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## **THE GLOBAL CRISIS AND THE TURKISH ECONOMY**

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\* 1) This is a revised version of a paper presented at the TWN-CAP Conference in Penang, Malaysia during 18-20 August 2009. It is last updated on 14 October 2009.

\*\* 2) I thank Yılmaz Akyüz for his comments on the first draft of the paper.

# THE GLOBAL CRISIS AND THE TURKISH ECONOMY

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## 1- INTRODUCTION

Turkey is quite familiar with financial crises and recessions that follow and the recent 2008-09 crisis is the fifth in the last 30 years. Turkey had a foreign debt crisis in 1979, followed by a “stabilization and liberalization program” in January 1980. This program was based on a stand-by agreement with the IMF and countered the crisis with an extensive liberalization in finance and trade. Measures continued throughout the 1980s and culminated into capital account liberalization in August 1989.

In early 1994, a post-liberalization financial crisis started, followed by another stabilization program that was supported with an IMF stand-by agreement in April 1994. The contagion effects of the Asian and particularly the Russian crises brought about a protracted crisis in Turkey in 1998 and 1999.<sup>1</sup> Negative growth in these years, combined with an inflation of over 60%, led to the announcement of a “disinflation program”, accompanied by the 17<sup>th</sup> stand-by agreement with the IMF at the end of 1999.<sup>2</sup>

The nominal anchor of the disinflation program was a pre-announced crawling peg exchange rate system, formulated in the context of the IMF agreement. The program emphasized on structural reforms, privatizations and downsizing of the public sector and would be in effect for three years until end-2002. But it was short lived; following a two-tier crisis in December 2000 and February 2001, the crawling-peg system was ended to be replaced by a floating exchange rate system. Thus came in the 18<sup>th</sup> stand-by agreement accompanied by a sizeable IMF credit.

The 18<sup>th</sup> agreement ended in 2005 in a state of relative tranquillity, but the authorities, with insistence of big businesses, asked for the 19<sup>th</sup> agreement. The argument was that the agreement would provide an anchor for policy, would encourage capital inflows, and help dampen exchange rate fluctuations.<sup>3</sup> Thus, the 19<sup>th</sup> stand-by agreement became effective for a three year period from May 2005 to May 2008. It was becoming clear in May 2008 that the global crisis was reaching the shores of Turkey.

Once again, insistent calls for an IMF agreement started, with the same old argument that it will be an anchor for policy and a safeguard against the global crisis. This must be a good example of what Akyüz (2008, p. 16) describes as “Lack of self-insurance against a sudden stop and reversal of capital flows, and excessive reliance on help and policy advice from the International Monetary Fund (IMF).” But this time, the government, after an election victory in the summer of 2007, declared its reluctance to sign another IMF agreement. The issue is still hotly debated at the time of writing in September 2009.

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<sup>1</sup> In 1999, there was also an earthquake that hit the industrial heartland in the north-west of the country.

<sup>2</sup> The first stand-by agreement with the IMF was signed in 1961.

<sup>3</sup> Reports of the Central Bank of Turkey contain remarks on the relation between exchange rate volatility and news of IMF agreements and evaluations. More on this below in section 4.

The crisis of 2008-09 in Turkey has been similar to the earlier ones in some respects, but there have also been important differences. For instance, in earlier crises there were austerity measures, aimed to reduce budget and current account deficits, and hikes in interest rates, exchange rates and inflation. In the crisis of 2008-09, interest rates and inflation declined and several economic stimulus packages were put into effect, raising budget deficits. There was not an effort to reduce the current account deficit as in the earlier crises; adjustment came with a sharp fall in private demand, lower import prices and some unexpected, unexplained foreign exchange inflows.

The first aim of this paper is to examine the extent and the channels through which the global crisis affected the Turkish economy. Among these channels, we consider trade, capital movements, external and internal financing and expectations. For an assessment with these dimensions, we first need to establish the depth of the recession. In the first quarter of 2009, the Turkish economy recorded the sharpest quarterly decline of the last three decades in GDP with -14.3% and the highest unemployment rate with nearly 16%.

These are among the highest rates when compared with other countries and indicate that the Turkish economy had a serious blow from the global crisis of 2008-09. This is not surprising given the degree of Turkey's integration with the global economy and the severity of the recent global recession, which has already earned names such as "Depression" (Eichengreen and O'Rourke, 2009a and 2009b), "Half Depression" and "Great Recession" (Krugman (2009). Whatever the effect of the global crisis, the following question comes to mind; why was there such a deep recession in Turkey, deeper than in countries with excessive exposures in banking and foreign exchange?

With such questions in mind, the answer to which is given in the concluding section, the recession in Turkey is explained in the following section 2 with a summary of developments in growth, employment, inflation and exchange rates. This section attempts to answer questions related to the contribution of several demand components, the role of capital movements and economic policies on growth and employment. In making explanations, we often refer to the crisis of 2000-01 for comparison purposes.

Section 3 explains four channels whereby the global crisis is transmitted; the current account, the capital account, banking and finance and uncertainty/expectations. In this section, the sharp fall in foreign demand, the role of trade finance, interesting variations in the errors and omissions item are among the issues addressed. As for foreign debt, we find that the non-financial corporate sector is still vulnerable in this respect. Section 3 also examines the banking sector in Turkey and finds that after the restructuring in 2001-02, the sector expanded substantially, but this expansion did not reach the levels of a Minsky bubble. This section reports that the Turkish banks did not carry toxic assets.

The second aim of the paper is to explain the policy responses in Turkey to counteract the effects of the recent global crisis. In section 4, we first explain the monetary policy implemented by the Central Bank of the Republic of Turkey (CBRT) during 2002-07, with inflation targeting as the framework and reserve accumulation as a performance

criterion, formulated in agreement with the IMF in 2001-02. We then explain the CBRT reaction to the recent global crisis, which we find rather late. Some details of the recent monetary policy changes are left to Appendix I.

Section 5 first gives information on the fiscal policies implemented in Turkey during 2002-07, which emphasized primary budget surpluses. This section then explains that fiscal balances were deteriorating before the global crisis reached Turkey. Fiscal policy responses to the recent crisis is explained in this section briefly, with the details left to Appendix II. It is explained here that the recent fiscal measures were late and not sustainable, given the burdens they brought on to the budget already in deficit.

A final aim of this paper is to discuss future prospects for the Turkish economy on the basis of likely developments in the global economy. This discussion is made in section 6 with reference to the forecasts of the Medium Term Programme of Turkey and of the IMF and points to the significant decline in the predicted performance of Turkey.

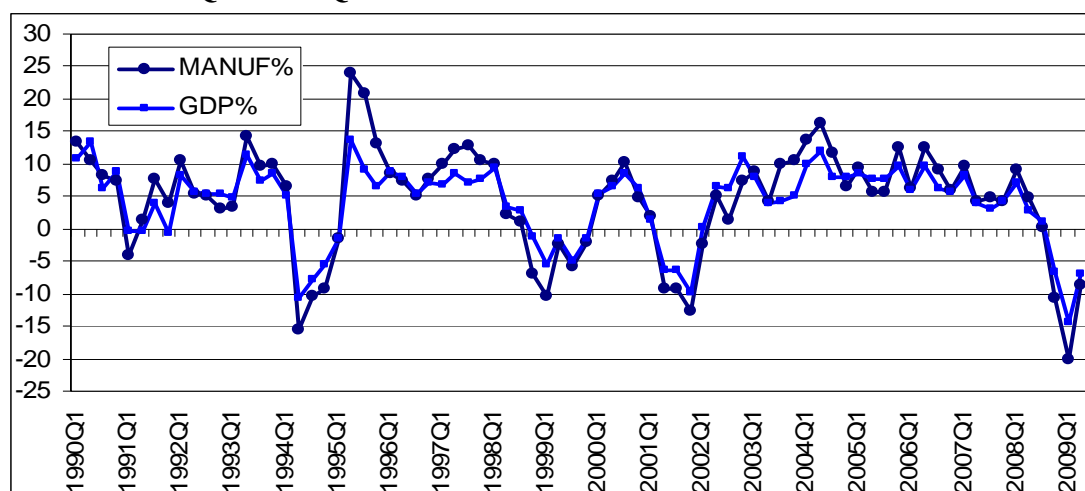
Section 7 concludes the paper with remarks on the deep recession in Turkey and policies.

## 2- RECENT DEVELOPMENTS; GROWTH, EMPLOYMENT AND INFLATION

### Growth

After the turbulences and volatility in the 1990s and early 2000s, the Turkish economy recorded a relatively high and stable growth between 2002 and mid-2007. The year-on-year growth rates of quarterly GDP and manufacturing output, shown below in Graph 1, are telling in this respect. However, GDP growth started to decline markedly in mid-2007. From an average of 7.2% during 2002-2006, growth was down to 3.7% during 2Q07 - 3Q08. Growth rates plunged down to -6.5% in 4Q08, to -14.3% in 1Q09 as the sharpest decline in the last three decades, and to -7.0% in 2Q09.

**Graph 1 Year-on-year Growth Rates of Quarterly GDP and Manufacturing Output 1990Q1 - 2009Q2**



**Source:** TURKSTAT and CBRT.

The sharp decline in growth is even more strikingly visible in monthly industrial production. The year-on-year growth rates of monthly industrial production during the four recessions in 1994-95, 1998-99, 2000-01 and 2008-09 are provided in Table 1.

Growth rates of the recession of 1994-95 are provided in column 1 of the table. This home-made recession started in 02/94 and lasted until 03/95 for 14 months. The recession of 1998-99, which started with the contagion effects of the Asian and Russian crises, lasted for 15 months from 09/98 to 11/99. The recession of 2000-02, which followed an exchange rate targeting regime, also lasted for 15 months between 12/2000 and 02/2002. The latest recession started in August 2008 and, as can be seen in column 4 of the table, has been going on for 12 months at the time of writing. The last column of the table contains manufacturing capacity utilization rates since June 2008.

**Table 1 Year-on-year Growth Rates in Monthly Industrial Production Index, Recessions During 1994 - 2009 and Manufacturing Capacity Utilization**

Months	Industrial Production, Year-on-year % Change								Man Capacity Utilization
	02/94 - 03/95		09/98 - 11/99		12/00 - 02/02		08/08 - --		06/08 - --
-1	14,4	1,8	12,80	2,4	82,3				
0	8,5	0,7	10,55	3,8	80,0				
1	02/94 -3,6	09/98 0,1	12/00 -4,72	08/08 -3,6	08/08 76,2				
2	1,9	-3,1	8,69	-4,3	79,8				
3	-10,4	-3,3	-3,92	-6,7	76,7				
4	-16,3	-10,3	-6,67	-13,2	72,9				
5	-8,5	-8,3	-11,04	-17,8	64,7				
6	-16,3	-5,8	-10,70	-21,4	63,8				
7	-0,4	-10,9	-11,43	-23,9	63,8				
8	-7,2	5,3	-10,40	-20,8	64,7				
9	-6,3	-3,7	-10,17	-18,5	66,8				
10	-2,7	1,2	-8,68	-17,4	70,4				
11	-11,5	-1,4	-13,39	-10,3	72,7				
12	-8,0	-10,2	-14,13	-9,1	72,3				
13	-2,0	-7,1	-7,74		69,7				
14	03/95 -1,8	-7,1	-2,77						
15	13,6	11/99 -0,2	02/02 -5,51						
16	13,9	5,3	18,50						
17		3,1	15,77						

**Source:** TURKSTAT and CBRT.

To better explain the growth performance of Turkey in the last decade, we dwell on four characteristics of the growth episode of 2002-07 and of the recession of 2008-09. Firstly, a higher and a more stable growth during 2002-2007 was recorded not only in Turkey;

this was a general tendency in the world, particularly in developing countries. But Turkish growth performance was relatively worse after 2007.

Table 2 includes arithmetic means and coefficients of variation (C. V = standard deviation / mean) of GDP growth rates for 10 developing countries and for 5 periods from 1981 to 2009. It is clear from the table that in all the countries included, average growth increased and growth volatility (C. V) decreased during 2002-2007, as opposed to 1995-2001. This is understandable; almost all the countries in the table were affected by the Asian crisis in the 1995-2001 period. In addition, the Russian crisis had a significant effect particularly on Turkey in 1998-99. Turkish growth ranked third from the top, after China and India, during 2002-2007 but second from the bottom during 2007-2009.

**Table 2 Arithmetic Mean and Coefficient of Variation (Standard Deviation /Mean) of GDP Growth Rates; 1981-2009**

	1981-1987	1988-1994	1995-2001	2002-2007	2007-2009
	Mean (C. V)	Mean (C. V)	Mean (C. V)	Mean (C. V)	Mean (C. V)
China	10,6 (0,3)	10,0 (0,4)	8,9 (0,1)	10,7 (0,1)	9,3 (0,3)
India	5,2 (0,2)	5,6 (0,4)	6,0 (0,2)	7,9 (0,2)	7,0 (0,4)
Indonesia	4,9 (0,4)	6,9 (0,1)	2,5 (2,9)	5,3 (0,1)	4,9 (0,4)
Korea	8,7 (0,2)	8,1 (0,2)	5,1 (1,1)	4,8 (0,3)	1,1 (4,2)
Malaysia	4,7 (0,7)	9,4 (0,0)	5,0 (1,3)	5,9 (0,1)	2,5 (2,1)
Pakistan	6,4 (0,1)	5,0 (0,5)	3,3 (0,5)	5,9 (0,3)	4,8 (0,4)
Philippines	0,3 (18,2)	3,2 (0,9)	3,8 (0,6)	5,6 (0,2)	3,9 (0,9)
Singapore	6,3 (0,7)	9,6 (0,2)	5,4 (0,9)	6,8 (0,3)	-0,4 (25,0)
Thailand	6,0 (0,3)	10,1 (0,2)	2,1 (3,1)	5,6 (0,2)	1,5 (2,7)
Turkey	5,8 (0,4)	3,0 (1,7)	3,2 (1,7)	6,8 (0,3)	0,2 (23,5)

**Source:** Computed from IMF, World Economic Outlook database;

<http://www.imf.org/external/pubs/ft/weo/2009/01/weodata/download.aspx>

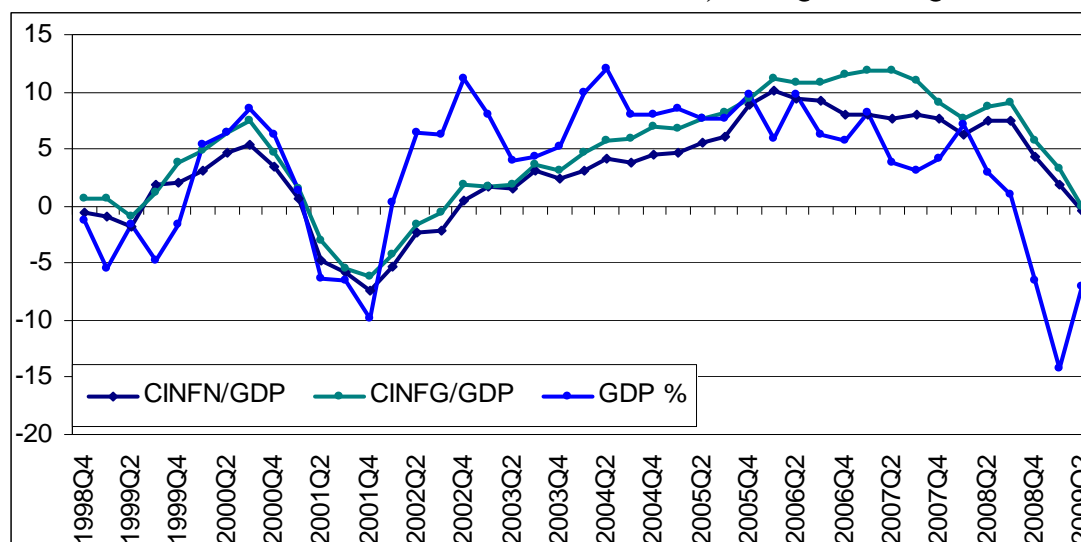
**Note:** GDP growth rates for 2009 are IMF estimates for all countries.

