

Macroeconomic Developments and Exchange-Rate Policy in Turkey, 1980-2001

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Abstract

Turkey introduced an exchange-rate-based stabilization (ERBS) program in January 2000. The program seemed to be on track until the economy was hit by a sudden attack on the Turkish currency in November 2000. After a few months of muddling through, a second attack hit the currency in late February and Turkey declared that it was going to implement a floating exchange rate regime from that date onwards. This was not the first time experience with the ERBS however. In fact, since 1980 authorities have been using exchange rate in order to stabilize the economy even if such an announcement has been avoided most of the time. This article analyzes macroeconomic developments in Turkey in the period of 1980-2001 and provides a rationale for why policymakers need to support their exchange rate arrangement with other economic policies that the arrangement requires. Although, a properly valued exchange rate is critical for sound economic management and sustained growth, it's the adoption of appropriate monetary and fiscal policies that ultimately will ensure macroeconomic stability. Since 1980, exchange rate has been used as the main stabilization instrument in Turkey. But it has never been supplemented with the necessary macroeconomic policies to ensure its success.

Keywords: Inflation stabilization, Fiscal deficit

1. Introduction

Turkey introduced an exchange-rate-based stabilization (ERBS) program in January 2000. The daily values of the foreign exchange basket for the next 12 months were announced to the public. Until June 2001, the rate of crawl would be set to be consistent with the targeted inflation rate. After then, the exchange rate policy would be based on a pre-announced widening band around a central parity. The program seemed to be on track until the economy was hit by a sudden attack on the Turkish Lira (TL in short) in the second half of November 2000. After a few months of muddling through, a second attack hit the TL in late February. As a result of rapid capital flight, overnight interest rates jumped to over 4000 percent in un compounded terms on 21 February 2001 and Turkey declared that it was going to implement a floating exchange rate regime from that date onwards. This was not the first time experience with the ERBS however. In fact, since 1980 authorities have been actively using exchange rate in order to stabilize the economy even if such an announcement has been avoided most of the time.

Until 1980, Turkey had a fixed exchange rate like many other less developed countries in those years. From that time onwards, the evolution of exchange rate policy has been toward flexibly managed exchange rate rather than purely flexible. As inflation reached to record levels towards the end 1990s however, Turkish authorities switched to a pegged exchange rate as it is known to deliver greater policy discipline and credibility to a stabilization program by providing a clear nominal anchor. Other development that influenced Turkey's decision to adopt a pegged exchange rate arrangement in January 2000 was continuously rising level of dollarization in the economy. Over the 1990s, the ratio of foreign currency deposits to broad money has been 45-47 percent on average. The share of foreign currency deposits in total deposits rose from 25.5 percent in 1990 to 45.9 percent in 1999 and reached 57.6 percent by the end of 2001 (Bahmani-Oskooee & Domac, 2002) even though the average real rates of return on TL denominated assets were generally higher than those on foreign currency denominated deposits (Note 1). A study by the Fed also confirmed that Turkey has been one of the highly dollarized economies in the world. In that study, Turkey ranked as the fifth largest US currency holder with an estimated \$10 billion in circulation as of 2002.

Dollarization adds additional complications to the determination of appropriate exchange rate arrangement and to understand those, it is useful to distinguish between dollarization in the form of currency substitution and dollarization in the form of asset substitution as each has different implications for the exchange rate. To start with the first one, currency substitution results in greater exchange rate volatility and makes the demand for domestic component of the money stock more sensitive to interest rates. Therefore, according to the literature the attractiveness of a pegged exchange rate is greater, the higher is the level of currency substitution in the economy. Contrary to this, dollarization in the form of asset substitution, measured by the ratio of foreign currency denominated deposits to total deposits, requires greater exchange rate flexibility by creating a strong link between domestic currency interest rates and foreign currency interest rates, hence reducing monetary authorities' control on domestic currency interest rates. Given the fact that both forms of dollarization has been quite high in Turkey, the assessment of the proper exchange rate arrangement has not been an easy task for policymakers.

This article provides an overview of macroeconomic developments in Turkey in the period of 1980-2001, with particular emphasis given on the exchange rate policy. The aim is to draw attention to the fact that regardless of the exchange rate arrangement, appropriate macroeconomic policies need to support the arrangement to ensure its success. Turkey's history of macroeconomic developments prior to the ERBS program adopted in January 2000 can be divided into two phases: 1980-89 reforms towards a free market economy, and the post-1990 struggle to achieve fiscal discipline. Section 2 provides an overview of Turkey's experience with the 1980 stabilization and liberalization program; and argues that despite a considerable progress toward a global integration, budget deficits and high inflation remained as an issue. Section 3 follows with an overview of the post-1990 period, which has been dominated by excessive public sector spending, high and persistent inflation, political instability, and failed disinflation attempts. Section 4 presents the policy measures of the ERBS program and discusses the macroeconomic developments after the implementation of the program. Finally, Section 5 presents the concluding remarks. The major point emerging from the analysis is the following: Although, a properly valued exchange rate is critical for sound economic management and sustained growth, it's the adoption of appropriate monetary and fiscal policies that ultimately will ensure macroeconomic stability, regardless of the exchange rate arrangement.

