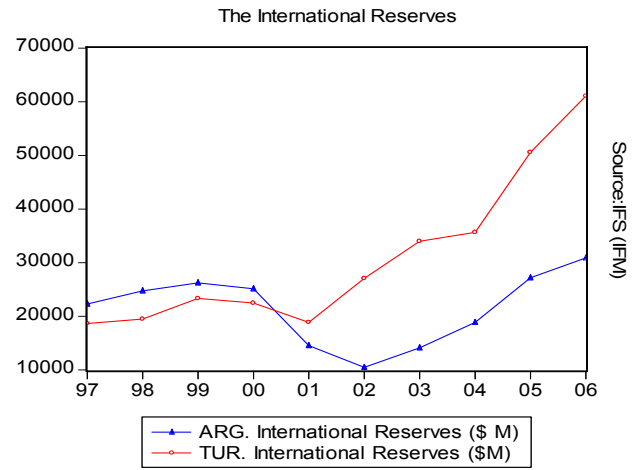


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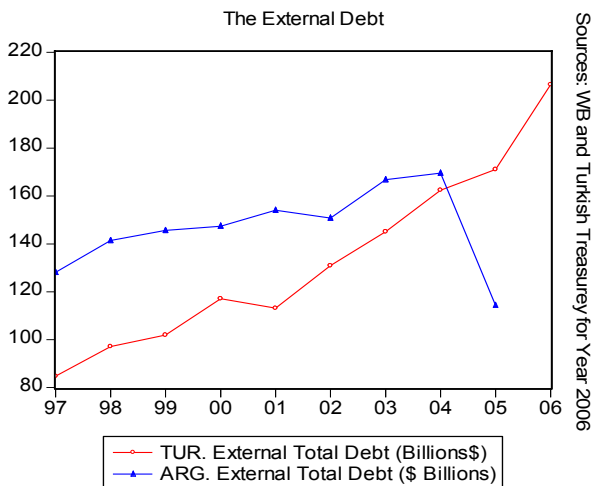


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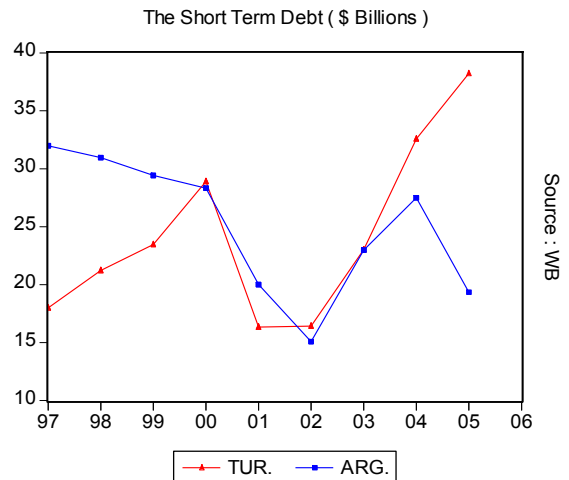


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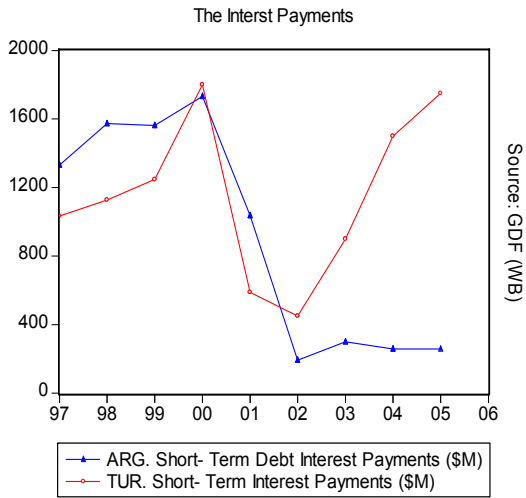


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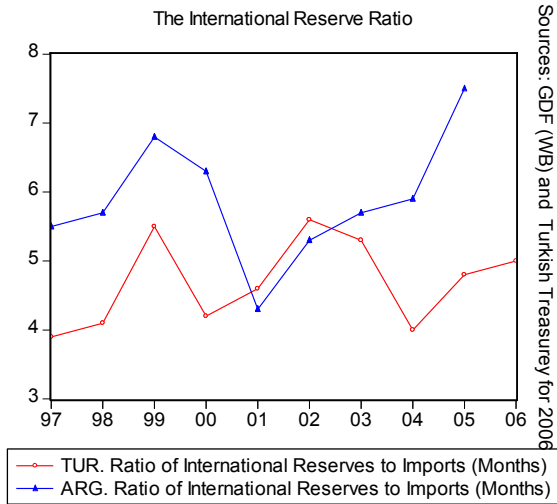


