Chapter 2

Turkish Economy: 1980–2001*

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Abstract: In this chapter 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 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 a "boom-bust" economy with relatively lower GDP growth and with 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.

1. Introduction

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

An early attempt to reduce inflation on a permanent basis and to put the economy on a sustainable growth path began 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, inflation started to rise again.

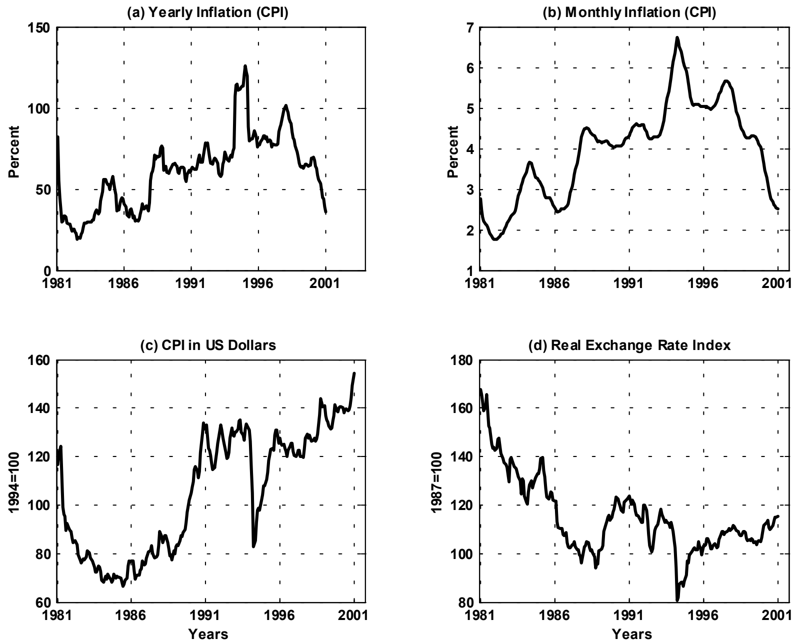

Figure 1: Inflation and Real Exchange Rate in Turkey
(a) Annual inflation, CPI (percent).
(b) Monthly inflation, CPI (seasonally adjusted, percent).
(c) Consumer price index in USD terms, 1994=100.
(d) Real exchange rate index, TRTWIN, 1987=100. An increase in the real exchange rate index indicates an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

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 combination necessitated a higher interest rate on domestic assets and a lower depreciation rate in order to secure short-term capital inflow. Especially after 1989 (the year the capital account was liberalized), the new disinflationary strategy pronounced itself strongly. However, the government did not take necessary measures on the fiscal front and the disinflationary attempts were futile. Due to the 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 (SMF). The program achieved some improvements concerning the 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 led to a deterioration of 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 60–70% per year to single digits by the end of year 2002. The program gained further momentum after the country signed a stand-by arrangement with the IMF in December 1999. The main tool of the disinflation program was 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 period of a year and a half. Although there was 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 infusion of additional funds 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 foreign direct investment finds itself comfortable, the program is probably destined to fail and inflation might start to rise again.

The aim of this chapter is to give an overall account of the Turkish economy during the 1980–2000 period.[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 1980s was quite successful. The average annual growth rate of real gross domestic product (GDP) was an impressive 5.8% between 1981–88 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 rate; it averaged 8.1% during the same period.

Starting in 1988, the economy entered into a new phase and the growth performance has been sluggish since then, with two minor and two major recessions. The annual real GDP growth averaged 3.7% during this period. The average annual growth rate of industrial value added was slightly higher at 4.4% (see Figure 2). The exemplary economy of the 1980s became a textbook case of "boom-bust" growth performance with a relatively lower average growth rate and 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. 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 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 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, as summarized in Calvo and Végh (1999):

(1) Slow convergence of the inflation rate (measured by the CPI) to the rate of change in exchange rates.
(2) Initial increase in real activity – particularly, real GDP and private consumption – followed by a counteraction.
(3) Real appreciation of the domestic currency.
(4) Deterioration of the current account balance.

(5) A decrease in domestic ex-post interest rates in the initial stages.

Possible explanations for an initial increase in real activity, followed by counteraction, in exchange rate-based stabilization programs are given in Calvo and Végh (1999). At the initial stage of slowed down depreciation, the 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 resource constraints.