2. 1980-1989: The First Big Reforms

Following a severe balance of payments crisis in the late 1970s, Turkey initiated a far-reaching stabilization and liberalization program in January 1980. External financial assistance provided for the program was one of the largest until then. The immediate goal of the program was to reduce inflation and relieve the economy from a severe foreign exchange constraint. The long term objectives were adopting a free market system and switching from inward-oriented industrialization to an outward-oriented industrialization. The program incorporated tight fiscal and monetary policies in order to restrain domestic demand and reduce the rate of inflation; and reforms consisted of price and interest rate deregulation, trade liberalization, and flexible determination of the exchange rate. Until 1980, Turkey had a fixed exchange rate system with multiple rates. The January 24, 1980 stabilization package changed the exchange rate policy fundamentally and as part of the market oriented policies a flexible exchange rate was adopted. From the very beginning of the program, the exchange rate was used as the main stabilization instrument not only for restraining domestic demand, but also shifting both consumption and production away from non-traded goods to traded goods.

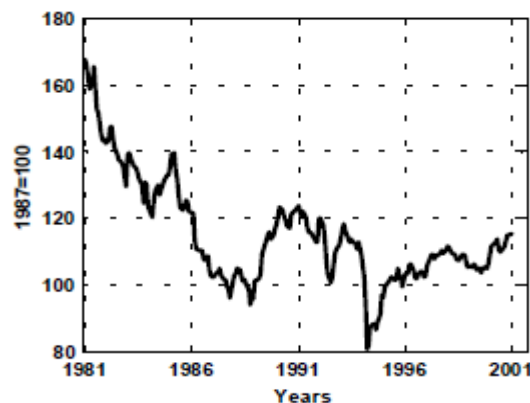


Figure 1. Real exchange rate index in Turkey

Description: An increase in the real exchange rate index indicates an appreciation of the Turkish Lira.

Source: Ertugrul and Selcuk (2002)

After a substantial one time devaluation in January, the exchange rate was depreciated more or less continuously in real terms until the late eighties to ensure that the Turkish Lira maintained its external competitiveness. Based on the real effective exchange rate series provided by the central bank; between the end of 1979 and the end of 1988 the TL was depreciated by 55 percent in real effective terms. From January 1980 to May 1981, the nominal exchange rate was adjusted at irregular intervals in order to offset the inflation differential between Turkey and major industrial trading partners. On May 1st 1981, irregular discrete devaluations were replaced by daily adjustments of the nominal exchange rate. Until August 1988, the rates were determined by the central bank. In August 1988, a system of partial market setting of the official exchange rate was introduced. The central bank and the participants of the foreign exchange market met at daily sessions of the interbank spot exchange market to determine the nominal exchange rate. In the period 1980-1988, depreciations were guided by trade considerations. Adjustments to the exchange rate were implemented with respect to the feedback mainly from exports and there has never been an explicit depreciation rule. At times, however, the use of exchange rate for maintaining competitiveness was tempered by concerns over its inflationary repercussions and in the years of accelerating inflation authorities refrained from sizable real depreciation.

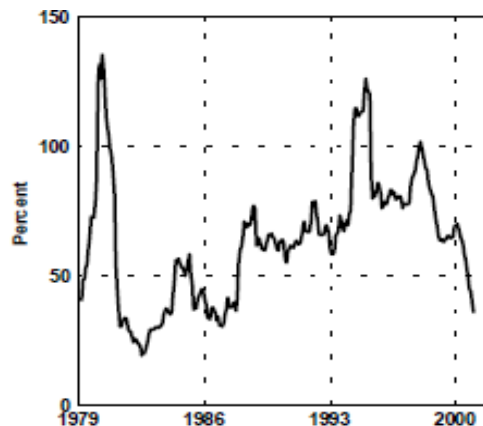


Figure 2. Inflation in Turkey

Description: Annual CPI inflation (in percent)

Source: Selcuk (2001)

The 1980 stabilization program led to a remarkable improvement in the external imbalance and the current account deficit declined from almost 6 percent of GNP in 1980 to 1.7 percent in 1982. Despite restrictive demand management, the real GNP growth rate averaged 4 percent over the period 1980-1983 owing to spectacular export performance. The rate of inflation started to decline in the second half of 1980 and decelerated from triple digits in 1980 to about 25 percent in 1982. This success did not last long however, inflation and public sector deficits both reversed their declining patterns in the mid-1980s. From 1980 to 1983, reforms were undertaken under an authoritarian military government. Freely competitive politics resumed only in 1987. Threatened by the opening up the political system and competitive pressures from rival parties, the government resorted to populist policies and used public resources generously. Real wages, which had been repressed severely since 1980, exploded in 1989-1990 when unions became active again (Celasun, Denizler & Dong, 1999). (Note 2) The upward trend in real wages coupled with populist policies had adverse effect on public accounts. Failure to rein in rising public sector deficit coupled with resurgence and continued strength of inflation prompted a shift in exchange rate strategy: Starting from 1988-89, the rate crawl was slowed down in order to reduce the inflationary effects of nominal depreciation.