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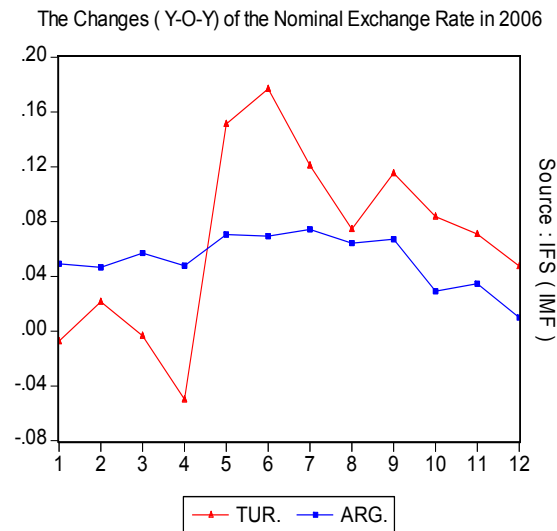


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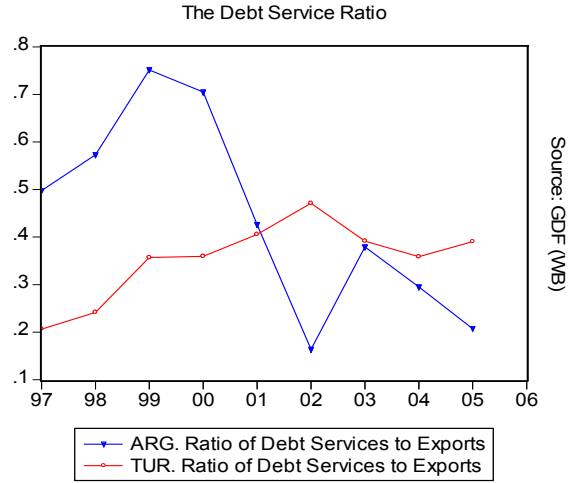


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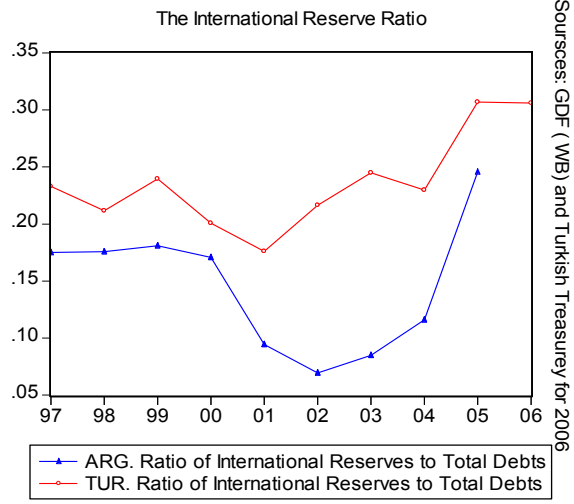


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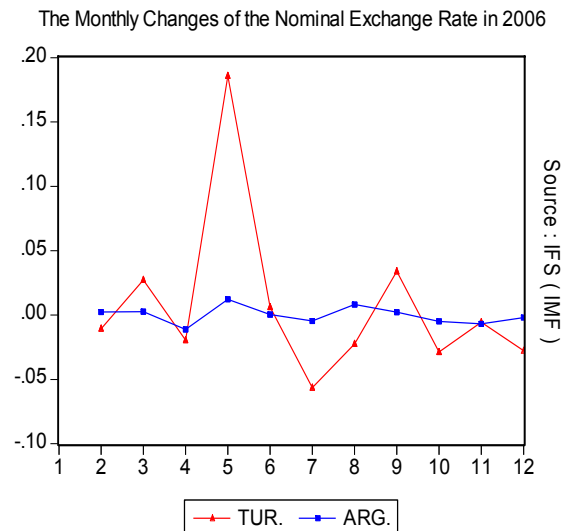


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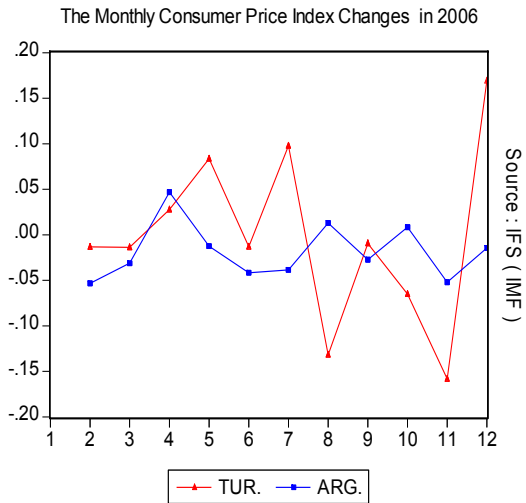