The second characteristic of Turkish growth is related to this large relative variation in growth rates. After 1980, the Turkish growth model rested heavily on external capital flows, as explicitly stated in several IMF supported programs. Luckily for these programs, capital flows to Turkey reached unexpectedly high levels during 2002-07 and these were crucial in the attainment of high growth rates during this period. Actually, realized growth rates surpassed the growth rates foreseen in these programs. On the other hand, stoppages and reversals of capital flows during 2007-09 contributed to and largely determined record declines in GDP growth.

It is clearly seen below in Graph 2 that the amplitude of fluctuations in GDP growth is higher than the amplitude of fluctuations in capital inflows. Given these large fluctuations in growth, policy makers would normally be expected to be skeptical on high dependence

on capital inflows, but it seems that they have preferred to look at only the expansionary phase of the process.

**Graph 2 Net Capital Inflows CINFN, Gross Capital Inflows CINFG as a Proportion of GDP and Year-on-Year Growth of GDP, 1998Q4 - 2009Q2**



**Source:** CBRT and TURKSTAT

**Note:** Both net and gross capital inflows are provided in the graph to show the divergence between these two particularly between 2Q06 and 3Q07.

The third characteristic of recent growth is that it started to fall in 2007, before the recent crisis affected Turkey, due to sluggish domestic demand. It is observed in Table 3 that private consumption and particularly private investment have been making negative contributions to year-on-year GDP growth since the beginning of 2008.

**Table 3 Contribution of Demand Components to GDP Growth, 2008Q3-2009Q2**

	2008Q2	2008Q3	2008Q4	2009Q1	2009Q2
Private Consumption	1,4	-0,3	-3,1	-7,3	-0,8
Govern. Consumption	-0,4	0,2	0,4	0,5	0,1
Private Investment	-1,3	-2,5	-5,9	-7,6	-6,4
Govern. Investment	0,5	0,2	0,7	0,6	0,2
$\Delta$ in Stocks	2,2	1,6	-3,8	-7,3	-3,6
Exports	0,9	0,7	-2,2	-2,8	-2,5
Imports	-0,5	1,0	7,3	9,6	6,1
Sum: GDP Growth %	2,8	1,0	-6,5	-14,3	-7,0

**Source:** Computed from TURKSTAT data.

## Employment

The fourth characteristic of recent Turkish growth is related to unemployment and employment; after reaching 10.5% in 2003, the rate of unemployment declined only

marginally to 9.7% in 2007. Unemployment increased sharply in the second half of 2008 and reached record rates of 16.1% and 15.8% in February and March 2009 as seen in Table 3. There is, to some degree, a seasonal factor in this sharp upturn, but the previous peak unemployment rate was only 12.3% in 1Q03. Firm-level deals such as nominal pay cuts, shortening of working hours and sabbatical schemes, which reflect flexibility in the labour market, prevented unemployment from rising further.

The rate of employment, on the other hand, did not rise; in fact it declined, albeit at a marginal pace, throughout the high growth period of 2002-2007. In the recent crisis, employment rate declined to as low as 38.5 % in February 2009. See Table 4. Again, there is a seasonal decline in employment rate in the first quarter, but seasonality can not explain this drastic fall.

The last two columns of Table 4 indicate that unemployment has been higher and has increased in the urban non-agricultural sectors and among mainly the educated young. One important reason for the former outcome is the ongoing mass migration from rural-agricultural areas to urban-non-agricultural areas. Non-agricultural activities have been unable to absorb the incoming additional workforce.

**Table 4 Employment and Unemployment Rates; %; 2000-2009**

	Employment Rate	Unemploy Rate	Unemploy Non-Agric	Unemploy Young <sup>1</sup>
	1	2	3	4
2000	46,6	6,5		
2001	45,7	8,4		
2002	44,7	10,4		
2003	43,2	10,5	15,0	20,5
2004	43,7	10,3	14,7	19,7
2005	43,4	10,3	13,6	19,3
2006	43,2	9,9	12,6	18,7
2007	43,2	9,8	12,5	19,4
2008Q1	40,9	11,2	13,8	20,6
2008Q2	44,5	9,2	11,8	17,1
2008Q3	44,8	9,8	12,8	19,2
2008Q4	42,4	12,3	15,6	23,7
2009M1	38,7	15,5	19,0	27,9
2009M2	38,5	16,1	19,8	28,6
2009M3	39,2	15,8	18,9	27,5
2009M4	40,2	14,9	18,2	26,5
2009M5	41,6	13,6	17,0	24,9
2009M6	42,5	13,0	16,4	23,7

**Source:** TURKSTAT

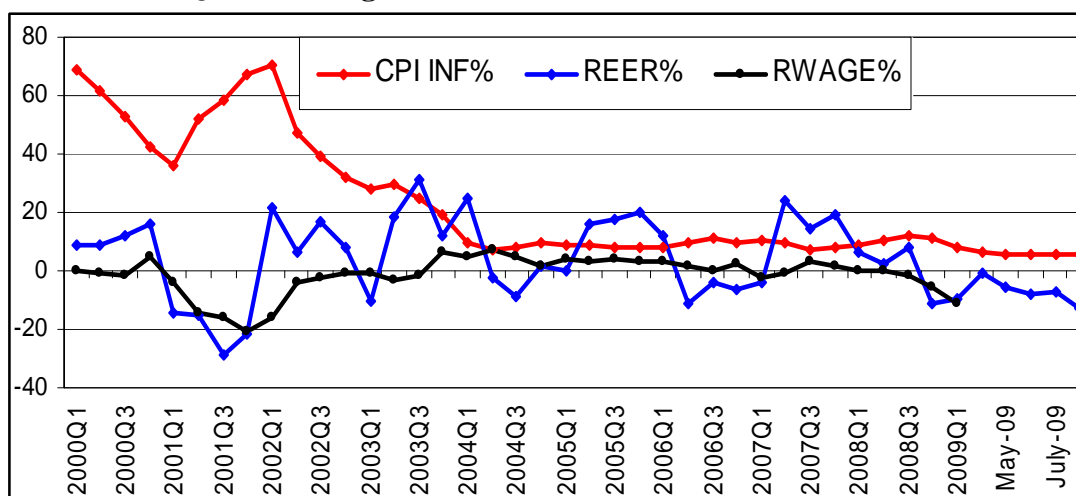
**Note:** (1) Percentage of unemployed in the age group between 15 and 24.

Several monetary and fiscal measures have been introduced to lessen the impact of the global crisis as late as in end-2008. Monetary policy measures are explained in section 4 and fiscal policy measures are explained in section 5 of the paper. These measures contributed to some improvement in manufacturing production after March 2009. It is explained in section 5 that fiscal measures were of temporary nature and that they added to already large budget deficits.

## Inflation

Turkey has been a chronic high inflation country since mid-1970s and the subject of inflation is still at the top of the list of policy concerns of the governments. Inflation dropped significantly from over 60% in 1999 and 2000<sup>4</sup> to single digit numbers by 2004, when relatively high growth rates were being recorded. See Graph 3. Inflation declined in a period when the Turkish Lira (TL) appreciated considerably in real terms starting from 2002. It is seen in Graph 3 that REER increased more than the inflation rate in 2004, 2005 and 2007 implying that the TL appreciated even in nominal terms during these periods.

**Graph 3 CPI Inflation, REER and Real Wage, Year-on-Year % Changes, 2000Q1 – 2009 August**



**Source:** TURKSTAT and CBRT

**Notes** (1) The CBRT computes the REER by defining FX rates as 1 TL equivalents of \$, € and other 15 currencies. Thus, positive changes imply real appreciation of the TL.

(2) Real wages are computed by deflating manufacturing wages with CPI.

In spite of the relatively high growth rates and substantial productivity increases in the 2000s until 2007, there was hardly any rise in real wages, as it can be seen in Graph 3. In the first six months of the recent recession of 2008-09, real wages fell and it is highly likely that they will continue falling in 2009, as they did in the earlier crises.

We should emphasize three points here. (a) With an appreciating TL, exporting firms found it difficult to compete in the international markets and costs had to be reduced.

<sup>4</sup> CPI inflation rate averaged just over 77% during 1990-1999.

Cost reduction was generally achieved by reducing or limiting employment. Employment and labor productivity data support this argument. (b) With an appreciating TL, especially intermediate and labor intensive goods producing industries were unable to adjust and were forced to stop producing. (c) With limited employment in non-agricultural activities and continuing migration from the agricultural sector, wage increases were kept barely in line with inflation.

Thus, appreciating TL and non-increasing real wages, in spite of productivity rises, contributed to the attainment of lower inflation rates in the 2002-07 period. In the more recent decline of inflation, particularly since end-2008, the sharp drop in prices of commodity imports such as petroleum and falling real wages were important. These more than offset the limited depreciation of the TL.

It is explained in sections 4 and 5 that with lower inflation, nominal and real interest on government borrowing declined considerably as compared to the very high nominal and real interest paid on domestic borrowing in turbulent periods. Consequently, budget performance of the governments improved markedly. Nevertheless, although the nominal and real interest rates have declined substantially, these rates have been among the highest in the developing world.

Sharp appreciation of the TL resulted from relatively large capital inflows to Turkey that started after 2002. But then, stops and reversals of capital flows brought about uncertainties to the economy. Effects of the recent sudden stops and reversals that intensified with the global crisis of 2008-09 are taken up in the next section 3.

### **3- THE IMPACT OF THE GLOBAL CRISIS ON THE TURKISH ECONOMY**

#### **A) Foreign Trade and the Current Account**

An important vulnerability of the Turkish economy during the growth episode of 2002-07 was the rising and high current account (CA) deficits. CA deficits increased together with growth/demand and appreciating currency, making growth itself unsustainable after mid-2006. It is seen in column 1 of Table 5 that the CA deficit/GDP ratio exceeded 5% between 2006 and 2008 and that this ratio fell steeply after the crisis of 2008-09 hit Turkey. The CA adjustment was possible at the expense of falling private investment, as can be inferred above from Table 3.

Foreign trade flows have been an important channel through which the recent global crisis affected the Turkish economy since mid-2008. We have shown in Table 3 that exports contributed substantially, in the order of 34%, 20% and 36%, respectively, to the negative growth rates of GDP in 4Q08, 1Q09 and 2Q09. Available data indicate that exports continued to decline in 3Q09 on a year-on-year basis.

There was a sharp fall in the value of Turkish exports starting in October 2008. The fall in the value of imports was even sharper, leading to smaller CA deficits from 4Q08 onwards. See columns 2 and 3 of Table 5. The recent monthly values in the same table

indicate that imports started to pick up from March 2009 onwards while exports continued to stagnate with the result that current account deficits started rising again after March 2009.

**Table 5 Current Account, Exports and Imports of Turkey, 2005Q1 –2009 August**

Period	Current Account, CA/GDP	Exports, Goods, Bil \$	Imports, Goods, Bil \$	Period	Current Account, CA/GDP	Exports, Goods, Bil \$	Imports, Goods, Bil \$
	1	2	3		1	2	3
2005Q1	-3,63	17,2	25,7	2008Q2	-6,32	35,6	56,7
2005Q2	-3,96	18,1	29,4	2008Q3	-6,19	36,4	57,7
2005Q3	-4,24	18,1	30,2	2008Q4	-5,56	26,8	38,4
2005Q4	-4,59	20,0	31,4	2009Q1	-4,33	24,5	28,9
2006Q1	-5,02	18,6	29,5	2009Q2	-2,28	23,3	33,5
2006Q2	-5,75	21,3	36,7		CA: Bil \$	Exp: Bil \$	Imp: Bil \$
2006Q3	-6,07	21,5	36,1	2009M1	-0,4	7,9	9,3
2006Q4	-6,04	24,1	37,1	2009M2	-0,2	8,4	9,1
2007Q1	-6,06	23,2	35,2	2009M3	-1,1	8,2	10,5
2007Q2	-5,65	26,4	42,1	2009M4	-1,5	7,6	10,1
2007Q3	-5,72	26,7	44,4	2009M5	-1,6	7,3	10,8
2007Q4	-5,90	30,9	48,4	2009M6	-2,0	8,3	12,5
2008Q1	-5,89	33,1	49,2	2009M7	0,3	9,1	12,5
				2009M8		7,8	12,7

**Source:** Column (1): CBRT. Columns (2) and (3): TURKSTAT.

**Notes:** CA/GDP ratio is annualized; CA and GDP are expressed as four quarter sums.

The sharp decline in the value of Turkish exports resulted from falling volumes as well as falling prices. This result is in line with developments in global trade. Graph 4 shows that (i) volume of Turkish exports have closely followed the falling volume of world imports, (ii) but export prices of Turkey have fallen more than the global import prices.

