

Forthcoming in *Russian and East European Finance and Trade*

A Brief account of the Turkish economy: 1980-2000

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February 2001

Abstract

In this paper we provide a brief account of the Turkish economy during the last twenty years. After the implementation of a structural change and reform program in 1980, the economy experienced a relatively high growth rate of the Gross Domestic Product, a healthy balance of payments situation and relatively low inflation in early 1980s. Towards the end of the 1980s, the annual inflation started to rise in a stepwise fashion and the growth performance was poor afterwards. Due to exchange rate policy preferences of the authorities, the economy became dependent on short-term capital flows – so called hot money – for the last ten years. As a result, the exemplary economy of the 1980s became a textbook case of “boom-bust” economy with a relatively lower GDP growth and a high volatility in the 1990s. Recently, the Government launched another restructuring and reform program. The aim of the program is to reduce annual inflation to single digits by the end of year 2002. A short-lived financial crisis during the course of the program showed that the financial system is very fragile. Ironically, the latest crisis made it clear that the continuation of the disinflation program and the stability of the banking system in the short run depend on short-term capital inflows.

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1. Introduction

The Turkish economy has experienced relatively high inflation and unsuccessful disinflation programs during the past 30 years. Although yearly inflation was over 100 percent in certain years, it has never reached to hyperinflationary levels but increased in a stepwise fashion by the time: An average annual inflation rate of 20 percent in the 1970s, 35-40 percent in the early 1980's, 60-65 percent in the late 1980s and early 1990s, and around 80 percent before the Government launched yet another disinflationary program in 1998 (see Figure 1).

An early attempt to reduce inflation on permanent basis and to put the economy on a sustainable growth path was on January 24, 1980. The Government declared its intention to liberalize the economy, and to pursue an export-led growth policy. After the implementation of the program, a military regime was installed in September 1980. The January 24 program reached its initial targets very soon in terms of a lower inflation, a higher GDP growth and a relatively liberalized external trade regime and financial system. However, after the general elections and a new parliament in 1984, the inflation started to rise again.

The basic elements of disinflation efforts in the late 1980s were in various forms of nominal anchoring and monetary tightening without any serious effort to reduce the public sector borrowing requirement. This policy necessitated a higher interest rate on domestic assets and a lower depreciation rate so that the short-term capital inflow would be secured. Especially after 1989 (the year capital account was liberalized), the new disinflationary strategy based on monetary tightening and real appreciation pronounced itself much more strongly. However, the Government did not take necessary measures in the fiscal front and the disinflationary attempts by the monetary policy makers were futile. Due to unsustainable nature of the fiscal policy and the external deficit, the economy experienced a major crisis in early 1994. The Government announced a new stabilization program on April 5, 1994 and a stand-by arrangement was approved by the International Monetary Fund (IMF) Board two months after the program started. However, it soon became clear that the Government was not strongly behind the April 5 program and the stand-by agreement came to an end in 1995. During the following two years, there was no serious attempt to stabilize the economy and to reduce inflation.

In July 1998, the Turkish Government started another disinflation program under the guidance of an IMF Staff Monitored Program (SMP). The program achieved some improvements concerning inflation rate and fiscal imbalances but it could not relieve

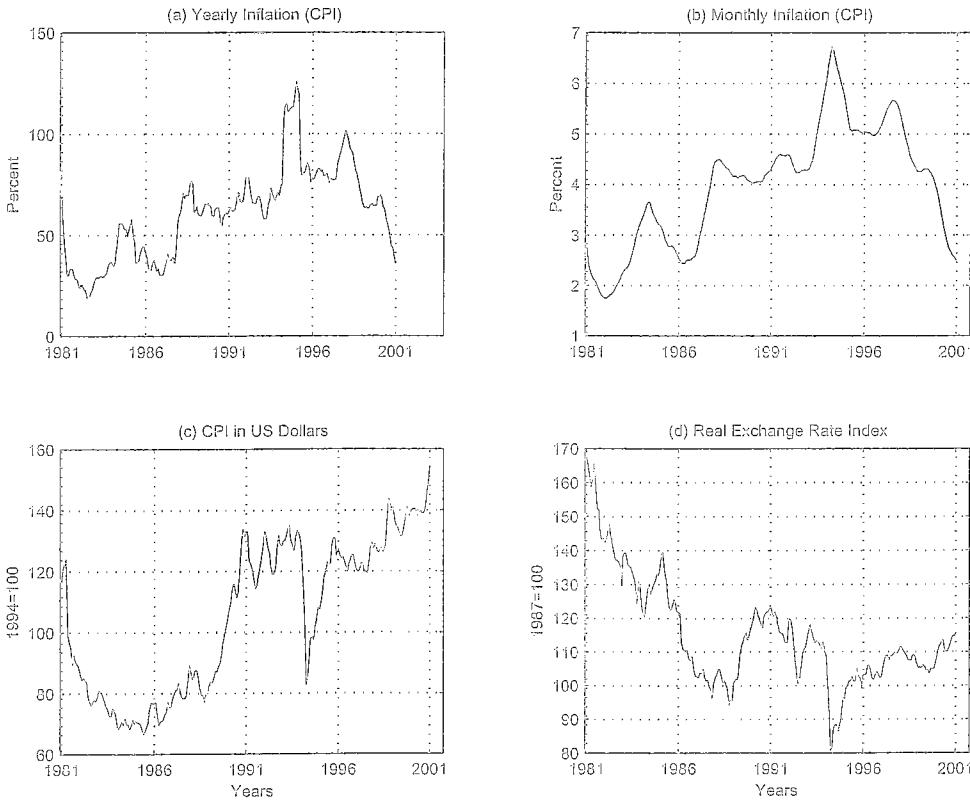


Figure 1: Inflation and real exchange rate in Turkey. (a) Annual inflation, CPI (percent). (b) Monthly inflation, CPI (seasonally adjusted, percent). (c) Consumer price index in USD terms, 1994=100. (d) Real exchange rate index, TRTWIN, 1987=100. An increase in the real exchange rate index indicates an appreciation of the Turkish lira. Sources: The Central Bank, The State Institute of Statistics, Reuters.

the pressures on the interest rates. The Russian crisis in August 1998, the general elections in April 1999 and two devastating earthquakes in August and October 1999 deteriorated the fiscal balance of the public sector.¹

The Government started implementing another far reaching restructuring and reform program after the general elections in April 1999. The aim of the program was to reduce inflation from its current 60-% percent per year to single digits by the end of year 2002. The program gained further momentum after the country made a stand-by agreement with the IMF in December 1999. The main tool of the disinflation

¹See, OECD (2000) and Selçuk and Yeldan (2001) for an evaluation of the macroeconomic impact of the August 1999 earthquake.

program has been adoption of a crawling peg regime; i.e., the percent change in the Turkish lira value of a basket of foreign exchanges (1 US dollar plus 0.70 Euro) is fixed for a year and a half period. Although there was a turmoil in financial markets in late November and early December 2000, the program seems to be on track as of February 2001 thanks to a substantial additional fund from the IMF after the crisis in December 2000. This short-lived financial crisis showed that the financial system is very fragile. Ironically, the crisis made it clear that the continuation of the disinflation program and the stability of the banking system in the short run depend on short-term capital inflows. Therefore, unless the Government creates an environment in which the foreign direct investment finds itself comfortable, the program is probably destined to fail and the inflation might start to rise again.

The aim of this paper is to give an overall account of the Turkish economy during 1980-2000.² The growth performance of the economy is presented in Section 2. The external balance and foreign trade developments are reported in Section 3. The fiscal position and domestic debt dynamics are reviewed in Section 4. After a detailed overview of the Turkish banking sector in Section 5, we conclude in Section 6.