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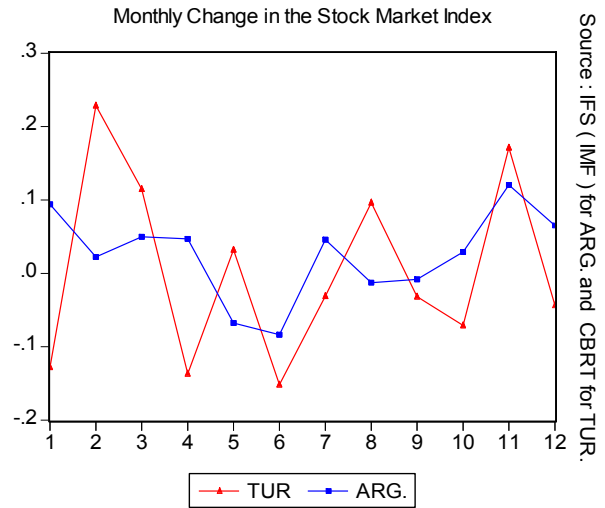


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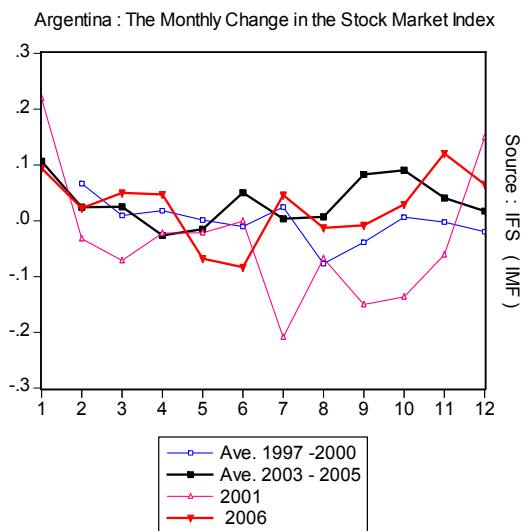


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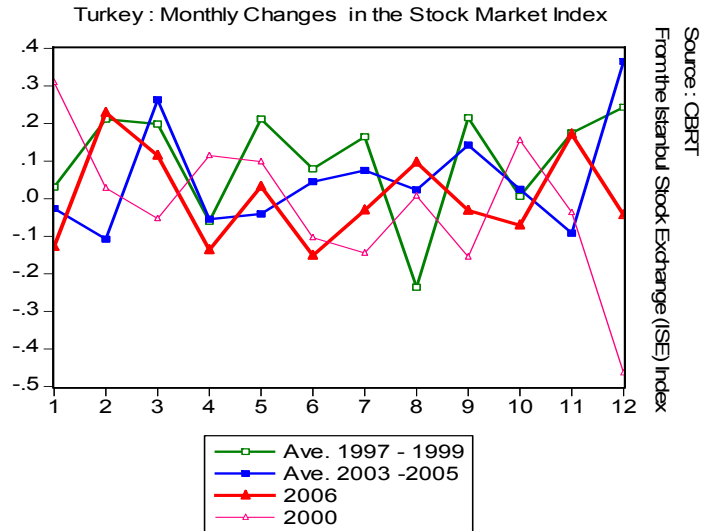


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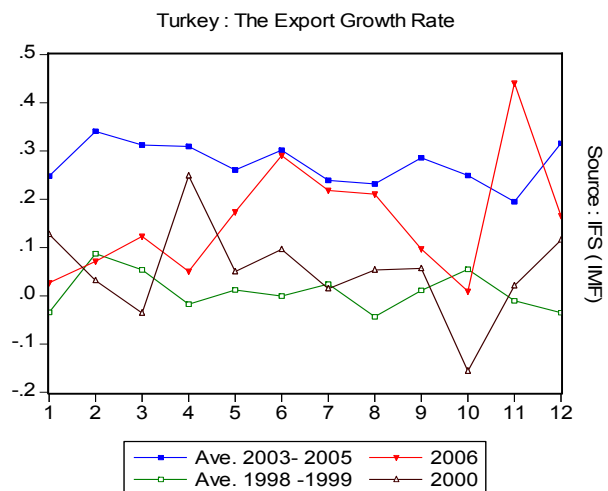
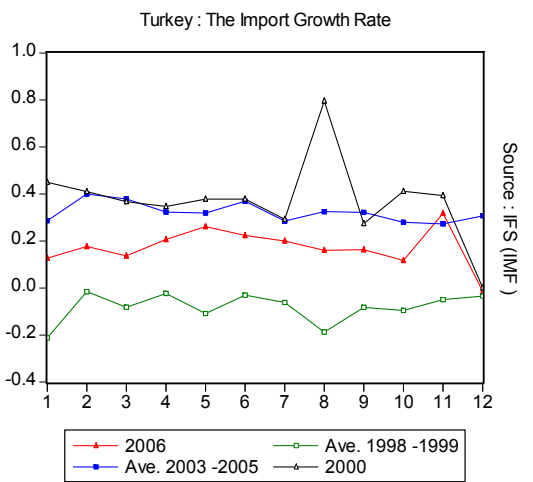