The crucial determinants of the success against inflation in the early liberalization period were alleviated foreign debt burden, generous official capital inflows and the excess capacity inherited from import substitution industrialization period. There was neither productivity increase nor capital accumulation in order to achieve a long lived success in this new export oriented

growth strategy. On the fiscal side, improvement in public accounts was the result of sharp price adjustments (i.e., real wage cuts, increases in public good prices) rather than a radical fiscal adjustment.

3. 1990s: The Struggle to Achieve Fiscal Discipline

Over the 1990s, Turkey never achieved a period of sustained fiscal control. Public accounts continuously deteriorated except some small and short lived improvements in 1995 and 1998 caused by the stabilization programs. Between 1990 and 1994, the main reason of public sector deficit was the increase in public sector primary deficit caused by off

budget expenditures that have been run on behalf of the central government by the other segments of the public sector (ie., agricultural subsidies provided by non-financial state economic enterprises and subsidized credits provided by the state banks). After 1995, public sector deficit rose mainly because of the increase in the central government deficit due to interest payments on domestic debt.

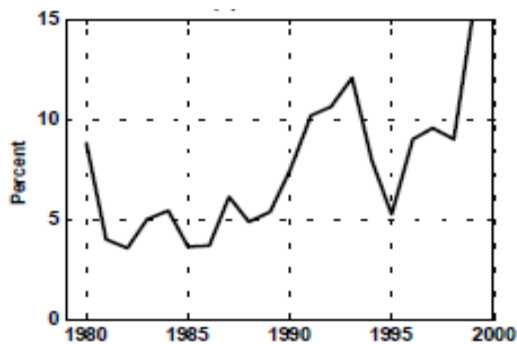


Figure 3. PSBR-GNP



Figure 4. Domestic Borrowing-GNP

Description: PSBR-GNP shows public sector borrowing requirement in percent of GNP. Domestic Borrowing-GNP shows domestic borrowing in percent of GNP.

Source: Ertugrul and Selcuk (2002)

Until mid-1980s, the Turkish economy was a net recipient of foreign capital inflows mainly through public accounts. After then, increase in foreign debt service requirements restrained public sector’s access to foreign funds and directed authorities to domestic market in order to finance budget deficit. Selling of government securities through periodic treasury auctions started in 1985. Banks and authorized institutions were the buyers. A secondary bills and bonds market was set up to enable government securities to be auctioned under a free market condition. Several incentives, including making government securities as part of banks’ liquidity requirements, were granted to domestic banks so as to increase demand for government debt instruments. In the next few years, authorities continued to increase the share of government securities that had to be purchased by banks. By 1991, the liquidity ratio reached 35 percent, of which 5 percent cash and 30 percent government securities.

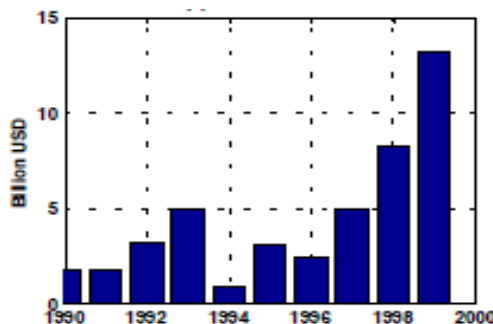


Figure 4. Short Positions of Commercial Banks in Turkey

Description: Short position is the difference between foreign exchange denominated liabilities and assets

Source: Ertugrul and Selcuk (2002)

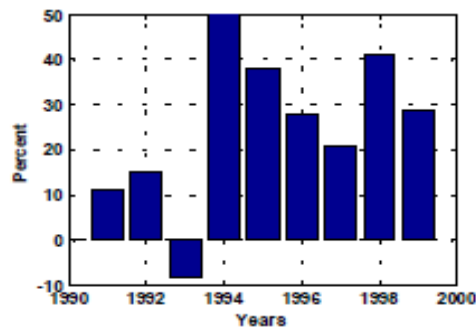


Figure 5. Dollar Interest Income from Domestic Debt

Description: Weighted average of ex-post dollar return from TL-denominated Turkish Treasury bills and Government bonds. The weighted rate of return is 140% in 1994. The vertical axis has been restricted in order to make all years visible.

Source: Ertugrul and Selcuk (2002)

After the remaining restrictions on capital inflows/outflows were lifted and capital account liberalization was completed at the end of 1989, financing of fiscal deficit through domestic borrowing was increasingly based on short-term capital inflows. Domestic commercial banks borrowed from abroad at lower interest rates and invested in high yielding government securities without hedging the currency risk. Net interest income they earned was much higher than the loss from currency depreciation because of the slower depreciation rate; hence they accumulated excessive short term foreign debt. Between 1990 and 1993, outstanding short term foreign debt stock increased by 96 percent and by the end of 1993 the ratio of gross short term foreign debt to Central Bank's FX reserves reached almost 300 percent. Foreign financed domestic borrowing and very short term maturity of the debt led to excessively high interest rates in the post-1995 period. Slowdown in capital inflows at times raised concerns about debt rollover which in turn increased the cost of domestic borrowing. Especially large capital outflows in the aftermath of Russian crisis led to a surge in Treasury auction interest rates. Meanwhile, increase in risk premium due to failed stabilization attempts, high and chronic inflation, unstable political and macroeconomic environment raised the cost of domestic borrowing further. In 1998, total interest payments (domestic and foreign) were claiming 40 percent of the consolidated budget total expenditures.