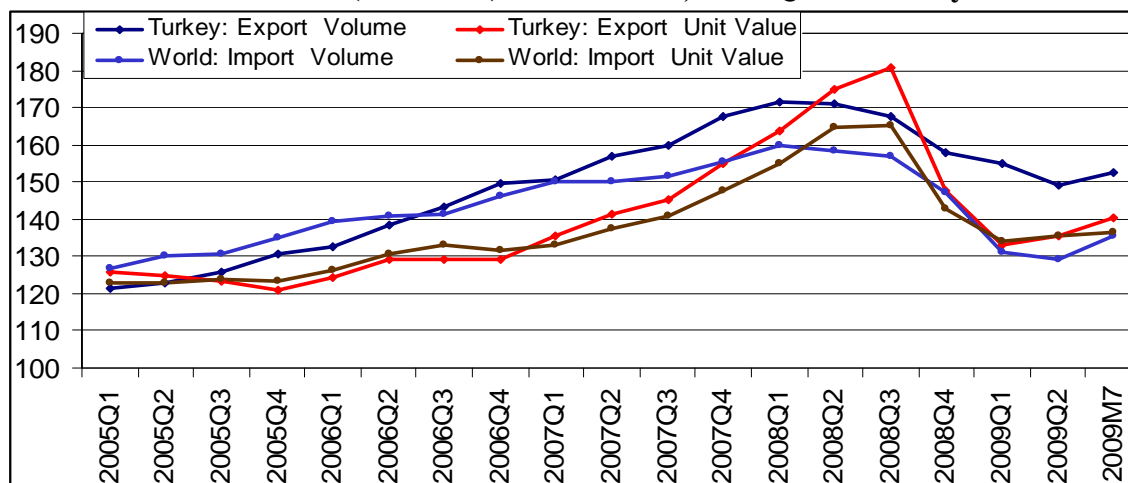
It seems that the seasonally adjusted world trade volume has reached a minimum in May 2009. The same is true for the seasonally adjusted volume of Turkish exports. World import prices and Turkish export prices reached a minimum earlier in April 2009.

While Turkish exports closely followed world imports, the recent global crisis affected the exports and production of different industries unevenly. The most notable declines were observed in the exports of passenger cars, other vehicles, chemicals and machinery starting in October-November 2008. For instance, there was more than a 50% year-on-year fall in the number of transport vehicles exports in December 2008 as compared to a year earlier. A similar trend continued in the first half of 2009<sup>5</sup>, although at a lower rate.

Considering that transport vehicles and components industry (i) has a value added share of around 10% in industrial output, (ii) has a 20% share in total commodity exports and

<sup>5</sup> Automotive Manufacturers Association (AMA) of Turkey.

**Graph 4 Export Volumes and Unit Values (2003=100) in Turkey; Import Volumes and Unit Values (2000=100) in the World, 2005Q1 –2009 July**



**Source:** TURKSTAT and Netherlands Bureau for Economic Policy Analysis.

<http://www.cpb.nl/eng/research/sector2/data/trademonitor.html>. Volume indices for the world and Turkey are seasonally adjusted; TramoSeats method is used in the latter.

(iii) exports about 80% of its production, the drastic fall in its exports was a shock to the economy.<sup>6</sup> Exports of some industries, such as iron and steel, textiles and wearing apparel did not fall significantly.

What factors were responsible in the drastic fall of exports particularly in certain industries, in spite of the depreciation of the TL? Was this fall due solely to the decline in international demand or were there also other factors such as rising costs and falling availability of export financing?

From 1996, when a customs union agreement with the EU became effective, to 2007, a stable 56% of Turkish exports were destined for the EU-27 countries on average. With the recent global crisis, however, that has changed; the share of exports to EU-27 in 2008 and 2009 fell below 50%. See column 1 of Table 6.

Judging by the directional changes in Turkish exports, provided in Table 6, we can assert that the main factor behind the contraction in Turkish exports was the sharp fall in EU demand. Given that Turkish exports, especially cars and electrical appliances, to Europe are not high-end items, there does not seem to be a substitution effect against them, which might be expected at the time of a crisis.

The share of Turkish exports to areas such as Africa and the Middle East increased significantly during the crisis of 2008-09. According to the Turkish Exporters Assembly, this outcome has largely been due to marketing efforts in these regions to counterbalance the shrinking demand in Europe. In this context, measures introduced by the government to boost export financing, explained in sections 4 and 5, were effective. Furthermore, real

<sup>6</sup> TURKSTAT and AMA. Value added share refers to 2005, the latter two shares refer to 2007-2008.

depreciation of the TL, in the order of about 10% in 4Q08 and 1Q09, must have helped in creating margins for competitive prices.

**Table 6 Destination of Exports, % of Total, 2006 – 2009 August**

	EU-27	Other Europe	Middle East	Other Asia	Africa	North America
	1	2	3	4	5	6
2006	56,0	9,3	13,2	4,6	5,3	6,3
2007	56,3	10,1	14,0	4,9	5,6	4,2
2008Q1	51,0	13,7	14,7	5,0	7,3	3,5
2008Q2	50,2	10,9	19,4	5,4	6,3	3,1
2008Q3	45,3	10,6	23,0	5,7	6,4	3,6
2008Q4	45,2	12,7	19,5	5,3	7,7	4,6
2009Q1	40,6	17,9	18,2	4,7	11,8	3,3
2009Q2	46,9	8,6	20,2	6,2	10,8	3,5
2009M7	48,0	6,7	19,6	7,1	9,8	3,8
2009M8	45,1	8,7	20,0	8,2	9,8	3,6

**Source:** TURKSTAT

There is general agreement that the recent global crisis raised the costs and constraints in the financial sector in providing working capital, pre-shipment export finance, export credit insurance and issuance of letters of credit for international trade. This issue was taken up in the G20 Summit communique, paragraph 22, issued on April 2, 2009.

However, it is not easy to obtain hard data evidence on the extent of the effects of trade finance problems. According to Auboin (2009, p.1) of the WTO, “The World Bank estimates that 85 – 90% of the fall in world trade since the second half of 2008 is due to falling international demand, and 10 – 15% is attributable to a fall in the supply of trade finance.”

In an empirical paper, Thomas (2009) attempts to estimate the effect of the financing constraints in the recent global crisis on imports and exports. He uses net private capital flows as a proportion of GDP to represent trade financing constraints in standard import and export equations. Thomas finds that financial conditions play a significant but not a dominant role in stimulating trade volumes and that financial flows affect imports more than exports. It is noted in the paper that credits for working capital and investment financing also have an impact on international trade.

Dorsey (2009), commenting on the results of an IMF survey conducted at end-2008 covering 40 major banks, explains that trade finance has become costlier and more difficult to obtain in emerging markets. The results of the IMF survey were as follows;

(i) The cost of trade finance increased sharply; prices of letters of credit were up markedly in 2008 and these trends were expected to continue in 2009 particularly in emerging markets.

(ii) Fear of default caused banks to tighten lending guidelines. Tighter lending guidelines were reported for at least 16 countries, including Argentina, Korea, Pakistan, Russia, Turkey and Ukraine.

(iii) Higher costs of trade finance were universal, but the decline in availability has occurred more in the emerging markets, especially in Asia. Duval and Liu (2009) explain the problems of trade financing and measures introduced to counter them in this region.

(iv) More than half the banks surveyed said that financing exports to the Middle East and North Africa actually increased.

In Turkey, there have been complaints of the small and medium sized establishments (SMEs) on export credit availability. To such complaints, the government responded by introducing measures to ease the conditions for export credits, as we explain in section 5.

To see if there has recently been tightness in export credits, we computed the ratios of export credits/total credits and export credits/exports of goods and also real export credits. These are provided in Table 7.

**Table 7 Export Credits, January 2008 – 2009 July**

	Export Credits / Total Credits, %	Export Credits / Goods Exports, %	Real Export Credits, TL Mil., Deflated by CPI
	1	2	3
2008M1	7,73	249,0	153,2
2008M2	7,96	258,2	160,9
2008M3	8,31	288,7	177,3
2008M4	8,20	306,3	174,9
2008M5	7,96	262,9	168,8
2008M6	7,80	280,7	173,3
2008M7	7,60	251,0	167,3
2008M8	7,69	283,6	171,5
2008M9	7,86	274,6	182,6
2008M10	8,54	485,8	199,7
2008M11	8,44	531,3	194,2
2008M12	8,27	609,1	189,6
2009M1	8,44	626,0	192,1
2009M2	8,47	610,9	193,5
2009M3	8,27	636,2	187,0
2009M4	7,98	614,0	177,7
2009M5	7,88	607,0	175,3
2009M6	7,73	528,3	174,3
2009M7	7,66	470,9	171,1

**Source:** Computed from data provided in Monthly Bulletins, Banking Regulation and Supervision Agency (BRSA).

We observe that export credits in real terms and as ratios did not decline until after March 2009. Note that the sharp rise in the export credits/goods exports ratio in and after October 2008 is due to falling exports. The fact that the fall in exports pre-dated the fall in export credits can be taken as an indication of causality running from exports to credits, rather than vice-versa. Thus, while general credit conditions were more constrained, export credits within Turkey were not a major impediment to exports.

Trade reports published in Turkey support this argument; not only new export credit lines were opened when demanded, but also export credits were not called back when they matured at least for some time from 4Q08 onwards. These credits were generally rolled over in compliance with government policy and their receivers were mostly prime rated.

For export financing at the global level, we may look at changes in export insurance and export credit data of the BIS. Table 8 contains BIS data on “insured export credit exposures” of Turkey and 12 other countries. In majority of the countries in the table, there was a fall in export credit exposures in 3Q08. Exposures continued to fall in 4Q08, except for Korea, and in 1Q09 without exception, in some cases reaching 20%.

**Table 8 Insured Export Credit Exposures, Billion \$, 2007Q1-2009Q1**

	2007Q1	2007Q2	2007Q3	2007Q4	2008Q1	2008Q2	2008Q3	2008Q4	2009Q1
China	50,74	52,36	57,80	63,69	66,57	67,70	65,30	61,65	53,45
India	19,14	21,13	24,48	25,42	27,41	30,28	32,39	31,98	29,35
Indonesia	23,04	22,95	23,81	23,81	25,86	25,75	24,70	24,09	22,16
Korea	19,00	20,95	23,68	23,37	25,60	25,78	26,48	29,10	26,28
Malaysia	8,77	9,53	9,92	9,66	10,82	11,26	10,66	10,51	9,90
Pakistan	11,50	11,95	11,77	13,52	13,85	13,48	13,08	11,36	10,42
Philippines	6,66	6,27	7,02	6,74	7,07	7,25	7,36	7,00	6,78
Singapore	11,69	13,24	14,53	15,06	16,25	18,05	18,65	17,20	15,44
Thailand	13,06	13,49	14,99	15,75	16,55	17,56	16,06	15,10	12,32
Turkey	30,55	29,75	33,96	34,13	36,93	38,25	34,18	32,48	29,54
Brazil	21,01	22,02	23,53	25,17	27,80	30,98	32,13	30,66	31,20
Russian F	26,19	28,90	31,61	36,58	40,10	43,15	41,55	39,72	36,92
USA	88,71	89,91	100,71	102,10	105,65	105,52	103,33	99,11	94,85

**Source:** Joint External Debt Hub of BIS-IMF-OECD-WB.

As we explained above, both world import volumes and prices started to decrease in 3Q08. There was therefore a simultaneous fall in export financing at a global level and the causality story is somewhat different than in Turkey. When we express the export credit exposures of Table 8 in real terms, by deflating them with unit values of world imports, there is no fall in exposures of some countries including Brazil and the USA.

We conclude that export financing had a negative effect on international trade in general in the recent crisis, but it was not the most important factor.

Going back to the geographical distribution of Turkish exports in Table 6, it is observed that with the intensification of the global crisis in 4Q08 and 1Q09, there was a steep rise in exports to “other Europe”. This is basically due to the equally steep rise in the exports of “products of precious metals”, namely gold and articles of gold, basically to Switzerland. Exports of products of precious metals were back to their normal levels in April 2009, and so were exports to Switzerland and to “other Europe”.

	2008Q2	2008Q3	2008Q4	2009Q1	2009Q2	2009M7
Exports of Precious Metals Million \$						
1 Total	623,2	582,4	1655,8	3750,6	680,6	137,8
2 Switzerland	111,7	80,1	765,7	2690,9	174,0	23,9
2 / 1, %	17,9	13,8	46,2	71,7	25,1	17,3

Source: TURKSTAT

One explanation of the surge in exports of gold and articles of gold, widely held by the public in Turkey as a means of saving, is the expectation that the price of gold will not rise further. This development, which meant depletion of some wealth, contributed to narrowing of trade and current account deficits of Turkey. The Swiss importers must have had a different expectation of future gold prices. In some reports it was argued that proceeds from gold sales were used to import cars and machinery from the EU countries.

Whatever the reason behind, exports of gold from Turkey have significantly reduced the CA deficit during 4Q08 and 1Q09 and eased the pressure on the exchange rate.

In the last five decades, Turkey had current account (CA) deficits except in periods of negative growth. History repeated itself in the recent crisis; the CA deficit fell from a record - \$15.51 billion in 2Q08 to - \$1.71 in 1Q09. This result, in spite of sharp declines in exports, is due not only to falling import volumes related to falling growth, but also to steep falls in import prices in general, petroleum and gas prices in particular.

Turkey is a major energy importer. In July 2008, when crude oil prices were at a historic peak, energy imports (petroleum and products, natural gas and coal) reached \$ 5.1 billion. Crude oil prices bottomed in December 2008 and January 2009 before rising again in the following months and energy imports bill was down to \$ 1.9 billion in April 2009.

After March 2009, imports and CA deficits started to turn up due to the following factors.

(a) Effective from mid-March 2009, the government reduced the VAT and special consumption tax (SCT) rates on motor vehicles and consumer durables to encourage demand.<sup>7</sup> Demand was also helped by interest rate reductions of the CBRT. (b) The TL started to appreciate once again in April 2009. (c) Energy prices started to rise. (d) Net portfolio investments started to turn positive, supporting financing of imports.

<sup>7</sup> The aim was to encourage demand for domestically produced goods, tax rates on imports were also automatically reduced, due to the rules of customs union agreement with the EU and the WTO agreement.

