THE CENTRAL BANK OF THE REPUBLIC OF TURKEY

(AMBLEM)

THE GLOBAL CRISIS AND THE TURKISH ECONOMY

"New Policy Challenges and Expectations for the Near Future"

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Prepared by:
The Central Bank of the Republic of Turkey
Head Office
Research Department
Ýstiklal Cad. 10
06100 Ulus, ANKARA
TURKEY.

For additional copies please address to:
The Central Bank of the Republic of Turkey
Head Office
General Secretariat
(Library and Documentation Secretariat)
Ýstiklal Cad. 10
06100 Ulus, ANKARA
TURKEY.

Chronological Layout of the Global Crisis

	Time	Occasion
1997	mid-May	• The Thailand Baht under speculative attack
July	Early	• The Thailand Baht exchange rate regime was switched to floating one and the Thailand Central Bank applied to the IMF for technical assistance • The Malaysian Central Bank intervened in foreign exchange markets
	mid	• The Philippines and Indonesia extended their floating bands of exchange rate
	Late	• The Malaysian foreign exchange markets collapsed
August	Early	• Thailand announced a stabilisation program for financial sector as recommended by the IMF
	Mid	• Indonesia switched to flexible exchange rate regime • The IMF accepted a financial aid package of 17.2 billion US dollar to Thailand
October	Late	• The situation of the companies that had been facing payment difficulties resulted in speculative attack on Won in Korea • The IMF announced a financial aid package of 40 billion US dollars to Indonesia
November	Early	• 16 banks in Indonesia were liquidated • Latin American stock markets crashed
	Mid	• Nikkei, Dow Jones, Dax Extra ended in day lows • The floating band of Won was extended to 10 percent
	Late	• Yamaichi of Japan went bankrupt
December	Early	• Russia raised interest rates • The IMF rescue package of 57 billion US dollars to Korea was accepted. Korea accepted a fiscal surplus by spending cuts

		and tax hikes as well as lowering growth level in 1998 to 3 percent from 6 percent. • The IMF revised its world growth by downgrading. • Social stress in Indonesia
	Late	• World's major banks agreed on rescheduling short-term debt of Korea amounting 100 billion US dollars.
1998	Jan	• Letter of intent was signed by the IMF and Indonesia that requires government to bail-out highly indebted banks and limits the fiscal contraction • Asian currencies headed south against US dollar • Rescheduling of Asian nations short-term debt by international creditors. Korea's rescheduling amounts to 24 billion US dollars.
February		• The Gulf Crisis
End-Mar		• The US senate as well as industrial nations agreed on a more transparent and accountable IMF
End-May		• Russian Economic Stress due to liquidity squeeze and rush to foreign exchange
July		• Fed intervened in the Japanese yen market with 5 billion US dollars purchase of yen
August		• Latin American Stock Markets crashed due to loss of confidence in emerging markets • Russian Economic Crisis, "Moratorium for 90 days on foreign debt"
October		• Fed and BOJ lowered interest rates and 4 billion US dollars of bail-out package for LTCM was announced. • The IMF-World Bank Annual Meeting • "G7 countries decided on financial aid package to the crisis countries, especially to Latin America" • Japanese bank restructuring package of 1 trillion US dollars was announced

Source:Reuters

1. Introduction

Technological advances in the near past made the international financial community to be highly sophisticated as well as efficient. The efficiency in flow of funds provided further growth in the participant nations. However, as the system evolves in itself, problems that arise in one part of the world or a misjudgment in international investment have immediate and chain responses in the global community.

Thailand was the initial point that faced the problems of lacking perfect infrastructure and operational efficiency in a system of rejecting fundamentals in valuation. In a few weeks, Thailand transmitted her problems to neighbouring countries and then to Russia, Latin America and most of the emerging economies including Turkey.

Financial distress towards a currency and financial crisis became the main determinant of the conjuncture in 1998 that began in the early 1997 as a snowball and continued to be an avalanche in 1998. As a result of the default in the emerging financial community, almost all of the emerging markets began to be considered as risky that rises from increasing uncertainty about the near future of the financial markets.

On the other hand, the fall in the prices of primary goods had a negative effect on the current account balances of the countries depending on the exports of such commodities such as Russia and Venezuela. In this respect, international investors became more cautious in their investment in the emerging markets and became even more reluctant to provide credit to these markets.

As a result, international investors forwarded their funds to the "developed markets" where they consider them as safe heavens. Eventually, a high demand of bonds in these economies began to push the yields down which resulted in gains in the bond markets. The rise of the spreads in the emerging markets and lack of foreign borrowing resulted in a necessity to finance the debt through domestic borrowing that increased the pressure for further depreciation of the domestic currencies. However, one consequence of the financial crisis is the decline in the growth rate of world output where the IMF revised its figures down by 1 percent to 2 percent in September 1998.

Consequently, new policy debate and new measures are being taken under consideration since the tools at hand once again failed as in the case of the early 1995 Mexican crisis. The G7 countries get together for further adjustment in the capital flows, such as diverting funds to the crisis countries to have a relief in the short term to halt the capital outflow, and supporting the discussions on the issues of strengthening international financial system through closed banking supervision, inspection, increasing transparency, accountability, and credibility (World Bank Group, 1998).

The second, third and fourth sections of the paper examine the fundamental causes, first responses and the initial effects of the crisis. In the fifth and sixth sections, the effects of the crisis on G7 countries and Turkey are examined. The following section discusses the aftermath of the problem. Section eight provides expectations in the Turkish economy for 1999. The last two parts of the study raise some questions on further adjustments in the world and give concluding remarks.

2. Fundamental Causes of the Crisis

The myth of the Asian miracle in the last two decades was constructed on the formation of large corporations to drive the economic growth. In this respect, these companies were given the privilege to grow faster through forming a financial sector within the industry so that they would be able to create their own funds domestically and abroad.

With massive capital account liberalisations in the 1990's, **capital flows** drastically increased to the emerging economies especially to Southeast Asian economies. Because financial sector was able to provide necessary funds to real sector, equilibrium rate of interest was also determined within the system and as the inflow of capital was managed by private sector, governments did not have significant controls on short-term foreign borrowing and central banks of the countries in the region had no significant dominance on interest rates.

However, some parts of the short-term borrowings were used to invest in mostly fixed assets for future collateral to future borrowing. In this respect, the total debt/equity ratio of the companies reached almost ranging from 200 to 8000 percent in the region which brought vulnerability to the system (Corsetti et al., 1998).

Moreover, long-term credit was disbursed to sectors of non-foreign currency earnings such as construction and real estate through external short-term borrowing of banks. The **maturity and currency mismatch** resulted in higher indebtedness that eventually ended in higher risks in the financial sector.

Another consequence of the evolve of the crisis was that high capital inflows in the 1990's caused **home currencies** to be

appreciated against currencies other than the US dollar (Özbay, Salman, Þahinbeyoðlu, 1998). In addition, due to the strengthening of the US economy, the US dollar appreciated against major currencies and the countries having fixed their currencies to the US dollar appreciated as well which might promulgate the expected current account worsening at hand. This is due to the fact that exports of these countries are forwarded to Japan and Europe.

In addition, **duality in the financial system** was the first inefficiency rising in the Asian economies. The integration of the financial system with the real sector which is already oligopolistic in itself creates a significant problem. There was no access to other players in the sector because a parallel financial sector had a different structure than other economies' where monetary policy had lesser effect on the financial sector as compared to other economies. The second inefficiency is the heavy use of derivatives to hedge in the money markets. Forward contracts were used to hedge at the margins to buy foreign currency like the Japanese yen and the US dollar which created positive illusions in the market. Nonetheless, when there was a pass through the margins, investors chose to shift to real balances which resulted with an acceleration in the rush for foreign exchange and eventually collapse of the system occurred.

Moreover, high intra-regional integration and flexibility in selection of the production base supported with ample capacity caused **chain depreciations**.

The default of the Southeast Asian countries put stress on other emerging markets. This was particularly because international investment banks consider emerging markets more or less the same which we call the **simplistic categorisation**. For this particular reason, investment banks became more cautious with the whole

emerging market area. A minor shift in economic indicators was immediately reflected in capital outflow and decreased lending. Further spillover effects of the crisis on Latin America were felt through weakening of the current account balances. Venezuela can be taken as an example since most of her exports depend on oil and oil products; a fall in oil prices (Graph I) was immediately reflected on current account balance and in a fragile environment of crisis any deviation from the stability in the macro aggregates resulted in a speculative attack on the currency with increasing demand for capital outflow. On the other hand, even if Russia faced the same situation as Venezuela, however, the important factor that pushed Russia into a crisis was the financing of the Russian Treasury's expenses through printing money by the Central Bank (Salman, 1998).

3. First Attempts of the Countries to Overcome the Crisis

In order to be in line with the goal of economic stability, countries initially defended the fixed exchange rate regime; however, when they could not able to cope with the situation, they extended exchange rate bands and/or abolished floating exchange rate regimes (Graph II). Afterwards, interest rates rose initially overnight interest rates; however, since government had little control in the interest rates due to high private sector own financing, the rise in the interest rates was not enough to prevent a rush to foreign exchange purchases and capital outflow. In this respect, the government had only the fiscal policy at hand. Even though the rise in the interest rates was not sufficient, the government chose to let the depreciation of the currency as an effective policy option.

Speculative attacks and loss in credibility finally resulted in capital outflows and high losses in the international reserves of the countries which again penetrated a further loss of funds and

credibility in the government institutions. In order to restore the confidence in the markets and halt the capital outflow, the IMF was invited by the countries for technical assistance. With technical assistance, the spillover effects of the crisis on other countries were given effort to prevent the crisis before it became a global one.

The IMF advised the countries for a depreciation of their currencies to restore competitiveness and halt capital outflow and go for further fiscal contraction. However, most of the Southeast Asian countries as a common feature had fiscal surpluses (Corsetti et al., 1998). That was one of the indicators that prevented inflation and continuing high growth at the same time in the past. Further fiscal contraction was aimed at a contraction in demand which would contract imports and through future current account surpluses, external obligations of the countries would be met.

4. Initial Effects of the Crisis

Since large losses were expected in the financial markets of the crisis countries, the demand for **capital outflow** was observed. The extent of the capital inflow in the emerging economies was 190 billion US dollars in 1996; however, with a declining trend in 1997, it is expected to decrease to 65 billion US dollars in 1998 (IMF, 1998) (Graph III).

International reserves fell due to excessive intervention in the foreign exchange market to defend the floating exchange rate policy within the given bands (Table I). This was particularly the first thing that happened due to excessive foreign exchange demand and it has been observed in all the emerging economies since the second half of 1997. Even it presented a declining trend in the first half of 1998, it again gained pace with the Russian crisis. The announcement of

policies such as moratorium on debts for 90 days and extending the exchange rate bands which was taken as an implicit depreciation in Russia accelerated the capital outflow from all emerging markets.

On the other hand, interest rates went up due to excess liquidity demand (**higher yield spreads**). This is easily seen through the decline in the yield for external-currency-denominated debt instruments of the emerging markets. According to the bond price index calculated by JP Morgan covering Argentina, Brazil, Ecuador, Mexico, Panama, Peru, Venezuela, Bulgaria, Morocco, Nigeria, the Philippines, Poland and Russia where Brady bonds, loans, Eurobonds and US dollar denominated local market instruments were included, sharp falls in the prices (sharp increases in their yields) were seen in the October 1997 and August 1998 period (Graph IV).

One major implication of sharp currency depreciations was the drastic **increase in the debt stock** and debt service ratios. If the debt stock is examined on a country base, in Indonesia external debt stock is expected to increase from 50 percent of GDP in 1997 to 167 percent of GDP in 1998, in the Philippines from 50 percent levels to 70 percent levels, in Malaysia, South Korea and Thailand from 40 percent levels to 60 percent levels. This would also be reflected as a deterioration of the wealth of the individuals in these economies (Deutsche Bank Research, 1998).

As well as a **loss of confidence in the financial markets** of the emerging economies and collapse of the stock markets, the bankruptcies of major institutions in the emerging economies resulted in heavy declines in the stock market indices. International and domestic investors began to realise their profits in the emerging markets which resulted in major capital market losses and loss of fund raising ability of the corporations whose stocks were traded in

the stock markets. The losses were seen in both the emerging markets and the developed markets (Table II). This had two implications; the first one was the uncertainty created in the markets resulted in a loss of confidence in the whole emerging market area. The second one was in order to overcome the losses in the stock markets, profits were realised in other emerging economies (money markets, stock markets, etc.) which led to all fall in the stock markets in the world (Graph V).