Table 1. Financial and Fiscal Indicators for the Turkish Economy

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
(as % of GNP)												
Current Account Balance *	-1.7	0.2	-0.6	-3.5	2.0	-1.4	-2.9	-1.4	1.0	-0.7	-4.9	1.3
Foreign Debt Stock	32.2	33.2	34.6	37.0	49.6	43.1	42.9	43.3	46.8	54.9	59.0	79.0
Domestic Debt Stock	6.1	6.8	11.7	12.8	14.0	14.6	18.5	20.2	21.7	29.3	29.0	69.2
Central Government Budget Balance *	-3.0	-5.3	-4.3	-6.7	-3.9	-4.0	-8.3	-7.6	-7.3	-11.9	-10.9	-16.9
Central Government Primary Budget Balance *	0.5	-1.5	-0.6	-0.9	3.8	3.3	1.7	0.1	4.3	1.8	5.3	6.4
PSBR **	7.4	10.2	10.6	12.3	7.9	5.0	8.6	7.7	9.4	15.5	11.8	16.4
Short-term foreign debt as % of Central Bank's FX reserves	159.1	185.4	207.0	298.3	159.0	126.7	104.9	96.0	105.3	98.9	127.6	87.3
Dollarization***	25.5	33.6	38.6	44.3	51.7	53.0	48.5	50.4	46.7	45.9	45.3	57.6
Total interest payments as % of total budget expenditures	20.8	18.5	18.2	24.0	33.2	33.7	38.0	28.5	39.6	38.2	43.5	50.6
Interest payments on domestic debt as % of total tax revenues	21.2	21.5	21.6	35.0	39.7	43.9	59.2	41.7	61.0	66.4	70.9	94.4
Real interest rates on domestic borrowing	-3.9	8.7	10.4	12.9	28.2	17.4	30.4	22.3	20.5	27.1	-10.9	27.1
CPI (average annual % change)	60.3	66.0	70.0	66.0	106.3	89.1	80.4	85.8	84.6	64.9	54.9	54.4
CPI (annual % change, Dec to Dec)	60.4	71.1	66.0	71.1	125.5	76.0	79.8	99.1	69.7	68.8	39.0	68.5
Real effective exchange rate	117.0	112.9	114.9	125.7	95.7	103.1	101.7	115.9	120.9	127.3	147.6	116.3

Description: * (+) sign indicates surplus. ** PSBR is public sector borrowing requirement. *** FX deposits as a percentage of total deposits (end year). Real interests on domestic borrowing were obtained from annual average compounded interest rates on domestic borrowing deflated by annual average CPI inflation. Real effective exchange rate is CPI based and increase denotes appreciation.

Source: Central Bank of Republic of Turkey, Treasury, Bahmani-Oskooee and Domac (2002).

Especially between 1990 and 1993, Turkey experienced large and growing fiscal imbalance; the public sector borrowing requirement rose from 7.4 percent of GNP to 12.3 percent. And domestic debt stock, by increasing from 6 percent of GNP in 1990 to 12.8 percent of GNP in 1993, more than doubled during the same period. In 1992, high levels of domestic debt service payments led to a shift in government's deficit financing policy and the share of money financing was raised. Beginning from the second half of 1993, nominal interest rates on short-term Treasury-bills were lowered considerably to save on interest expenditures. Furthermore, auctions of Treasury-bills with short-term maturity were canceled one after another in the last months of 1993; and the Treasury relied heavily on short term credit from the central bank. The amount of domestic credit from the central bank in the last quarter of 1993 corresponded to 30 percent of international reserves of the central bank at that time, and reached record levels in the first few weeks of 1994. Meanwhile, the announced budget had no fiscal measures for 1994; inflationary expectations were high because of the delayed increases on government administered prices. (Note 3) Cancellation of Treasury auctions coupled with excessive liquidity build-up in domestic financial markets had raised concerns about a possible speculative attack; and following an unexpected sharp downgrading in Turkey's credit rating in international capital markets, the economy was hit by a severe currency crisis. Commercial banks, accumulated excessive short-term foreign debt during 1991-1993, rushed to the foreign exchange market. The central bank lost half of its foreign reserves when it was bailing out the banks and defending the Turkish Lira. CPI inflation hit 120 percent and the currency was devalued by almost 70 percent after the crisis.