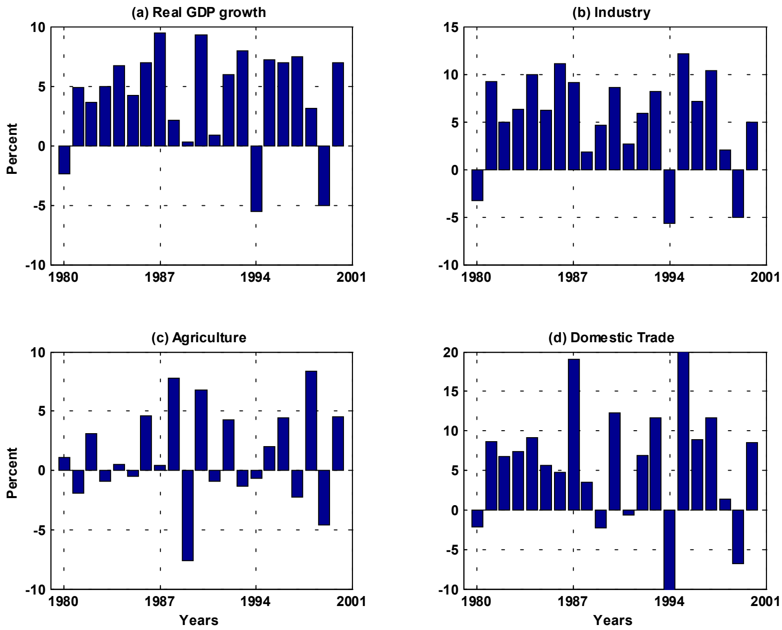

Figure 2: Real Growth in the Turkish Economy: Percentage Change in Gross Domestic Product and Economic Activities at Producers' Prices (at 1987 prices)
(a) Real GDP growth (percent).
(b) Industrial production.
(c) Agriculture.
(d) Domestic trade.
Source: State Institute of Statistics.

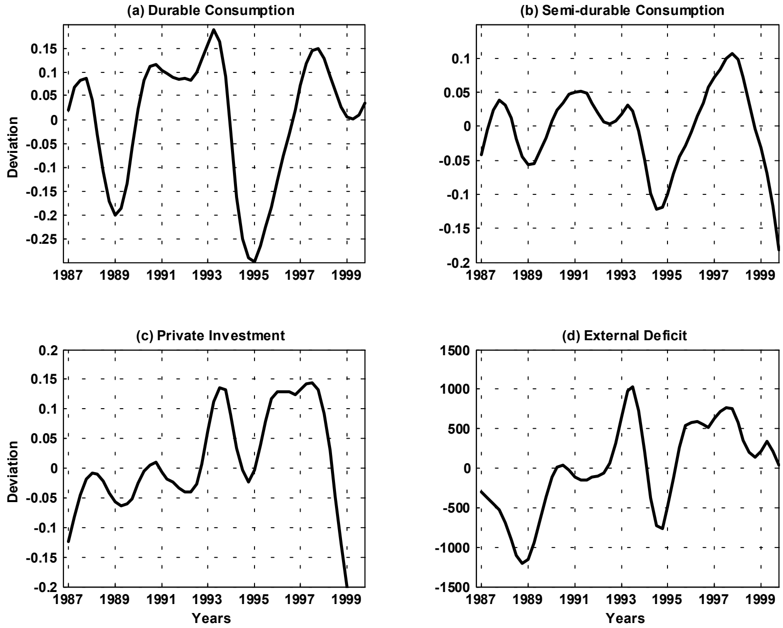

Figure 3: Cyclical Movements of Real GDP Components in Turkey
(a) Private sector durable goods consumption (deviations from logarithmic trend).
(b) Private sector semi-durable goods consumption (deviations from logarithmic trend).
(c) Private sector investment expenditure (deviations from logarithmic trend).
(d) External deficit (deviations from the sample mean). Calculated from the expenditure side of gross domestic product (at 1987 prices). Series are filtered to remove seasonalities.
Source: State Institute of Statistics.

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 (see Figure 2). Both the 1991 and 1994 recessions were preceded by a substantial increase (appreciation) in the real exchange rate, as shown in 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 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%) 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 of 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.

3. External Balance

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

The export-led growth policy was quite successful in the early stages of its implementation. The openness of the economy increased immediately: the total exports-GDP ratio increased from 4.1% to 13.3% during the period of 1980–88. The total imports - GDP ratio also increased but the rate of increase was smaller as it went up from 11.3% to 16.4% during the same period. Therefore, the external balance situation improved significantly. The external deficit-GDP ratio went down from 7% in 1980 to negative 1% (surplus) in 1988. The real depreciation of the Turkish lira (approximately 40%) 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% in 1989 and continued to appreciate in 1990 at a slower rate. Consequently, the rate of increase in the total exports slowed down and that of total imports jumped up. The external deficit - GDP ratio increased to 2% in 1989 and to 4% in 1990. Although there was a slight decrease in 1991 and 1992, the external deficit reached to approximately 6% of the GDP in 1993 (see Figure 4).[5]

Towards the end of 1993, it was clear that both 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 in April of 1994. Total exports increased dramatically while total imports contracted. As a result, the external balance was positive in 1994 at 1% of GDP.