## B) The Capital Account and Foreign Debt

We explained earlier that deceleration in growth of the Turkish economy started in mid-2007, before it was hit by the recent crisis, basically due to falling growth in private investment and consumption. The main reason for the fall in private domestic demand was the volatility in capital flows first in mid-2006, when there was a global volatility, and second in mid-2007, when there were political uncertainties. As expected, there has been more volatility in portfolio investments and credits, than foreign direct investment. See Table 9.

Volatility in capital inflows negatively affected domestic demand through several channels. Firstly, there have, at times, been increases in interest rates. For instance, in the 2006 turmoil, the CBRT raised short term interest rates significantly and other rates followed. During the recent turmoil, the CBRT raised interest rates between May and November 2008. These rates were lowered as late as in December 2008.

**Table 9 CA, Net Capital Inflows, Errors & Omissions and Change in Reserves, Billion \$, 1999-2009Q2**

	CA, Bil \$	Net FDI, \$ Bil	Net Port Inv, \$ Bil	Net Cred, \$ Bil	Net Capit Inflow, \$ Bil	Errors & Omissions, \$ Bil	Change in Reserves, \$ Bil
	1	2	3	4	5=2+3+4	6	7
1999	-0,93	0,14	3,43	1,26	4,83	1,30	5,21
2000	-9,92	0,11	1,02	8,45	9,58	-2,66	-3,00
2001	3,76	2,86	-4,52	-12,90	-14,56	-2,13	-12,92
2002	-0,63	0,94	-0,59	0,83	1,17	-0,76	-0,21
2003	-7,52	1,25	2,47	3,48	7,19	4,42	4,10
2004	-14,43	2,01	8,02	7,67	17,70	1,07	4,34
2005	-22,09	8,97	13,44	20,26	42,66	2,63	23,20
2006Q1	-8,63	1,38	3,58	11,34	16,30	1,23	8,90
2006Q2	-10,74	7,86	-4,53	4,21	7,54	2,04	-1,15
2006Q3	-4,79	3,55	4,08	0,02	7,65	-2,13	0,73
2006Q4	-7,89	6,47	4,25	0,49	11,21	-1,16	2,16
2007Q1	-9,42	8,28	4,50	4,25	17,03	1,09	8,70
2007Q2	-10,08	2,71	1,49	3,32	7,51	3,01	0,44
2007Q3	-6,90	4,32	-1,91	10,11	12,52	-3,56	2,06
2007Q4	-11,82	4,63	-3,37	10,31	11,58	1,05	0,82
2008Q1	-12,29	3,73	-1,32	9,09	11,50	1,35	0,55
2008Q2	-15,50	4,72	2,97	7,93	15,62	-2,96	-2,85
2008Q3	-7,95	3,40	-1,19	10,00	12,22	-0,02	4,25
2008Q4	-5,75	3,79	-5,51	-4,17	-5,89	6,93	-4,71
2009Q1	-1,71	2,00	-3,14	-2,93	-4,07	5,18	-0,60
2009Q2	-5,13	1,39	2,82	-4,88	-0,67	2,64	-3,15

Source: CBRT

Secondly, there have been constraints on credits during these episodes. As we explain below, foreign capital is a major source in funding credits for banks in Turkey. Therefore, when there are stoppages and reversals of capital inflows, there are limitations on domestic credit flows.

Thirdly, volatility in capital flows generally brought about volatility in exchange rates, as for instance it happened in 2Q06, 3Q06, 3Q08, 4Q08 and 1Q09.

Fourthly, volatility has created and fed uncertainty. Investment is particularly sensitive to these uncertainties and there are large fluctuations in this variable. For instance, the average growth of private machinery investment was over 20% between 1Q05-2Q06; growth was still positive but declined to 5.6% between 3Q06 and 4Q07, and plunged down to -16.1% during 1Q08 and 2Q09. In this outcome, we might talk of a “fear of capital stoppages and reversals”.

It is evident in column 2 of Table 9 that there was a substantial rise in net FDI flows to Turkey from 2005 onwards. Several factors were effective in this result. (i) Lower inflation and smaller budget deficits, (ii) an accompanying high and stable growth, (iii) EU leaders’ decision in December 2004 to start accession negotiations with Turkey in October 2005 (negotiations has been seen as an anchor for policy), (iv) speeded up privatization after 2002, and (v) Turkish banks and retail chain stores being considered as attractive assets for acquisition. Most of the FDIs were in the form of M&A’s rather than green house investments and were mainly directed towards banking and retail trade.

Stoppages and reversals of capital flows can be traced on the stock market indices, capitalization values and foreign shares. The effect of the recent crisis in this sense on

**Table 10 Market Capitalization and Foreign Share in Istanbul Stock Exchange (ISE)**

	Total Market Capitalization, \$ Bil	Traded Market Capitalization, \$ Bil	Foreign Share, %	ISE 100 Index
	1	2	3	4
2006M12	163,8	53,5	65,3	39.117
2007M12	288,8	96,0	72,4	55.538
2008M3	188,0	63,2	71,1	39.015
2008M6	193,7	62,6	69,8	35.090
2008M9	198,7	66,2	69,2	36.051
2008M12	119,7	40,5	67,5	26.864
2009M1	110,0	36,7	67,3	25.934
2009M2	100,5	34,5	63,6	24.027
2009M3	110,3	38,0	62,9	25.765
2009M4	139,1	48,7	63,2	31.652
2009M5	156,0	55,5	64,3	35.003
2009M6	166,0	58,2	65,8	36.949
2009M7	196,8	69,2	66,2	42.641
2009M8	209,6	74,4	66,5	46.551

**Source:** Capital Markets Board.

Istanbul Stock Exchange can be traced in Table 10. It is clear from this table that the lowest values of all the variables mentioned were reached in February-March 2009.

We mentioned above that there has been a substantial decline in interest rates in Turkey since 2002. Despite this development, real interest rates have been relatively high, averaging almost 10% between 2003 and 2008. While high interest rates attracted portfolio investments from abroad, these rates pushed the Turkish corporations and banks towards foreign borrowing at lower rates. Thus the large demand for credit flows observed in column 4 of Table 9.

In spite of large current account deficits, the CBRT accumulated substantial reserves until 1Q08, helped by even larger capital inflows. However, as observed in column 7 of Table 9, foreign exchange reserves have declined since 2Q08, in the order of \$ 7.1 billion until 2Q09. According to stock data, FX reserves declined by \$ 10 billion from \$ 75.9 in June 2008 to \$ 65.9 billion in June 2009. The difference between the flow and the stock data arises from recording at different times, valuations with different FX rates and inclusion of interest earnings in the stock data.

An interesting development in the balance of payments is a jump in the errors and omissions; in the 9 months from October 2008 to June 2009, the sum of this item reached \$ 14.8 billion. See column 6 of Table 9. This constitutes nearly 20% of exports of goods and services in the same period.

Without the inflow of foreign exchange of this size, the source of which is not known, foreign deficits and foreign exchange rates would have been much higher and the Turkish economy would have felt the global crisis much harder. As yet, there has not been a satisfactory official explanation regarding the source of this substantial inflow.

One unofficial explanation is that some Turkish corporations with foreign debt have transferred their FX accumulations abroad to repay their debts. If the explanation is true, these transfers were obviously unrecorded.

Reserve accumulation of the CBRT based on portfolio investments and foreign credits was possible at a price; there was substantial foreign debt accumulation especially after 2003, reaching a peak in 3Q08. Yet, Total Foreign Debt/GDP ratio is not high and has declined from 56.2% at end-2002 to 37.4% at end-2008.

However, as can be observed in Table 11, this decline has been entirely due to falling Public Foreign Debt/GDP ratio from 37.5% at end-2002 to 12.4% at end-2008. Private Foreign Debt/GDP ratio has increased from 18.6 % at end-2002 to 25.1% at end-2008. Most of the latter resulted from the rise in foreign debt of the corporate sector especially after 2005.

Since the global crisis reached Turkey in 3Q08, the public sector and the banking + other financial sectors reduced their foreign debt. See Table 11, where public debt = total debt - short term private debt – long term private debt. But the corporate sector has not reduced

its debt; thus, it has been considered exposed to foreign exchange risk since the start of the crisis. It seems, however, that most of the foreign debt of this sector has been rolled over up until 3Q09 and there does not seem to be an immediate risk.

Note that the aforementioned data refer to gross foreign debt. At end-2Q09, gross debt stock was \$268.6 billion, whereas net debt stock was \$144.8 billion.

**Table 11 Gross Foreign Debt, Billion \$, 2002-2009Q2**

	Total For Debt Bil \$	Short Term Bil \$	Private, Bil \$		Long Term Bil \$	Private, Bil \$	
			Banks+Fin	Corporate		Banks+Fin	Corporate
	1	2	3	4	5	6	7
2002	129,5	16,4	5,4	8,4	113,1	4,8	24,4
2003	144,1	23,0	8,4	10,5	121,1	5,3	24,8
2004	161,0	32,2	13,1	14,0	128,8	8,6	28,3
2005	169,7	38,3	17,2	16,2	131,5	16,1	34,4
2006Q1	184,5	40,8	20,9	15,4	143,7	17,7	44,2
2006Q2	190,9	42,0	20,8	17,2	149,0	21,3	47,6
2006Q3	196,4	41,4	19,7	17,7	155,1	22,6	50,5
2006Q4	207,6	42,6	20,7	17,6	165,0	28,5	53,5
2007Q1	213,5	37,5	14,7	18,2	176,1	31,3	60,2
2007Q2	224,0	39,5	15,5	19,8	184,5	35,1	65,7
2007Q3	235,9	39,3	13,8	21,4	196,6	39,2	71,6
2007Q4	249,4	43,2	16,6	22,1	206,2	41,9	79,5
2008Q1	265,5	45,9	17,1	24,0	219,6	44,4	88,8
2008Q2	286,9	53,2	22,0	27,1	233,7	45,6	98,1
2008Q3	291,7	57,6	25,0	27,5	234,1	45,8	100,1
2008Q4	278,1	50,5	21,9	23,5	227,6	41,1	99,5
2009Q1	266,6	48,3	21,5	22,3	218,3	38,1	95,6
2009Q2	268,6	47,7	21,2	21,8	220,8	37,4	96,5

**Source:** Treasury and CBRT

**Note:** Public debt = total debt – short and long term private debt.

### C) Banking and Finance

The banking sector in Turkey was substantially restructured, with a set of regulations formulated together with the IMF, between 1999 and 2002. During this period, a state bank was dissolved and 18 troubled private banks were transferred to the Savings Deposit Insurance Fund (SDIF). SDIF banks were subsequently liquidated or sold after rehabilitation. In 1999, there were 81 banks, including 8 that were managed by the SDIF. In June 2009, the total number of banks was down to 45, with only one bank at SDIF.

Between 2002 and 2008, the largest drop was in the number of private commercial banks owned by residents. Table 12, row numbered I-(2). The number of foreign banks originally founded in Turkey increased by an almost equal amount in the same period, as seen in row numbered I-(4) of the same table. This resulted from the acquisition of

Turkish banks by foreign banks. Consequently, the number of foreign banks represented with branches, given in row numbered I-(5), decreased. See Table 12 for other details on the ownership structure of banks.

**Table 12 Ownership and Number of Banks in Turkey, 1999 – 2009 June**

	1999	2002	2008	06/2009
Total Banks; I + II	81	54	45	45
I- Total Commercial (Deposit) Banks	62	40	32	32
(1) State	4	3	3	3
(2) Private	31	20	11	11
(3) SDIF	8	2	1	1
(4) Foreign, Founded in Turkey	5	4	11	11
(5) Foreign, Branches	14	11	6	6
II- Development & Investment Banks	19	14	13	13
(1) State	3	3	3	3
(2) Private	13	8	6	6
(3) Foreign	3	3	4	4

**Source:** Banks Association of Turkey (BAT), Annual and Quarterly Reports.

**Note:** Only banks with more than 50% of their equity held by foreigners are counted as foreign. Banks with a foreign equity share of less than 50% appear among private banks.

During the recent crisis, as of September 2009, there are as yet no banks transferred to the SDIF, no changes in ownership, no liquidation and thus there is not a fall in the number of banks. What is more, as we explain below, there was no fall in the profitability of banks. Thus, at the present time, banks in Turkey were relatively in good shape than in the past and as compared to banks in some other countries. The following were contributing factors to this outcome.

(a) The banking sector was restructured in the crisis of 2000-01 and well regulated and supervised afterwards. (b) At the time of the recent global financial crisis, “there were no toxic financial instruments in banks’ portfolios”<sup>8</sup> and they extended only a limited amount of mortgage credits.

The numbers in Table 12 tell only a partial story about the developments in Turkish banking and it may be more informative to look, for instance, at the assets of the banks, which are provided in Table 13. This table indicates that the crisis of 2000-01 reduced the activities and size of the banking sector, but after restructuring and with proper regulation, the sector recorded a substantial growth until mid-2008. Foreign banks were active in this process and raised their share in the system substantially. With the recent crisis, assets of the sector contracted in late 2008 and particularly in early 2009.

Credits of the banking system showed a significant decline in and after the crisis of 2000-2001. But credits increased at high rates after 2002. However, this growth did not reach

<sup>8</sup> Yorukoglu (2008, p. 18). The author is a deputy governor at the CBRT. A similar statement is also found in the Financial Stability Report 2008II of the CBRT.