On April 5, 1994, one week after the elections, a stabilization program supported by a three year stand-by agreement with the IMF was introduced. The program relied on substantial front-loaded fiscal adjustment; including increases on government administered prices up to 100 percent, and accomplished a major correction in the fiscal stance. However, the difficulties in delivering on structural reforms planned for 1994 coupled with the tensions within the coalition government and the speculations on the likelihood of early general elections impaired the credibility of the program. With the revival of inflationary expectations, the initial success in reducing inflation proved fleeting.

Against this background, a new inflation stabilization strategy based on tight monetary policy cum real exchange rate targeting was formulated in early 1995: Strict limits on domestic credit expansion were to be complemented by an interest rate policy aimed at limiting exchange rate depreciation to a pace consistent with the inflation target. More specifically the nominal exchange rate, defined as "1.5 German marks +1.0 USD", was to be maintained above an agreed floor for each month and it was to be increased by as much as the inflation target for the month. The new policy, including inflation targets and quarterly limits on the pace of exchange rate depreciation, were announced to the public at the outset in order to bring price expectations in line with inflation targets. It should be noted that during the first review of the 1995 program on November 18, 1994; IMF directors and Turkish authorities discussed the possibility of designing a heterodox ERBS around a crawling peg. However, impaired credibility of the 1994 program and the major uncertainties that prevailed in the domestic political arena, created a strong case against commitment to a firm exchange rate anchor. (Note 4)

Until the end of 1999 the central bank continued its real exchange rate targeting policy. Unfortunately the stabilization program came to end in September 1995 because of upcoming general elections, and lost fiscal discipline. Following general elections in December 1995, the coalition government changed two times in 1996. Political cum macroeconomic instability and lack of fiscal discipline dominated the economy once again. Central government budget deficit jumped from 4 percent of GNP in 1995 to 8.3 percent of GNP in 1996; while the CPI inflation reached 100 percent by the end of 1997. Meanwhile, capital inflows surged and the economy entered a fast growth period which continued until after the Russian crisis in August 1998.

As comes to the situation before 2000 ERBS program, an eighteen month stabilization program aiming at reducing inflation was introduced in July 1998. Monetary policy was tightened and the program resulted in a temporary surplus in public sector primary balance. In the following year, fiscal control was completely lost mainly because of the general plus local elections to be held in April 1999. Central government expenditures rose from 29 percent of GNP in 1998 to 36 percent of GNP in 1999 and the budget deficit jumped from 7 percent of

GNP to 12 percent. Deficit was financed completely through direct domestic borrowing. Consequently, net domestic debt surged from 24 percent of GNP to 41 percent. Under these circumstances, the program came to end in 1999 due to lost fiscal control and adverse effects of Russian crisis.

4. The 2000-2001 ERBS Program

4.1. Policy measures

As of January 2000, the central bank moved from a “managed float” to a pre-announced exchange rate path against a currency basket composed of a weighted average of the euro and the US dollar. The daily values of the basket for the 12 month period were announced to the public. The programmed depreciation of the TL was equal to the WPI inflation target (20 percent) for the year of 2000. The exit strategy was announced in conjunction with the launching of the program. Until June 2001, the rate of crawl was supposed to be consistent with the targeted inflation rate. After then, there would be a gradually widening band around a central parity.

The exchange rate policy was to be assisted by a monetary policy similar to a currency board. Net domestic assets of the central bank were not to exceed their end-1999 level at the end of each quarter. Fiscal deficit was to be financed mainly by selling bonds. Sterilization was completely excluded. Therefore, base money was to be changed only in connection with balance of payments inflows or outflows, with interest rates being fully market determined. In order to break downward rigidity in inflation, the program was supported by prices and incomes policies, according to which public sector prices, agricultural support prices, rents, the minimum wage, and civil servants’ wages were to be increased in line with the targeted inflation.

The program rested on an up-front fiscal adjustment and broad based structural reforms such as privatization, deregulation of the banking sector, and social security and tax reforms. In order to control overall public sector, all public sector accounts were consolidated. According to this, consolidated public sector consists of the central government, extra-budgetary funds, local administrations, non-financial state enterprises, unemployment insurance fund, social security institutions, central bank, and the duty losses of state banks. Fundamental goals were bringing down the CPI inflation from 68.8 percent at the end of 1999 to 25 percent by end-2000 and raising the consolidated public sector primary balance from a deficit of 2.8 percent of GNP in 1999 to a surplus of 3.7 percent of GNP. Achieving these targets for 2000 required fiscal measures worth 6.5 percent of GNP, of which more than two-thirds would result from revenue raising measures and the remainder from expenditure cuts. Revenue raising measures that were introduced at the end of 1999 were expected to amount to 5 percent of GNP in 2000. (Note 5) The target for privatization receipts in 2000 was \$7.6 billion (3.5 percent of GNP). But delays and problems in the privatization process led to a \$4 billion shortfall (2 percent of GNP). Thus, the amount of collected privatization receipts was around \$3.5 billion (1.6 percent of GNP) in 2000, which was more than the sum of 15 years of privatization receipts since privatization program started to be implemented in the mid-1980s.