2. Growth performance: Boom-bust cycle

The export-led growth strategy of the early 1980's was quite successful. The average annual growth rate of the real Gross Domestic Product (GDP) was an impressive 5.8 percent between 1981-1988 and the economy did not experience any recession, making the country an exemplary one in annual reports of international financial institutions such as the IMF. Also, the real increase in industrial value added was above the GDP growth; it averaged 8.1 percent during the same period.

Starting in 1988, the economy entered into a new phase and the growth performance has been sluggish since then, with the two minor and two major recessions. The annual real GDP growth averaged 3.7 percent during this period. The average annual growth rate of industrial value added was slightly higher: 4.4 percent (see Fig-

²Tezel (1994) is a standard reference on the Turkish economic history up to 1950. See Aricanlı and Rodrik (1990) and Öniş and Riedel (1993), and the references therein, for a detailed account of the Turkish macroeconomic experience during 1951-1987. For recent years, see Selçuk (1997) and other chapters in Rittenberg (1998). Yeldan (1997, 1998) analyzes the Turkish economy with computable general equilibrium (CGE) models from a political economy viewpoint. Similarly, Öniş and Aysan (2000) conduct a comparative analysis of financial crises in Turkey, Mexico and the East Asian economies from a political economy perspective. An excellent source of information on the Turkish economy is www.economy.gov.tr.

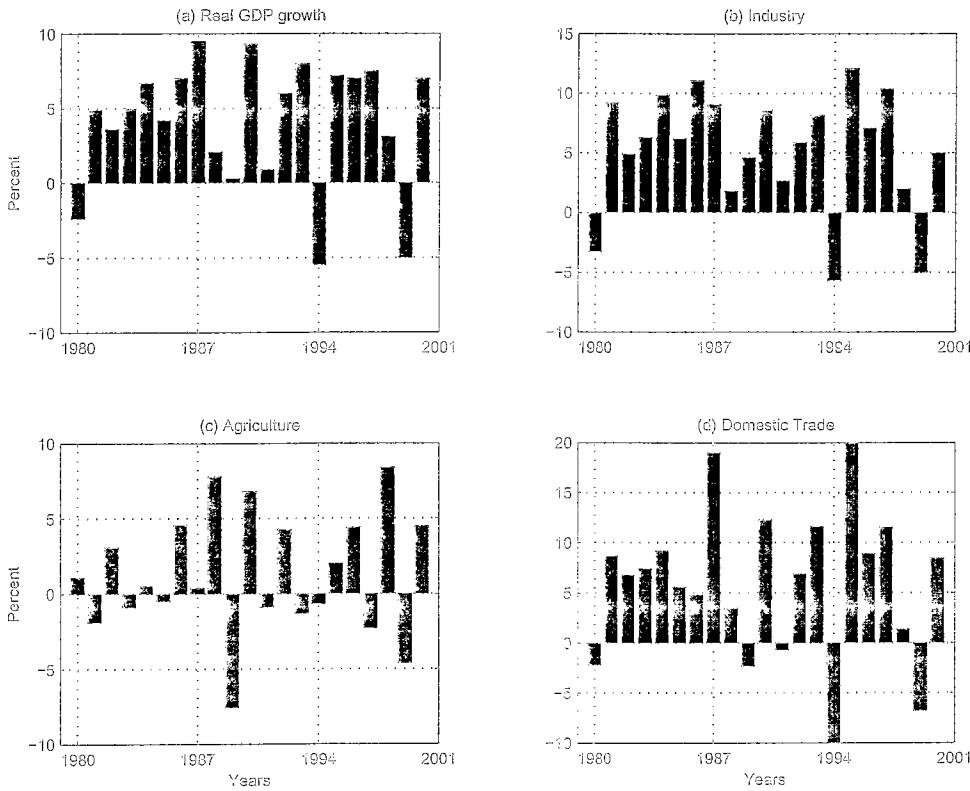


Figure 2: Real growth in the Turkish economy: Percentage change in Gross Domestic Product and economic activities at producers' prices (at 1987 prices). (a) Real GDP growth (percent). (b) Industrial production. (c) Agriculture. (d) Domestic trade. Source: The State Institute of Statistics.

ure 2). The exemplary economy of the 1980s became a textbook case of “boom-bust” growth performance with a relatively lower average growth rate and a high volatility in the 1990s.

The dynamics of the growth performance of the Turkish economy after 1989 can be linked to unsuccessful disinflationary efforts and debt financing policies of the Government, pronouncing themselves in the exchange rate policy. The Turkish policy makers started to slow down the depreciation rate of the Turkish lira, in part to control the inflation, but mainly to be able to borrow easily from the domestic markets in 1989. Although there was a crisis in 1994 which interrupted this policy, the Turkish authorities have pursued the same exchange rate policy for the last ten years. As Calvo and Végh (1999) and Guidotti and Végh (1999) show, the credibility of a

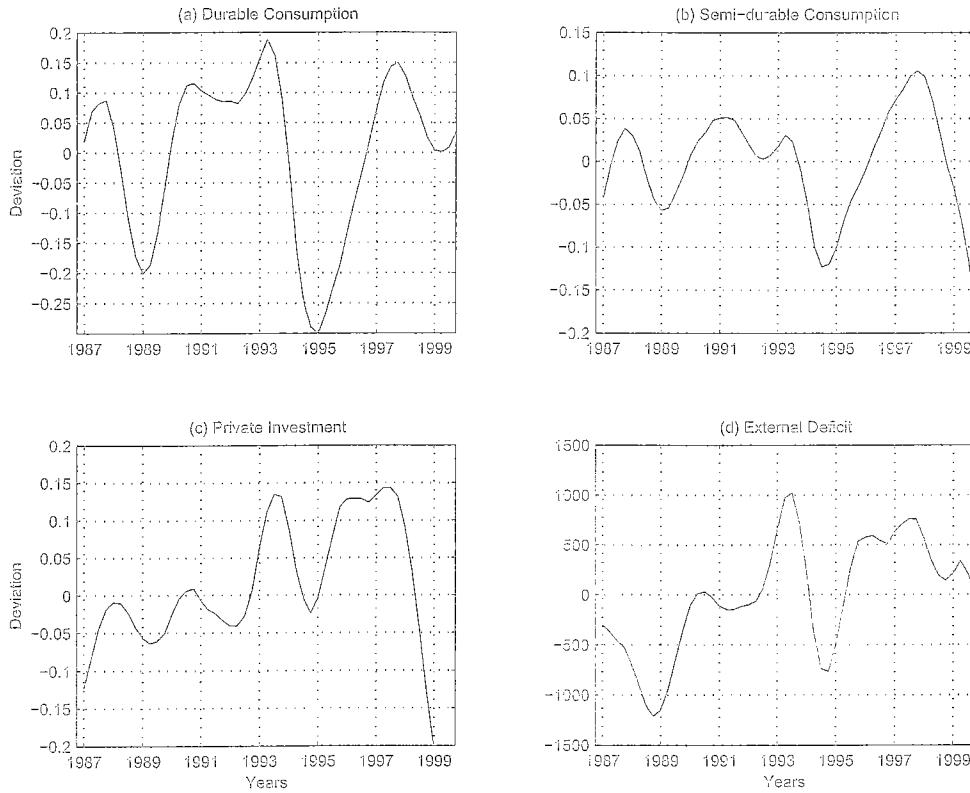


Figure 3: Cyclical movements of the real GDP components in Turkey. (a) Private sector durable goods consumption (deviations from logarithmic trend). (b) Private sector semi-durable goods consumption (deviations from logarithmic trend). (c) Private sector investment expenditure (deviations from logarithmic trend). (d) External deficit (deviations from the sample mean). Calculated from the Expenditure on the Gross Domestic Product (at 1987 prices). Series are filtered to remove seasonalities. Source: The State Institute of Statistics.

slowed down devaluation in fighting inflation in moderate to high inflation economies is almost always low, both because of inflation inertia and because of the failure of the previous disinflation programs. The developments in the Turkish economy after 1987 are in line with stylized facts from exchange rate-based stabilization programs in different economies, summarized in Calvo and Végh (1999):

- (i) Slow convergence of the inflation rate (measured by the CPI) to the rate of inflation.
- (ii) Initial increase in real activity – particularly, real GDP and private consumption – followed by a counteraction.

