TURKEY'S 2000-2001 FINANCIAL CRISIS AND THE CENTRAL BANK'S POLICY IN THE AFTERMATH OF THE CRISIS[1]

1. INTRODUCTION

The Turkish economy was hit by two crises in the last decade. The first one occurred at the beginning of 1994, at which time there was a managed float. The second crisis erupted in the second half of November 2002 in the midst of an exchange rate based stabilization program. In response to the turmoil, a new letter of intent was presented to the International Monetary Fund (IMF) by the government, which calmed market pressure. However, at the end of December the interest rates were almost four times higher than the levels at the beginning of November and five times higher than the pre-announced (at the outset of 2000-02 program) year-end depreciation rate of lira. This unsustainable situation ended on February 19, 2001 when Prime Minister Bülent Ecevit announced that there was a severe political crisis, which had ignited an equally serious economic crisis in the highly sensitive markets. On that February date, overnight rates jumped to unprecedented levels of 6,200 percent. Three days later the exchange rate system collapsed, and Turkey declared that it was going to implement a floating exchange rate system.

The following section briefly discusses the underlying reasons behind the crisis. Monetary policy in the post-crisis period is analyzed in the third section. The last section presents developments in the aftermath of the crisis.

2. UNDERLYING REASONS OF THE CRISIS

Analyzing the 2000 data, one would immediately observe poor macroeconomic performance. The public sector borrowing requirement, ratio of public debt to GNP, current account deficit, inflation level, and the ratio of liabilities of financial sector to official reserves were all high. Moreover, the lira was appreciated in real terms. However, this analysis would be a misleading picture of the Turkish economy. Turkey started to implement an IMF-supported program at the beginning of 2000. This program addressed macroeconomic imbalances and succeeded (to some extent) in reversing the negative trend. Relative to 1999, there was a sharp decline in both in the inflation and real interest rates as well as a significant increase in primary surplus. Consequently, the ratio of debt to GNP and public sector borrowing requirement decreased.

[1] Prepared for the "Bank of Albania in the Second Decade of Transition" conference that is going to be held on December 6, 2002 in Tirana. This note heavily draws on "F. Özatay and G. Sak (2002), Banking Sector Fragility and Turkey's 2000-01 Financial Crisis" which is forthcoming in Brookings Trade Forum 2002, edited by D. Rodrik and S. Collins.

It is true that the rising current account deficit and real appreciation of the lira was a source of increasing concerns. However, an important part of the current account deficit was due to external shocks-rising oil prices and appreciation of the U.S. dollar against major European currencies. And, there was a built-in exit strategy from the crawling peg system, which was the main factor behind appreciation. Moreover, the program envisaged a further fiscal tightening for 2001 that would have been one of the remedies to the current account program.

Without a fragile banking system and triggering factors, the high current account deficit and real appreciation of the lira would not be enough on their own to precipitate the 2000-01 crisis. There was risk accumulation in the banking system in the period preceding the crisis. For example, there was an increase in currency and maturity mismatches as well as a rise in non-performing loans. Hence the banking system was highly vulnerable to capital reversals. However, the risk accumulation was not homogenous throughout the system. There were two different types of dichotomization: private versus state banks and within the private banks. While the state banks were more open to interest rate risk, private ones were prone to exchange rate risk. Within the private banking system there were some mid-sized banks that were heavily concentrated in government debt instruments business. Moreover, they were carrying these instruments by borrowing in the extreme short term.

Given the weakness in the banking system, it is no surprise that the crisis triggering factors closely related to the banking sector and its practice of carrying government debt instruments portfolios. Main igniting factors were the delays in reforming the banking sector and the actions that caused the dichotomy in the banking sector to come to the surface. This environment made things extremely difficult for state banks, which were suffering from duty losses. These banks that had been heavily dependent on overnight funds found themselves in a position not to be able to do business as usual.

The root cause of the banking system fragility was the high public sector borrowing requirement and the way it was financed. There was no close link between rising deficits and inflation, beginning as early as the 1990s. The main reason was that the budget deficits were primarily financed through government securities. However, the sustainability of this financing mechanism was conditional on the continuation of demand for government securities. In the absence of a program that would have reduced borrowing requirements, a halt in demand would have forced authorities to monetize and hence would have caused a jump both in the exchange rate and inflation rate. This led economic policymakers to try to prevent a decline in demand for government securities. These policies, coupled with the upward trend in banks' government debt instruments portfolios, increased the vulnerability of the banking system.