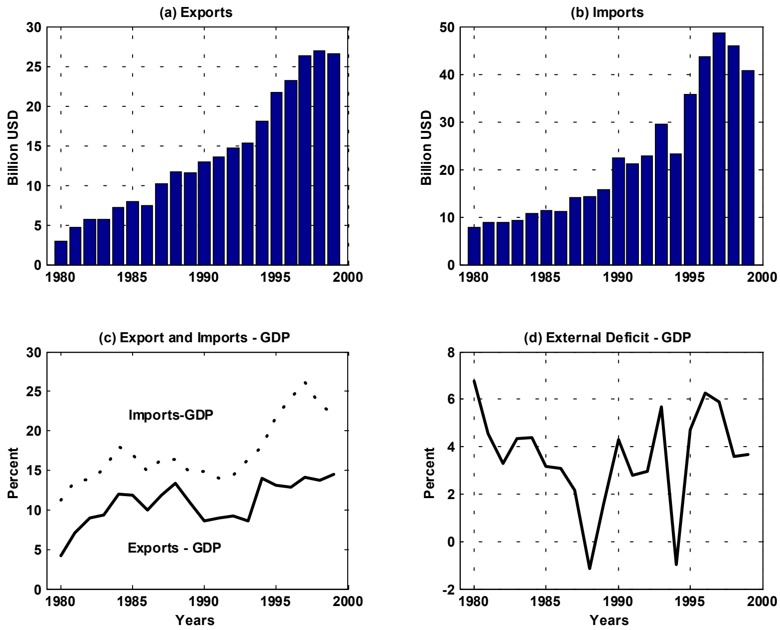

Figure 4: External Trade
(a) Exports (in billion USD).
(b) Imports (in billion USD).
(c) Exports and Imports to GDP Ratios (in percent).
(d) External deficit to GDP ratio (in percent).
External deficit figures are taken from the national income accounts of the State Institute of Statistics. Export figures do not contain the shuttle trade estimates of the Central Bank. See Footnote 3 on unofficial exports and imports.
Source: State Institute of Statistics.

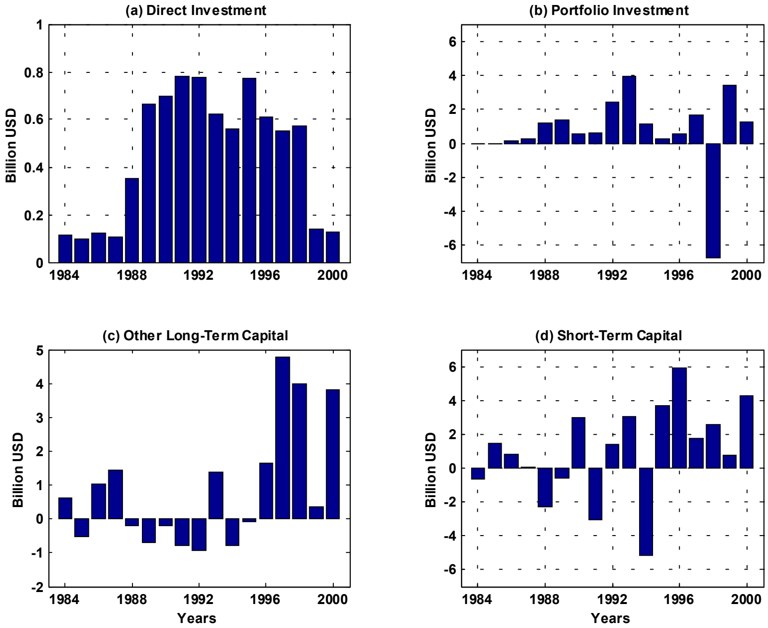

Figure 5: Capital Flows
(a) Foreign direct investment (in billion USD).
(b) Portfolio investment (in billion USD).
(c) Other long-term capital (in billion USD).
(d) Short-term capital (in billion USD). All figures are net.
Source: Central Bank of the Republic of Turkey.

Between April 1994 and December 1994, the Turkish lira appreciated in real terms significantly (22% 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% of the GDP in 1995 and approximately 6% 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 were relatively low, thanks to extremely high real interest rates after the Russian crisis and a shrinkage in total demand. Total exports have been stagnant for the last four years at around USD 26 billion and changes in total imports are dominating the current account dynamics.