Due to competitive devaluations in the region, goods purchased from these countries became cheaper followed by accelerated imports from the region. However, economic recessions led the countries to export from their stocks that they had accumulated by excessive utilisation of their capacities before the crisis (IMF, 1998). Countries in the near future are expected to increase their production to stimulate exports in a fairly competitive environment (Graph VI). However, in the mean time, the situation is **weaker exports to Asia and higher imports from the region**.

Over utilisation of the capacity in the pre-crisis period resulted in an accumulation of stocks in the Southeast Asian countries so that countries in the region could be able to export at low prices in advance (IMF, 1998). The same trend should continue in the following years even if the economies are contracting (which is already a matter of debate). One particular reason for this fact is that by further fiscal adjustment, domestic demand would be squeezed and the production must be forwarded to the export markets in an already accrued competitiveness by subsequent depreciations in their currencies. For 1998, it is expected to be a worsening of the budget balances in almost all emerging markets. However, this is aimed to end in 1999 due to advice of the IMF on fiscal adjustment. Especially

in the Southeast Asian countries, an improvement in the current account positions is expected primarily due to the decline in imports. Because competitive devaluations were not made in Latin American countries to protect their export markets, an improvement in their current accounts is not a consequence in the mean time. On the other hand, Venezuela and Russia had different deterministic patterns. The decline in the **commodity prices** resulted in the worsening of their current account balances. This was particularly because their exports were highly dependent on primary goods. In this respect, a significant contraction in the Southeast Asian countries is expected to occur, except in China in 1998. The same pattern is observed in Venezuela and Russia. However, Latin American countries are expected to face a decline in the growth rates "not" a contraction in 1998 (Table III).

5. The Effects of the Crisis on the G7 Countries

In order to cover their lost stock market wealth in the developed markets which was due to subsequent falls during the crisis, international investors realised their profits immediately in the emerging markets. In addition, **immediate falls and rises in the stock markets** resulted in increased volatility that created uncertainty (Graph VII). In this respect, households long term investment was negatively affected from the increased volatility. This eventually reduced the stock market wealth which was then expected to result in a decreased household spending.

Moreover, funds that had been withdrawn from the emerging markets due to uncertainty directed to the developed markets caused increased demand especially for long term bonds. This eventually resulted in a decrease of the bond **yields**. The fall in the yields was initially reflected in the United States due to high capital repatriation to the country. For convenience and representation of the basic

locations in the world the United States, Germany and Japan are investigated for comparison (Graph VIII).

With the emergence of the crisis, Japan, which had (even has) a higher economic relationship with the region than any other country in the world, began to live the results of the systemic financial difficulties in her economy which began in the early 1990s. Major institutions in the Japanese economy such as Yamaichi defaulted (a similar one is observed in Peregrine which is located in Hong Kong) due to a loss of capital in the region. Also, the yields are still lower in Japan than other G7 countries. In this respect, international investors became reluctant to invest in Japan. On the other hand, the capital inflow to Germany did not increase because of the uncertainty created with the losses of major German investment banks in the Southeast Asian region and the process of integration of the European countries under monetary union beginning on January 1, 1999.

In this respect, the United States turned out to be the best place for the investor, because of the US dollar's dominance in the world economy and strong economic performance of the country in 1997 and 1998 (Table IV), in the environment of decreasing inflation, growing economy, higher yields than Germany and Japan and comparably lower exposure of the US investment banks in Southeast Asian region than other countries.

As a result, interest rate differentials among developed countries increased volatility in the **foreign exchange markets** (assuming that uncovered interest rate parity holds). The strengthening of the United States economy in 1997 which has been carried to 1998 appreciated the US dollar accordingly. In this respect, the US dollar gained from 120's against the Japanese yen and 1.60's

against the German mark in Autumn 1997 to high 140's and 1.80's in the summer of 1998, respectively. However, The Fed's intervention in the Yen/$ market in June by 5 billion US dollars of yen purchase was the first impact for the reversal of the trend (Graph IX). Later capital inflow began to the developed markets where they were considered to be safer places to go. However, the increased bond demand in these markets increased the bond prices and lowered their yields.

As a result, three points should be considered. The first one is increasing **current account** deficits resulted from increasing imports from emerging markets (as the currency of the countries in the region depreciates against advanced countries' currencies, the imported goods from the region become cheaper that increase the total imports from the region. GDP=C+I+G+(X-M), and subsequently decrease in net exports decrease GDP) (IMF, 1998) (Graph VI). The second point is that due to financial market losses, the net wealth of the households decreased dramatically which, in turn, expected to decrease the household spending. And last is financial distress caused credit rationing which also rationed the investment through credit channels. (Dornbusch, 1998)

Due to above mentioned reasons, industrial production in the G7 countries presented a similar pattern of decline (Table IV, Graph X), and a **recession in the world economy** is expected in 1998 and 1999.

6. The Effects of the Crisis on Turkey

In the first half of 1998, policy goals of both the Treasury and the Central Bank (reserve money target) were obtained within the given limits which provided confidence in the markets for lowering inflation in the near future (Graph XI). A number of factors has

continued to influence the slowdown in the rate of inflation, namely tighter fiscal policy (aiming at a primary surplus), low oil prices and cautious liquidity and exchange rate management by the Central Bank (does not necessarily mean tighter monetary policy since the interest quotation margins widened and the lower bound was lowered in order not to heavily squeeze liquidity in the money markets). Another point is that the decreasing trend in the world commodity prices (oil, aluminium, steel and iron, which are the main ingredients of the public investment) helped the public sector not to inflate (not a partial freeze in the public sector goods prices). These all gave a fall in inflationary expectations that was initially reflected in the nominal interest rates (Graph XII). This trend continued until the end of July. Nonetheless, as Russia and Latin America approached to a new eve of a crisis, reversal of the downward trend occurred.

The aim of the Central Bank of Turkey in the first quarter of 1998 was to inject more stability to the financial markets which was similar to the attempts since the eve of the crisis in the fourth quarter of 1997. Achieved stability triggered the capital inflows in April and May. The Central Bank had to sterilise the liquidity in order to stay within the objectives of the **monetary program**. In this respect, net foreign assets increased due to foreign exchange purchases and with the help of open market operations, the injected Turkish lira was offset so that net domestic assets decreased accordingly.

In May, the Central Bank stopped its operations in the Ýstanbul Stock Exchange (ISE) and stopped compulsory foreign exchange purchases in order to signal the market that the Central Bank would be reluctant to sterilisation.

With the Staff Monitored Program, the Central Bank announced a new monetary program in July which was aiming at targeting a new

monetary aggregate on the Central Bank's balance sheet that was the net domestic assets. The interest rate margin between the lower and upper quotations was extended and with open market operations the Central Bank did not heavily sterilise the Turkish Lira in order to leave the market with liquidity and to increase volatility in the interest rates. In this case, the Central Bank expected that markets determine an equilibrium interest rate that avoids the need of sterilisation. A level of minus 1514 trillion Turkish liras for the end of 1998 was announced for the net domestic assets (Table V). However, the monetary program has been negatively affected by the economic crisis in Russia which resulted in a capital flight from Turkey.

The Central Bank actively intervened in the foreign exchange markets in order to provide exchange rate stability and to overcome the excess liquidity demand in the money markets in August 1998 (Graph XIII). The Central Bank official foreign exchange reserves declined by 4.2 billion US dollars. Also, the Central Bank held open market operations (OMO) in order to reduce the uncertainty and illiquidity in financial markets. Therefore, in August 1998, the Central Bank became a net lender to the market whereas it was in net debtor position by the end of June (Net domestic Assets became positive). As a result of these developments, the Central Bank monetary program has deviated from its targets (net domestic asset target has revised to 700 trillion Turkish liras as of the end of 1998). Since mid-August the main policy aim of the Central Bank has been to sustain exchange rate stability and to reduce negative effects of the expectations to the Turkish economy, which we call to keep financial market stability as the primary goal. However, the inflation outcome is still in-line with the end-year projections.

In parallel to the crisis in the Southeast Asia and Russia, **official international reserves of the Central Bank of Turkey** began to fall in October 1997, recovered in second quarter of 1998, and then fell again in August 1998.

The loss of confidence in the emerging markets due to the Southeast Asian crisis resulted in an increasing demand for foreign exchange where the reserves of the Central Bank fell by 2.8 billion US dollars in the last quarter of 1997, but since the Central Bank was aiming to achieve financial market stability and not to stress the exchange rate, the effect of the crisis was not as significant as the Russian crisis in August 1998.

As mentioned before, the achieved stability through monetary policy in the first quarter of 1998 provided the necessary confidence to the markets. Several other measures were taken to keep in line with the monetary program and sustain the financial markets stability. In this respect, initially the compulsory foreign exchange purchases of the Central Bank were postponed to slowdown the short-term capital inflows. The second measure was to shift from daily repo operations to weekly repo operations. This led the banking system to follow weekly management of their holdings and to provide relief to the banks that the Central Bank was willing to fund the markets at a constant rate one week later.

The former measure led to an increase in the Central Bank reserves until mid-August to 26.7 billion US dollars. However, with the emergence of the Russian crisis capital flight had begun like in the case of other emerging markets. In accordance with the developments, the Central Bank sold approximately 5.2 billion US dollars and reserves fell from 26.7 billion US dollars to 21.5 billion US dollars (Graph XIV). Some parts of the foreign exchange purchases

were immediately reflected as banks' closing their open positions (Graph XV); however, a significant part was reflected as capital outflow. This can be inferred from the bond holdings of the foreign banks, an immediate fall in the bond holdings, which was parallel to the fall in the Central Bank reserves, is observed (Graph XVI).

In August 1998, with the help of the crisis in Russia, capital outflow resulted in a liquidity squeeze and a rise in the **interest rates**. Two particular reasons contributed to the rise; one is the uncertainty due to the unexpected reform measures announced on the tax system and the use of public banks in providing agricultural support funds which created an excess liquidity demand by the public banks.

The rise in the interest rates is observed on overnight, treasury auctions, secondary market and 3 month time deposit rates (Graphs XVII, XVIII). The rise in the interest rates also increased the volatility and the level of interest rates. Another point to note is that the overnight repo simple rates at the ISE began to increase up to 100 percent, which was then expected to result in an increase in the bond market rates. The increase in the interest rates of the bond markets would be reflected in the increasing cost of borrowing of the Treasury and increase in the budget deficit, etc. In this respect, in order to overcome the increase in the repo rates at the ISE, the Central Bank again entered into the secondary market of the ISE by asking quotations to fund the market to decrease the volatility. However, the volume of liquidity injection increased to the 400 trillion Turkish lira level which was a sign of increasing liquidity demand. In the end, beginning from August 28, 1998, the Central Bank shifted to auctions in open market operations. There has been an increase in the level and the volatility in the short-term interest rate when compared with its pre-crisis level since then.

Definitely, the crisis affected the **Treasury's debt program** and cost of debt financing (Treasury bill rates) and "Maturity" of the debt. The crisis as felt in the other emerging markets was reflected as a capital outflow from the country which increased the liquidity demand in the markets. This excess liquidity demand in the markets which was reflected as an increase in the nominal interest rates (Graph XII), especially in October and November, unfortunately increased the real interest rates since inflation stayed way under the nominal interest rates.

The increase in the interest rates was immediately reflected in the Treasury's debt program. Initially, in one of the four auctions, the actual amount of borrowing deviated from the expected quantity and in the other from the expected maturity in August. The Treasury was not able to suffice the amount of the borrowing for repayment of the government debt. In September, another deviation in the quantity, that was expected to be sold from a CPI indexed bond auction, was observed.

One of the consequences of increasing interest rates was the increasing cost of borrowing by the Treasury which deteriorates the government's future budget balance. Another consequence of the crisis was the shortening maturity of the debt, this particularly arises from the increasing uncertainty in the market, where market became even more reluctant to lend the government. In this respect, as of September, the "average maturity" of the domestic short-term debt shortened to 10.7 months from 12.4 months according to the figures of the end of 1997 on cash based bonds and the "date to maturity" became 6 months from 7.7 month levels in the end of 1997. The average maturity of the short-term debt was realised as 6.1 months as of September (Research Department, 1998).