3. MONETARY POLICY IN THE AFTERMATH OF THE CRISIS

Both the Turkish banking system and corporate sector were severely impacted by the 2000-01 crisis. The immediate re-capitalization needs of the state-owned banks and the banks taken over by the Savings Deposits Insurance Fund (SDIF) led to a jump in the domestic debt stock, which was already too high. Meanwhile, rapid depreciation of the exchange rate had the potential of starting a new inflationary process. Additionally, policymakers lost their credibility. The undersecretary of Treasury resigned, as did the Central Bank governor. To overcome these problems, Turkey announced a new, IMF-supported program in May 2001. The new program had three pillars: fiscal and monetary discipline; structural reforms; and a substantial amount of external financial support.

Following the 22nd of February, the Central Bank set its short-term priorities so as to remove defects in the payments system, to make the financial system function again and to provide stability in financial markets. After easing the tensions in the market, the main priority became price stability in line with the Central Bank's new law.

3.1. Operation of restructuring of state-owned banks

The Central Bank played a key role in the operation of restructuring of state-owned banks. The Treasury issued government securities amounting to 25.8 quadrillion Turkish liras (approximately 23 billion dollars) and gave them to state banks to fulfill its liabilities to these banks. The state banks, in turn, raised funds by selling these securities to the Central Bank, or carrying out repo transactions with the Central Bank. The Central Bank purchased 14 quadrillion Turkish liras worth of these securities in April and May and had started to roll-over the remaining part of the liquidity needs of these banks at 7- and 14-day maturity repo transactions.

In this way, the public sector banks repaid all of their short-term liabilities to the market. Their duty losses were also terminated by the use of these funds. The Central Bank's balance sheet was heavily affected by this operation. In the remaining months of 2001, the excessive liquidity arising from the banking sector operation was withdrawn by open market operations. Hence, to avoid the inflationary effects of the operation, the Central Bank controlled base money by the implementation of monetary targeting, which imposed some restrictions on the classical aggregates of the Central Bank balance sheet.

3.2. Operations in the Foreign Exchange Market

In the beginning of the floating exchange rate regime, the Bank declared that the exchange rate would be determined by market dynamics and it would not intervene in the exchange rate markets except in cases where exchange rates display an instantaneous and highly volatile pattern. Indeed, since August 2001 the Central Bank intervention in the market was almost nil. However, until mid May 2001, the Central Bank conducted regular foreign exchange sales auctions.

Between May 17 and July 11, FX sales auctions were conducted whenever required without pre-announcing the amount. After July 11, the monthly program of FX sales auctions was pre-announced. Main underlying reason of these auctions was to sterilize the excess liquidity in the market caused by the use of external financing, which was provided by the IMF to make the Treasury's domestic debt payments. In this context, 2.8 billion U.S dollars worth of FX was sold between July 11 and November 30, 2001. On November 30, it was announced that FX sales auctions would not be conducted after that date.
At the beginning of 2002, the Central Bank announced that, based on its projections there was an increasing probability of reverse dollarization. The Bank made it clear that under these conditions it was going to open pre-announced foreign exchange buy auctions. In fact, reverse dollarization increased in the first quarter of 2002, and the Bank opened these auctions as it promised. However, not to interfere with the level of the exchange rate it designed a specific auction mechanism. By the increase in political uncertainty in summer months, these auctions were halted.

3.3. Nominal anchors

From May 2001 to late 2001, base money was the only anchor of the monetary policy. Since late 2001, the Bank has been using two nominal anchors. First one was again base money. However the Bank did not see monetary targeting as a sufficiently powerful anchor. Taking into consideration the fact that some problems might arise in forecasting base money demand and the possibility of a weakening relationship between base money and inflation as observed in some countries, the Bank started to also use implicit inflation targeting. This practice was announced to the public at the end of 2001. In this framework, short-term interest rates were actively determined solely based on inflationary outlook. Economic reasoning of these interest moves was announced by detailed press releases. This transparent policy helped to increase the credibility of the monetary policy.

Significant progress has been made to satisfy the preconditions for the implementation of explicit inflation targeting. The Central Bank Law has been amended. A new law on Public Debt was passed from the Parliament. Various forecasting and policy analysis models were developed.