The capital account of the balance of payments indicates that the Turkish economy became dependent on short-term capital flows, especially after 1989 (see Figure 5). Foreign direct investment (net) was extremely low up until 1988. 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, in particular in the category of 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 the "Other Long Term Capital" item, starting in 1996 (see Figure 5). 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 that the foreign exchange exposure of the country is increasing. Total external debt figures confirm this conclusion. The outstanding external debt was USD 79.6 billion in 1996 and 106.9 billion in 2000(Q3), indicating a 34% increase in four years. The composition of the external debt has also changed. In 1996, only 21% of the total debt had a short-term maturity while 25% did in 2000(Q3). The share of commercial banks in short-term external debt is 60% (USD 15.6 billion). The private sector, excluding banks, carries 38% (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, extra-budgetary funds, local authorities, state economic enterprises, social security institutions and revolving funds.[7] Following the January 24, 1980 program, the PSBR as a percent of GNP decreased immediately from 9% in 1980 to 4.5% in 1981 and stayed less than 5%. After 1986, the PSBR started to increase in a steady fashion and reached 12% in 1993. Although there was a correction in 1994 and 1995, it kept increasing again and reached over 15% in the year 1999 (see Figure 6).

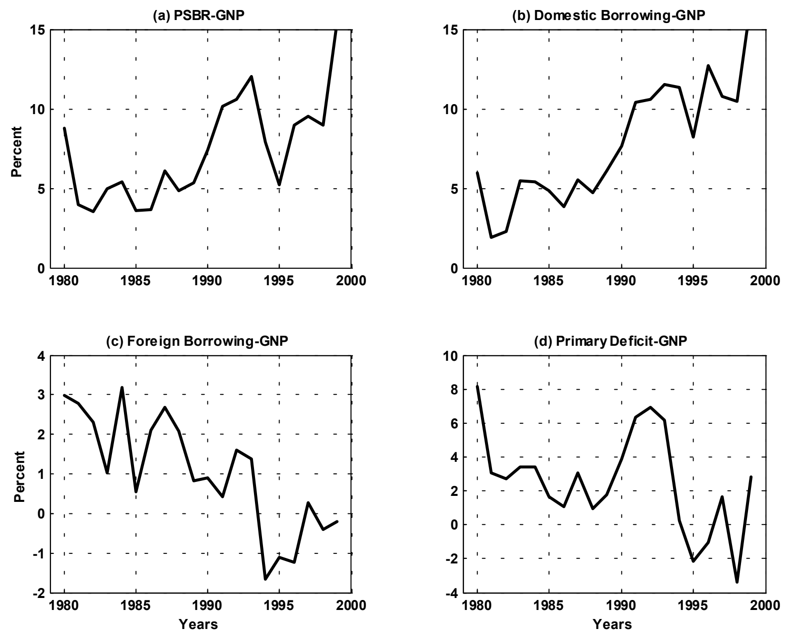

Figure 6: Public Sector Borrowing Requirement and Financing
(a) Public sector borrowing requirement in percent of GNP.
(b) Domestic borrowing in percent of GNP.
(c) Foreign borrowing in percent of GNP.
(d) Primary deficit in percent of GNP.
Source: State Planning Organization.

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 government in 1988 was a mere USD 4 billion. As of December 2000, the stock reached USD 53.8 billion. The ratio of domestic debt to GNP also increased from 6% in 1988 to 30% 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 can be solved in a smooth fashion.

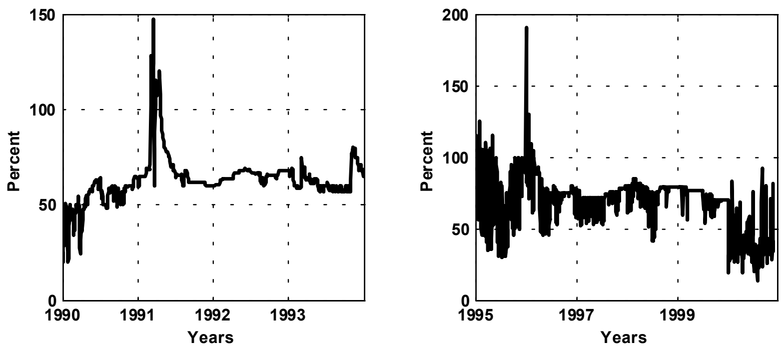

Figure 7: Daily Weighted Average of Overnight Interest Rates (simple annual, percent)
The overnight interest rates reached to extreme levels in 1994 and in late 2000. Therefore, these periods are excluded.
(a) January 2, 1990 – December 31, 1993.
(b) January 2, 1995 – November 17, 2000.
Source: Central Bank of the Republic of Turkey.