4.2. Macroeconomic developments after the implementation of the program

The debate over whether exchange rate based stabilization is superior to money based stabilization or the other way around for a successful and long lasting disinflation still has not reached an agreement. But it’s now been widely acknowledged in the literature that the business cycle associated with ERBS are strikingly different from those associated with money based stabilization plans: ERBS is characterized by initial increase consumption and real GDP followed by a later contraction, pronounced deterioration in current account, and sustained real exchange rate appreciation. More specifically, after the exchange rate is fixed, private consumption rises rapidly driven mainly by a boom in consumption of durable goods. Large increases in imports of durable goods lead to a considerable deterioration in trade balance. The increase in consumption is accompanied by an expansion in output in the early stages. Typically output in the non-traded goods sector expands far more than output in the traded goods sector, which even contracts sometimes. Inflation usually falls, but convergence to the devaluation rate is slow and incomplete, which results in sustained real exchange rate appreciation. During the program, the current account deficit increases sharply and is financed by large capital inflows, leading to an increase in foreign liabilities. The capital inflows are also associated with a large increase in the ratio of money balances to GDP. Later on, the initial boom is reversed and real output contracts. Most of the time, recession starts before the program ends and as the recession sets in the real exchange rate continues to appreciate. The program eventually ends in full-blown balance of payments crisis with costly devaluations and large losses of international reserves.

Main macroeconomic developments after the implementation of the program are in line with the general dynamics displayed by other ERBS programs. The early announcement of the program on 9 December 1999, led to a decline in inflationary expectations. For the first time inflation expectations for the coming twelve month period were lower than 50 per cent according to the central bank business survey. Although the recorded decline was the lowest ever, it was still above the inflation target. Upon the announcement, nominal interest rates declined immediately. (Note 6) The sharp decline in interest rates was accompanied by a surge in spending. The real rate of growth in imports rose from -2 percent in 1999:3 to 5.2 percent in 1999:4 and jumped to quarterly rates of 34.9 percent and 25.2 percent in the first half

of 2000. The surge in sales of durable goods and cars was remarkable. The growth rate in sales of durable goods jumped from 4.3 percent in December of 1999 to 62 percent in January of 2000, while the rate of growth of car sales jumped from 29 percent to 107.5. Because of the very strong upturn in domestic demand, real GDP which has fallen 5 percent in 1999, expanded at a rate of 7.4 percent in 2000.

The recovery in domestic demand was not homogeneous. The real rate of growth in private consumption expenditures for durables rose from -7.6 percent in 1999:3 to 9 percent in 1999:4, and then jumped to quarterly rates of 24 percent and 26.7 percent in the first half of 2000. The real rate of growth in semi-durables consumption expenditures on the other hand, followed their declining trend in the first six months of the program. By the end of the third quarter, the real rate of growth of expenditure on durables consumption reached 40 percent while it was only 9.6 percent for total private consumption.

Table 2. Annual Real Rate of Growth (%)

	(over the same period of the previous year)					
	Total consumption	Durables consumption	Semi-durables consumption	Expenditure on services	Imports	GDP
2000Q1	4.01	24.15	-1.66	6.49	34.89	5.61
2000Q2	4.61	26.75	-7.69	7.21	25.26	6.93
2000Q3	9.63	39.51	8.14	7.86	23.48	7.84
2000Q4	5.56	19.28	5.37	8.29	19.55	8.55
2001Q1	-2.99	-20.32	3.80	-2.07	-14.47	-0.99
2001Q2	-11.99	-36.12	-12.46	-12.50	-31.00	-9.79
2001Q3	-9.86	-31.07	-9.88	-9.28	-26.47	-7.52
2001Q4	-11.34	-33.25	-19.00	-11.49	-25.95	-10.34
2002Q1	-1.86	-7.00	-2.09	2.02	2.49	2.3
2002Q2	3.17	8.66	4.33	10.04	20.36	8.95

Description: Consumption figures belong to private sector

Source: Central Bank of Republic of Turkey

Economic growth following the inception of the program was mainly due to the increase in value added in domestic trade sector, which is part of the non-traded goods sector. Expansion in domestic demand and surge in imports resulted in an 11 percent increase in domestic trade sector value added in 2000. In the overall manufacturing industry, the highest and most rapid recovery occurred in the transportation industry. The production in the transportation industry, especially the production of automobiles, increased by 47.8 percent compared to a mere 6.5 percent increase in overall manufacturing industry production.

The program succeeded in reducing the inflation, but not enough to prevent the sizable real appreciation associated with ERBS episodes. Due to slow convergence of inflation, real exchange rate appreciated 16 percent by the end of 2000. Real appreciation was accompanied by massive net capital inflows by non-residents, which reached 15.5 billion US dollars by the end of October 2000. Meanwhile, strong domestic purchases of foreign durables, largely automobiles, caused a huge spike in imports and trade deficit almost doubled. Surge in domestic absorption coupled with real appreciation of the domestic currency led to the rapid expansion in current account deficit reaching 9.8 billion US dollars (almost 5 percent of GNP) by the end of the year.