- (iii) Real appreciation of the domestic currency.
- (iv) Deterioration of the current account balance.
- (v) A decrease in domestic ex-post interest rates in initial stages.

Possible explanations for an initial increase in real activity, followed by a counteraction, in exchange rate-based stabilization programs is given in Calvo and Végh (1993). At the initial stage of slowed down depreciation, interest rate parity condition leads to a lower domestic interest rate. If the convergence of inflation is slow, the real interest rate will fall as well, leading an increase in domestic demand; especially in private durable and semi-durable goods consumption and private investment. Eventually, a reduction in consumption and investment, and a real depreciation is inevitable because of the resource constraints. As a result, the economy experiences a recession right before or immediately after the program ends. If the economy goes through several “slowed down depreciation-correction” cycles, the overall economic activity will also experience boom-bust cycles. The amplitude of these cycles will be higher if the intertemporal elasticity of substitution is high in the economy.³

With regard to economic growth after 1987; there were four recessions in Turkey: 1989, 1991, 1994, and 1999 (see Figure 2). Both the 1991 and 1994 recessions were preceded by a substantial increase in the real exchange rate (an appreciation, see Figure 1). Also, private durable and semi-durable goods consumption and private investment were well-above their trend values before those recessions (see Figure 3).

The last recession in 1999 was mainly caused by the response of monetary authorities to the Russian crisis in the late 1998 and two devastating earthquakes in 1999. The real interest rates were kept higher to defend the Turkish lira for a considerable period of time after the Russian crisis. Nevertheless, it is worth noting that there was a small appreciation (approximately 10 percent) from January 1996 up until the Russian crisis in July 1998. During this period, we observe again a boom in both private consumption and private investment. Since the recent disinflationary program also relies on a slowed-down depreciation policy, it is reasonable to expect another boom-bust cycle in economic activity starting 2000, regardless the outcome of the program. If the slow-down in economic activity arrives relatively early, it might be a real concern for the Government and the program might come to an unexpected end.

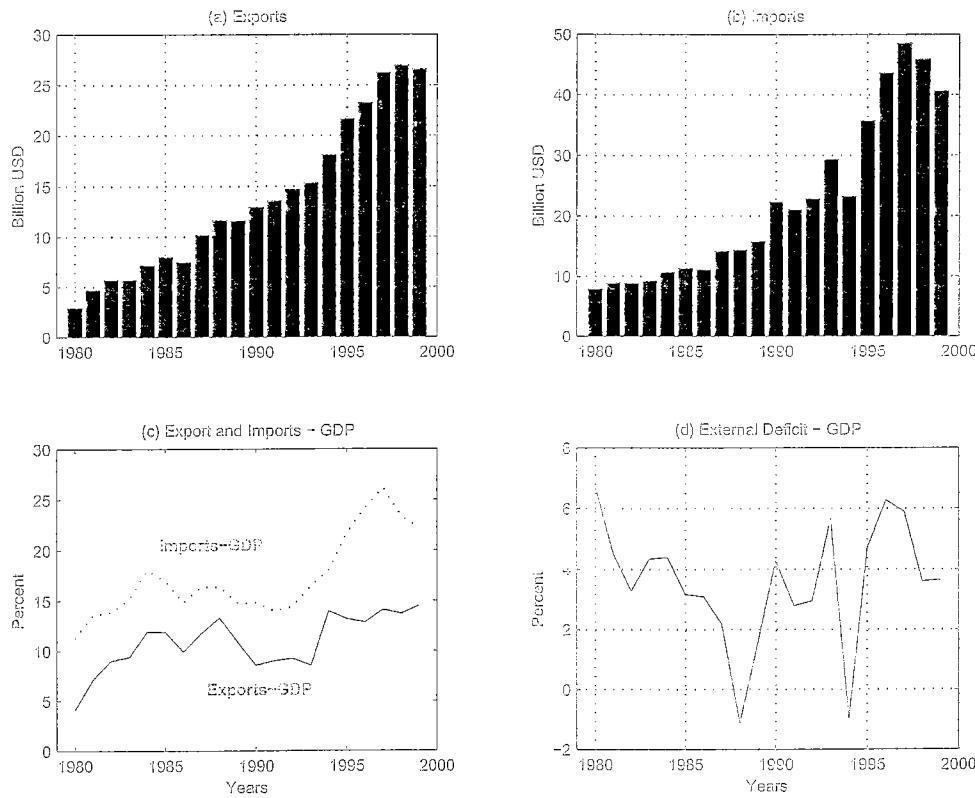


Figure 4: External trade. (a) Exports (in billions of U.S. dollars). (b) Imports (in billions of U.S. dollars). (c) Export-Import Ratio. (d) External deficit in percent of the GDP (external deficit figures are taken from the national income accounts of the State Institute of Statistics). Export figures do not contain the shuttle trade estimates of the Central Bank. See Footnote 3. on unofficial exports and imports. Source: The State Institute of Statistics.

3. External balance

With the introduction of a comprehensive stabilization program in January 1980, outward oriented development strategy was accepted and external balance became a major concern of the Governments as protracted current account imbalances for the previous three decades made the Governments more sensitive about the sustainability of external imbalances.

The export-led growth policy was quite successful at the early stages of its imple-

³Selçuk (1997) shows that Turkey was not able to smooth consumption after 1987 and the realized consumption was more volatile than an estimated optimum consumption.

mentation. The openness of the economy increased immediately: total exports-GDP ratio increased from 4.1 percent to 13.3 percent during the period of 1980-1988. Total imports-GDP ratio also increased but the rate of increase was smaller as it went up from 11.3 percent to 16.4 percent during the same period. Therefore, the external balance situation improved significantly. The external deficit to GDP ratio went down from 7 percent in 1980 to negative 1 percent (surplus) in 1988. The real depreciation of the Turkish lira (approximately 40 percent) and several tax incentives to exporters in this period were the major driving forces of the export-led growth policy.⁴

The policy reversal after 1987 had an adverse effect on the external balance situation of the economy. Because of the slowed-down depreciation, the Turkish lira appreciated in real terms 22 percent in 1989 and continued to appreciate in 1990 at a slower rate. Consequently, the total exports slowed down and total imports jumped up. The external deficit - GDP ratio increased to 2 percent in 1989, and to 4 percent in 1990. Although there was a slight decrease in 1991 and 1992, the external deficit reached to approximately 6 percent of the GDP in 1993 (see, Figure 4).⁵ Towards the end of 1993, it was clear that the fiscal policy and external balance situation was not sustainable. In January 1994, international credit rating agencies lowered Turkey's sovereign debt rating to below investment grade. This triggered a panic in financial markets. The Turkish lira was devaluated twice, in January and April 1994. The total exports increased dramatically while the total imports contracted. As a result, the external balance was positive in 1994 (one percent of GDP).

Between April 1994 and December 1994, the Turkish lira appreciated significantly (22 percent in five months) and the corrective nature of the devaluation during the first half of the year disappeared. According to the national income statistics, the external deficit was 5 percent of the GDP in 1995 and approximately 6 percent in 1996 and 1997. However, the worsening external balance situation did not result in large current account deficits in these years.⁶ The external deficits in 1998 and 1999

⁴See Togan (1995) for a review of the trade policy of Turkey. More recently, Togan (2001) reviews the openness of the Turkish economy in relation with the European Union. For the real exchange rate developments, see Agenor *et al* (1997) and Eriyat and Eriyat (1998).