The role of the Central Bank's monetary policy in debt management in recent years was one of accommodation.[8] A close inspection of the daily overnight interest rates in Figure 7 preceding the IMF program reveals two distinct periods. There was a volatile period after 1994 crisis (June 1, 1994 – April 16, 1996) followed by a 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%, respectively. The second period had almost the same sample mean (72.3%) but much lower standard deviation (7.4%). 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 was 39% and the standard deviation was 14%.[10] Clearly, the Central Bank had an implicit ceiling on overnight borrowing 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 "controlled 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 9).

State economic enterprises are another contributing factor to the public sector borrowing requirement. Zaim and Taşkın (1997) compare the performance of the public enterprise sector to the private sector in Turkey and show 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 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 spills over to other countries through trade flows and changes 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% of the GNP) to USD 134 billion (68% of the GNP) by the end of 1999. The total deposits - GNP ratio also increased from 15.4% to 61% 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% to 35% and the share of private banks increased from 41% to 50%. However, the state banks increased their share in total deposits (see Figure 8).

Liberalization and integration efforts created important structural changes in the balance sheets of banking system, especially after 1987. Starting from 1987, when the government slightly changed its exchange rate and debt policy, the relative share of non-deposit funds in total liabilities of private banks permanently increased and reached a peak in 1993. In other words, during this period, the Turkish private banks tried to substitute non-deposit funds for deposits.

After 1987, the share of foreign currency denominated assets and liabilities of the banking sector started to increase. The share of foreign currency denominated assets in total assets rose from 26% in 1988 to 38% in 1999. Similarly, the share of foreign currency denominated liabilities in total liabilities rose from 25% in 1988 to 48% 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 policy facilitated managing the 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 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 USD 13.2 billion at the end of 1999 (see Figure 9).

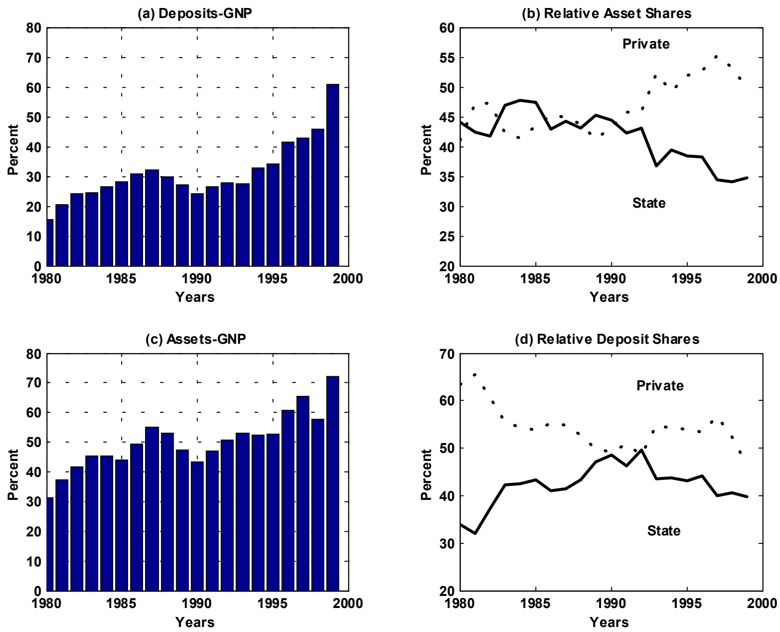

Figure 8: Selected Banking Sector Indicators
(a) Total deposits in commercial banks – Nominal GNP ratio (in percent).
(b) The share of state banks (straight line) and the share of private banks (dotted line) in total assets.
(c) Total assets of commercial banks – Nominal GNP ratio (in percent).
(d) The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

The 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% in 1988 to 17.2% in 1999 (see Figure 9).