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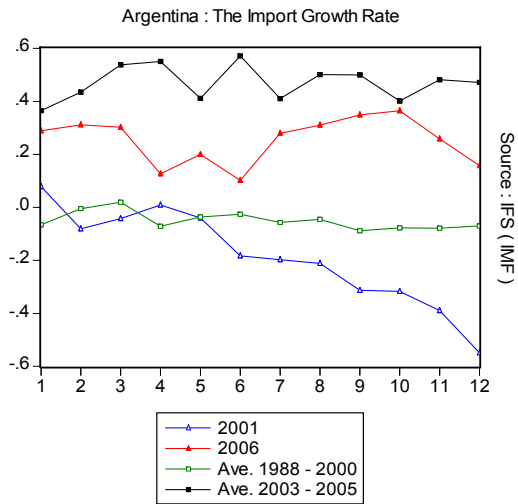


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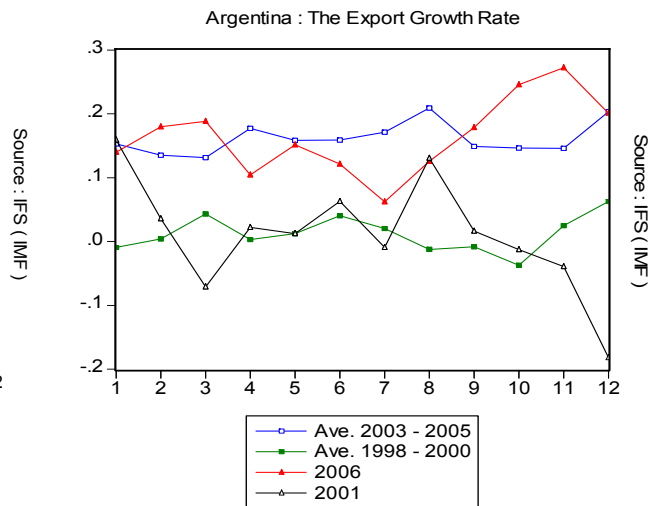


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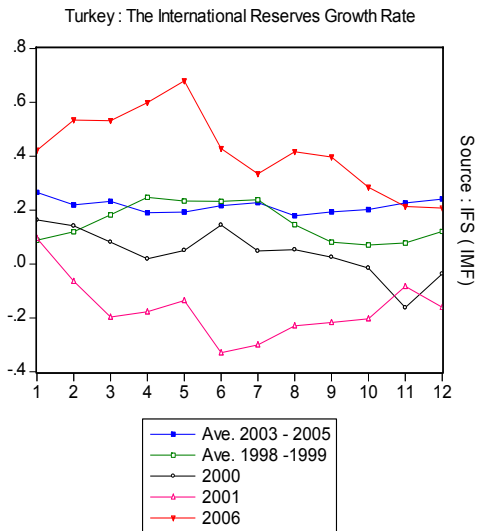


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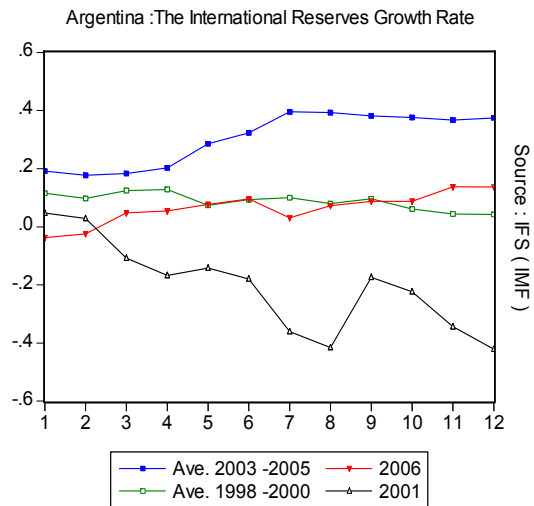