⁵The external balance figures are taken from the GDP components of the national income statistics, estimated by the State Institute of Statistics. The current account of the balance of payments statistics may give different results. For example, the large inflow of official unrequited transfers in 1990 and 1991 reduced the otherwise large current account deficit. These and similar unrequited transfers should be excluded from the external balance analysis of an economy, unless they have a permanent nature.

⁶Especially after 1993, there is a substantial foreign exchange flow into the economy and the source of this flow is officially unknown. The Central Bank views this unknown inflow as current

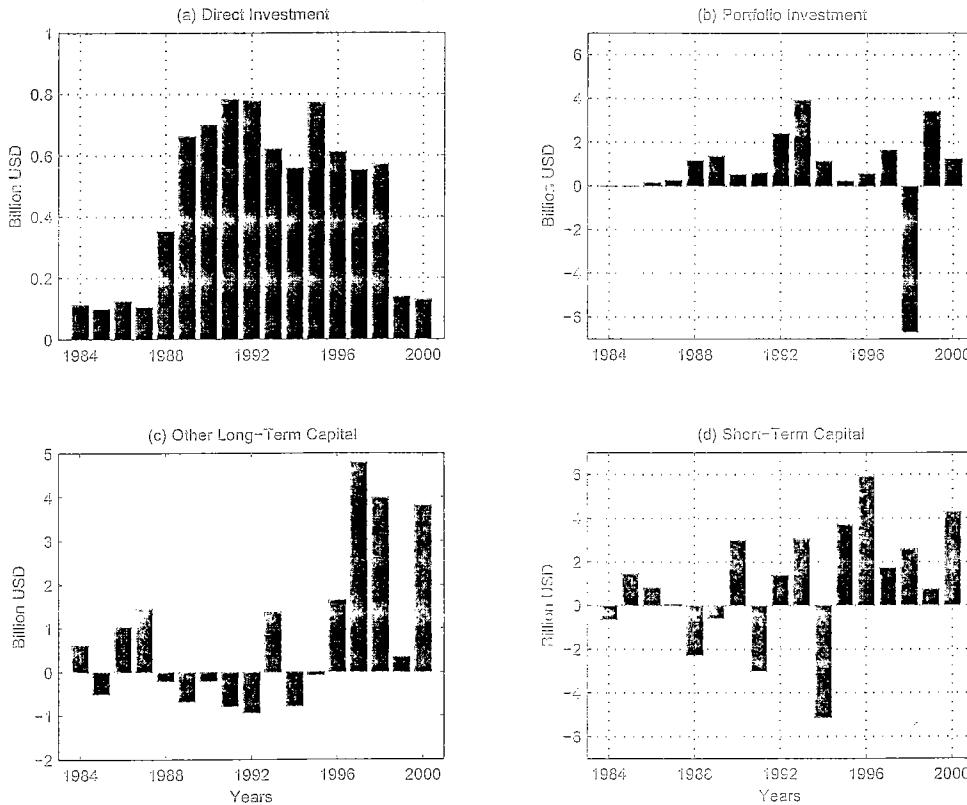


Figure 5: Capital flows. (a) Foreign direct investment (in billion USD). (b) Portfolio investment (in billion USD). (c) Other long-term capital (in billion USD). (d) Short-term capital (in billion USD). All figures are net. Source: The Central Bank.

were relatively low, thanks to extremely high real interest rates after the Russian crisis and a shrink in total demand. It is clear that the total exports are stagnant for the last four years around USD 26 billion and the total imports are dominating the current account dynamics.

account income. It was classified under “Other income, Other” item in the balance of payment statistics for a long period of time. Recently, a new category -shuttle trade- is added to the balance of payments. This item includes estimated unofficial exports, mainly to the former Soviet Union countries. However, there is no estimate of unofficial imports in the balance of payments. The total amount of unofficial exports *and* imports as well as unofficial foreign exchange transfers from external services are difficult to estimate. A recent letter of intent to the IMF points out this problem: “In the period ahead, the institutional capacity to compile balance of payment statistics needs to be strengthened, in light of the difficulties in this area encountered in recent years (especially regarding the external service accounts)” [The Letter of Intent, December 18, 2000, paragraph 61].

The capital account of the balance of payments indicates that the Turkish economy became dependent on the short-term capital flows, especially after 1989. Foreign direct investment (net) was extremely low up until 1988. Since then, there was a surge in foreign direct investment, reaching USD 800 million in 1992 from USD 100 million in 1987. The foreign direct investment averaged USD 600 million between 1993 and 1998 and became low again during the last two years as a result of long-term capital outflows (investment by domestic residents abroad). Overall, it is safe to conclude that the Turkish economy has not been able to attract significant foreign direct investment for the last 20 years. The total foreign direct investment during the last fifteen years was 7.7 billion, roughly equivalent to total long-term borrowing by the private sector (excluding banks) in just one year (1999). Another noticeable development in long-term capital figures is the surge in "Other Long Term Capital" item, starting in 1996. A close inspection of the statistics reveals that the private sector (excluding banks) has increased its external borrowing for the last five years. This development signals the fact that the foreign exchange exposure of the country is increasing. Total external debt figures confirm this conclusion. The outstanding external debt was USD 79.3 billion in 1993. The same figure is 106.9 billion in 2000(Q3), indicating a 34 percent increase in four years. The composition of the external debt has also changed. In 1996, only 21 percent of the total debt had a short-term maturity while it is 25 percent in 2000(Q3). The share of commercial banks in short-term external debt is 60 percent (USD 15.3 billion). Private sector, excluding banks, carries 38 percent (10.5 billion) of the short-term debt. Incidentally, the total short-term external debt of the country is roughly equivalent to the total reserves of the Central Bank.

4. Fiscal balance and domestic debt

The public sector borrowing requirement (PSBR) in Turkey consists of six components: central Government, extrabudgetary funds, local authorities, state economic enterprises, social security institutions and revolving funds.⁷ Following the January 24 program, the PSBR as a percent of the GNP decreased immediately from 9 percent

⁷For a measure of the overall public sector deficit and borrowing requirement, the losses of the state banks and the Central Bank must also be included in the PSBR definition above. For example, accumulated duty losses of the state banks reached to USD 20 billion in year 2000 (approximately 11 percent of the GDP) and the state banks have been registering significant losses in recent years. Developments in the banking sector will be investigated in Section 5.