Other developments in Turkey also contributed to the uncertainty in the markets such as the debate on the **tax reform**. The content of the tax reform came out to be different from what the market had already expected. Withholding tax began to be imposed on the interbank deposits, repos and on all bonds and bills in all maturities. Another aspect was bonds that have maturity over than a year will be free of tax, however, this again did not come out. This obviously created uncertainty and disapproval in the markets since they believe that government would take further steps on the misjudged points of the reform. On the other hand, the tax that was expected to be imposed on the financial markets created extra uncertainty on the present value of the expected future value of the assets. This, in turn, accumulated the negative effects of the crisis. In the end, by mid-September the government had to back on some degrees of dispute such as lowering taxes on banking transactions and insurance activities and cancelling withholding taxes on government domestic debt instruments as of October 1998.

A second point to note is the lowering of the tax brackets of the wage earners gradually first by 5 percent in August 1998 and another 5 percent in the beginning of 1999. In this respect, the lowest tax bracket will begin from 15 percent. This puts extra pressure on the budget and the Treasury's debt program since a lower revenue that should be accrued in the first months of 1999 will definitely have to be financed through Treasury's borrowing.

With the new measures taken to be applied in 1998, the tax base increased by tax identity numbering, imposing taxes on government domestic debt instruments and on revenues from rental housing and inflation netted time deposits income. Also, the announcement effect where people were informed about the tax

system and the new developments had positive effect on the tax collection. Following the measures, the **budget** deficit target which has been expected to be 8.1 percent is expected to undershoot to 7.1 percent and the primary surplus target which has been aimed at 3.8 percent is expected to overshoot to 4.6 percent as of the end of 1998.

However, due to the crisis as discussed briefly in the previous sections, government had to back on some issues of taxing on financial instruments (as of October 1, 1998) that limited further fiscal improvements in the last 3 months of the year.

As happened in other parts of the world, the **ISE** also presented a downward trend during and after the crisis periods. Due to the uncertainty about the near future and existing capital outflow, the ISE composite index (CI) entered into a declining trend. However, even worse happened after the fall of Russia.

In October 1997, due to Southeast Asian economic stress, in February 1998 due to the Gulf crisis and in August 1998 due to the Russian economic breakdown, the ISE immediately felt the effects (Graph XIX). However, the loss of confidence with the Russian default was the most effective on the market where a significant amount of capital outflow did occur in the ISE (Graph XX).

In this respect, the ISE lost 40 percent in value since the beginning of the year in Turkish lira terms and 56.5 percent in value in US dollar terms which significantly accelerated after August 1998. Also, total amount of capital outflow that began in late May to September was 688 million US dollars.

The financial sector immediately responded to the volatility due to the crisis, however, real sector followed a longer pattern. In terms of the competitiveness measures, real effective **exchange rate** which

is calculated by domestic private manufacturing prices does not present a significant change since last October, according to the 1987 prices. From year on year, only 1 percent real depreciation was observed until October. When we examine it from the beginning of 1998, a 0.7 percent real depreciation was seen. This results from the co-movement of the prices of the domestic private manufacturing industry (the inputs of the industry is highly sensitive to the import prices since the industry should consider the costs to meet the demand) and the nominal effective exchange rate (Graph XXI).

When the terms of trade measures examined, there cannot be seen any significant disadvantageous situation against Turkey (Graph XXII). However, due to an approaching world recession, the **volume of trade** began to decline as in the case of the world economy. It is observed that a downward trend was observed in the export and import figures. This is particularly due to the decline in the growth rate of domestic demand and pessimist behaviour of the domestic industry on production (Graphs XXIII, XXIV). One important factor affecting the Turkish exports (mostly through shuttle trade) was the decreasing exports to Russia, which is the second (before the crisis; the fourth after the crisis) largest trading partner of Turkey. The contraction of domestic demand in Russia contracted their imports from Turkey immediately. However, due to a high percentage of goods exported are consumption goods, Turkish exports (mostly in terms of shuttle trade) are expected to increase in the near future. This rises from the fact that consumption goods exported by Turkey is cheaper than China and Italy, which are the main competitors of Turkey in the shuttle trade to Russia (Mustafaoðlu, Burhan, 1998). On the other hand, current account deficit is expected to be around 1.7 percent of GDP by the end of 1998.

In a recessing world with declining capital flows and volume of trade, it is inevitable for the Turkish economy to sustain a high level of **growth**. However, since the economic fundamentals are stable in the Turkish economy, it is expected that economy should grow at a pace of 4 percent which is less than the 10 year average. Declining trend is also observed on the reference figures (Graph XXV).

7. Solutions to the Problem

The **IMF**'s advice to countries in distress was to impose excessive contraction in the monetary and fiscal policies to depress the domestic demand and to generate future current account surpluses to roll-over their foreign debt. In this respect, the IMF technical assistance and financial aid programs were forwarded to the crisis countries. The quotas of the Fund were increased and with the leadership of the IMF, the G7 countries decided on financial assistance to the countries that were having financial difficulties. The loan programs of the IMF had been provided since the evolve of the crisis to Southeast Asian countries reaching 100 billion US dollars. In addition, recently, Latin America, especially Brazil is having a 30 billion US dollar loan from the G7 countries for financial sector renovation. An increase in the amount of loans to 90 billion US dollars to Latin America is also on the agenda. However, up to now, this only seems to prevent the short-term outflows.

On the other hand, attempts to **strengthening financial markets** through closer banking supervision and inspection began to be discussed in the international arena. By closer inspection and supervision in the banking system, the regulatory authorities can easily prevent the markets from taking high risks, in this case transparency on the accounts takes an important role so that risks in

the system can easily be understood and solutions to the problem can be easily be offered.

Another solution offered is the **capital controls** and **fixed exchange rate regime** (!). Globalisation and financial deregulation in the world resulted in the increased vulnerability of the world markets (Dornbusch, 1998). A possible stress in one part of the world is immediately reflected on other parts. Consequently, capital outflow in the crisis economies would result in growth losses in the medium term; emerging economies need external credit to pursue a long term growth and to stay competitive in the world economy. If this credit could not be found, the world would be in stress. Consequently, capital controls seems not to be a solution to the problem.

Moreover, as long as there is capital inflow, there will be financial market stability and fixed exchange rate regime can be pursued; however, one of the reasons of the crisis was the efforts to keep the fixed exchange rate regime. This prevents currency risk for the foreign investor where a safe environment is created through the regime; however, in case of a fixing of the currency monetary authority looses her freedom in conducting the monetary policy. Hence, at every pre-crisis and crisis periods monetary authority must intervene in the markets to keep the exchange rate stability still. This again fails as a solution to the problem.

8. Expectations about the Turkish Economy and Policies that should be Pursued by the Agents

Economic situation in 1999 will mainly be determined by the **Treasury's debt program** and the **elections** that are expected to be held in April. Elections in April still continue to create uncertainty in the expectations about the economy. In a time of serious economic distresses, uncertainties about the government still create problems.

On the other hand, the Treasury has to roll over 22.2 to 25.2 billion US dollars of domestic and external debt plus the fiscal deficit in the first 3 to 4 months of 1999, which will probably create an upward pressure on the interest rates and it is a pretty high stock of debt as compared to the 1998 figures, unless foreign debt will be found. However, the Treasury is aiming at increasing the foreign borrowing with the company of Deutsche Bank and Commerzbank (600 million Deutsche Mark of foreign borrowing, which is definitely low in amount but aimed at signalling the market for further capital inflow to the country).

The recession expectations in the world is also expected to be reflected in Turkey. There is not a way out since it is not possible for Turkey to increase her **growth** when the world is going into recession. The long-run potential growth of Turkey as calculated in the last 20 years is 4.6 percent. The contraction in demand and expected rise in the interest rates in the following year is expected to result in an output loss in 1999 so that growth rate of the economy is expected to be less than her potential rate in the following year. However, the fundamentals such as current account deficit, budget, etc. are still OK.

However, Turkey should **stay competitive** where a slight appreciation of the Turkish Lira is unbearable for the Turkish economy in a competitive international market. The volume of trade of Turkey is contracting due to slowing world economy. In this respect, there will be no shift in the structural policies since fundamental economic indicators are strong, if there is, it will be only gradual.

On the **Central Bank** side, we are aware of the fact that there is no need for sharp depreciation, one cause is Turkey's foreign debt stock will increase immediately in terms of the Turkish Lira as happened in the case of Asian economies. Also, the Central Bank will not appreciate the currency to be in-line with the competitiveness concerns. On the other hand, capital outflow will be responded by immediate interest rate rises as was done before and the Central Bank will not finance the increase in the budget expenditures due to elections that is planned to be held in April 1999.

9. Discussions for Further Adjustment in the World

Domestic demand led **growth** has become an initial concern than any other instability to overcome a crisis. In this respect, inflation should be taken as the second best policy concern by the policy maker.

One policy for debate is the IMF based programs aiming at **depreciation** and **fiscal contraction** which was implemented by almost all countries. As noted earlier, the IMF based stabilisation programs to the crisis countries begin with depreciation and continue with further fiscal adjustment. The main concern of the Southeast Asian countries and the IMF before crisis was to live low inflation through fiscal surpluses. However, in this case depreciations faced by the countries, initially lowers the prices of the exported goods but not

the wages of the labourer. The labourers nominal wage does not change however real wage declines. In this respect, the depreciations can be considered as a transfer of wealth from the deprecating economies to the developed economies since lower import prices mean higher real income for the importing economies. This resulted in a compression of inflationary expectations and realisations in the developed economies.

On the other hand, fiscal surpluses obtained by increasing taxes depress the growth of the economies. One important factor for overcoming the crisis is to achieve current account surpluses through contraction in demand and finance the foreign debt by expected future current account surpluses. In this case, higher taxes are imposed to squeeze demand and extract revenues to come up with increased fiscal surplus that is definitely a further wealth transfer from the emerging to developed economies.

An important point to note is the **bail-out of major corporations**. One way to bail-out of the institutions is to transfer funds to these institutions. In an economy lacking funds, foreign aid is needed for restorations and this happens by purchases of the corporations shares in the already beared stock markets. A safe bet is forecasting the crisis, exitting the bullish market by realising high gains and purchasing in the bearing market at half price (!).

Eventually, decreasing **yields** in the developed markets in the medium to long term are reflected on the lending rates of the banks which, in turn, means higher investment trend in the future. So that especially in the United States, the decrease in the yields will be reflected in higher investment and growth that overcomes the negative effects of the crisis through current account and the depressed domestic demand in the country.

10. Main Conclusions

Advancements in information technology and financial innovations are still far away to avoid "illusions" in pricing the financial instruments. We may even claim that recent moves on the low and past moves on the high side of "illusions" are supported by the "sophistication" in the financial markets.

Decreasing "liquidity premium" due to globalisation and massive liberalization of the capital account around the world reshaped the investors behaviour with a bias towards short-term instruments. However, the pricing of long-term instruments is affected more on the availability of funds and short-term borrowing rates than the fundamentals.

The worst of the crisis is not over yet. Problems in Latin America would not have quick solutions like funding, those already made avoided capital flight. Application of the "New Order" to economics seems to be more difficult than dominating in military power. Path of the adjustment still has the risks of domestic tensions, which may require more funding.

There still remains a problem in Latin America, especially in Brazil and Argentina where there is a possibility of a default in Argentina due to a possible speculative depreciation in Brazil since Argentina follows a "currency board" policy to stabilise the economy.

Is crisis that we are living through a "zero-sum" game or does the crisis push the "global production frontier" down? For the time being, we are more on the "zero-sum" side. Now, what can be said about the identification of winners and loosers?

For the winners, capital inflows increased, interest rates decreased more or less a flat yield curve, new refinancing decreased,

feasibility in investment, problem of maturity mismatch of the domestic intermediation in medium-term. For the loosers, is Africa expanding? Domestic currency depreciates in order to keep the individual competitiveness intact and fiscal contraction which squeezes domestic demand in the medium term and discrepancy in technological levels increase. How resilient are the emerging markets to the changes?

It is likely that the G7 countries benefited from the crisis. However, the United States even received more than the others. This rises from the fact that increased bond demand decreased the interest rates in the country, which was in line with the expected expansion in the economy in the medium term. On the other hand, the decreasing import prices increased the volume of imports, subsequently the current account deficit in the rest of the world (other than crisis countries) in the short-term, however, declines in the prices first of all decreased the costs in the production line, which is reflected as an increase in the real income of the importing country and second helped the countries to pursue their long-term low inflation targets.

Turkey has its own fundamentals, however, due to simplistic categorisation, she is included in the same class with Russia and some other emerging markets. In this respect, there still remains a small percentage of possible gap for economic stress, if Russia cannot take over. The Treasury's debt program in the first months of 1999 and elections in April mainly will determine the agenda. However, an access to foreign borrowing will bring immediate relief in the economy. The Central Bank is calm in her decisions, hence no problem is expected on the monetary policy side unless any negative externality occurs.