Casual evidence suggests that a slowdown in inflation is typically accompanied by strong money demand and reverse currency substitution. However, demand for currency did not increase significantly in the first quarter of the program and there was not much reverse currency substitution either. In fact, by the end of May 2000, currency in circulation decreased by 8 percent in real terms with respect to the end of 1999. In Turkey, currency is still the most commonly used medium of exchange in daily transactions. Therefore, weak demand for it led authorities to conclude that the economic recovery had been weaker than expected. During the same period, M1 and M2 monetary aggregates contracted by 12.9 percent and 16.6 percent respectively in real terms with respect to the end of 1999. The observed contraction in narrow money aggregates was driven mainly by the contraction in TL denominated deposits. Sharp and rapid decline in interest rates resulted in higher ex-ante real interest rates on foreign currency denominated deposits relative to the TL denominated deposits; hence TL denominated deposits contracted substantially in real terms. Foreign currency denominated deposits on the other hand, increased in real terms throughout the year. The appreciation of the

US dollar against the euro until April 2000 also raised the demand for US dollar denominated deposits and prevented the shift from foreign currency denominated deposits partially. (Note 7)

Regarding the fiscal front, fiscal benchmarks were attained successfully. The primary surplus of the consolidated government sector increased to 4.6 percent of GNP; it was far above the target of 3.6 percent of GNP. More importantly, the consolidated public sector primary balance turned into a surplus of 2.8 percent of GNP. The consolidated government sector budget deficit was 9.3 percent of GNP (including privatization receipts), of which 8 percent was financed through net domestic borrowing and the rest was through net foreign borrowing. The Treasury managed to borrow \$7.5 billion from foreign markets through bond issue in 2000; the net international reserves increased mainly because of the foreign borrowing of the Treasury in the first half of the year. As a matter of fact, the program appeared to be successful in the first ten months of its implementation except deteriorating external balance.

By November 2000 IMF officials started to express their concerns on the widening current account deficit. On November 22nd, a financial distress emerged in domestic banking sector turned into a full-blown liquidity crisis in no time when the sustainability of the peg was called into question. Foreign creditors reduced the rollover of their credit immediately forcing a reduction of the foreign debt mainly of commercial banks while foreign investors liquidated their TL denominated assets, mainly Treasury-bills. Consequently, demand for foreign currency increased sharply while the rapid liquidation of government debt instruments raised secondary market interest rates to very high levels. In an attempt to help problematic banks and prevent interest rates from skyrocketing, the central bank extended domestic credit; which increased the drain on foreign reserves by fueling demand for foreign currency further. As a matter of fact, the loss in foreign reserves was much higher than the extended domestic credit, thus created a reduction in base money, which then raised interest rates further. More than one quarter of the total central bank reserves flowed out during the November crisis. Only after the announcement of the IMF package on 6 December, the capital outflow stopped. In order to bail out troubled banks, more than \$6 billion worth of non-cash securities (around 3 percent of GNP) was issued. After a few months of muddling through to keep the nominal anchor at all costs, a second attack came on February 20th. The overnight interest rates jumped to sky-high levels and the central bank sold \$5.2 billion within two days. (Note 8) Two days later, the exchange rate system collapsed and domestic currency depreciated by 40 percent in a day. The currency peg was abandoned and replaced with a regime of free floating.

The economy fell into a severe recession in February 2001, which continued almost until the last quarter of 2002. Real GDP declined by 7.5 percent after expanding at a rate of 7.4 percent in 2000. The highest and most rapid decline occurred in the transportation industry, which contracted 20 by percent in 2001:1 and 49 percent in 2001:2. Of the consumption expenditures, the deepest slump was witnessed in durables, with contractions of 20.32 percent and 36.12 percent in the first half of 2001. Durables expenditures followed their contractionary trend until the second quarter of 2002. Unlike durables, total private consumption expenditures decreased by 3-12 percent in real terms within the first six months of 2001. After durables, the highest contraction was in imports, with annual real rates of growth of -14.5 percent in the first quarter and -31 percent in the second quarters. Following the severe downturn in domestic absorption, the current account balance tilted to a surplus of 3.3 billion US dollars from a deficit of 9.8 billion US dollars.

The sharp depreciation that followed the floating of the Turkish lira in February 2001 and the hike in interest rates inflicted heavy losses in the banking sector as their balance sheets combined large currency mismatches (foreign currency denominated liabilities vs. TL denominated assets) and large maturity mismatches (short-term liabilities vs. long-term assets). Many banks became insolvent. In order to avoid a widespread banking sector bankruptcy, the government swapped TL bonds held by banks for FX bonds, issued recapitalization bonds to banks, and borrowed heavily from the IMF to finance these transactions. As a result, both domestic and foreign debt soared in 2001. Foreign debt stock rose to 79 percent of GNP while domestic debt stock jumped from 29 percent of GNP to 69 percent of GNP with interest payments on domestic debt claiming almost all of government's tax revenues.