4. Response of the Economy

Based on the 2001-03 program, economic fundamentals continuously improved. However, up to October 2001 the markets' reaction was not in line with fundamentals. The situation was reversed in the October-May 2002 period. The nominal exchange rate, inflation rate, interest rate, and Turkish Eurobonds spreads all followed a significant downward trend. With the surge in political uncertainty at the beginning of May 2002, which was perceived by market participants as policy uncertainty, this positive stance began to change. Finally, election results, which led to a one-party majority government was highly

welcomed by the markets, and once again both the interest and exchange rates started to follow a downward trend (Table 1).

Table 1: Macroeconomic indicators of the January 2001 - July 2002 period[a]

	Average exchange rate (USD/TL)	Secondary market average interest rate (%)	Average Treasury borrowing rate (%)	Eurobond spread (end of period, basis points)	Annual inflation rate (CPI, %)	Expected year-end inflation rate (CPI, %)	Annual industrial production growth rate (%)
2001.01	672240	60.1	65.0	729	35.9	n.a.	7.5
02	739889	103.1	122.5	936	33.4	n.a.	-4.9
03	968299	154.8	193.8	990	37.5	n.a.	-7.6
04	1209865	127.0	130.5	864	48.3	n.a.	-9.6
05	1132510	85.1	82.0	833	52.4	n.a.	-9.4
06	1215605	83.2	88.4	848	56.1	n.a.	-10.1
07	1320506	95.2	91.9	1021	56.3	n.a.	-11.0
08	1400947	89.1	92.7	904	57.5	63.7	-10.8
09	1469858	87.9	87.6	929	61.8	64.8	-9.2
10	1600157	87.7	86.4	884	66.5	68.4	-13.6
11	1521208	77.6	79.3	755	67.3	72.0	-14.4
12	1452198	72.6	74.1	678	68.5	69.8	-8.1
2002.01	1369182	70.8	71.4	641	73.2	47.3	-2.1
02	1349975	69.6	70.0	640	73.1	47.5	-4.9
03	1356993	65.2	68.5	591	65.1	43.6	19.3
04	1317739	56.6	58.7	577	52.7	37.0	14.9
05	1389555	57.0	55.3	629	46.2	36.7	11.3
06	1523940	69.1	72.3	847	42.6	35.2	7.3
7	1653098	75.4	72.6	912	41.3	35.7	12.5
8	1639441	67.5	64.2	872	40.2	35.0	7.3
9	1646970	71.3	62.3	952	37.0	34.3	10.8
10	1650869	67.8	64.0	761	33.4	33.3	11.8
11	1607762	53.9	52.9	584	32.1	32.0	n.a.

a: Average figures are the monthly averages of daily data. Eurobond spread is the spread between the 30-year Turkish Treasury Eurobond yield and 30-year US bond yield. Annual figures denote annualized values for the monthly data, that is they are calculated as [(X(t)/X(t-12))-1]*100. Expected inflation data comes from the biweekly survey of the Central Bank.

The key to understanding these contrasting phenomena is the high ratio of domestic debt to GDP and the issue of its sustainability. The imposed fiscal and monetary discipline of the program and the accompanying structural reforms notwithstanding, reducing the debt to GDP ratio to manageable levels requires a considerable time period. In the interim period, such an economy is vulnerable to changes in the market sentiment, which increases concerns about the debt sustainability. Such a high level of debt raises the possibility of multiple equilibria. Given the macroeconomic fundamentals, the type of equilibrium in which the economy is in, or approaching, is mainly determined by expectations. Negative expectations can yield an economy to a “bad” equilibrium, at which the rates of inflation, interest, and exchange are all high. Positive expectations will yield to a “good” equilibrium. Based on this possibility, one should look at both fundamentals and expectations.

4.1. Fundamentals and expectations: May 2001-October 2001

Right after the twin crises, Turkey took key structural reform measures: Weak banks were taken over by the SDIF and excluded from the banking system. The overnight borrowing of these excluded banks was significantly reduced, and some of the banks were re-capitalized or merged, or both, while some were actually sold. There was a dramatic change in the governance structure of

state-owned banks. Accumulated debts of the Treasury to these banks were paid and the state banks were re-capitalized. A politically independent board of directors was appointed. The board's mandate was specified as protecting the interests of depositors. A new management for these state banks was appointed, and the number of branches and employees were significantly reduced according to an operational plan. In May 2001 the Central Bank law was changed and the bank gained "tool independence". The law explicitly stated that the main goal of the Bank is price stability. In additional to structural reforms, both the fiscal and monetary policies remained on track.