**Table 13 Total Assets of the Banking Sector<sup>1</sup> in Turkey, 1999-2009Q2**

	1999	2002	2008	03/2009	06/2009
Total Bank Assets, \$ Billion	133,5	129,7	482,2	452,7	503,5
Total Bank Assets/GDP	67,1	58,6	78,1	79,8	79,1
Total Banks: I + II % Share	100,0	100,0	100,0	100,0	100,0
I- Commercial (Deposit) Banks	95,2	95,6	96,9	96,7	96,7
1) State	34,9	31,9	28,5	29,0	30,2
2) Private	49,5	56,2	41,0	40,7	40,2
3) SDIF	5,6	4,4	0,0	0,0	0,0
4) Foreign <sup>2</sup>	5,2	3,1	27,4	27,0	26,3
II- Devel. & Investment Banks	4,8	4,4	3,1	3,3	3,3
1) State	3,4	3,2	2,8	3,0	3,0
2) Private	0,9	0,8	0,2	0,2	0,2
3) Foreign	0,5	0,4	0,1	0,1	0,1

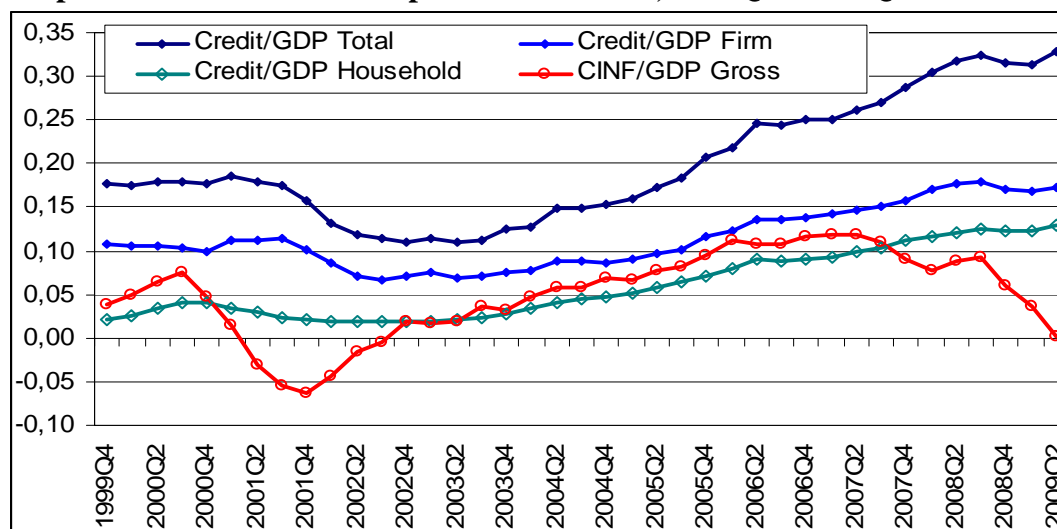
**Source:** BAT, Annual and Quarterly Reports; BRSA, Monthly Bulletins.

**Note:** (1) Non-interest participation banks are grouped separately after 2002. Here they are counted among the private banks. (2) There are two groups of banks with foreign equity capital. In the first group, non-residents hold more than 50% of equity capital. Assets of this group had a share of 14.1% in total assets in 2008 and 14.0% in June 2009. In the second group, non-residents hold less than 50% of equity capital. Assets of this second group had a share of 13.3% in total assets in 2008 and 12.3% in June 2009. BAT estimated the foreign held assets of the two groups at 26% of total assets in June 2009, which is close to 26.3% estimated here.

the levels of a Minsky bubble. The proportion of total domestic credits to GDP was a low 11.1% in 4Q02 and increased to 32.5% in 3Q08. The rise in credits to households, which were low by any standards and which the banks considered less risky, contributed more to this growth than credits to firms. The latter, as a ratio of GDP, were 7.0% in 4Q02 and reached 17.9% in 3Q08. Credits to households/GDP increased from a low 1.9% in 4Q02 to 12.6% in 3Q08. Graph 5 below shows developments in ratios of total credits/GDP, household credits/GDP and credits to firms/GDP.

Graph 5 also contains gross capital inflows as a ratio of GDP; CINF/GDP. It is apparent that the turning points of credits in Turkey are preceded by turning points in the capital inflows. This can be explained by the fact that banks in Turkey borrow from the capital and money markets abroad, particularly in Europe, and extend these funds as credits in Turkey denominated either in domestic currency or in FX.

This process is encouraged by the following factors; (a) savings rate in Turkey has been falling and is low, (b) consequently, cost of funding credits within Turkey is high as compared to funding from abroad, and (c) maturity disparities between short maturity savings deposits and relatively long maturity credits. At end-2008, time deposits with 1-month and 3-month maturities constituted 83% of total deposits. The share of sight deposits was 13%, and the share of time deposits with 6 or more months was only 4% at the same date.

**Graph 5 Credits/GDP and Capital Inflows/GDP, 1999Q4 - 2009Q2**

**Source:** CBRT and TURKSTAT.

**Notes:** (1) Data used relate to end of period domestic credits. Within total domestic credits there are credits to government agencies and financial institutions including banks. Thus, credits to private firms and households will not add up to total credits. (2) GDP and capital inflow CINF data are rolling four quarter sums.

The effect of the recent sharp downturn in capital inflows on credits was rather mild, at least compared to their effect in 2001-02. This is observed below, where changes in real credits are compared for the crises of 2000-01 and 2008-09.

	Sept 2008 <sup>2</sup> – April 2009, % Change	Febr 2001 <sup>2</sup> – September 2001, % Change	Febr 2001 – November 2002 <sup>2</sup> , % Change
	1	2	3
Real <sup>1</sup> Credits: Total	-7,0	-15,4	-46,3
Real Credits: Firms	-10,4	-7,6	-45,4
Real Credits: Households	-4,5	-44,3	-50,9

**Source:** CBRT and TURKSTAT

**Note:** (1) Credits are deflated by CPI. (2) Real credits peaked in September 2008 and bottomed after 7 months in April 2009 in the crisis of 2008-09. Real credits peaked in February 2001 and bottomed after 21 months in November 2002 in the crisis of 2000-01. For comparison purposes, changes in the first 7 months of the two crises are given above.

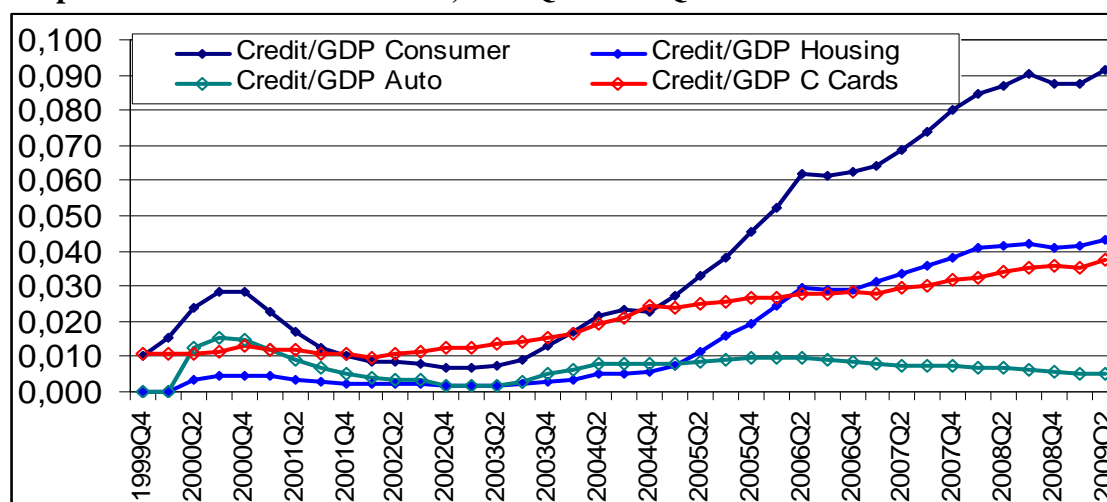
It is apparent that credit flows behaved differently in the two crises; in the recent crisis of 2008-09, the fall in real total credits was relatively smaller, but interestingly, real credits to firms declined at a much higher rate in this period. During 2000-01, however, it was credits to households that plunged. The milder decline in credits in the recent crisis may be due to the relative strength of the banking system, but there may also be a further fall in credits to come; in the earlier crisis credits bottomed after 21 months.

On the other hand, two factors may have been effective for the larger decline in credits extended to firms in the recent crisis. (a) As we mentioned above, the corporate sector has accumulated a relatively large foreign debt in recent years. Thus, this sector may have been considered risky by banks in Turkey. There were indeed reports pointing to this risk; see for example IMF (2008). (b) Credits were partly called back by the banks; there were complaints from the business organizations and the government that this happened.

Nevertheless, we can say that the sharp downturn in growth and upturn in unemployment in late 2008 and early 2009 can not solely be explained by the decline in credits, although it is surely one of the factors.

Consumer credits constituted just over 70% of household credits as of end-2008.<sup>9</sup> The former, as a proportion of GDP, increased sharply from 0.7% in 1Q03 to 9.1% in 3Q08 and declined only marginally in the recent crisis. Housing, auto and personal credits are the three components of consumer credits, with the first having the largest share. We observe in Graph 6 that there is only a marginal fall in housing credits and a significant fall in auto credits, which have been low anyway. The fall in auto credits may explain the sharp decline in demand for autos in the recent crisis.

**Graph 6 Consumer Credits/GDP, 1999Q4 - 2009Q2**



**Source:** CBRT and TURKSTAT.

**Notes:** (1) Explanations below Graph 5 apply here as well. (2) Housing and auto credits before December 2005 are obtained from weekly data.

Currency substitution (dollarization) in Turkey led to credits and deposits denominated in FX, generally in \$ and €. At times of crises when local currency may depreciate, banks carry FX risk on TL credits. Receivers of credits carry the same risk on FX credits. With similar considerations, depositors would prefer to have FX deposits at times of crises. One question related to the recent crisis is the following; has there recently been a change in currency substitution, in both credits and deposits?

<sup>9</sup> Credits extended through credit cards constitute the remaining 30% in household credits.

To answer this question, we looked at the ratios of FX denominated credits and deposits in the banking sector in Turkey. Table 14 shows that FX denominated credits and deposits had very high shares in the crisis of 2000-01. As conditions improved, there was return to TL denominated assets and liabilities, or, in CBRT terminology, there was “reverse currency substitution.” With the onset of the recent global crisis, there was some rise in FX denominated credits from October 2008 onwards. But, this trend seems to have ended after March 2009. It is interesting that there was hardly any change in the share of FX deposits; the latter seems to have stabilized at about 34% as of August 2009.

**Table 14 Currency Composition of Credits and Deposits, Credits/Deposits, Non-Performing Loans and Profits, 1999-2009 August**

	1999	2002	2006	06/08	12/08	03/09	05/09	08/09
Total Credits, TL Billion	22,0	49,0	219,0	342,8	367,4	366,2	362,6	368,3
TL, %	50,6	41,1	74,5	75,0	71,3	70,3	72,4	73,1
FX, %	49,4	58,9	25,5	25,0	28,7	29,7	27,6	26,9
Total Deposits, TL Billion	48,0	138,0	307,6	405,8	454,6	467,1	461,7	475,7
TL, %	47,5	42,7	60,6	64,0	64,7	63,7	64,1	66,6
FX, %	52,5	57,3	39,4	36,0	35,3	36,3	35,9	33,4
Credits/Deposits	45,8	35,5	71,2	84,5	80,8	78,4	78,5	77,4
Non-Perf Loans, % of Credits	10,7	20,0	3,9	3,1	3,8	4,6	5,0	5,5
Provisions, % of Credits	6,1	13,0	3,5	2,6	3,0	3,6	4,0	4,4
Profits/Total Assets	-0,6	1,4	2,3	1,3	1,8	0,7	1,2	2,3

**Source:** Year 1999: BAT, Annual Report 1999. Other Periods: BRSA Monthly Reports.

**Note:** (1) Negative figure for 1999 is due to the losses of the SDIF banks. (2) Profits ratios in 03/09, 05/09 and 08/09 account for the profits in the first three, five and eight months of 2009, respectively and are not comparable with year-end ratios.

There are three other ratios that we can look to see the effect of financial turmoil on the banks. The first is the credits/deposits ratio, which declined sharply in 2001-02 and increased steeply as normality returned, but declined somewhat moderately since mid-2008. The second is the ratio of non-performing loans/credits; there has been some increase in this ratio recently, but it is very much lower than that observed in the previous crisis. The third one is the profits/assets ratio; it is evident from Table 14 that profitability increased recently, in spite of the crisis, which we can attribute to falling interest rates.

What was the effect of the recent crisis on the capital markets in Turkey? We tried to answer this question by looking at the new issues of public and private securities. We see in Table 15 that prior to and during the crisis of 2000-01, public securities dominated the market so much so that only a negligible share was left for the private sector; 2.3% in 1999 and 4% in 2002. As public sector deficits declined, the share of private sector securities increased considerably, reaching 34,3% in 2008.

With the recent crisis, the share of private sector securities was down to a low 6.3% in April 2009 but recovered again to 24.4% in June 2009. It is not clear whether the sharp fall in the issue of private securities was demand or supply determined, but probably both factors were at work.

**Table 15 New Issues of Securities, 1999 – 2009 June**

	1999	2002	2005	2007	2008	04/09	06/09
Total Securities, TL Billion	31,11	102,98	81,63	66,91	79,67	33,02	51,7
Total Securities, 100	100,0	100,0	100,0	100,0	100,0	100,0	100,0
PUBLIC, %	97,7	96,0	91,0	84,2	65,7	93,7	75,6
State Bonds,%	69,0	8,9	44,7	54,2	41,5	79,3	62,7
Treasury Bills,%	28,7	75,6	37,8	28,6	22,8	14,4	12,9
PRIVATE, %	2,3	4,0	9,0	15,8	34,3	6,3	24,4
Shares, %	2,2	1,6	4,9	11,8	14,7	3,2	2,4
Bonds, %	0,0	0,0	0,0	0,2	0,3	0,0	0,0
Participation Certificates, %	0,1	2,3	2,9	2,8	18,9	3,1	21,6

**Source:** Capital Markets Board and State Planning Organisation.

#### D) Global Uncertainty and Loss of Confidence

In almost all the business surveys conducted in Turkey, uncertainty transmitted from the global economy and the resultant loss of confidence were mentioned as important factors in the uncertainty and pessimistic expectations that prevailed in Turkey until early 2009. Since March 2009 there has been an improvement in sentiment, perhaps a too optimistic one, as can be seen in the “business confidence index” below. However, improvements in “expected exports in the coming 3 months” and “expected investment expenditure in the coming 12 months” are very modest; in fact pessimism continues in investment.

	Apr07	Jan08	Mar08	Jun08	Sep08	Dec08	Mar09	Jun09	Jul09	Aug09	Sep09
Confidence	119,5	104,2	105,4	98,3	85,2	52,3	67,8	99,4	100,1	98,5	97,8
Exports	42,2	24	30	16,6	4,3	-35,7	-0,2	14,5	9,4	9	12,5
Investment	21,1	7,1	3,1	-1,4	-9,3	-47,8	-49,6	-29,3	-27,4	-25,2	-22,4

**Source:** CBRT business survey to which around 1500 firms respond.

**Note:** Exports and investment data reflect “expectations balance indices” which are obtained by deducting the “expect to decrease” percent from “expect to increase” percent.