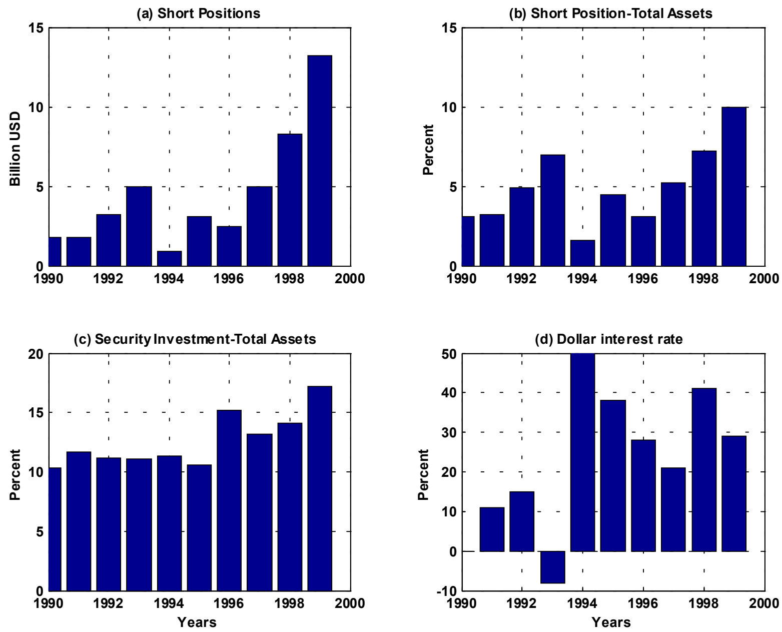

Figure 9: Hot Money and Turkish Banking Sector
(a) Foreign exchange short position of commercial banks. Short position: The difference between foreign exchange denominated liabilities and assets.
(b) Short position - total assets ratio.
(c) Security investment - total assets ratio for commercial banks.
(d) Weighted average of dollar return (ex-post) from TL-denominated Turkish treasury bills and Government bonds (domestic debt). The weighted rate of return was 140% 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 Undersecretariat of the Treasury.

A combination of disinflationary efforts and short-term borrowing-based deficit financing policies made the banking system more vulnerable against foreign exchange and interest rate risks. The 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. The 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 external balance policy based on short-term capital inflow.

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 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 getting involved in external, as well as internal, borrowing activities. High interest rates, lower depreciation and heavy internal and external short-term borrowing were the typical characteristics of the financial environment between 1989–94. A lower credit risk and a high rate of return on government bonds made the privately owned banks weak in managing 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 large profit margins for them (see Figure 9). The net profit-equity ratio and the net interest earnings - net interest expenses ratio increased remarkably in the early 1990s (see Table 1).

Table 1: Net Interest Earnings - Net Interest Expenses Ratio (NIE-NIEX); Net Profit in Percent of Shareholders Equity (NP-NSE) of Private Commercial Banks, in Percent

	1990	1991	1992	1993	1994
NIE-NIEXPrivate Banks	1.41	1.55	1.57	1.86	1.66
NP-NSEPrivate Banks	33.5	37.3	32.1	43.2	42.1

Source: The Banks Association of Turkey.

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% in 1988 to 38% in 1999. Also, the share of foreign currency denominated liabilities in total liabilities increased from 25% to 48% 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 72% in 1999.

In general, the privately owned banks in Turkey prefer to increase their capital by adding retained earnings to net worth rather than by new equity participation. Between 1989–93, relatively higher returns on domestic assets helped to increase retained earnings and consequently the net worth of the banking system. As a result, the capital adequacy ratio in the sector was at internationally acceptable levels.[13]

5.2 The Effects of the 1994 Crisis on the Banking Sector

Towards the end of 1993, the policy reversal of the government, namely, a lower interest rate - higher depreciation policy, and the 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 foreign currency and started the events, which eventually led the economy to the 1994 crisis. In January 1994, the TL was devaluated around 13%. 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 in nominal terms the TL by another 65%. The shift in the policy stance and accumulated structural defects of the vulnerable banking system were the apparent reasons for 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 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 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% of their net worth. Credit expansion activities of the sector almost ceased and non-performing loans increased 65%.

The financial crisis in 1994 was a turning point for the state banks. Ertuğrul and Zaim (1996) investigate 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 1980–93 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 1981–93. Under the constant-returns-to-scale assumption, the inefficiency index of the state banks decreased from 10.7% to 4.1% and the inefficiency index of the privately owned banks went down from 24.5% to 13.7%. The inefficiency index of private banks in general is above the state banks. However, the speed of improvement in private banks was 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 decisions of the government. As it was mentioned before, the state banks lost almost 90% 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% in 1993 to -0.1% in 1994 and remained well below the same ratio for the private banks in the following years (see Table 2). The net interest margin of privately owned banks was roughly three times larger than the net interest margin of the state banks.