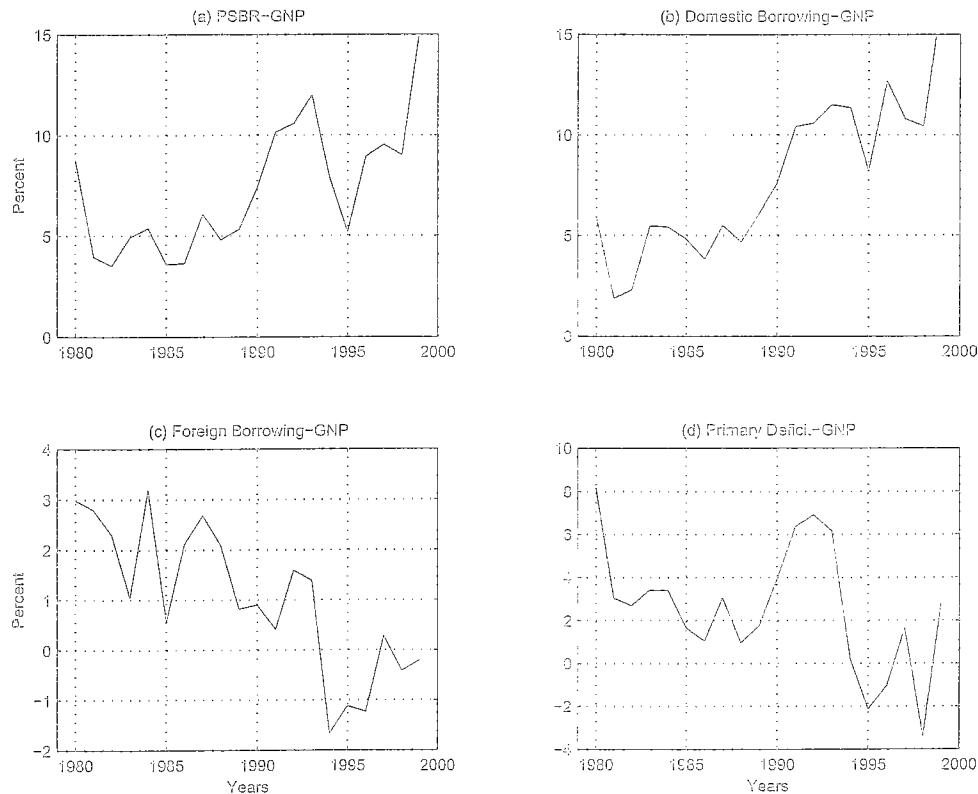


Figure 6: Public sector borrowing requirement and financing. (a) Public sector borrowing requirement in percent of GNP. (b) Domestic borrowing in percent of GNP. (c) Foreign borrowing in percent of GNP. (d) Primary deficit in percent of GNP. Source: The State Planning Organization.

in 1980 to 4.5 percent in 1981 and stayed less than 5 percent. After 1986, the PSBR started to increase in a steady fashion and reached to 12 percent in 1993. Although there was a correction in 1994 and 1995, it kept increasing again and reached to over 15 percent in the year 1999 (see Figure 6).

There was not only a change in deficit dynamics, but also in deficit financing policies of the Governments after 1987. The share of domestic borrowing in PSBR financing kept increasing and the share of foreign borrowing declined. After 1993, the share of foreign borrowing in PSBR financing was negative. As a result, the domestic debt started to increase. Right from the beginning of 1990, the total domestic debt dynamics in Turkey clearly indicated that the fiscal policy was on an unsustainable path. See, for example, Selçuk and Rantanen (1996). Total domestic debt of the

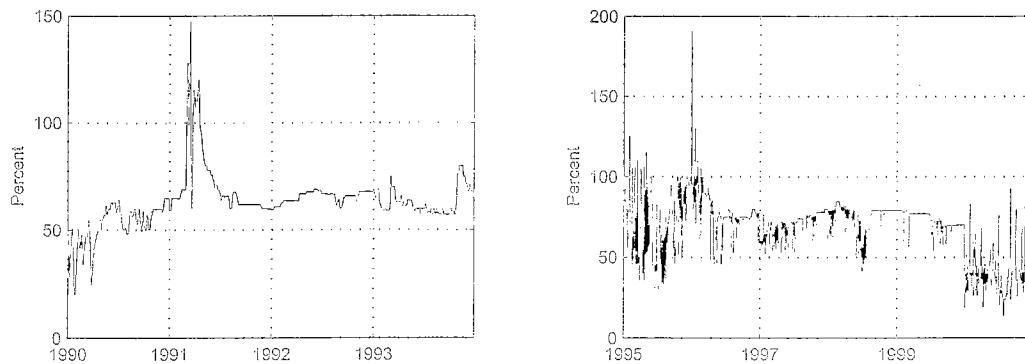


Figure 7: Daily weighted average of overnight interest rates (simple annual, percent). The overnight interest rates reached to extreme levels in 1994 and 2000. Therefore, these periods are excluded. (a) January 2, 1990 - December 31, 1993. (b) January 2, 1995 - November 17, 2000. Source: The Central Bank.

Government in 1988 was a mere USD 4 billion. As of December 2000, the stock reached up to USD 53.8 billion. The ratio of domestic debt to GNP also increased from 6 percent in 1988 to 30 percent in 1999. Note that this figure does not include some other public liabilities such as unpaid duty losses of the state banks (approximately USD 20 billion). It is hard to imagine that the domestic debt problem could be solved in a smooth fashion.

The role of the Central Bank's monetary policy in debt management in recent years was one of accommodating.⁸ A close inspection of the daily overnight interest rates in Figure 7 preceding the IMF program reveals two distinct periods. A volatile period after 1994 crisis (June 1, 1994 - April 16, 1996) and relatively less volatile period (April 17, 1996 - December 31, 1999).⁹ During the first period, the sample mean and the standard deviation of the overnight rates were 73.6 and 26.3 percent, respectively. The second period had almost the same sample mean (72.3 percent) but much lower standard deviation (7.4 percent). During the stand-by period in 2000, the sample mean of overnight interest rate decreased. Also, the standard deviation of interest rates increased, as to be expected. The mean of overnight rates between January 3, 2000 and November 17, 2000 were 39 percent and the standard deviation was 14 percent.¹⁰ Clearly, the Central Bank had an implicit ceiling on overnight borrowing

⁸See Berument and Malatyali (2000) for an analysis of the Central Bank policies in recent years.

⁹The second period corresponds to the tenure of current Governor Gazi Erçel. He was appointed at April 17, 1996.

¹⁰In terms of the sample coefficient of variation CV, the volatile period had a CV of 0.36 and

rates starting April 1996, especially after the Russian crisis in 1998 until January 2000. This implicit ceiling provided a cushion for the commercial banks against the interest rate risk in the market, reducing their risk management capabilities. However, the average interest rate during this “ceiled interest rates” period indicates that it was not profitable to buy domestic debt instruments and to fund them from the money market. It was still “borrowing abroad-lending home” strategy which left a hefty profit margin in dollar terms (see Figure 5).

State economic enterprises are another contributing factor to the public sector borrowing requirement. Zaim and Taşkin (1997) compares the performance of the public enterprise sector to the private sector in Turkey and shows that the public enterprise sector performance deteriorated in the 1980s. Although it was always on the agenda of every government, privatization performance of Turkey was quite weak until 2000. The existing legal framework, and populist policies of the Governments were probably the main reasons for this result.¹¹

5. The Turkish banking system

One of the main aims of the January 24, 1980 structural adjustment program was the liberalization of the repressed financial system. Concerning the financial deregulations, the Governments started to liberalize the foreign exchange regime, certain restrictions on capital movements were removed, and the convertibility of the Turkish Lira was provided. Meanwhile, restrictions on interest rates were removed, a short-term money market was established, the Central Bank was allowed to engage in open market operations and most of the regulations concerning the financial markets were eliminated in the context of liberalization and globalization. These deregulation efforts speeded up the linking of the domestic financial market to the rest of the world, and provided more competitive working conditions to the commercial banks. Liberalization and integration occurred more rapidly than expected, partly due to the advances in the telecommunications sector.

It may be asserted that liberalization and integration might improve the overall efficiency in the economy. However, increasing interdependence makes the international linkage of policy implementations more important than before. A boom or a recession in one country spill over to other countries through trade flows and change

less-volatile period had a CV of 0.10. The same statistic for the program period is 0.36

¹¹Celasun (2001) reports the privatization policies and the privatization performance of Turkey between 1985-1995.

in interest rates and capital movements. Hence, the liberalization and integration of the financial sector may also increase the vulnerability of an economy to adverse shocks from the rest of the world. In this section, we investigate the developments in the Turkish banking system in three distinct periods: early liberalization efforts in the 1980s and developments especially after 1987 leading to the 1994 crisis, the 1994 crisis and afterwards, and the 2000 disinflation program. The last subsection also includes an account of the November 2000 crisis in the financial markets.