A contraction in 1998 is expected in the world economy due to contraction in the Southeast Asian countries. However, as far as the measures taken in 1998, it is obvious that short-term outflow in the emerging economies stopped and necessary economic recovery will be present in 1999 in the whole world.

References

Burhan V., Mustafaoðlu Z., (1998) Rusya krizi ve Türkiye üzerine muhtemel etkileri, DPT, available at *http://www.dpt.gov.tr/dptweb/konj/rk.html.*

Corsetti G., Pesenti P., Roubini N., (1998) What caused the Asian currency and financial crisis? available at *http://www.stern.nyu.edu/~nroubini/asia/AsiaHomepage.html.*

Deutsche Bank Research (1998) Global Emerging Markets, Deutsche Bank AG, London.

Dornbusch R., (1998) World Economic Trends, VII, 5, Trans-national Research Corporation, New Jersey.

IMF (1998) World Economic Outlook, IMF, Washington D.C.

Özbay P., Salman F., Þahinbeyoðlu G., (1998) Güneydoðu Asya Krizi ve Türkiye, TCMB, Ankara, Unpublished manuscript.

Research Department (1998) Monthly Economic Developments Report, CBRT, Ankara.

Reuters online news services

Salman F., (1998) Rusya Ekonomisi ve Mali Piyasalarda Oluºan Kriz, TCMB, Ankara, Unpublished manuscript.

World Bank Group (1998) Reports on the International Financial Architecture, World Bank available at *http://www.worldbank.org/html/extdr/ifa-reports)index.htm.*

TABLE I

International reserves (US$ billion)									
End of period	Russia*	Korea	Thailand	Argentina	Brazil*	Singapore	Venezuela*	Mexico	Taiwan
1997 Jan	15.3	31.7	38.2	17.8	57.2	77.3	...	20.3	89
Feb	14.0	30.5	37.2	19.0	57.9	77.2	15.8	21.3	89
Mar	15.2	29.9	37.1	17.7	57.5	78.7	16.0	21.1	90
Apr	16.5	30.7	36.3	17.5	54.3	79.0	15.9	22.6	90
May	18.2	32.7	32.3	19.3	57.7	80.4	16.1	24.5	91
Jun	20.0	34.1	31.4	19.9	56.0	80.7	16.7	23.8	91
Jul	24.5	33.4	29.4	19.8	59.0	79.4	16.5	24.6	89
Aug	24.5	31.1	24.9	20.0	61.8	76.8	18.6	25.8	88
Sep	23.9	30.4	28.6	19.5	60.7	77.3	18.3	27.0	86
Oct	23.1	30.5	30.3	19.8	52.4	74.5	18.3	28.1	84
Nov	22.9	24.4	25.3	20.0	50.7	74.4	18.9	27.0	84
Dec	16.8	20.4	26.2	22.3	52.2	71.3	17.8	28.8	84
1998 Jan	17.8	23.5	25.9	21.1	53.1	68.2	17.1	29.2	85
Feb	15.4	26.7	25.4	21.5	58.8	73.9	17.0	29.0	85
Mar	15.0	29.7	26.9	21.1	68.6	74.6	15.8	30.1	...
Apr	16.9	35.5	28.7	21.3	74.7	76.1	14.8	31.1	...
May	16.0	38.7	26.7	22.4	72.8	71.9	16.0	31.0	...
Jun	14.6	40.8	25.8	22.8	70.9	70.9	15.5	30.6	...
Jul	16.2	43.0	26.0	22.5	70.2	69.2	14.4	31.7	...
Aug	18.4	45.0	25.9	24.4	67.3	68.3	13.9	29.8	...
Sep	12.5	46.9	26.6	24.0	45.8	72.4	13.0	29.3	...
Oct	12.7	48.8	...	...	...	...	14.5	...	...

Source: International Financial Statistics-IFS, excl. Russia

1/ minus Gold

*Central Bank of Russia, beginning of period; Banco Central de Venezuela, Banco Central do Brasil

TABLE II

Stock Market Indeces (percentage change)								
%	Dow-Jones	Dax (Xetra)	Nikkei 225	Hang Seng	Rus RTS ($)	Venezuela	Mexico Bolsa	Brasil Bovespa
Sep_97	5.9	6.0	-1.9	6.5	5.0	8.6	14.5	11.2
Oct-97	-3.7	-9.7	-8.0	-29.4	-15.3	-11.4	-12.7	-23.8
Nov-97	4.5	5.8	1.1	-0.9	-22.2	-6.3	7.0	4.5
Dec-97	2.0	6.3	-8.3	1.9	20.8	-0.6	5.1	8.5
Jan-98	-0.1	5.2	9.0	-13.7	-28.4	-15.3	-12.6	-4.7
Feb-98	5.4	5.7	1.2	24.1	8.9	-2.1	4.7	8.7
Mar-98	4.3	8.6	-1.8	0.3	5.1	7.1	4.8	13.0
Apr-98	1.0	2.8	-5.4	-9.9	-4.0	-20.6	1.6	-2.3
May-98	-2.3	6.0	0.2	-14.0	-38.8	1.2	-11.2	-15.7
Jun-98	1.9	5.1	1.0	-4.4	-20.9	-22.3	-5.5	-1.7
Jul-98	-3.2	0.3	3.5	-7.1	-1.1	0.9	-0.9	10.6
Aug-98	-12.7	-17.9	-13.9	-8.3	-56.2	-40.1	-29.5	-39.6
Sep-98	3.2	-7.9	-5.0	8.4	-33.2	34.1	19.3	1.9
Oct-98	8.7	3.6	1.2	28.8	31.3	-6.7	14.1	6.9

Source: Bloomberg

TABLE III

Emerging Markets Indicators											
	GDP (Annual %)		CPI (Annual %)		Current Account (% of GDP)		Bundget Deficit (% of GDP)		M2 /Rezervs		Credit Ratings
	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998	Sep-98
Argentina	8.4	4.8	0.8	1.6	-3.3	-3.8	-2.1	-1.5	3.5	3.5	Ba3
Brazil	3.2	1.2	7.4	1.8	-4.2	-3.7	-6.1	-6.2	3.7	3.2	B2
Chile	7.1	4.8	6	4.8	-5	-7.1	1.4	0.5	2.2	3.1	Baa1
Mexico	7.1	4.8	16.3	15.8	-0.6	-3.3	-0.8	-1.4	5.7	6.1	Ba2
Venezuela	5.1	-0.1	38	34.7	7.7	-2.5	2.6	-5	1	1.4	B2
Russia	0.5	-5	10.9	139	1.2	-2.2	-8.4	-6.2	4.5	11.3	B3
China	8.7	6.6	2.8	-0.5	1.9	1.5	-0.7	-2	7.8	9.4	A3
Hong Kong	5.3	-4.1	5.7	3.2	-3.8	0.2	5.8	-2.3	4.2	4.5	A3
Indonesia	4.6	-23.7	7.1	63.5	-1.9	13.1	-0.2	-5	3.2	3.1	B3
Malaysia	7.8	-3.6	2.7	5.8	-4.8	8.2	1.8	-2.2	3.6	3.5	Baa3
The Philippines	5.2	-1.9	5.1	9	-5.2	0.4	0.1	-1	2.8	2.4	Ba1
South Korea	5.5	-9.6	4.4	7.6	-1.9	13.9	-0.5	-5	8.6	5.1	Ba1
Thailand	-1	-6.9	6.5	8.7	-1.4	9.1	-0.9	-4	5.6	4.1	Ba1

Source: Paribas (1998) Emerging Markets Research", London

Bloomberg, Online database

* 1998 values are expected values

TABLE IV

Economic Indicators of Selected Countries												
												Annual percentage change
Period	Consumer prices				Industrial production (SA)				Unemployment rate			
	United States	Japan	Germany	United Kingdom	United States	Japan	Germany	United Kingdom	United States	Japan	Germany	United Kingdom
1997 Jan	3	0.6	1.8	2.8	5.2	8.1	1.8	2.2	5.4	3.3	11.3	6.5
Feb	3	0.6	1.7	2.8	4.7	3.5	6.3	1.6	5.3	3.3	11.3	6.2
Mar	2.8	0.5	1.5	2.6	5.4	7.5	4	0.4	5.2	3.2	11.2	6.1
Apr	2.5	2	1.4	2.4	4.8	4.8	2.9	2.4	4.9	3.3	11.2	5.9
May	2.2	2	1.6	2.6	4.2	7.5	0.5	-0.1	4.8	3.5	11.4	5.8
Jun	2.3	2.2	1.7	3	3.8	7.8	2.8	2.4	5	3.5	11.4	5.7
Jul	2.2	2	1.9	3.4	4.7	5	5.9	2.2	4.8	3.4	11.5	5.5
Aug	2.2	2.1	2.1	3.5	4.9	3.3	1.1	2.2	4.9	3.4	11.6	5.3
Sep	2.2	2.4	1.9	3.6	5	4.3	0.9	1.4	4.9	3.4	11.7	5.2
Oct	2.1	2.4	1.8	3.8	5.6	2.1	4.3	1.4	4.7	3.5	11.8	5.2
Nov	1.8	2.1	1.9	3.7	5.7	-1.1	3.4	0.5	4.6	3.5	11.8	5.1
Dec	1.7	1.9	1.8	3.7	5.8	-1.3	3	0.1	4.7	3.4	11.9	5
1998 Jan	1.6	1.9	1.3	3.3	5.4	-3.2	7.8	-0.1	4.7	3.5	11.6	5
Feb	1.4	2	1.1	3.4	4.4	-3.1	4.9	-0.1	4.6	3.6	11.5	6.4
Mar	1.3	2.2	1.1	3.5	4.5	-5.2	4.5	1.1	4.7	3.9	11.5	6.4
Apr	1.5	0.4	1.4	4	4.3	-1.9	2.9	1.4	4.3	4.1	11.4	6.4
May	1.7	0.5	1.3	4.2	4.5	...	5.4	1.0	4.3	4.1	11.2	6.3
Jun	1.7	0.1	1.2	3.8	3.3	...	1.6	0.2	4.5	4.3	11	6.2
Jul	1.7	-0.2	0.9	3.4	2	...	2.8	0.0	4.5	4.1	10.9	...
Aug	1.6	-0.4	0.8	3.3	3.1		...	...				

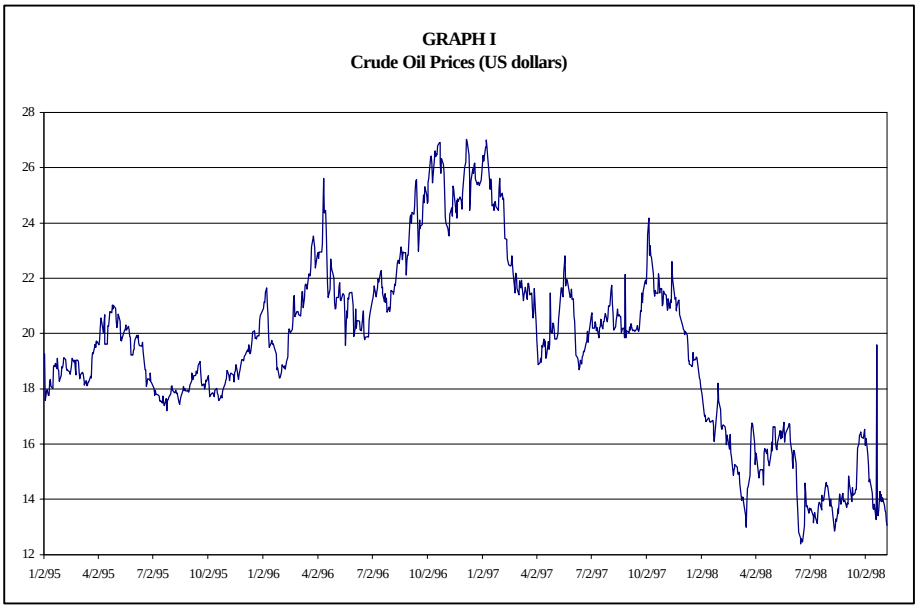
Source: International Financial Statistics-IMF , Economic Outlook - OECD