Table 2: Net Income - Average Total Assets Ratio (NI-ATA); Net Interest Income - Average Total Assets Ratio (NII-ATA), in Percent

	1993	1994	1995	1996	1997	1998	1999
NI-ATA							
Privately owned	.39	3.8	5.7	5.8	4.8	5.6	5.6
The state banks	3.1	-0.1	0.2	0.9	0.8	0.8	0.5
NII-ATA							
Privately owned	11.2	12.4	11.5	12.5	13.2	14.9	12.3
The state banks	8.7	7.9	2.9	6.2	4.2	4.9	3.7

Source: The Banks Association of Turkey.

The state owned commercial banks extended concessionary credits to the agricultural sector, to small- and medium-sized enterprises, and to the housing sector. In spite of the increasing market interest rates, 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 10% of GDP and 14% of the total assets of the banking system. An inadequate reimbursement of the Undersecretariat of the Treasury concerning the duty losses increased the liquidity needs and exacerbated capital adequacy problems of the state owned banks. 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 the 1994 stabilization program could not relieve the vulnerability of the banking system. The government 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 get heavily involved in deficit financing, neglecting 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 to 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 the Year 2000 and the Banking Sector

In July 1998, the Turkish government started to implement a disinflation program under the guidance of an IMF Staff Monitored Program (SMF). The program achieved some improvements concerning the 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 led to a deteriorating fiscal balance of the public sector. The relative share of primary surplus in GDP decreased and the public debt - GDP ratio kept increasing. Another IMF-backed disinflation program was launched in December 1999. The program was preloaded with several structural changes. Among other 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

(BRSA) 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 the raising of funds 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 (SDIF).

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 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 Ziraat Bank, Halk Bank, and Emlak Bank, and eventually privatization of them tied up to a special action plan.

Most of the actions which will be taken to strengthen the banking system were considered as performance criteria for the stand-by arrangement and the government was expected to fully implement them according to a special time-table.

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 a fire-sale on government bonds in order to obtain liquidity. Similar actions by the market makers in government securities pushed the interest rates up further 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] Liquidity pressure as a result of the heavy capital outflow and a decrease in the Central Bank reserves rocketed interest rates. The Central Bank started to provide liquidity to the market violating the rule set by the Stand-by Agreement for 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 the overnight interest rate (simple annual) reached its peak of 800% 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 taken 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 on public finance, privatization, the agriculture sector, income policy, monetary and exchange rate policies. 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 the restoration of confidence in the banking and financial system. In this regard, it is promised that a comprehensive system of guarantees for depositors and other creditors to the banks will be established, necessary measures will be taken to resolve the situations of ten banks which are under the management of the SDIF, appropriate regulation and supervision mechanisms will be put into effect for keeping the banking system sound and necessary actions will be taken for commercialization and privatization of state owned banks.

On December 22, 2000, the request of the Turkish government was accepted by the IMF Board 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 their 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 long-term capital in the 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.

6. Conclusion

The history of the Turkish economy for the last 20 years might be analyzed in two distinct periods: an export-led growth period (1980–88) characterized by sustained growth and a volatile growth period during which the economy became dependent on the short-term capital flows, thanks to an alluring “hot money policy” (1989–99) initiated by the monetary authorities of the Central Bank in 1989. The recent restructuring and reform program aims at reducing the inflation to single digits and putting the economy into a sustainable growth path. A 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 foreign direct investment finds itself comfortable, the program is destined to fail like the previous programs.

Epilogue

One week after the final version of this chapter was written there was a scheduled domestic debt auction of the Treasury on February 20, 2001, the day before the maturing of USD 7 billion domestic debt. The auction aimed at borrowing approximately USD 5 billion (around 10% of the total domestic debt) and the market participants were nervous about the outcome as it would indicate the level of confidence in the market about the ongoing stabilization program.

Suddenly, the day before the auction, Turkish Prime Minister Bülent Ecevit stormed out of a key meeting of top political and military leaders stating that "a serious crisis had arisen between himself and the country's president". He further emphasized that "of course, this is a serious political crisis". This development was perceived as a blunt statement that the ongoing stabilization program had come to an end. The news hit the market and the stock market dived 18% in one day. The same day, the Central Bank sold USD 7.5 billion (approximately one-third of the total official reserves) for the next day delivery. The next day, two state banks (Ziraat and Halkbank) were not able to meet their obligations in the markets and the Central Bank refused to provide Turkish lira liquidity to the banks. Therefore, the banks were not able to fulfill their TL obligations to buy foreign exchange from the Central Bank and they were forced to cancel USD 5 billion portion of their foreign exchange buying contracts with the Central Bank. The daily weighted average overnight interest rates rocketed up to 2000% on a simple annual base on February 20, and 4000% in the following day. The government responded by dropping its exchange-rate controls early on February 22, 2001. The Turkish lira fell 40% in value against the US dollar. The change in the exchange rate between February 19 and May 30, 2001 is around 65%. Consequently, monthly inflation in March (calculated from wholesale price index) was 10%, followed by a monthly inflation of 14% in April.