5. Conclusion

Over the 1980s and the 1990s, exchange rate has been used as the main stabilization tool in Turkey even though such an announcement has been never made mainly because of high political costs of undertaking exchange rate adjustments in an explicit arrangement. By avoiding the announcement of a discrete rule, movements in the exchange rate could easily be attributed to the market and nobody could blame the continuous depreciation of the Turkish Lira vis-à-vis major currencies on the officials. The overall exchange rate policy in the period concerned has been managed floating in Turkey, which requires monetary policy subordinating to the needs of a stable nominal exchange rate meaning the burden of stabilizing domestic demand resulting from economic shocks falls largely on fiscal policy. In Turkey however, monetary authorities subordinated mainly to the needs of budget deficit.

Despite the lack of a radical fiscal adjustment, there was a short lived success in the early 1980s thanks to the generous official capital inflows following the severe balance of payments crisis the economy had towards the end of 1970s. Besides, maintaining export competitiveness was the only consideration behind the adjustments in the nominal exchange rate in the 1980s since high and chronic inflation was not in the picture yet. As domestic financial markets became more integrated with world capital markets following the completion of full capital account convertibility in 1989 and financing of excessive public expenditures via domestic borrowing became increasingly based on short-term capital inflows channeled by domestic commercial banks, the short run benefits of preventing nominal appreciation were outweighed by its long term costs as it jeopardized economic growth by leading to severe macroeconomic disruptions in the economy. Poorly supervised and regulated banking sector accumulated large balance sheet weaknesses, meanwhile, rapid domestic credit expansion raised inflation further. Instead of allowing the nominal exchange rate to adjust in response to capital inflows, authorities have often sterilized the inflows and aggravated inflation even more. Sterilization prevented domestic interest rates from falling which attracted more inflows and resulted in widening current account deficit. Short term nature of the capital inflows due to unstable internal conditions owing to frequently changing ruling party and short-lived coalition governments in the 1990s increased capital account volatility over time and the economy eventually became dependent on pro-cyclical capital flows which also led to a very distinctive boom-bust cycle in economic activity.

In addressing persistently high inflation, large fiscal deficit and deteriorating balance of payments position, policymakers embarked on an ERBS program in January 2000 by formally switching from managed floating exchange rate to a crawling peg. Fiscal policy was finally disciplined, at least seemingly disciplined based on the attained fiscal targets for the program, for the peg to function effectively. But success of a pegged exchange rate depends on, apart from fiscal discipline, how healthy domestic financial system is. Turkish banking sector, lacking strong prudential regulations and supervisory standards, became rapidly and excessively exposed to currency and maturity mismatches in their balance sheets following the inception of the program and suffered large losses, undermining banking stability, when the economy was hit by severe attack on the Turkish lira at the end of 2000 .

This paper, based on the exchange rate policy from 1980 to 2001 in Turkey, provides a rationale for why policymakers need to support their exchange rate arrangement with other economic policies that the arrangement requires. Although, a properly valued exchange rate is critical for sound economic management and sustained growth, it's the adoption of appropriate monetary and fiscal policies that ultimately will ensure macroeconomic stability, regardless of the exchange rate arrangement. From 1980 onwards, exchange rate has been actively used for the purpose of stabilizing the economy in Turkey. But it has never been supplemented with the necessary macroeconomic policies to ensure its success.

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Notes

Note 1. Between 1990 and 2000, the average real rates of return on TL denominated deposits were 20 percent in Turkey while the same rate were about 3 percent for foreign currency denominated deposits according to Civcir (2005).

Note 2. The 1988-89 period saw a sharp increase in wages: 129% in private and 188% in the public sector according to Celasun et. al (1999).

Note 3. In Turkey, price adjustments have been typically postponed until after the elections. Because of the local elections to be held in March 1994, price increases on public goods were delayed. Based on experience from previous elections, the public knew that the prices would go up right after the elections in March. Ozatay (2005) provides empirical evidence for pre-electoral manipulations of public sector prices in Turkey. His results suggest that in the 1987-2003 period, around the election times; public sector prices were kept significantly below private sector prices.

Note 4. IMF Staff Report, April 6, 1995.

Note 5. On 26 November 1999, an earthquake tax package and withholding tax on government securities were introduced in order to cover the losses of the earthquakes and support the stabilization program. The contribution of the savings generated from the one-off measures in the earthquake package was 0.75 percent in 2000. The withholding tax, which was introduced in order to reduce the windfall gains from the decline in inflation, generated savings of 1.3 per cent of GNP in 2000. In December, additional revenue raising measures such as 2 percent increase in VAT and increases in tax liabilities on interest earnings were introduced.

Note 6. Table.6 in OECD (2001) shows that nominal interest rates on three month maturity of Treasury secondary market securities fell from 96.4 percent in September 1999 to 51.6 percent in December upon the announcement of the program and continued to fall until mid-summer.

Note 7. In Turkey, more than half of the foreign currency denominated deposits is US dollar based.

Note 8. Gokkent et. al. (2003) states that interbank weighted average overnight simple interest rates, which were 43 % on February 19th, jumped to 2058 % on the 20th, peaked at 4019 % on the 21st, fell to 1195 % on the 22nd, then to 568 % on the 23rd, finally settled at around 100 % by end – February.