Global uncertainty and loss of confidence in business environment adversely affected particularly machinery and equipment investment in Turkey. Put it in differently, “animal spirits” were lowered by waves of negative news from different parts of the globe.

## 4- MONETARY POLICY AND POLICY RESPONSE TO THE GLOBAL CRISIS

### A) Monetary Policy in Turkey

To better explain the monetary policy of the CBRT, we provide a brief account of the developments in this area since February 2001 when the shaky “disinflation program” and its nominal anchor, the crawling-peg system, that were in effect since end-1999, broke down and a floating exchange rate regime was adopted.

A new economic policy program was shaped in May 2001, the aim of which was to attain stability by way of reduced deficits, lower inflation and, higher and sustainable growth. This program contained a monetary policy framework with “base money” as the nominal anchor. In the mean time, part of the IMF credits would be auctioned to meet FX demand, preconditions would be created for an “implicit inflation targeting” policy and short-term interest rates were to become critical policy variables.

As we mentioned earlier, the 18<sup>th</sup> stand-by agreement was signed with the IMF in January 2002 which raised the previous \$ 9.4 billion IMF credit to \$ 16 billion and was to cover the 2002-2004 period. With this agreement, in addition to the base money target, Net International Reserves became a performance criterion and Net Domestic Assets an indicative criterion. Reverse repo transactions within the framework of open market operations were to be used for sterilization of excess liquidity.

In compliance with the floating exchange rate regime, the FX rate would be determined by market conditions. However, the CBRT also announced that it could intervene in the foreign exchange market “to prevent excessive volatility”. There were interventions in the FX markets and FX purchase auctions were carried out to increase the FX reserves “without affecting the long-term equilibrium value of the FX rate.” CBRT Annual Reports (2002 and 2003). The CBRT argued that FX buying auctions aimed to absorb the excess supply of foreign exchange due to reverse currency substitution.

Confident that monetary growth was under control and FX rates were pointing towards nominal appreciation, the CBRT started to reduce the short-term interest rates gradually; from 67% in June 2001, to 59 % at end-2001, to 44% at end-2002, and to 18% at end-2004. See Graph 7 below. The CBRT explains that the following are the indicators taken into account in O/N rate decision-making; (i) \$ and € rates and oil prices, (ii) inflationary expectations, (iii) supply - demand gap, (iv) indicators with respect to fiscal policy and budgetary discipline, (v) wage developments, (vi) relations with the IMF and the EU, and (vii) external shocks. CBRT Annual Reports (2003 and 2004).

The O/N policy interest rates were generally lowered until mid-2006 with low volatility. The exchange rates also declined but with high volatility. The CBRT explains that the relations with the IMF and the EU have been quite effective in capital inflows and exchange rate changes. The following are quotations from CBRT Annual Reports 2004 and 2005:

“The Turkish Lira appreciated against the US dollar in the first quarter of 2004 due to the improvement in inflationary expectations and the finalization of the IMF 7th Review.”

“The declaration that the IMF had ratified the 8th Review caused the US\$/TL rate to decline to 1.457.”

“At the beginning of the month, the rate was 1.501 which declined to 1.487 because of the expectations that the negotiations for EU accession would commence in the first half of 2005. However, debates regarding the Turkish Penal Code raised the rate to 1.547.”

“The prospective 3-year stand-by agreement with the IMF, including a credit of \$ 10 billion, and the decision of the EU ... to start negotiations with Turkey on 3 October 2005 were perceived positively by the market... Accordingly, \$/TL rate declined below 1.390.”

“Expectations on the commencement of negotiations for Turkey’s EU accession, the interest rate decisions of the FED, the course of the stand-by agreement with the IMF and developments in oil prices all caused interim fluctuations in the exchange rates from time to time, throughout 2005.” Similar statements could be found in the later CBRT reports.

By 2005, the authorities were confident that fiscal discipline was established, there were no worries on the sustainability of public debt, inflation was reduced to single digits for good, and financial sector fragility was eliminated. Accordingly, at the beginning of 2005, six zeros were removed from the TL.

In 2005, the CBRT also made preparations regarding its institutional and technical infrastructure, to establish explicit inflation targeting at the beginning of 2006. The more interesting change was in the approach towards money – inflation relationship;

“Since the currency issued, the main determinant of Base Money, contains very limited information on inflation rates in the upcoming period and it is endogenously determined under a policy in which interest rates are employed as the basic monetary policy tool, the Base Money seems to lose its value as a strong anchor. This view is further supported by the fact that expectations regarding monetary policy implementations did not deteriorate, due to favorable inflation performance, despite the fact that the realized Base Money was above the set target.” CBRT Annual Report 2005. On the other hand, the floating exchange rate policy was hailed as before.

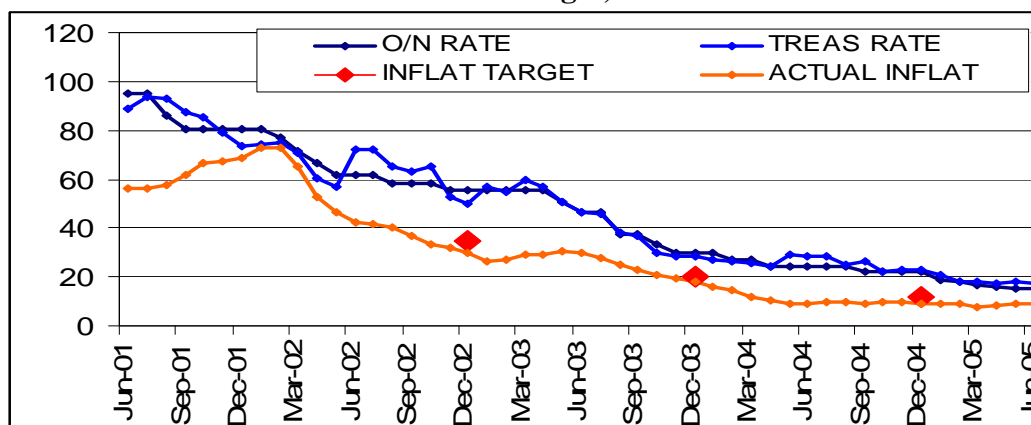
In short, as Graph 7 shows, all went well until end-2005. The borrowing rates of the treasury closely followed the short-term rates of the CBRT. Implicit inflation targeting was successful; realized inflation turned below targeted rates in 2002, 2003 and 2004.

But then came 2006 and 2007, both of which were difficult years for monetary - exchange rate policies and for the CBRT. In May-June 2006 there was a global turmoil that hit developing countries. In Turkey, this turmoil resulted in major reversals of capital flows and a jump in exchange rates (in CBRT language “exchange rate volatility”) to which the CBRT responded by hikes in the O/N interest rates; from end-May to end-June

2006, the CBRT raised the O/N interest rate by 4 percentage points. In spite of this hike, actual inflation was almost the double of targeted inflation at end-2006. See Graph 8 for the developments after mid-2005.

Inflation far exceeded the targeted rate in the first half of 2007. Thus, the CBRT kept the O/N interest rates high. After some easing at the beginning of 2008, the rates were raised from 15.25% to 16.75% between May 2008 and July 2008. The latter rate was kept unchanged until November 2008.

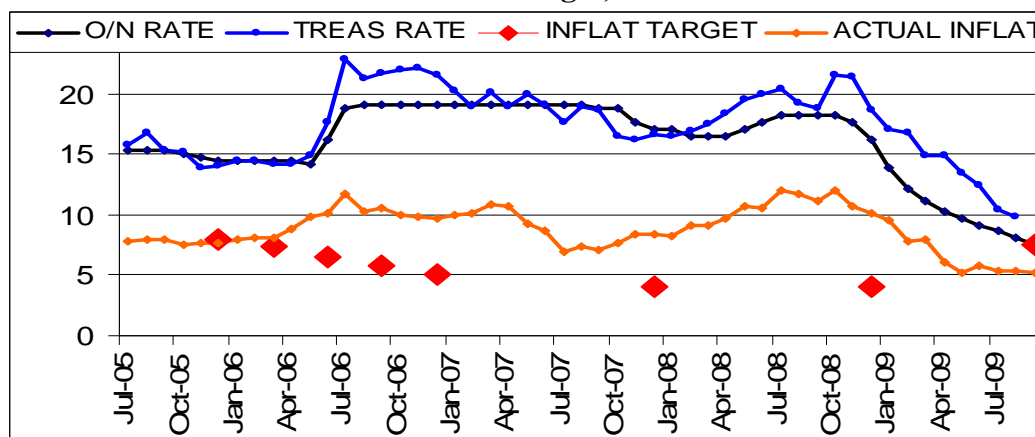
**Graph 7 O/N Policy Rates, Treasury Rates and Targeted and Actual Inflation, Annual and Year-on-Year Changes, June 01 – June 05**



Source: CBRT.

Notes: (1) Interest rates are compounded annual rates. (2) Inflation is year-on-year 12 month rates computed from the CPI. Targeted inflations are for end of 2002, 2003, 2004.

**Graph 8 O/N Policy Rates, Treasury Rates and Targeted and Actual Inflation, Annual and Year-on-Year Changes, 07/05 – 06/09**



Source: CBRT.

Notes: Interest rates are compounded rates. Targeted inflations are year-on-year rates for the end of 2005, 2007, 2008 and 2009, and for the end of 1Q06, 2Q06, 3Q06 and 4Q06.

Yet, it was known by the summer 2008 that the global crisis was already in Turkey and industrial production has started falling. It must have been the overemphasis of the CBRT

on inflation, its observance of rising inflation expectations in Turkey and its misreading of the effects of the global crisis that led to interest rate rises during this period. We should note that interest rate increases of the CBRT were carried out at a time when, for instance, in the USA the Federal Reserve cut the O/N Federal Funds rate from 4.25 to 2.00% between January and April 2008 on four occasions. There was another rate cut in mid-October 2008.

What is more, observing the rising global commodity prices, the CBRT announced in mid-2008 that inflation at end-2008 would reach 10.6% and raised the target inflation rate from a targeted 4% to 7.5% for end-2009.

Before we turn to the monetary policy measures that the CBRT introduced to counteract the recent global crisis, we look at recent changes in three monetary variables; currency in circulation, M2 (M1 + time deposits in TL), and M2Y (M2 + FX deposits). We see in Table 16 that the CBRT has reduced the O/N rates but has not followed a monetary easing policy recently.

**Table 16 O/N Rates and Money Growth Rates, 2001 – 2009 June**

	CBRT O/N Rate, %	CBRT O/N Rate Comp, %	Currency in Circulation, %	M2, %	M2Y, %
	1	2	3	4	5
2001	59,0	80,3	39,6	88,0	48,0
2002	44,0	55,2	54,6	26,9	31,0
2006	17,5	19,1	34,3	24,7	21,7
2007	15,75	17,1	2,3	15,7	22,5
2008M6	16,25	17,6	16,8	18,5	22,6
2008M12	15,0	16,2	17,0	26,7	27,0
2009M3	10,5	11,2	18,5	20,0	20,3
2009M6	8,75	9,1	15,0	18,8	20,3

**Source:** CBRT. **Note:** Interest rates and money growth rates are end of period rates.

## B) Monetary Policy Measures to Counteract the Global Crisis

1) Between November 2008 and September 2009, the CBRT cut O/N rates eleven times; the borrowing rate was reduced from 16.75% to 7.25%. These reductions were more than expected, given the overemphasis of the CBRT on inflation.

2) Measures were taken to meet the liquidity needs of the banking system.

3) Dividend distribution of the banks was restricted, to strengthen their capital structures.

4) Measures were taken to help ease export financing.

Details of some of these measures are provided in Appendix I.

(1) We think that the CBRT was late in responding to the global crisis. What is more, its overemphasis on inflation led to rate increases in mid-2008 and high rates were kept until late November 2008. Yet, central banks around the globe, led by the Federal Reserve, were cutting rates from early 2008 onwards.

(2) However, the measures introduced, particularly rate cuts, were larger than expected from the CBRT. This is also expressed by the CBRT itself. CBRT Inflation Report (2009II, p.13).

(3) The CBRT has already declared that it would not emphasize on inflation under the present significant negative growth rates and high unemployment.

(4) The CBRT argues that if O/N rates were cut by 3 percentage points instead of the 7 percentage points over the November 2008-May 2009 period, GDP growth and inflation would have been lower by 2.4 and 2.2 percentage points respectively. CBRT Inflation Report (2009II, p.12-14).

## **5- FISCAL POLICY AND POLICY RESPONSE TO THE GLOBAL CRISIS**

### **A) Fiscal Policy in Turkey**

Public debt jumped in Turkey, at the time of the crisis of 2000-01, mainly because of the securities issued by the treasury to finance the huge losses and recapitalization needs of the state banks and private banks transferred to SDIF. Total public debt almost doubled from 39.8% in 1999 to 77.6% in 2001. Note that these ratios are expressed in terms of the new, revised GDP series published in 2008 which are about 30% higher than the previous series. With the previous GDP, public debt ratio was 104.4% at the time. There were also large budget deficits in double digits; for 2001, deficit/GDP ratio is 11.9% with the new GDP series but was 16.1% with the previous GDP series.

The economic program of May 2001, that we mentioned earlier, targeted a primary surplus/GDP of 4.1% in 2001 and 5% in 2002 for the public sector<sup>10,11</sup>. These ratios were 5.5% and 6.5%, respectively, with the previous GDP series. With limited external borrowing possibilities, the deficits had to be largely financed by domestic borrowing.

Debt sustainability was the main concern from 2001 onwards, at least until 2006. The IMF, in addition to the 5% (6.5% with the previous GDP series) primary surplus target, put upper limits on non-interest public expenditures and floors on the overall balance.

In addition to reports prepared for the IMF, Turkey prepared Pre-Accession Economic Programs and submitted them to the European Commission since 2001; fiscal targets and achievements have also been evaluated and crosschecked by the commission. Finally, starting from 2006, three-year medium term programs have been prepared. The first of these targeted a primary surplus/GDP of 5% for the public sector for 2006, 2007 and 2008 and predicted a balanced budget by 2008.<sup>12</sup> These programs have been updated each year; the latest program was published in September 2009 and includes government targets and macroeconomic forecasts for the 2010-2012 period.