TABLE V

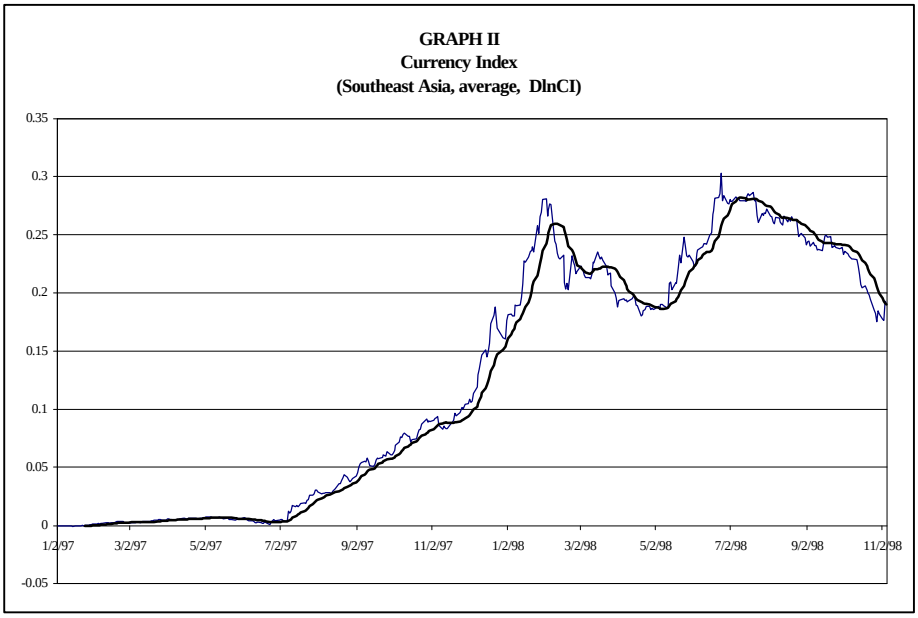
CENTRAL BANK BALANCE SHEET
(Trillion TL)

	9712	9801	9802	9803	9804	9805	9806	9807	9808	9809	9810
ASSETS (1+2)	**1,934.0**	**2,189.4**	**2,148.2**	**2,299.5**	**2,391.6**	**2,540.5**	**2,641.4**	**2,902.4**	**3,079.9**	**3,087.1**	**3,256.1**
1. Net Foreign Assets (a+b)	**1,791.0**	**2,157.9**	**2,204.2**	**2,797.5**	**3,619.8**	**4,039.6**	**4,419.5**	**4,194.1**	**3,296.9**	**2,992.3**	**2,882.5**
a. Foreign assets	4,337.0	4,874.6	5,054.7	5,786.0	6,786.3	7,313.5	7,770.2	7,684.6	6,862.6	6,775.8	6,839.8
b. Foreign liabilities	-2,546.0	-2,716.7	-2,850.5	-2,988.5	-3,166.5	-3,273.9	-3,350.6	-3,490.6	-3,565.8	-3,783.5	-3,957.3
2. Net Domestic Assets (a+b+c+d+e+f+g)	**143.0**	**31.6**	**-56.0**	**-498.0**	**-1,228.2**	**-1,499.1**	**-1,778.1**	**-1,291.7**	**-216.9**	**94.9**	**373.6**
a. Net cash credits to public sector (aa+ab+ac)	6.0	148.0	101.5	-154.4	-404.8	-383.5	-223.4	-106.5	-101.8	6.0	147.8
aa. Cash Credits to public sector	892.0	894.7	913.4	653.6	615.3	699.6	693.1	742.3	775.5	766.3	845.6
ab. Deposits of public sector	-182.0	-255.3	-174.2	-279.8	-108.6	-229.6	-260.8	-256.7	-365.5	-292.7	-185.2
ac. FX Deposits of non-bank sector	-704.0	-491.3	-637.8	-528.3	-911.6	-853.5	-655.6	-592.1	-511.8	-467.6	-512.6
b. Extra budgetary funds	-50.0	-44.8	-50.2	-51.2	-41.3	-26.5	-11.6	-17.2	-18.0	-16.5	-25.0
c. Deposits of non-bank sector	-7.0	-3.5	-4.5	-9.9	-9.0	-8.1	-10.7	-13.0	-13.5	-9.8	-11.7
d. Cash Credits to banking sector	8.0	7.7	7.7	7.7	7.2	7.7	7.7	7.7	7.7	7.7	7.4
e. Open market operations	720.0	571.4	589.0	197.1	-311.4	-583.3	-1,008.5	-569.5	626.9	871.7	1,101.5
f. Other items	-342.0	-378.2	-444.2	-478.9	-415.3	-394.1	-339.1	-363.5	-425.2	-468.8	-515.7
g. Fx revaluation account	-190.0	-269.0	-255.2	-8.3	-53.7	-111.2	-192.5	-229.6	-293.1	-295.5	-330.8
LIABILITIES	**1,934.0**	**2,189.4**	**2,148.2**	**2,299.5**	**2,391.6**	**2,540.5**	**2,641.4**	**2,902.4**	**3,079.9**	**3,087.1**	**3,256.1**
1. Reserve money (X) (a+b+c+d)	**1,934.0**	**2,189.4**	**2,148.2**	**2,299.5**	**2,391.6**	**2,540.5**	**2,641.4**	**2,902.4**	**3,079.9**	**3,087.1**	**3,256.1**
a. Currency issued	759.0	947.7	810.5	897.9	924.7	928.2	1,006.0	1,177.1	1,239.3	1,195.3	1,280.8
b. Required reserves of banking sector	336.0	364.0	376.7	387.0	416.0	470.6	526.3	572.7	586.0	598.3	651.2
c. Free deposits of banking sector	34.0	29.1	31.9	46.2	38.9	81.7	20.4	38.0	83.2	65.6	51.8
d. FX Deposits of banking sector	804.0	848.6	929.1	968.4	1,012.0	1,060.0	1,088.7	1,114.5	1,171.4	1,227.9	1,272.3

Source: The Central Bank of the Republic of Turkey



Source: Bloomberg online database



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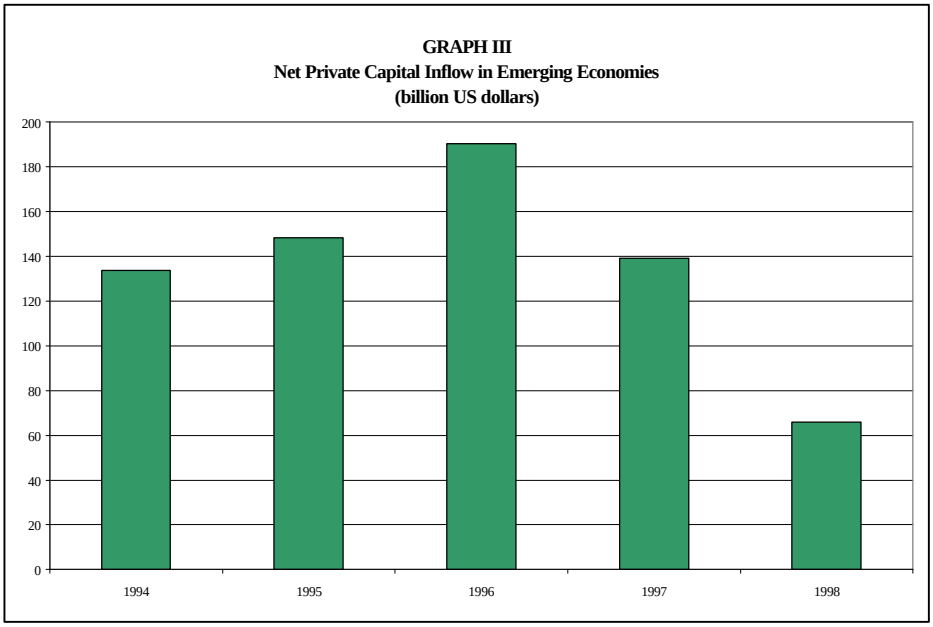
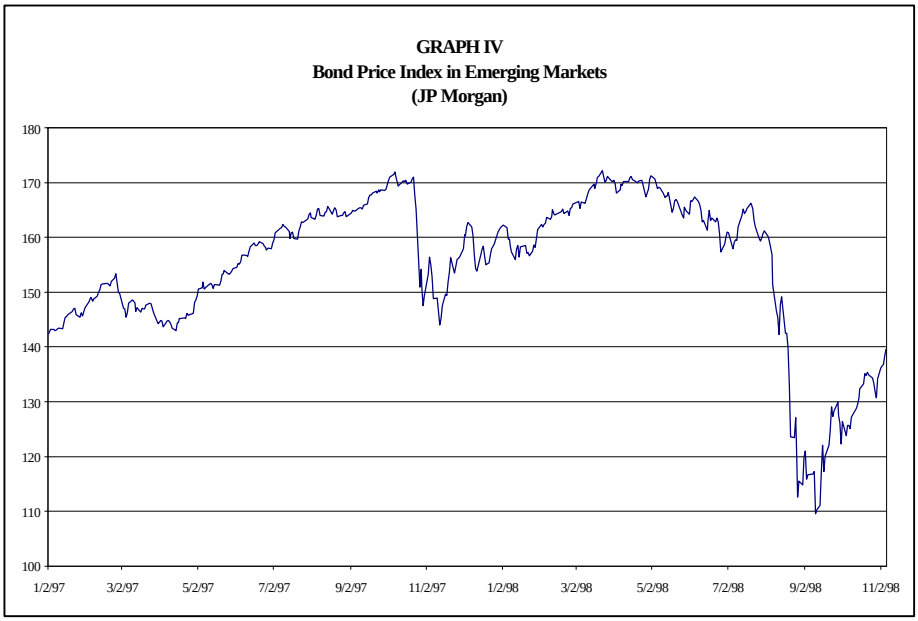


Source: IMF (1998) "World Economic Outlook", IMF, Washington D.C.



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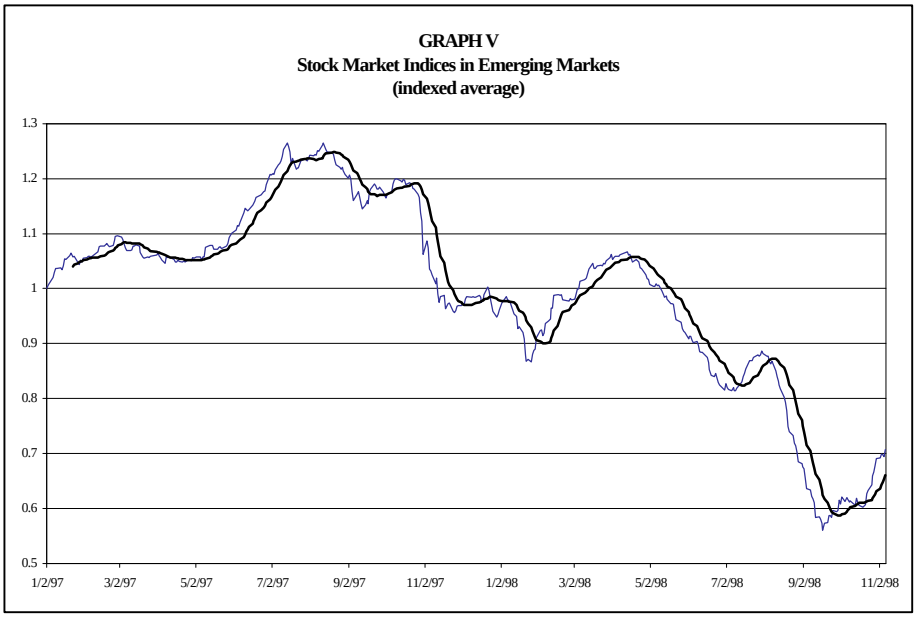
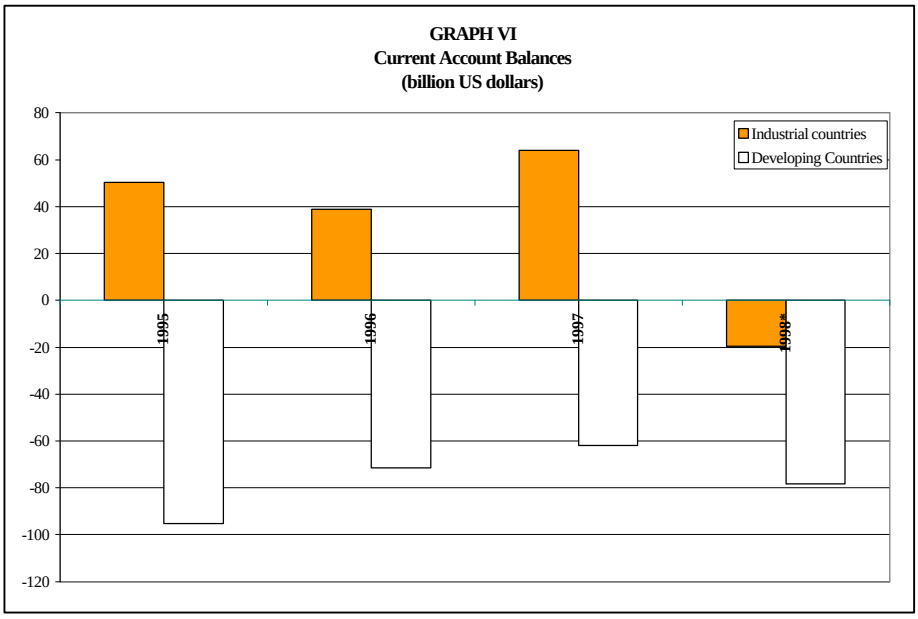
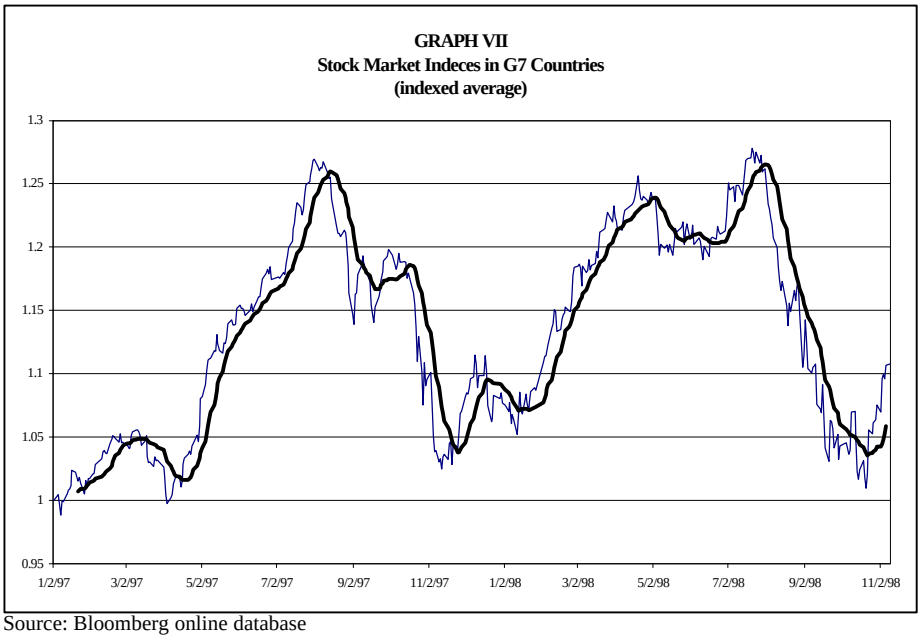