Figure 49

Figure 50

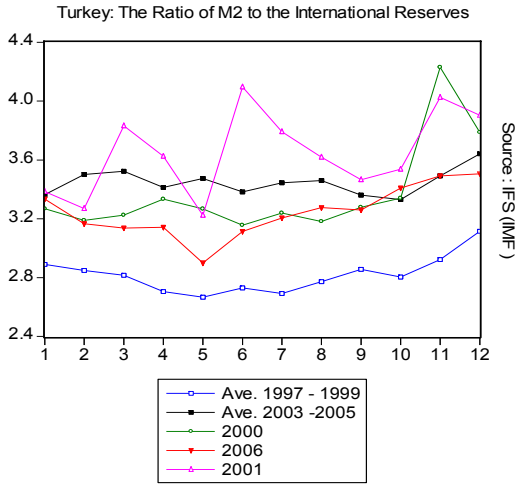


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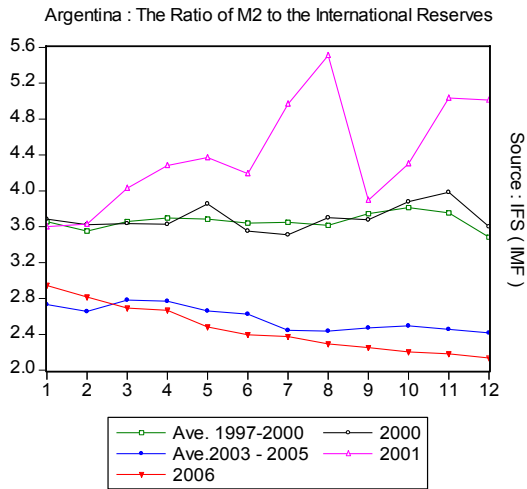


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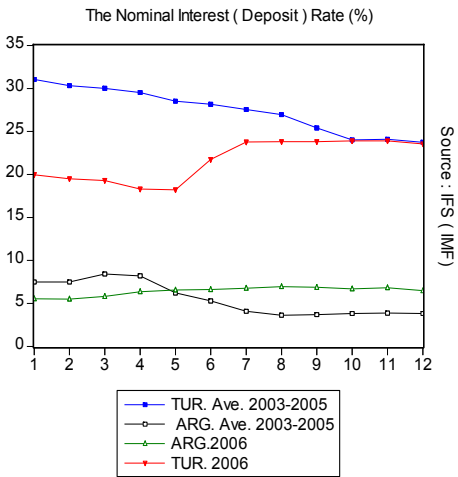


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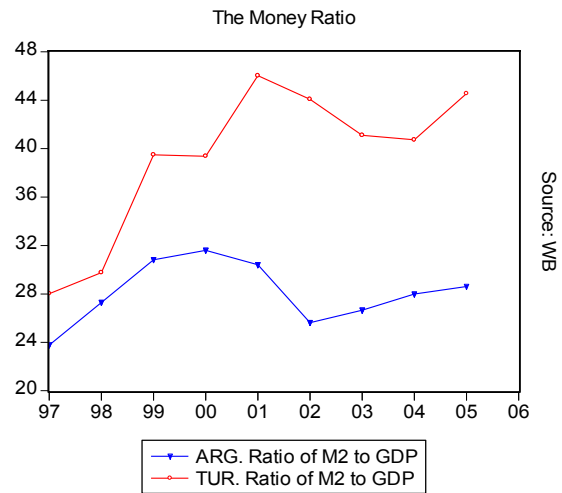
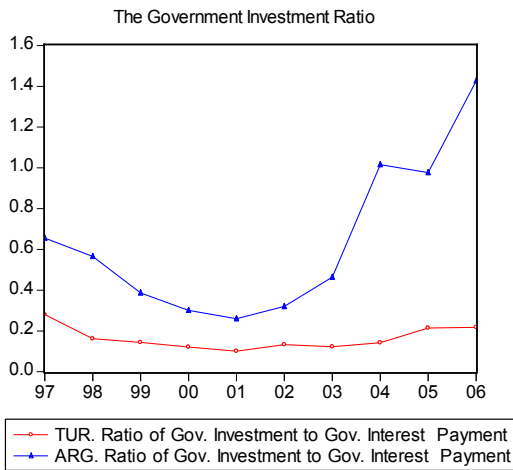


Figure 54



Sources: MECOM for ARG. and Turkish Treasury for TUR.