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<sup>10</sup> Until 2007, these ratios were expressed as proportions of GNP. Since 2007, all such ratios have been stated in terms of GDP. But GDP and GNP are not significantly different in Turkey on average.

<sup>11</sup> Public sector includes, in addition to the central government, local governments, non-financial state enterprises, social security funds and the unemployment insurance fund.

<sup>12</sup> Pre-Accession Economic Programmes between 2004 and 2008 are provided in SPO (2004-2008). Medium term budget programs are in SPO (2006-2009).

Governments more or less attained the primary surplus target of 5% until 2007. See the last row in Table 17. The “interest payments” row of the same table shows how these payments fell after 2002 and helped in the sharp reduction of overall budget deficits. But the deficits in the social security system, seen in the third row of Table 17, were and have been a potential deficit source for the budget.

**Table 17 Budget Performance of the Central Government, 2001-2009H1, % of GDP**

	2001	2002	2005	2006	2007	2008	1H <sup>1</sup> 2008	1H <sup>1</sup> 2009
Total Expenditures	36,2	34,1	24,6	23,5	24,2	23,8	22,1	28,5
Non-Interest Expend	19,1	19,4	17,6	17,4	18,4	18,5	17,5	22,3
Current Transfers	7,5	7,3	7,1	6,6	7,5	7,4	7,7	10,5
Soc Sec Transfers	2,1	3,2	3,7	3,1	3,9	3,7	3,9	5,9
Interest Payments	17,1	14,8	7,0	6,1	5,8	5,3	4,5	6,2
Total Revenues	24,3	22,7	23,5	22,9	22,6	22,0	22,5	23,2
Tax Revenues	18,2	17,2	18,4	18,1	18,1	17,7	18,2	18,0
Non-Tax Revenues	6,2	5,5	5,1	4,7	4,4	4,3	4,3	5,1
Budget Balance	-11,9	-11,5	-1,1	-0,6	-1,6	-1,8	0,4	-5,3
Primary Bud Balance	5,2	3,3	6,0	5,4	4,2	3,5	4,6	0,9

**Source:** Ministry of Finance and Treasury.

**Note: (1)** For the ratios in 1H08 and 1H09, first half GDP’s of 2008 and 2009 are used.

2007 was an election year, growth was on the decline and non-interest expenditures increased in spite of stagnant revenues; the result was that the 5% primary surplus could not be attained. It is observed in Table 17 that the overall budget deficit increased in 2007, after some improvement in 1H08, there was further deterioration in 2H08 and especially in 1H09, as the government started a spending spree for the local elections in March 2009.

Thus, while the global crisis was reaching Turkey, fiscal policies were already loosened and budget deficit was on the rise. In late 2008 and from March 2009 onwards, several fiscal stimulus packages were announced, which obviously further deteriorated the fiscal balances. This trend is clearly visible in the last column of Table 17 for almost all the revenue and expenditure items.

There was a simultaneous deterioration in financing quality of the budget deficits. For instance, average maturity of domestic borrowing decreased from 34.0 months in 2007 to 31.7 months in 2008 and was 32.7 months in July 2009. Average maturity of foreign borrowing, by Eurobond issues in \$, declined from 14.8 years in 2008 to 9.1 years in 2009 as of August; the cost of the same bond issues increased from 7.% in 2008 to 7.3%

in 2009 as of September. Foreign residents' share in domestic debt fell from 13.4% in 2007 to 10.3% in 2008 and 9.2% in August 2009.<sup>13</sup>

Finally, public debt stock started to rise for the first time since 2003. Table 18 shows that there was a significant rise in central government debt stock in both 1Q09 and 2Q09.

**Table 18 Public Debt (Central Government), 1999-2009Q2, % of GDP**

	Domestic Debt	External Debt <sup>1</sup>		Total Debt
	% of GDP	% of GDP	\$ Billion	% of GDP
1999	21,9	17,9	44,1	39,8
2001	50,9	24,0	47,1	74,9
2002	42,8	28,0	64,5	70,8
2005	37,7	14,6	70,4	52,3
2006	33,2	13,6	71,6	46,7
2007	30,3	11,3	73,5	41,6
2008	28,9	10,6	78,3	39,5
2009Q1	31,0	12,2	76,2	43,2
2009Q2	32,3	11,5	78,2	43,8

**Source:** Treasury

**Note:** (1) Excludes foreign debt of the CBRT and differs from public foreign debt in Table 11. (2) In the last two rows, four quarter sums of GDP is used to find the ratios.

## **B) Fiscal Policy Measures to Counteract the Global Crisis**

When the global financial crisis started to hit Turkey in the summer of 2008, the government, particularly the prime minister, was confident that the crisis would tangentially bypass Turkey and that there was no need for additional measures. What is more, the government insisted on such official forecasts as 4% GDP growth in 2009 in spite of negative growth rates published for different activities and industries. The 4% growth forecast was changed to -3.4% as late as in mid-April 2009.

With also pressure from business representatives, firstly monetary policy changes were announced, as in other countries. Then the government began to think of fiscal measures in December 2008. After the introduction of some piecemeal measures, the first comprehensive stimulus package was announced in mid-March 2009. Two more packages were unfolded at the beginning and in mid-June 2009.

Below we provide a short summary of the measures taken with reference to stimulus packages under five headings. Details of these measures are provided in Appendix II.

<sup>13</sup> Treasury, Indicators of Debt, August and September 2009.

### **1) Measures to Promote Consumption Spending**

Major reductions were made in consumption tax rates; SCT (special consumption tax) and VAT rates were reduced effective firstly for 3 months starting on 16 March, then for 3.5 months and ending on 30 September 2009.

(1) Tax reductions encouraged sales of motor vehicles, white goods and furniture during mid-March to mid-June 2009. Momentum was lost in the second period, because the coverage and the degree of tax reductions were narrowed and consumers with deferred consumption had already made their spending. These were one shot measures and could not be sustained given their burden on the budget.

(2) Available data indicate that spending on imported goods increased more than on domestically produced ones. This was especially true for automobiles and electronic goods where 70% of additional demand went to imports.

### **2) Measures to Promote Employment**

There was a considerable reduction in social security premiums and allowances were made for short-time working. A substantial expenditure is planned on an employment and training package, to deal with the problem of unemployment.

(1) Especially short-time working has been effective in preventing lay-offs.

(2) Given that the problem is structural, measures may not be sufficient to solve the problem of unemployment in the medium term.

(3) At any rate, the employment and training schemes introduced in 4 June 2009 were not operational as of August 2009.

### **3) Measures to Promote Capital Inflows**

An "Asset Peace Law" was adopted, by which there would be a tax amnesty for all unrecorded assets. Tax exemptions were announced for incomes earned abroad. The Asset Peace Law has been criticized on the premise that it would encourage unrecorded and even unlawful activities.

### **4) Measures to Promote Investment**

A comprehensive stimulus package was announced to promote investment. The promotion scheme included corporate and income tax reductions, interest rate subsidies, payment of workers' social security premiums and allocation of investment locations.

(1) The investment promotion scheme has new features in that it makes an ordering of industries at a regional level for promotion purposes.

(2) However, there are uncertainties in terms of coverage and timing of the schemes.

### **5) Measures to Promote SME Production and Exports**

A loan guarantee scheme and subsidized credits were announced for the SMEs.

The estimated total burden of the fiscal measures designed to stimulate the economy, inclusive of government spending, on the budget, amounts to 0.8%, 2.1% and 1.6% of GDP respectively in 2008, 2009 and 2010. SPO (2009a, p.12).

## 6- PROSPECTS FOR THE FUTURE

We have seen in several tables and graphs of this paper that in Turkey the bottom of the recent crisis was generally reached at the end of the first quarter of 2009. Year-on-year growth in GDP was at a minimum in 1Q09 with -14.3%, in 2Q09 it was -7.0%. Year-on-year growth in industrial production was at the lowest in February 2009 with -23.9%, in July 2009 it was -9.1%. The highest unemployment rate was likewise recorded in February 2009 with 16.1%, it was 13% in June 2009.

The minimum in real domestic credits was recorded in April 2009. In line with the volume of world imports, volume of Turkish exports reached its lowest level in May 2009, but recovery in these two variables looks quite slow. The lowest index value of the Istanbul sock exchange was recorded in February 2009 and this index has been rising since then. The confidence index of the CBRT reached a minimum even at an earlier date in December 2008 and January 2009. However, after reaching a local maximum in July 2009, this index declined in both August and September 2009.

We conclude from these observations that in Turkey the deepest, or “depression like” part of the recent crisis is left behind, but negative growth still continues and, as evidenced by the confidence index, the future looks uncertain indeed.

We explained above that, given the insufficiency of domestic savings, capital inflows were among the most significant determinants of growth in Turkey. Thus, under the present structure of the economy, there is dependency on capital flows for higher growth. The critical question here is; will capital inflows continue in the future?

We have serious doubts here. Actually, there is a dilemma that needs to be stressed. One major adjustment that is required for the global crisis to end is the elimination of global imbalances. Yet, global imbalances have been the driving force behind capital flows. Countries like Turkey benefited from spillover effects of these flows. Countries with low-savings and deficits, such as the USA, received capital from countries with high-savings and surpluses, such as China. The adjustment suggested implies more saving for low-savers and more consumption for high savers.

If this adjustment takes place, like any adjustment it will have a cost, in the sense that global capital flows will have to slow down. That would mean that countries like Turkey would receive much less capital compared to the 2002-07 period.

If the above adjustment does not materialize and global imbalances continue, there is a serious risk of currencies like the dollar and the pound sterling to tumble down, taking the world payments system into a chaos. Such a chaos would have a retarding effect not only on capital flows but also on international trade. That might mean an even lower growth for the global economy in the medium term. We tend to think that the above adjustment will take place, but may be at a slow pace.

In either case, we predict a much lower growth for the global economy in the medium term. Obviously, this is not a novel prediction and is in line with forecasts of the multilateral institutions including the IMF. The World Economic Outlook (WEO) of the IMF forecasts a significantly lower global growth and lower capital flows in the coming three years; world average GDP growth was 4.4% in 2002-07, but is forecasted to be 2.7% in 2009-12. See below row (3) of Table 19. There is a similar lower growth forecast for developing countries, that can be seen in row (4).

**Table 19 MTP and IMF Forecasts for Macroeconomic Variables, 2009-2012**

		2002-07 Average	2009	2010	2011	2012	2009-12 Average
Tur.GDP Growth, MTP, %	(1)	6,8	-6,0	3,5	4,0	5,0	1,6
*Tur.GDP Growth, IMF, %	(2)	6,8	-6,5	3,7	4,0	3,5	1,2
*World GDP Growth, IMF, %	(3)	4,4	-1,1	3,1	4,2	4,5	2,7
*Developing World GDP Growth, IMF, %	(4)	7,0	1,7	5,0	6,1	6,4	4,8
Tur.Investment Growth, %	(5)	15,6	-17,9	7,5	6,8	10,2	1,7
Tur.Unemployment, %	(6)	10,2	14,8	14,6	14,2	13,3	14,2
Tur.CA, \$ Billion	(7)	-19,2	-11,0	-18,0	-22,0	-28,0	-20,0
Tur.CA, MTP, % of GDP	(8)	-3,8	-1,8	-2,8	-3,3	-3,9	-3,0
*Tur.CA, IMF, % of GDP	(9)	-3,8	-1,9	-3,7	-4,2	-4,1	-3,5
Tur.CPI Inflation, MTP, %	(10)	13,9	5,9	5,3	4,9	4,8	5,2
*Tur.CPI Inflation, IMF, %	(11)	13,9	5,8	6,3	5,5	4,0	5,4

**Source:** SPO (2009a) Medium Term Programme and IMF (2009) World Economic Outlook October 2009.

**Note:** (1) Inflation rates are year-end rates.

Turning now to Turkey, we refer to forecasts of the recently published Medium Term Programme (MTP) of Turkey and of the WEO of the IMF for the period 2009-2012 in Table 19. Rows that start with a \* contain IMF forecasts.

The MTP presumably assumed lower global growth and smaller capital flows in arriving at forecasts for Turkey. The MTP and the IMF forecasts agree that average Turkish growth over the 2009-12 period will decline sharply as compared to the 2002-07 period. What is more, the IMF forecasts that Turkish average growth will fall not only below the average growth of the developing countries, but also below that of the world. In the 2002-07 period, average growth of Turkey was close to the average growth of the developing countries and considerably higher than that of the world.

There are other pessimistic forecasts for Turkey. Investment is forecasted to grow at about half the rate recorded in the 2002-07 period. Investment/GDP ratio is forecasted to stay at about 20% in Turkey during 2009-10. IMF forecasts an investment/GDP ratio for

the developing countries at 30.6% in both of these years. According to the MTP, unemployment stays at over 14% on average during 2009-12. IMF forecasts that CA deficits/GDP ratio will rise again in spite of the much lower average growth.

These forecasts imply that, according to the IMF and the MTP, there will not be an adjustment in Turkey on the lines we explained above. Turkey is therefore assumed to try to pursue a growth strategy that is known to be unsustainable in the medium term. That strategy may succeed for some time, only if there is not a global adjustment.

We note here that we expect small positive year-on-year growth rates in industrial output in November–December 2009. However, a lasting recovery will not start unless investment spending starts to rise.

On the inflation front, IMF assumes that on average global inflation will be lower in the coming years, at about half of the average rate during 2002-07. Inflation in Turkey is forecasted to be just over 5% in the 2009-12 period by both the IMF and the MTP. It seems that the optimistic global inflation forecasts are extended to Turkish inflation. Yet, there is a significant probability of inflation rising globally and in Turkey.

At the global level, a lot depends on (i) when and how fiscal and monetary adjustments are made, or to put it with a fashionable term, on exit strategies, and (ii) on the path of commodity prices. If rising petroleum and gold prices incorporate higher inflation expectations, then IMF forecasts look optimistic and a mild form of stagflation is a real possibility. In the case of Turkish inflation, global inflation is an important determinant, but the coming election is an equally important element and it might mean continuation of expansionary fiscal and monetary policies for a year and a half.

## **7- CONCLUDING REMARKS**

In the previous sections, we evaluated the developments in the Turkish economy but left one important question unanswered; why was there such a deep recession in some countries like Turkey, than in others? On the basis of visual inspection of data, we find that countries with the following characteristics were more affected by the global crisis.