Source: Bloomberg online database



Source: IMF (1998) "World Economic Outlook", IMF, Washington D.C.



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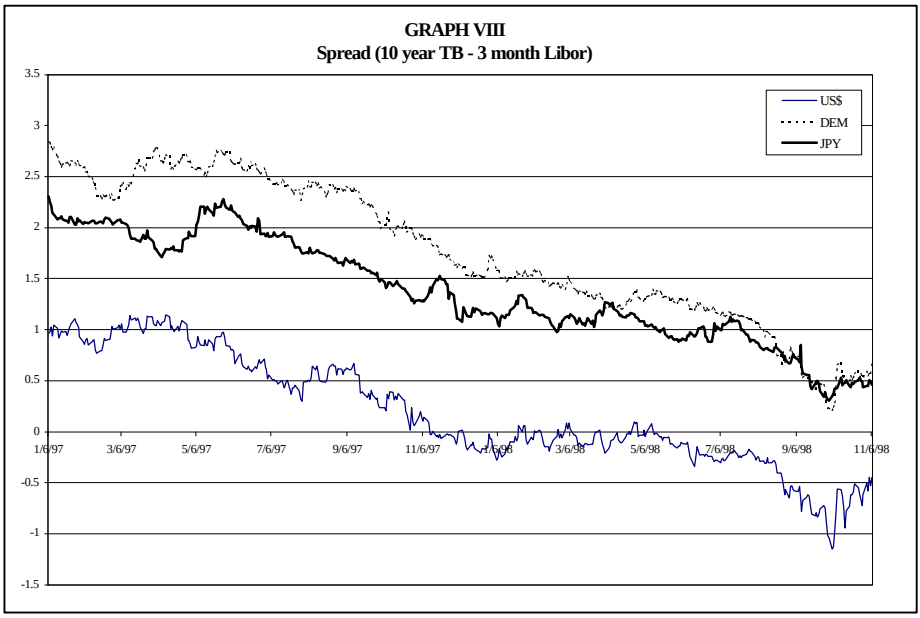

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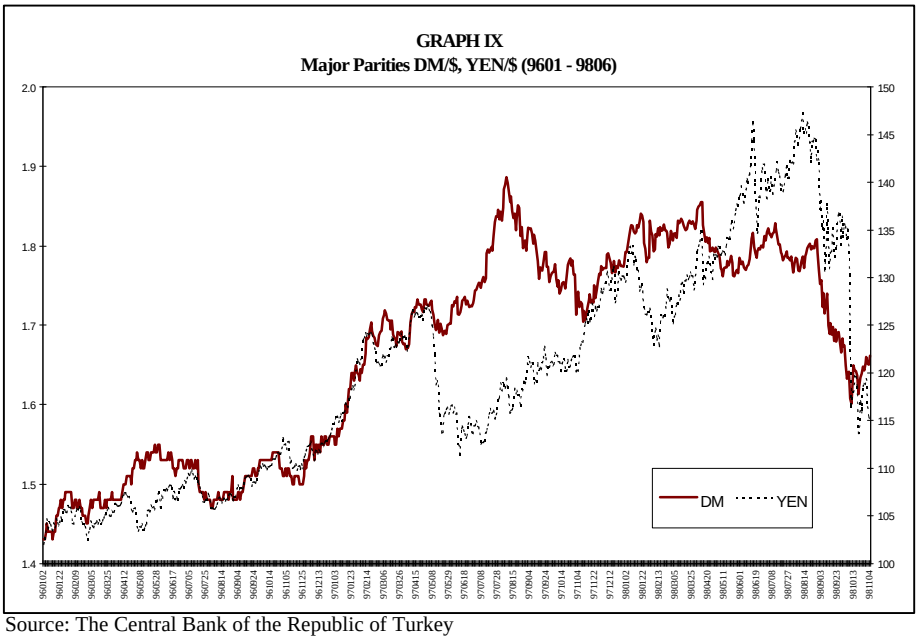
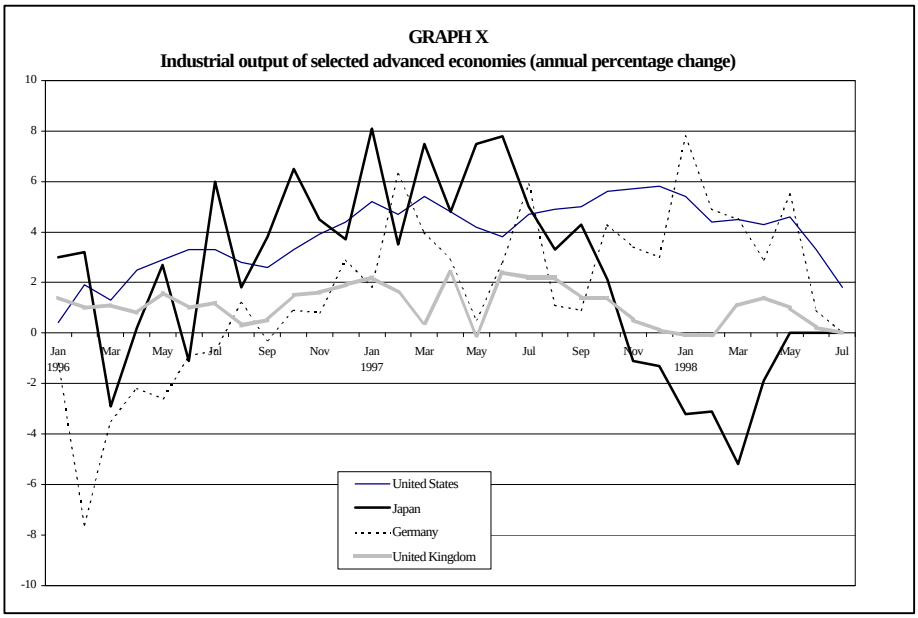
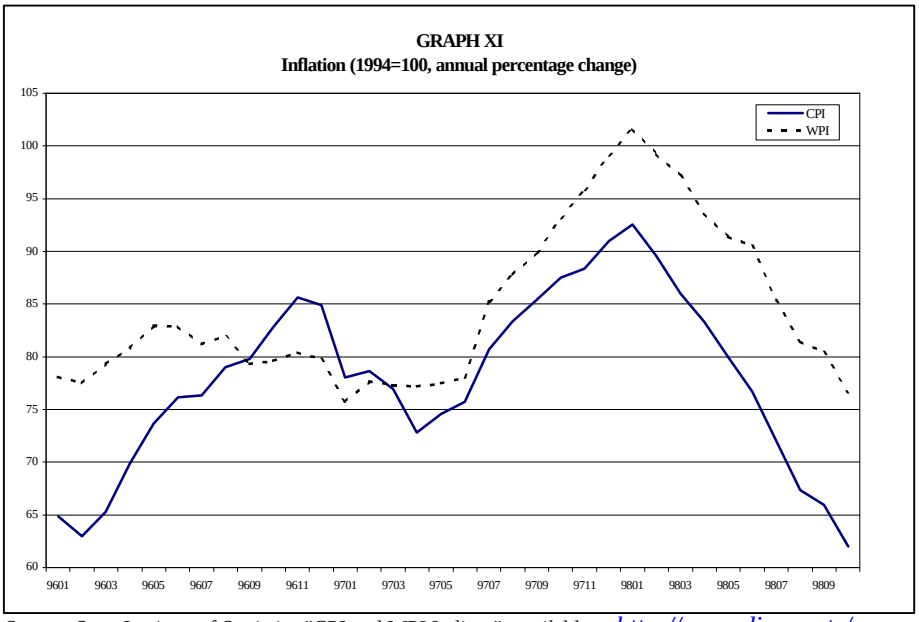


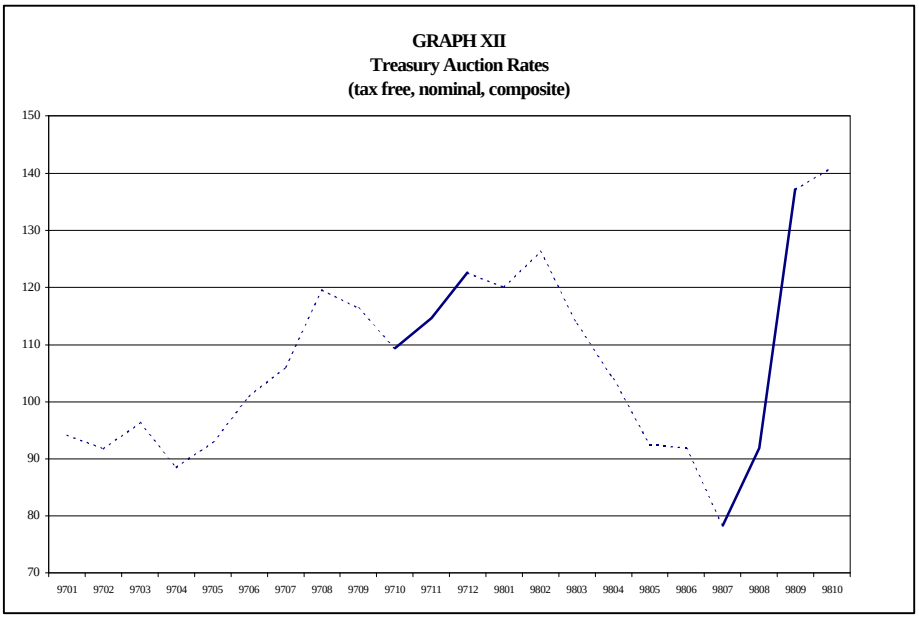
Source: The Central Bank of the Republic of Turkey



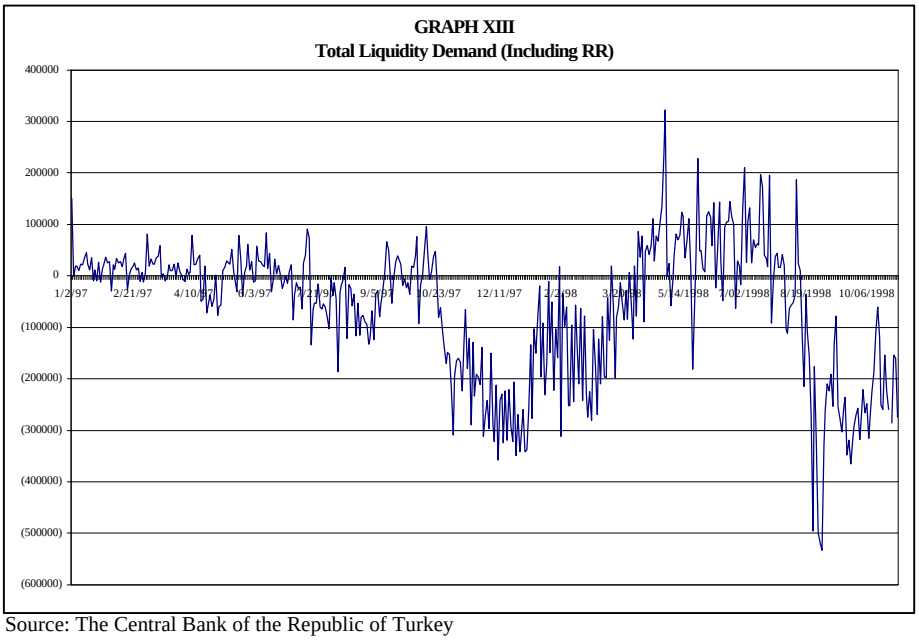
Source: IMF (1998) "International Financial Statistics", IMF, Washington D.C.