5.1. Liberalization and the banking system

The structural adjustment program which was implemented in the early 1980s produced substantial changes in the banking sector. Starting in 1980 total assets of the banks increased from USD 18.5 Billion (31 percent of the GNP) to USD 134 billion (68 percent of the GNP) by the end of 1999. The total deposits to GNP ratio also increased from 15.4 percent to 61 percent during the same period (see Figure 8).¹² During this period, the market share of the state banks (in terms of their share in total assets) gradually decreased from 44 percent to 35 percent and the share of private banks increased from 41 percent to 50 percent. However, the state banks increased their share in total deposits (see Figure 8). Liberalization and integration efforts have created important structural changes in the balance sheets of banking system, especially after 1987. Starting from 1987, when the Government slightly changed its policy from the current account based one to disinflationary efforts, the relative share of non-deposit funds in total liabilities of private banks permanently increased and reached to its peak in 1993. In other words, the private banks tried to substitute non-deposit funds for deposits.

The share of foreign currency denominated assets and liabilities started to increase, especially after 1987. The share of foreign currency denominated assets in total assets rose from 26 percent in 1988 to 38 percent in 1999. Similarly, the share of foreign currency denominated liabilities in total liabilities rose from 25 percent in 1988 to 48 percent in 1999. Short-term borrowing based deficit financing policies of the Governments increased the interest rates and encouraged short-term capital flows into the economy. The new policy facilitated managing public deficit and helped the central bank to build up its foreign currency reserves. These deficit financing and reserve accumulation policies led commercial banks to open short positions in foreign

¹²Sudden jump in these ratios in 1999 were direct consequence of a deep recession, and consequently a drop in GNP.

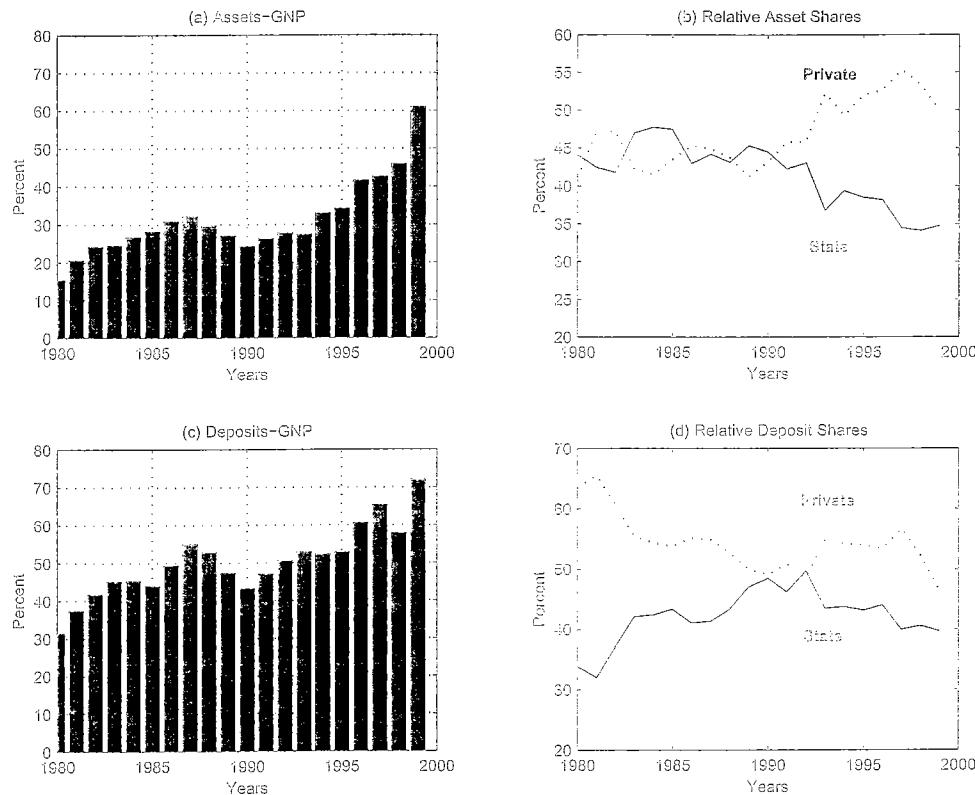


Figure 8: (a) Total assets of commercial banks in - Nominal GNP ratio (percent). (b) Total deposits in commercial banks - Nominal GNP ratio (percent). (c) The share of state banks (straight line) and the share of private banks (dotted line) in total assets. (d) The share of state banks (straight line) and the share of private banks (dotted line) in total deposits. Source: The Banks Association of Turkey.

currencies. The short positions in the banking system increased from 1.8 billion in 1990 to USD 5 billion in 1993. Although there was a decrease in 1994 as a result of a financial crisis in that year, the short positions of the banking system kept increasing and reached to USD 13.2 billion at the end of 1999 (see Figure 9).

A short-term borrowing based deficit financing policy of the Government also led the commercial banks to change their asset management policies: they shifted from direct loan extensions to purchasing Government securities. The share of security investment of the banks in total assets increased from 10 percent in 1988 to 17.2 percent in 1999 (see Figure 9). A combination of disinflationary efforts and short term borrowing based deficit financing policies made the banking system more vulnerable

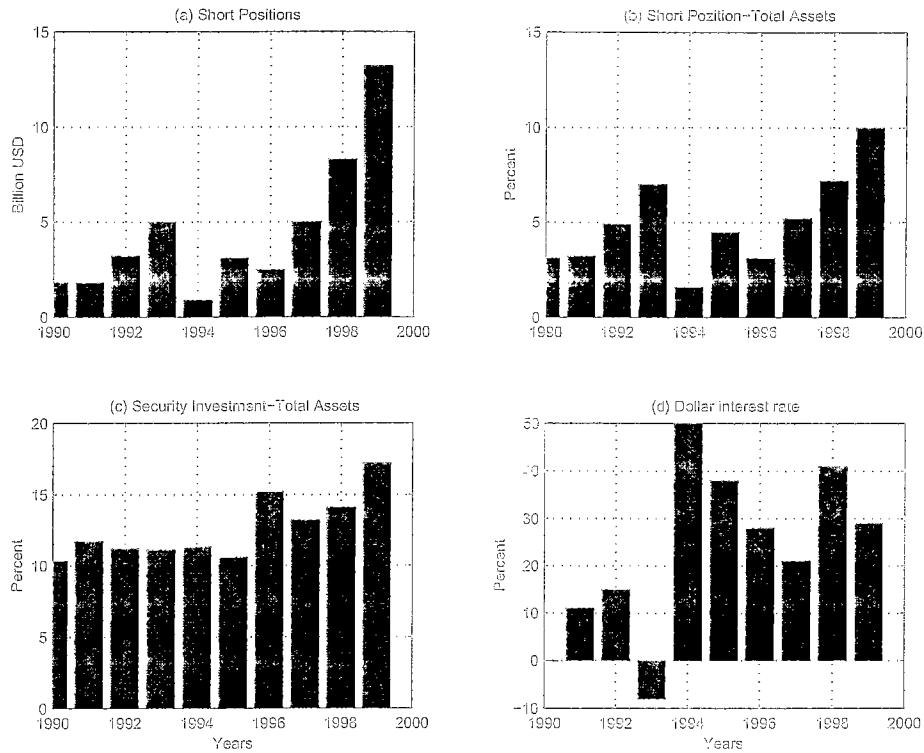


Figure 9: (a) Foreign exchange short position of commercial banks. Short position: The difference between foreign exchange denominated liabilities and assets. (b) The share of short positions in total assets. (c) The share of security investment of commercial banks in their total assets. (d) Weighted average of dollar return (expost) from TL denominated Turkish treasury bills and Government bonds (domestic debt). The weighted rate of return was 140 percent in 1994. We restricted the vertical axis from above to make all years visible in plot (d). Source: The Banks Association of Turkey and The Treasury Department

against foreign exchange and interest rate risks. Higher interest rate commitment on domestic assets, lower depreciation rate, and increase in the public sector borrowing requirement built up the foreign exchange reserves of the Central Bank but also opened up the banking sector to speculative attacks. A more risk taking behavior of the privately owned banks and their large short positions in foreign currency raised the question about the sustainability of the short-term capital inflow based external balance policy.