After long turmoil on the financial markets, Prime Minister Bülent Ecevit appointed World Bank Vice President Kemal Derviş to a cabinet post in charge of the Treasury, with responsibilities for overseeing the Central Bank and state banks on March 2, 2001. Since then, Derviş has in fact been in charge of all economic affairs. After meeting with officials from the International Monetary Fund, the World Bank and the U.S. Treasury, Kemal Derviş prepared a new letter of intent, emphasizing a major overhaul in the banking system and a promise of further acceleration of structural reforms outlined in earlier letters of intent. On May 15, 2001, the IMF approved this revision of the Turkey's three-year Stand-By arrangement by US $8 billion which put the overall IMF support to a total of US $19 billion since the beginning of the program in year 2000. The

World Bank also announced that there would be additional credit lines to Turkey to support the new program.

Table 3: Selected Items from the Balance Sheet of the Deposit Banks in Turkey, in billions of USD

	September 2000	December 2000	February 2001
Total Assets	*131,340*	*142,001*	*139,322*
Securities Portfolio	14,988	16,913	15,159
Interest Income Accruals	9,205	5,654	10,797
Tied Securities Portfolio	6,279	7,800	12,810
Special Duty Account	17,129	22,490	16,626
Total Liabilities	*131,340*	*142,001*	*139,322*
Interest & Expense Redisc.	3,404	4,157	5,324
Shareholder's Equity	8,261	9,113	4,491
Paid-up Capital	6,812	7,078	(538)
Reserve Funds	1,675	6,601	6,036
Profit (Loss)	(457)	(4,663)	(4,455)

Note: Some of the securities in the banks' portfolio are classified under "tied securities portfolio" which is valued with "internal rate of return" methodology, not with the "mark-to-market" approach. Under optimistic assumptions, the total loss of the deposit banks would increase to USD 7 billion if "mark-to-market" approach was adopted in calculations for some of these assets. Also notice that the Treasury issued government bonds to recapitalize some of the banks operating under the Saving Deposits Insurance Fund. These bonds are classified under "reserve funds". Excluding these bonds and adopting "mark-to-market" approach for some of the securities in "tied securities portfolio" would result in a shareholders' equity of negative US $ 4 billion.
Sources: Central Bank of the Republic of Turkey and Dışbank Research Department.

Although there is substantial support from international financial institutions, the economic situation in Turkey is more fragile than before. Particularly, there is nothing substantial in the new program to resolve the sustainability problem of the domestic debt and there is no sign of a major overhaul in the banking system (see Table 3). The political structure, which is the main cause of the recurrent crisis, is still in power. Recent developments have showed that most of the current cabinet members are reluctant to support the ongoing program. Unfortunately, we have to conclude this epilogue with a similar sentence we concluded the original article above: "Unless the Turkish economy creates an environment in which foreign direct investment finds itself comfortable, unless the domestic debt dynamics are put onto a sustainable path, and unless there is a major overhaul in the banking system, the program is destined to fail like the previous programs".

Ankara, May 29, 2001

Notes

[*] Revised and reprinted with M. E. Sharpe's permission from *Russian and East European Finance and Trade*, 37 (6): 6–28.

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

[2] Tezel (1994) is a standard reference on Turkish economic history up to 1950. See Arıcanlı 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.

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

[4] See 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 Agénor *et al.* (1997) and Erlat and Erlat (1998).

[5] The 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.

[6] Especially after 1993, there was 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 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 – was 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 of Turkey. 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.]

[7] For 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% of the GDP) and the state banks have registered significant losses in recent years. Developments in the banking sector will be investigated in Section 5.

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

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

[10] In terms of the sample coefficient of variation CV, the volatile period had a CV of 0.36 and the less-volatile period had a CV of 0.10. The same statistic for the program period is 0.36.

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

[12] Sudden jumps in these ratios in 1999 were direct consequence of a deep recession, and consequently a drop in GDP.

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

[14] See, Özatay (1996) for an analysis of 1994 crisis from a public mismanagement point of view.

[15] It is estimated that Demirbank (paid capital USD 300 millions) had approximately USD 7.5 billion of government securities (almost 15% of the total domestic debt stock).

[16] Dornbusch (2001) claims that a large number of bad banks and the 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 300% and 1950%, respectively, during this period.

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