Source: State Institute of Statistics "CPI and WPI Indices", available at *http://www.die.gov.tr/*



Source: The Central Bank of the Republic of Turkey



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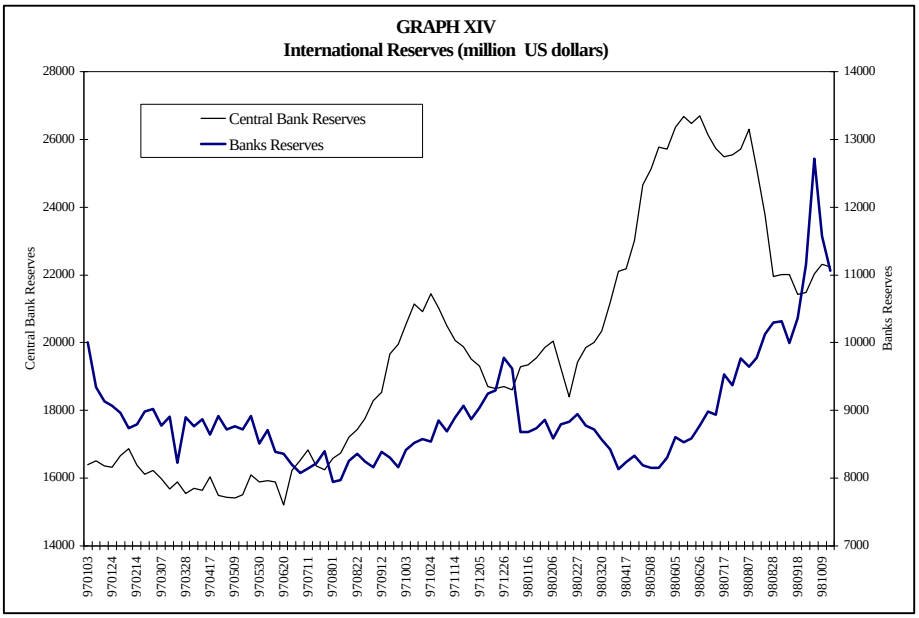
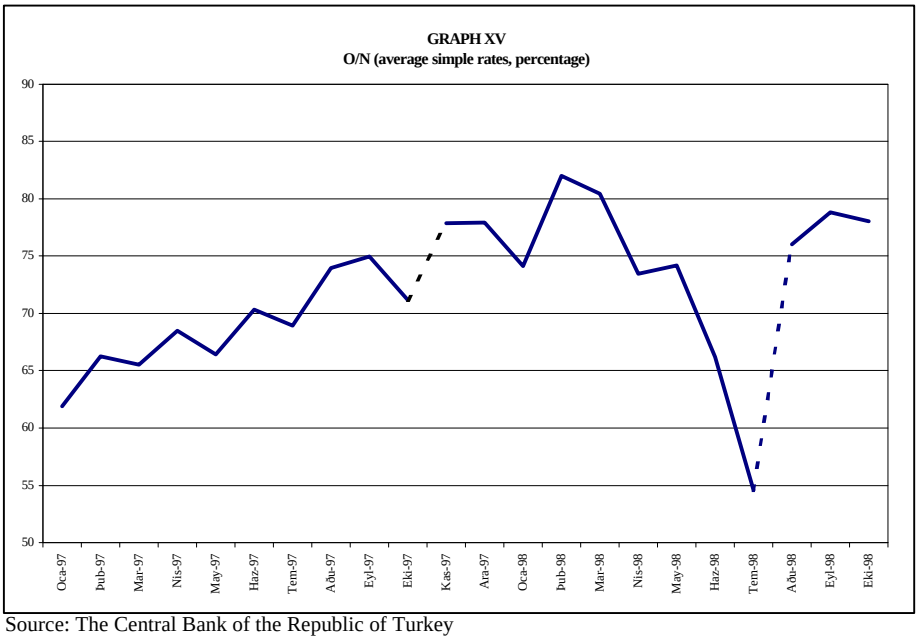


Source: The Central Bank of the Republic of Turkey



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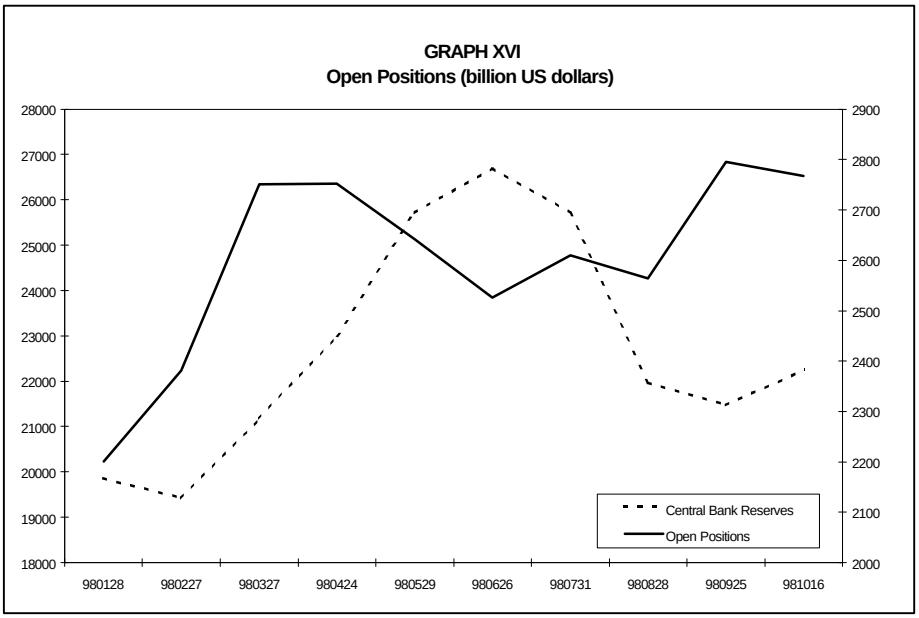
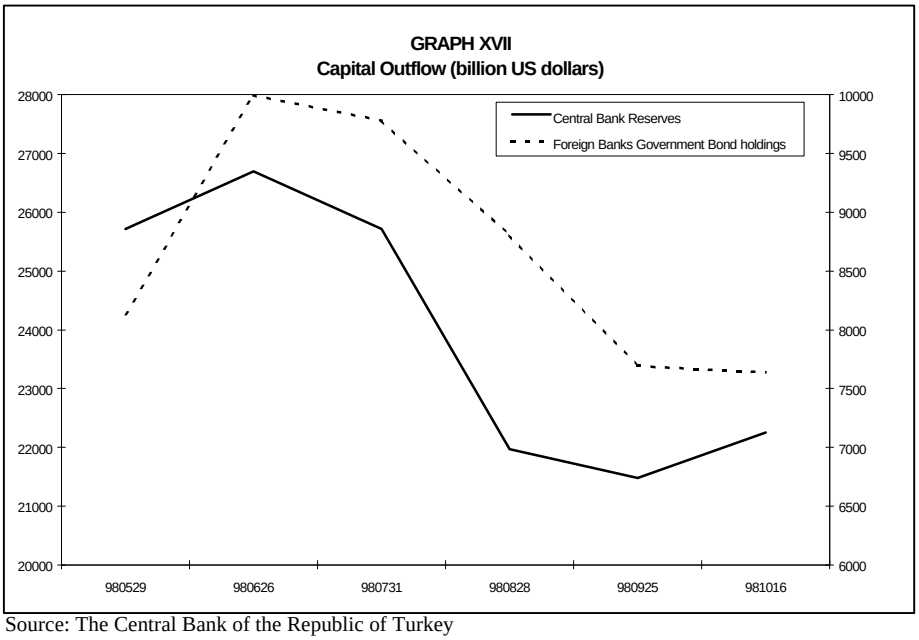


Source: The Central Bank of the Republic of Turkey



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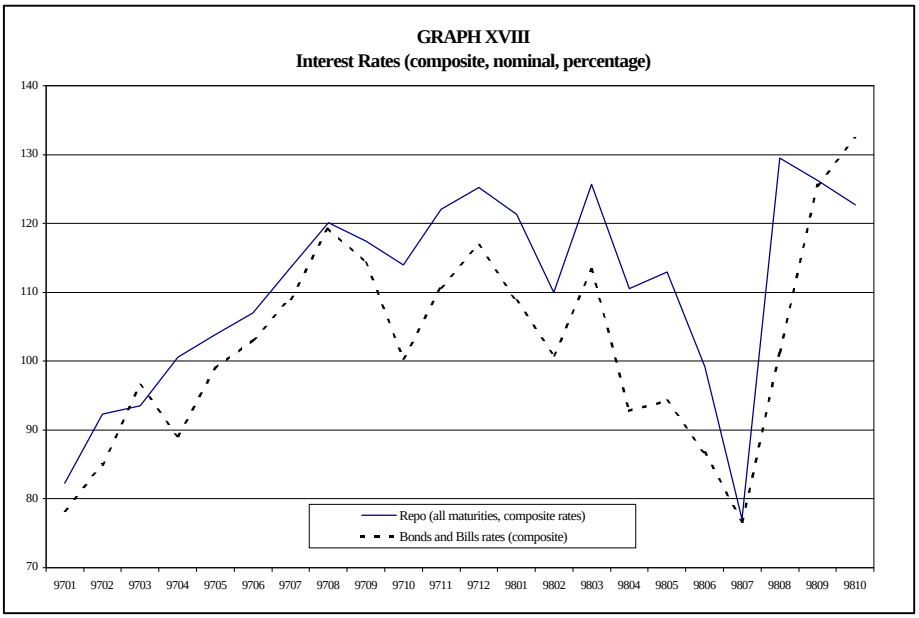