- 1) A fast expanding financial bubble, or a Minsky bubble. Turkey did have a rather fast expanding financial sector, but it did not reach the levels of a Minsky bubble. Domestic credits/GDP ratio fell to a low 12% after the 2001-02 crisis, and reached 29% in 2007.
- 2) A financial – banking sector with “toxic” assets. The Turkish banking sector did not carry any or significant toxic assets.
- 3) Declining growth before the global crisis. Turkey did have a falling growth before the crisis, starting in 2007. The fall in investment growth was more pronounced; investment growth turned to negative before the crisis hit Turkey.

4) Significant CA deficits and dependence on capital inflows. Turkey had high CA deficits, exceeding 6% of GDP in 2006 and 2007 and depended heavily on capital inflows. In 2006, there was a major volatility in global capital markets. In 2007, there were political uncertainties in Turkey. These meant volatility in capital inflows to Turkey leading to volatility in exchange rates, hikes in interest rates and uncertainties generated by “fear of stoppages and reversals.” Fall in private domestic demand growth, particularly in investment, followed these developments.

5) Strong integration with the world markets. Turkish exports are heavily dependent on EU demand. The main factor behind the fall in Turkish exports when the crisis started was the sharp decline in exports to the EU.

6) Significant budget deficits and limited room for expansionary fiscal policies during the crisis. While the global crisis was reaching Turkey, fiscal policies were already loosened and budget deficit was on the rise. Although fiscal stimulus packages were announced, they could not be sustained for long, since they raised fears of fastly deteriorating fiscal balances. What is more, when the global financial crisis started to hit Turkey, the government, particularly the prime minister, was confident that the crisis would tangentially bypass Turkey and that there was not an urgent need for stimulus packages.

7) An overvalued currency. The TL was substantially overvalued before the crisis. Estimates of the degree of overvaluation differ; in mid-2008 it was about 60% on the basis of REER computed by the CBRT, and was about 25% when labor productivity is accounted for. Overvalued currency contributed to non-employment generating growth and the decline of labor intensive industries.

8) Falling savings rates. CA deficits reflected falling private savings rates in Turkey and contributed to global imbalances. We dwell more on savings rates below in the concluding section.

### **Medium Term Policy Alternatives**

Monetary policy in Turkey since 2001 has rested heavily on interest rate changes as the only policy option in the impossible trilemma, while capital movements are left completely free and exchange rates are let to float. This approach has created its believers that capital will flow without much aberrations and will stay for long. It has also created believers in floating exchange rates that it will cure problems related to external imbalances and achieve necessary adjustments.

However, this system has created heavy dependence on capital inflows, namely on external savings in Turkey. It is seen in Table 20 that in the last 10 years, the savings rate declined from 24% to 16%. Likewise, private savings declined from about 25% to below 15%.

Yet, the recent crisis reminds, as the earlier ones did, once again that Turkey can not achieve stable and sustainable growth by depending so much on capital inflows. External savings could obviously complement domestic savings, but they should be considered as

a source of temporary financing. Heavy dependence on capital inflows creates uncertainties based on “fear of stoppages and reversals” which particularly affect private investments.

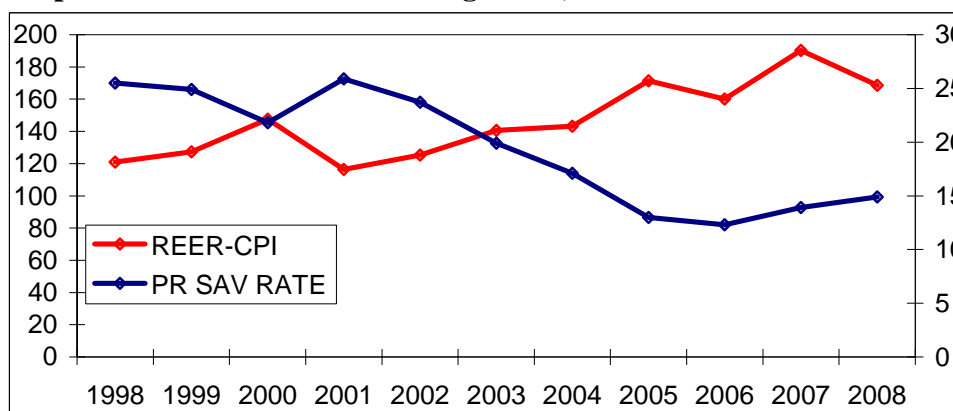
**Table 20 Savings Rates, 1998-2008**

	Private	Public	Total
1998	25,5	-1,4	24,1
1999	24,9	-4,9	20,0
2000	21,8	-3,4	18,3
2001	25,9	-7,2	18,6
2002	23,7	-4,9	18,8
2003	19,9	-4,2	15,7
2004	17,1	-1	16,2
2005	13,0	3,1	16,1
2006	12,3	4,4	16,7
2007	13,9	2,3	16,2
2008	14,9	1,1	16,0

**Source:** State Planning Organization

The implied monetary policy of completely free capital flows and floating exchange rates has tried to discipline the fiscal policy by way of high interest rates, leading to an overvalued TL, which in turn has encouraged lower savings. There is a significant negative relationship between private savings rate and the REER in Turkey, as is evident below in Graph 9.

**Graph 9 REER and Private Savings Rate, 1998-2008**



**Source:** CBRT and State Planning Organization

It is true that this monetary has succeeded in reducing inflation, but it has been detrimental for long-term competitiveness and employment generation. In the medium term therefore, capital controls and exchange rate controls should also be given consideration.

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## **APPENDIX I**

### **Details of Monetary Policy Measures to Counteract the Global Crisis**

(1) Measures to meet the liquidity needs of the banking system:

(a) To prevent excessive volatility in the O/N repo rates, the CBRT started to provide liquidity through 1-week repo auctions starting in May 2008 with rates close to O/N borrowing rates.

(b) The CBRT resumed intermediation in the FX Deposit Market on 9 October 2008 and transaction limits of the banks were doubled to \$ 10.8 billion on 24 October 2008.

(c) FX purchase auctions were suspended as of 16 October 2008.

(d) To provide FX liquidity to the banks, the CBRT started FX selling auctions on 24 October 2008 with a daily limit of \$50 million. These auctions were suspended on 30 October 2008. Considering the volatility in the FX markets in early March, they were resumed once again on 10 March 2009. The second round auctions were suspended on 3 April 2009. Altogether, \$ 1 billion were sold in 20 auctions.

(e) The maturity of the FX deposits borrowed by the banks from the CBRT in the FX Deposit markets, in terms of \$ and €, were extended from one week to one month on 21 November 2008. On the same date, the lending rates of the CBRT in these markets were reduced to 7% for the \$ and 9% for the € from 10% for both. The maturity of borrowing from the CBRT was extended once again to 3 months. Lending rates were cut once again to 5.5% for the \$ and 6.5% for the € on 20 February 2009. In addition, the maturity of matched inter-bank transactions in this market was extended from 1 month to 3 months.

(f) The FX required reserves ratio was reduced from 11% to 9%, creating an FX liquidity for the banking system equalling to around \$2.5 billion.

(g) To promote TL deposits and loans, the remuneration on FX required reserves was terminated and the interest rate on TL required reserves was raised from 75% to 80% of the CBRT’s overnight borrowing rate.

(2) Measures to help ease export financing: (a) The limit of pre-shipment and post-shipment export rediscount credits of the Eximbank was doubled from \$500 million to \$1 billion on 5 December 2008. This limit was raised once again on 17 April 2009 to \$ 2.5 billion. (b) To raise the number of exporters and producers that receive export rediscount

credits, eligibility criteria for these credits were loosened. Credit limits were raised on 20 March 2009. These limits were raised once again on 17 April 2009.

## **APPENDIX II**

### **Details of Fiscal Policy Measures to Counteract the Global Crisis**

#### **1) Measures to Promote Consumption Spending**

1). Tax reductions were made effective first for a 3-month period, between 16 March and 15 June 2009, then for a 3.5 month period between 16 June and 30 September 2009.

i) VAT reduction from 18% to 8% on sales of new houses with an area of over 150 m<sup>2</sup>. This reduction was effective for the first three-month period and was not extended in the second three months.

ii) Special Consumption Tax (SCT) reduction on;

- a) Light commercial vehicles, from 10 % to 1% in the first period, to 3% in the second period.
- b) Passenger cars with an engine up to 1600 cm<sup>3</sup>, from 37% to 18% in the first period, to 27% in the second period.
- c) Buses and trucks, from 4% to 1% in the first period, 1% again in the second period.
- d) Motorcycles with an engine up to 250cm<sup>3</sup>, from 22% to 11% in the first period, to 16% in the second period.
- e) Electrical appliances (white goods), from 6.7% to 0% in the first period, to 2% in the second period.
- f) Electronics, from 6.7% to 0% in the first period, back to 6.7% in the second period.

2). Removal of all taxes and fines on vehicles produced before or in 1979 if scrapped.

3). VAT reductions were made from 18% to 8% between 29 March and 30 June 2009 on the sale of the following items; new offices, furniture, information, communication and office equipment and industrial equipment. The 8% VAT rate was extended for another 3 months until 30 September 2009.

4). The Resource Utilization Support Fund tax on consumer loans was reduced starting on 16 March 2009 from 15 to 10%.

5). Sales tax on real estate reduced from 0.15% to 0.05% during 29 March to 30 June 2009. This reduction was not extended into the 1 July-30 September 2009 period.

#### **2) Measures to Promote Employment**

1). In May 2008, social security contributions for young and female workers were reduced; there would be 100% exemption in the first year of employment, 80% in the second year, 60% in the third year, ... 20% in the 5th year. These exemptions would be paid for by the treasury. The exemptions were extended for a second year in May 2009.

2). Subsidies on energy costs and exemptions on income taxes and social security premiums were introduced in mid-2008 to promote investment and employment. These were then extended for another year.

3). Short-time working, with employees either working less hours in a day or working less days in a week, started in January 2009 for a period of 3 months. Employees in a short-time working program receive allowances paid by the Turkish Employment Organization from the Unemployment Insurance Fund. These allowances could not exceed unemployment premia. In March 2009, short-time working is extended for another 3 months and the allowances were increased by 50%. The government could extend short-time working for another 6 months.

4). The government announced a comprehensive employment package, to deal with particularly the youth unemployment problem, as part of a wider package that covers a credit guarantee scheme and measures promote investment on 4 June 2009. The package contained mainly five items. (i) Temporary employment for 6 months in the public works for 120 000 persons, (ii) internships for 100 000 persons, to be financed from the Unemployment Fund, (iii) vocational training for 200 000 persons, (iv) courses on entrepreneurship to 10 000 persons, and (v) establishment of private employment offices.

### **3) Measures to Promote Capital Inflows**

1). In November 2008, the parliament adopted an "Asset Peace Law" by which there would be a tax amnesty for all unrecorded assets, including cash, securities, other capital market instruments and real estate, if they are declared. No tax inspections or reassessments will be made on the declared assets. Only a 2% tax will be imposed on assets of foreign origin if they are repatriated or declared for repatriation. The tax rate would be 5% for domestic assets declared. The law was applicable till March 2009, but was extended again till 30 September 2009.

2). The withholding tax on credits obtained from foreign creditors is reduced to 5% from 15% in March 2009.

3). Portfolio management companies of foreign funds that are not subjected to corporate taxation will pay income tax only for those incomes they earned through their portfolio management companies set up in Turkey.

4). Incomes generated from; (i) sale of shares of legal entities established outside of Turkey, (ii) dividends of legal entities established outside Turkey, and (iii) commercial activities conducted abroad, will be exempt from taxation provided that these incomes are transferred to Turkey by 31 May 2009 the latest.

### **4) Measures to Promote Investment**

A comprehensive stimulus package was announced on 4 June 2009 that included measures to promote investment. The investment promotion scheme was devised on the basis of regions, industries and size of investments. In this scheme, there were corporate and income tax reductions, interest rate subsidies, payment by the treasury of employers'

share of workers' social security premium and allocation of investment locations. These measures would apply until the end of 2010.

In addition to regional variations in the promotion schemes, there were industrywise differences and 12 industries were singled out, including automotive industry, chemicals, petroleum refineries, transportation, mining, and pharmaceuticals. Promotion schemes also varied according to size; large-scale new investments would be supported more.

The scheme promotes the following industries on a regional basis:

**Region 1:** Corporate tax rate would be cut to 10% and the treasury would contribute the social security premiums for 2 years to encourage high technology industries including electronics, pharmaceuticals, machinery and motor vehicles.

**Region 2:** Corporate tax rate would be cut to 8% and the treasury would contribute the social security premiums for 3 years to encourage industries including machinery, paper, non-metallic minerals, technical textiles and food and drink.

**Region 3:** Corporate tax rate would be cut to 4% and the treasury would contribute the social security premiums for 5 years to encourage labor intensive industries including agriculture-based manufacturing, textiles and clothing, leather, and plastics as well as tourism, health and education.

**Region 4:** Corporate tax rate would be cut to 2% and the treasury would contribute the social security premiums for 7 years to encourage the same industries in region 3.

In addition to the above, (i) all investments would be waived of VAT and customs duties, and (ii) investments in Regions 1 and 2 would receive subsidized credits.

### **5) Measures to Promote SME Production and Exports**

1) The stimulus package of 4 June 2009 included a loan guarantee scheme by which the Credit Guarantee Fund would insure 65% of the loans extended by banks to SMEs in 2 years. The remaining 35% of the risk will be borne by the banks. The treasury would transfer TL 1 billion to the Credit Guarantee Fund.

2). Zero interest loans were extended to manufacturer and exporter SMEs amounting to \$ 1.2 billion. Additional low interest loan programs for the SMEs was initiated with a credit value of \$ 2 billion.

3). Starting from 1 January 2009, interest on loans provided for the construction of industrial zones and small industrial districts were reduced and the grace period of these loans were doubled from 1 year to 2 years.

4). In credit financing for exports, the payment guarantee requirement given by the foreign banks has been removed and guarantees by the Turkish Eximbank and other commercial banks would be sufficient. Also, limits of Eximbank credits were raised and interest on these credits were reduced further on 24 March 2009.

5). Maturities of low interest investment credits were raised from 5 years to 7 years.