However, excluding a few weeks prior to the September 11 terrorist attack in the Unites States and up to mid-October, market expectations were not in line with the improvement in fundamentals. The interest rate stayed at a high level. The exchange rate followed an upward trend. The spread of the Turkish Treasury bond stayed at high levels (see table 1). That is, the Turkish economy was at a bad equilibrium. But why?

There were at least four reasons hampering gains in policy credibility: First, some political developments-that is, disputes among the coalition parties regarding some of the structural reforms- increased doubts about the continuation of the program and raised the tensions in the market. Second, the financial sector had a significant amount of open foreign exchange position before the crisis-that is, the sharp depreciation of Turkish lira did have an adverse impact on the balance sheets of the entire banking system. Third, there were external shocks, namely the potential of negative developments in Argentina was thought to have a contagion effect for Turkey. Fourth, the exchange rate regime was radically altered and economic agents were not familiar with a floating exchange rate regime environment.

These developments led to negative expectations by the markets, as the sustainability of public debt was continuously questioned. There was a vicious cycle: despite improving macroeconomic fundamentals, negative expectations were pushing the economy to a bad equilibrium. That bad equilibrium, in turn, was validating negative expectations. In early August the exchange rate volatility started to decline, and this was seen as a positive sign for gains in policy credibility. However, the tragic events of September 11 reversed market sentiment. In just a few days time, interest rates increased by some fifteen percentage points and the Turkish lira depreciated considerably. Once again, the sustainability of the program began to be questioned.

4.2. Changing market sentiment: October 2001-May 2002

This worsening trend halted as it became evident that Turkey was going to further strengthen the ongoing program by additional structural fiscal measures and a banking sector re-capitalization program aiming for a quick recovery of sound banks. Also, there was the additional credit line from the IMF. The government announced its primary surplus target for 2002 as 6.5 percent of

GDP. This announcement was found credible by market participants, since it became evident that the ambitious primary budget surplus target of 6.5 percent of GNP for 2001 was, in fact, going to be met. In addition developments in the Central Bank's balance sheet were in line with the constraints agreed to by the IMF. One should also add to these positive developments the fact that the political disputes among the coalition parties were finally out of the picture. There were other contributing factors as well. First, the fundamental differences between the Argentina and Turkish economies became more apparent. Second, banks started to roll over their foreign credits. Third, the economic agents began to get used to the mechanics of the floating exchange rate regime and, since the beginning of August, the Central Bank intervention to foreign exchange market had been almost nil. Fourth, the structural reforms in the banking sector were continued. Fifth, to finalize the restructuring of the financial sector, in February 2002 a re-capitalization law passed. Sixth, at the beginning of 2002, a debt management law, designed like a fiscal responsibility act, was enacted by Parliament.

Consequently, the nominal exchange rate almost followed a continuously declining trend from mid-October up to the beginning of May 2002. A similar phenomenon was also observed in interest rates. In March 2002, for the first time since the eruption of the crisis, the industrial production index showed positive growth. This growth stance continued in the following months. Inflation started to decline sharply. A similar phenomenon was also observed in the Turkish Eurobond spreads.

4.3. Political and policy uncertainty

From the beginning of May, two negative developments occurred in the political sphere. First, the Prime Minister was hospitalized and there were widespread rumors about his health. This was considered lethal to political stability, as it led to the possibility of a meltdown in his party-the party with the largest representation in a three-party coalition government. Second, discussions about the necessary steps that should be taken to meet the Copenhagen criteria- which would start the negotiation process for possible European Union accession- started to undermine the unity of the coalition government. The resulting political uncertainty led to an environment of policy uncertainty. Although there was no change in the fiscal and monetary policy stance, as of the beginning of May 2002, interest rate, exchange rate, and Treasury spreads once again started to deteriorate, demonstrating the importance and the fragility of market expectations once again.

4.4. Political certainty

At the beginning of August the Parliament decided to have an early election on November 3, 2002. This decision calmed down the markets and both the exchange and interest rates started to follow a horizontal path. Towards the end of October, results of various polls demonstrated that the likelihood of a

one-party majority government was very high. Indeed this was what happened after the general election. Markets reaction was very positive and rapid. A sharp decline in interest rate occurred. The Turkish lira once again appreciated in nominal terms.