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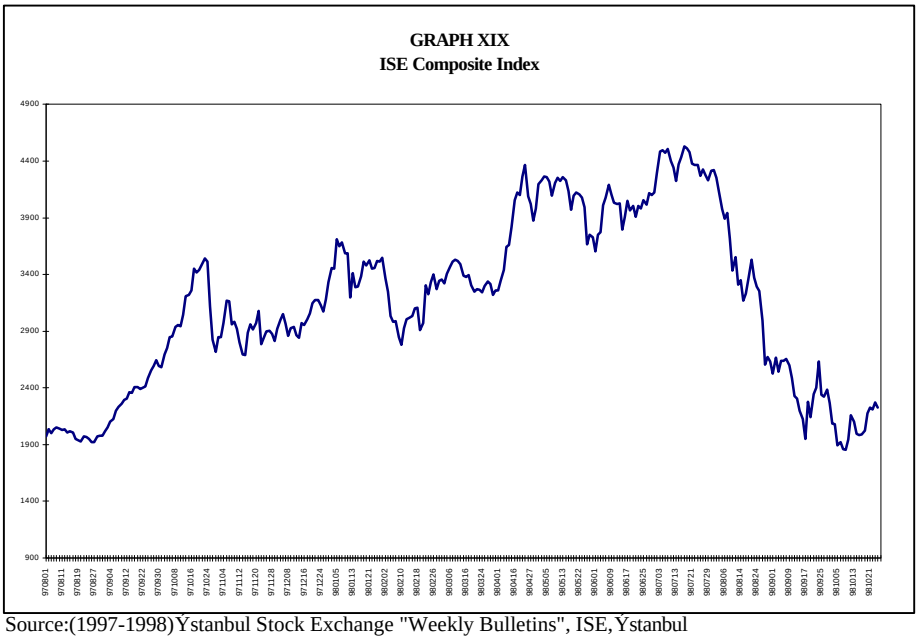
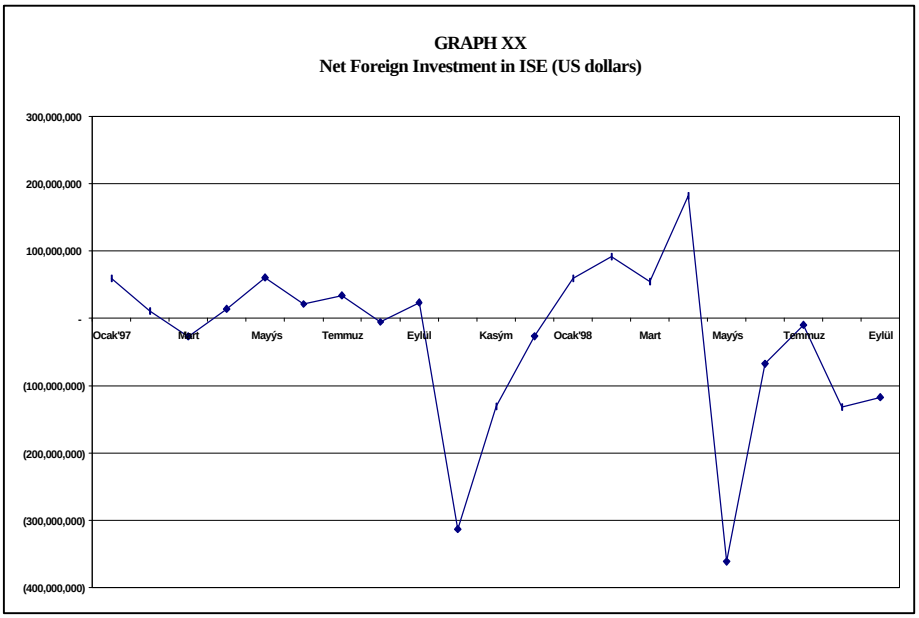
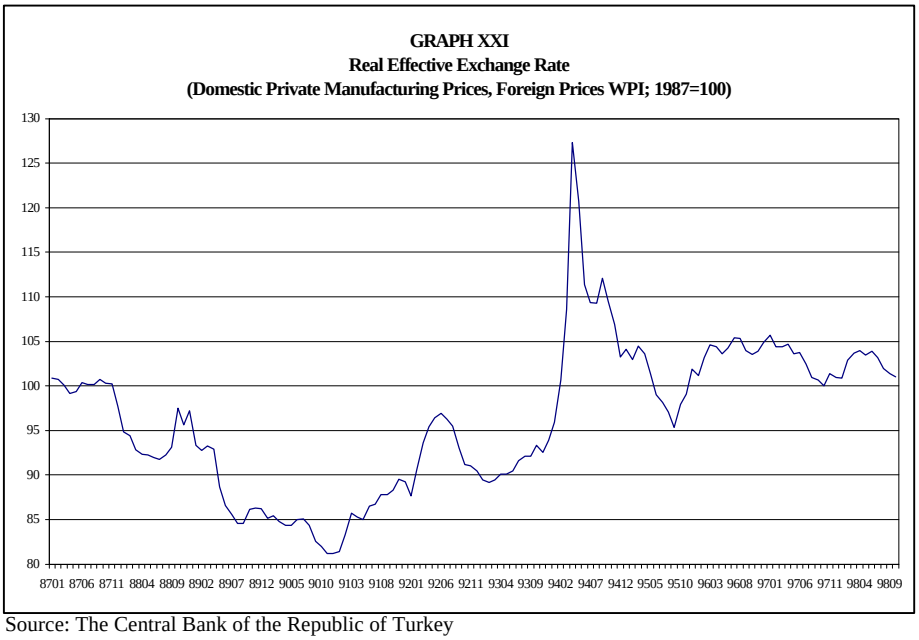


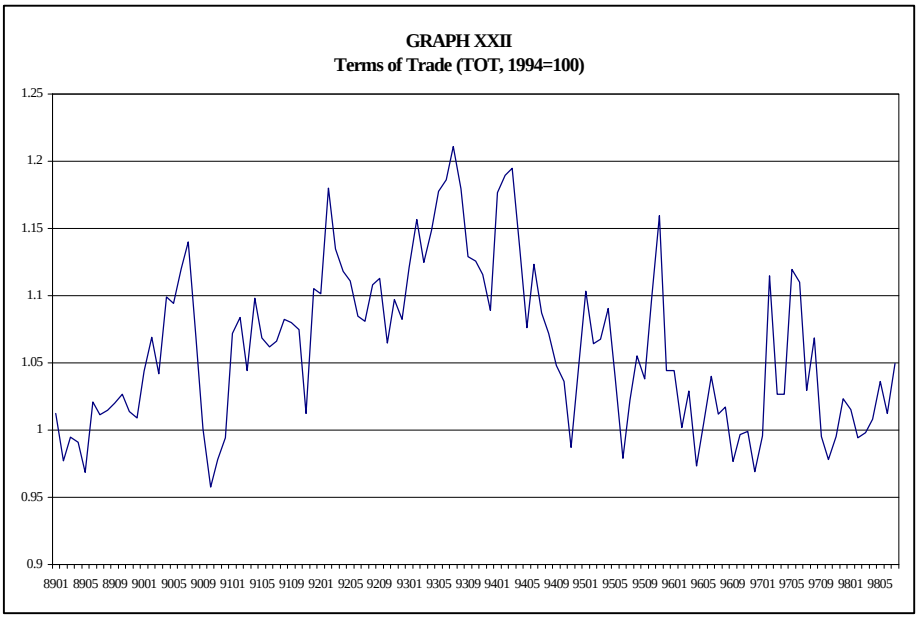
Source:(1997-1998)Ýstanbul Stock Exchange "Weekly Bulletins", ISE,Ýstanbul



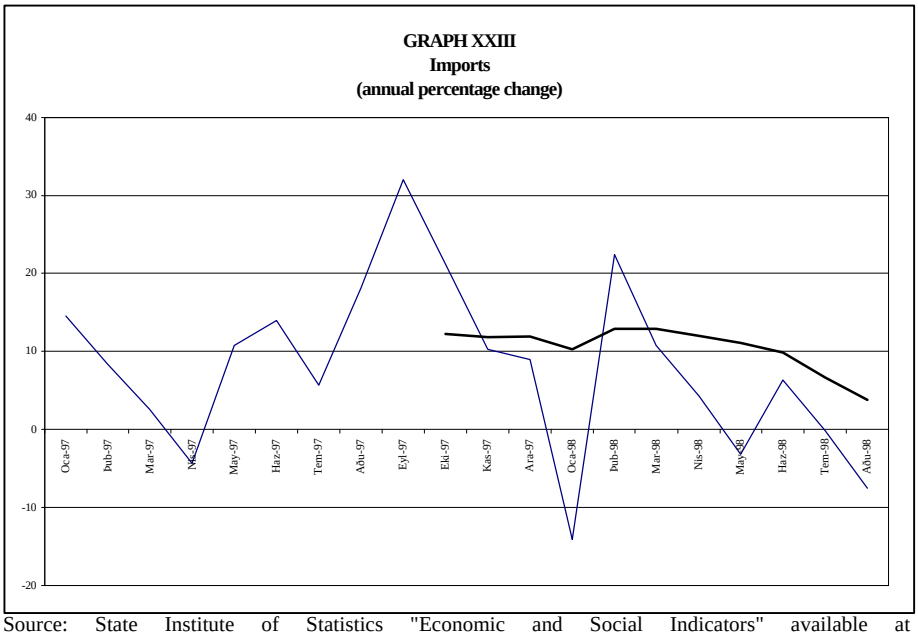
Source:(1997-1998)Ýstanbul Stock Exchange "Monthly Bulletins", ISE,Ýstanbul



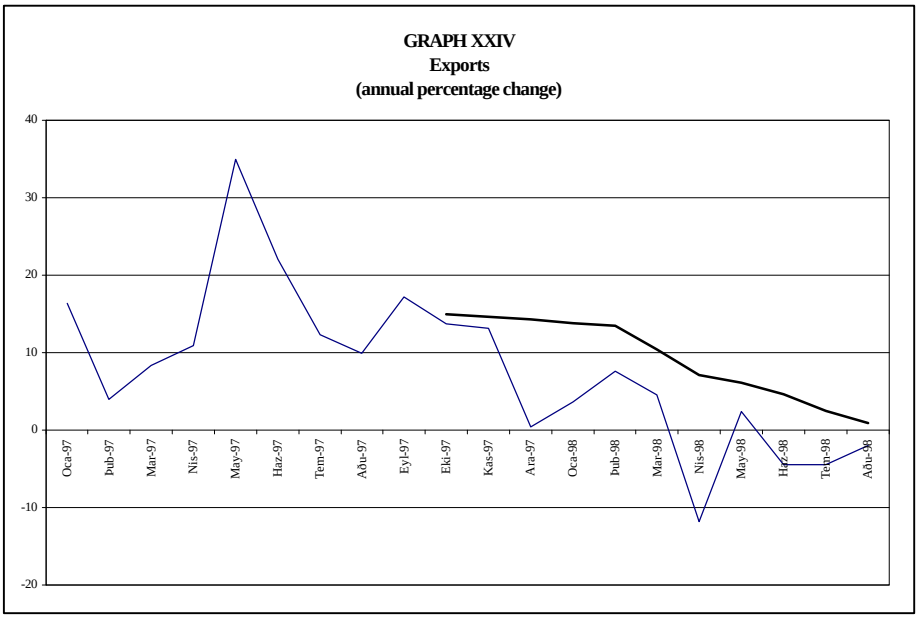
Source: The Central Bank of the Republic of Turkey



Source: State Institute of Statistics "Foreign Trade Indices" available at *http://www.die.gov.tr/TURKISH/SONIST/DISTICIND/251198.htm*



Source: State Institute of Statistics "Economic and Social Indicators" available at *http://www.dpt.gov.tr/dptweb/esg/esgx.html*



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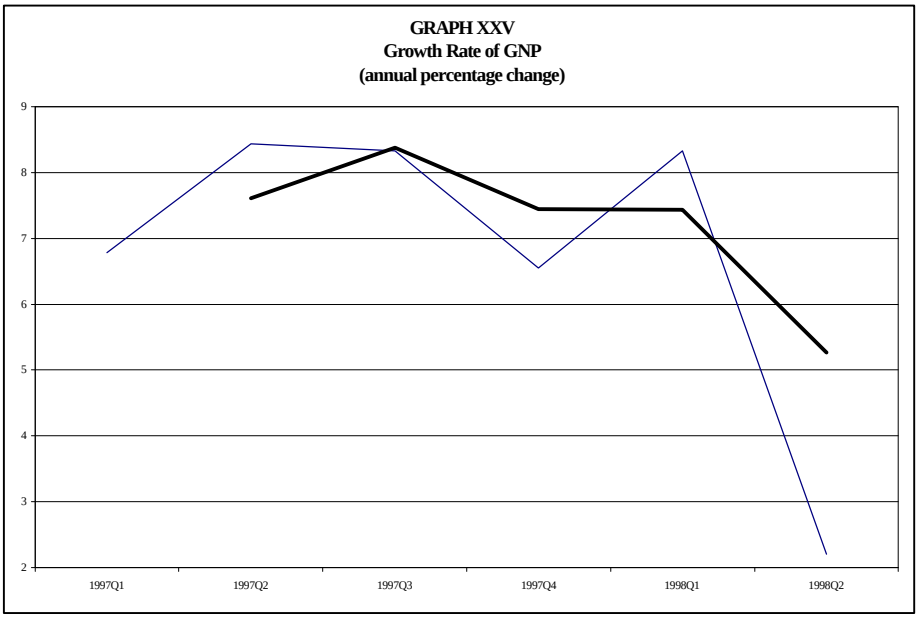

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