The financial sector liberalization was completed to a great extent with the demise of restrictions on capital movements in 1989. In the same year, the Central Bank also

launched a new monetary program which prevented the easy access of the public sector to the Central Bank's credit lines. However, the Government did not accommodate the new monetary policy by taking necessary measures in the fiscal area and the Treasury kept involving in external, as well as internal borrowing activities. High interest rates, lower depreciation, heavy internal and external short term borrowing were the typical characteristics of the financial environment between 1989-1994. A lower credit risk and a high rate of return on Government bonds made the privately owned banks reluctant to manage the market risks. As we mentioned above, private banks changed their global asset-liability management strategies and started to operate in short positions in foreign currency denominated assets since the existing policy provided enjoyable profit margins for them (see Figure 9). The net profit-equity ratio and the net interest earnings to net interest expenses ratio remarkably increased (see Table 1).

Because of profitable short-positions, the dollarization in the banking system started to increase. The share of foreign currency denominated assets in total assets went up from 26 percent in 1988 to 38 percent in 1999. Also, the share of foreign currency denominated liabilities in total liabilities increased from 25 percent to 48 percent during the same period. Because of the currency substitution in the economy, the deposit collection activities of the sector concentrated on foreign currency denominated deposits. In private banks, the share of foreign currency denominated deposits in total deposits reached up to 72 percent in 1999.

In general, the privately owned banks in Turkey prefer to increase their capital by adding the retained earnings to the net worth rather than by new equity participation. Between 1989-1993, relatively higher returns on domestic assets helped to increase the retained earnings and consequently the net worth of the banking system. As a result, the capital adequacy ratio in the sector reached to internationally acceptable levels.¹³

5.2. The effects of 1994 crisis on the banking sector

Towards the end of 1993, the intention of a policy reversal of the Government, namely, lower interest rate-higher depreciation and cancellation of the Treasury auctions compelled the banking system to an urgent re-arrangement of foreign currency denominated assets and liabilities. This very hasty adjustment provoked the demand for

¹³According to the Basel accord, if the ratio of total capital to borrowed resources is over 8 percent, the capital adequacy ratio is generally accepted as satisfactory.

	1990	1991	1992	1993	1994
NIE-NIEZ					
Private Banks	1.41	1.55	1.57	1.36	1.36
NP-NSE					
Private Banks	33.5	37.3	32.1	43.2	42.1

Table 1: Net interest earnings - Net interest expenses ratio (NIE-NIEZ); Net profit in percent of shareholders equity (NP-NSE) of private commercial banks, in percent. Source: The Banks Association of Turkey.

foreign currency and started the events which eventually led the economy to the 1994 crisis. In January 1994, the TL was devaluated around 13 percent. However, it did not help much to curb the extra demand for foreign currency and the Central Bank increased its lending rates. Although the devaluation was small, it destroyed the balance sheet of commercial banks. In order to alleviate the heavy burden of the short positions of commercial banks, the Central Bank and the state banks started to sell foreign currency to the privately owned banks. After three months of turmoil, the Government launched a stabilization program on April 5, 1994 and devaluated the TL by another 65 percent. The shift in the policy stance and accumulated structural defects of the vulnerable banking system were the apparent reasons of the hard landing.¹⁴

Almost all of the short positions of privately owned commercial banks were removed before April 5, 1994. Therefore the effect of devaluation on these banks was limited. In addition, there was a substantial increase in interest income of commercial banks; the ratio of net interest earnings to net interest expenses reached to 2.5 in this period. The higher interest margin helped to cover the difference between non-interest expenses and non-interest income, and provided a reasonable net income for private banks. Also, a full coverage of insurance scheme for bank deposits was put into effect after launching the stabilization program on April 5, 1994. In spite of all those measures, the burden of the crisis on commercial banks was very destructive. Many banks came to the brink of losing their net worth and three of them were liquidated. Capital adequacy ratios of all banks substantially diminished and the state banks lost 90 percent of their net worth. Credit expansion activities of the sector almost ceased and non-performing loans increased 35 percent.

The financial crisis in 1994 was a turning point for the state banks. Ertugrul and

¹⁴See, Özatay (1999) for an analysis of 1994 crisis from a public mismanagement point of you.

	1993	1994	1995	1996	1997	1998	1999
NI-ATA							
Privately owned	3.9	3.8	5.7	5.8	4.8	5.3	5.3
The state banks	3.1	-0.1	0.2	0.9	0.8	0.8	1.5
NII-ATA							
Privately owned	11.2	12.4	11.5	12.5	12.2	14.8	12.6
The state banks	8.7	7.9	2.9	6.2	4.2	4.9	3.7

Table 2: Net income - Average total assets ratio (NI-ATA); Net interest income - Average total assets ratio (NII-ATA), in percent. Source: The Banks Association of Turkey

Zaim (1996) investigates the efficiency in the Turkish banking sector within the framework of neoclassical theory using nonparametric techniques. The study shows that there was a significant increase in the global efficiency of the system in terms of credit extension and deposit collection between 1980-1993 and a decrease in 1994. These findings point out the positive impact of the liberalization efforts on the efficiency in the system. The study also indicates that the state banks were more efficient than the private banks in terms of credit extension and deposit collection during 1981-1993. Under the constant returns to scale assumption, the inefficiency index of the state banks decreased from 10.7 percent to 4.1 percent and the inefficiency index of the privately owned banks went down from 24.5 percent to 13.7 during this period. The inefficiency index of private banks in general is above the state banks. However, the speed of improvement in private banks is remarkable.

After the crisis in 1994, private banks became more efficient than the state banks in terms of credit extension and deposit collection. The inefficiency of the state banks stems from the implicit resource allocation decision of the Government. As it was mentioned before, the state banks lost almost 80 percent of their net worth during the 1994 crisis. Devaluation and the new measures taken by the Government negatively affected the income statement of these banks. The ratio of net income to total assets declined from 3.1 percent in 1993 to -0.1 percent in 1994 and remained well below the same ratio for the private banks in the following years. The net interest margin of privately owned banks was roughly three times larger than the net interest margin of the state banks. The state owned commercial banks extended concessionary credits to the agricultural sector, small and medium sized enterprises, and the housing sector. In spite of the increasing market interest rates for fund raising, these banks were not able to change their traditional loan extending policies and could not reduce

the volume of concessionary loans. The total burden of this credit policy and some quasi-fiscal duties on the state banks reached up to USD 20 billion at the end of year 2000. These so called "duty losses" were slightly above ten percent of the GDP and 14 percent of the total assets of the banking system. An inadequate reimbursement of the Treasury department concerning the duty losses increased the liquidity and capital adequacy problems of the state owned banks. As a result, the cost of fund raising for these banks increased. The practice of extra interest offerings by the state banks to attract deposits created distortions in the market.

In sum, the measures taken during and after 1994 stabilization program could not relieve the vulnerability of the banking system. The Governments and the commercial banks returned to the alluring hot money policy immediately after the 1994 crisis; i.e., short-term borrowing from abroad and lending at home as a result of hefty profit margins on the treasury bills and government bonds in dollar terms (see Figure 9). Due to large fiscal deficits and extensive Government borrowing, higher interest rates induced the banking sector to involve heavily in deficit financing, neglecting the market risk, exchange rate risk, and proper management of assets and liabilities. The excessive risk taking behavior of privately owned banks increased the vulnerability of the system against even small shocks. Protracted fiscal imbalances, inadequate regulation and supervision of banking system, poor risk management, and implicit and explicit government guarantees prevented the provision of the preconditions of a sound financial system.

5.3. Stabilization program in year 2000 and banking sector

In July 1998, the Turkish Government started to implement a disinflation program under the guidance of an IMF Staff Monitored Program (SMP). The program achieved some improvements concerning inflation rate and fiscal imbalances but it could not relieve the pressures on the interest rates. The Russian crisis in August 1998, the general elections in April 1999 and two devastating earthquakes in August and October 1999 deteriorated the fiscal balance of the public sector. The relative share of primary surplus in the GDP decreased and the public debt-to-GDP ratio kept increasing. Another IMF backed disinflation program was launched in December 1999. The program was preceded with several structural changes. Among others measures, a new banking law was enacted in June 1999, and later modified in December 1999 before the program was launched. An independent Banking Regulation and Supervision Agency (BBSA) was established with this law. The new Banking Law stipulates

many rules and principles which are compatible with the regulation and supervision standards of the Basel committee. In this regard, qualifications and responsibilities of the main shareholders were rearranged, new provisions concerning credit extension and fund raising activities were accepted, the minimum capital requirement and capital adequacy were redefined in accordance with the BIS regulations, and actions which will be taken by the BRSA for bank failures were determined. Just before launching the stabilization program, five privately owned insolvent banks were taken under the control of the Savings Deposits Insurance Fund.

In the letter of intent dated December 9, 1999, a special emphasis is given to the restructuring of the banking sector. Under the title of "strengthening the banking system and banking regulation", the Government committed to carry out necessary amendments for providing full autonomy to the BRSA and strengthening the prudential standards for lending. Furthermore, the Government declared the new regulations about capital adequacy, loan-loss provisions and foreign exchange exposure limits. All these measures aim at providing the appropriate prudential requirements in line with the international standards. In addition to these new regulatory efforts, the Government undertook some measures to remove the distortions created by the state owned banks. Commercialization of Eiraat Bank, Halk Bank, and Emlak Bank, and eventually privatization of them tied up to a special action plan. The most of the actions which will be taken about strengthening the banking system were considered as performance criteria for stand-by arrangement and the Government intended to fully implement them according to a special time-table.

New regulations regarding reserve requirement, liquidity ratio, loan loss provision and their amendments were put into effect in 2000. Special law on the privatization of state owned banks, Eiraat Bank, Halk Bank, and Emlak Bank was amended. Shortly after the undertaking the management of two commercial banks by the BRSA, a new action plan for the banks under the management of the Savings Deposit Insurance Fund (SDIF) was announced.

5.3..1 Crisis in the middle of the road

Despite the fact that the program achieved some remarkable results in a short period of time, the Turkish financial system experienced a short-lived crisis at the end of year 2000. During the second half of the year 2000, the slow down in economic reforms in general and the opposition to the privatization of certain state enterprises from inside the government increased the suspicion in the market that the program was about to end.

It was very well known in the market that one of the commercial banks, Demirbank, had an extremely risky position. The bank had a substantial Government securities portfolio, financed through short term borrowing from the money market.¹⁵ Due to difficulties in borrowing from the money market on November 20, 2000, Demirbank started to fire-sale Government bonds in order to obtain liquidity. Similar actions by the market makers in Government securities pushed the interest rates further up and the market makers stopped posting prices. The turmoil in the market promoted expectations of an immediate devaluation and triggered an inverse movement of short term capital.¹⁶ A liquidity pressure as a result of the heavy capital outflow and decrease in the Central Bank reserves rocketed the interest rates. The Central Bank started to provide liquidity to the market violating the rule set by the Stand-by Agreement for the net domestic assets. However, the additional liquidity bounced back in the form of additional demand for foreign currency. Therefore, the Central Bank stopped providing liquidity and overnight interest rate (simple annual) reached to its peak at 800 percent on December 4, 2000.¹⁷ The financial turmoil forced a set of urgent measures. The Government requested the completion of the third and fourth program reviews and asked for access to the Supplemental Reserve Facility of the IMF. The IMF "emergency" team in Ankara and the Government officials announced on December 5, 2000 that the IMF was considering an additional USD 7.5 billion loan to Turkey to support the on-going program. The same day before the markets opened, Demirbank was undertaken by the SDIF, ten days after the crisis started.

With an additional letter of intent to the IMF, the Government committed to take additional actions about public finance, privatization, agriculture sector, income policy, monetary and exchange policies. The most of the new steps, policy formulations and regulations are parallel to those stipulated in the first letter of intent, dated December 9, 1999. However, the new letter stresses the importance of the policies and specifies the dates of almost each additional measure. The letter also emphasizes restoration of the confidence in the banking and financial system. In this regard, it is

¹⁵ It is estimated that Demirbank (paid capital USD 300 millions) had approximately USD 7.5 billion of Government securities (almost 18 percent of the total domestic debt stock).

¹⁶ Dornbusch (2001) claims that a large number of bad banks and banking system's short term funding caused the crisis in Turkey. Stanley Fischer, first deputy managing director of the IMF, relates the crisis in Turkey to banking sector problems and the failure to undertake corrective fiscal actions against the widening current account deficit. See Fischer (2001).

¹⁷ This rate is a weighted average of interest rates in the money market. The highest and the lowest (simple annual) overnight interest rates were 800 percent and 1950 percent, respectively, during this period.

promised that; a comprehensive system of guarantee for depositors and other creditors to the banks will be established, necessary measures will be taken to resolution of ten banks which are under the management of the SDIF, appropriate regulation and supervision mechanism will be put into effect for keeping the banking system sound and necessary actions will be taking for commercialization and privatization of state owned banks.

The request of the Turkish Government was accepted by the IMF Board on December 22, 2000 and additional financial support was assumed in terms of access to the SRF. Specifically, the Board announced that an additional USD 7.5 billions would be provided to Turkey in several installments. The reverse capital flow took place immediately, especially in the beginning of the year and the Central Bank reserves returned to its pre-crisis level. Interest rates decreased, albeit stabilizing at a higher level than the pre-crisis average.

Preliminary developments in the money market and the bond market indicate that the confidence in the economy has been restored. However, dependency on the short-term capital flows and the vulnerability of the banking sector signals the possibility of a new crisis. The liquidity creation mechanism stipulated in the stand-by arrangement requires sizable capital inflows. The poor performance of the economy in attracting the long-term capital in form of a direct investment makes the short term capital flows and external borrowing more important than before. Ironically, the success of the disinflation program and the stability of the banking system now depend on short term capital inflow, although the program aimed to put the economy on a sustainable growth path. Clearly, this creates a very fragile financial system as it is unsustainable to rely on short term capital flows in the long run. Unless the Turkish Government creates an environment in which the foreign direct investment finds itself comfortable, the program is destined to fail like the previous programs.

6. Conclusion

The history of the Turkish economy for the last 20 years might be analyzed in two distinct periods: export-led growth period (1980-1987) and a volatile growth period during which the economy became dependent on the short-term capital flows, thanks to an alluring "hot money policy" (1989-1999). The recent restructuring and reform program aims at reducing the inflation to single digits and putting the economy into a sustainable growth path. A short-lived financial crisis during the course of the program showed that the financial system is very fragile. Ironically, the latest crisis

also made it clear that the continuation of the disinflation program and the stability of the banking system in the short run depend on short-term capital inflows. Unless the Turkish Government creates an environment in which the foreign direct investment finds itself comfortable, the program is destined to fail like the previous programs.

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