

# MONETARY POLICY REPORT

JANUARY 2003



*CENTRAL BANK OF THE  
REPUBLIC OF TURKEY*

## CONTENTS

<b>GENERAL ASSESSMENT</b> .....	1
<b>I. PRICE DEVELOPMENTS</b> .....	4
I.1. Developments in Consumer Prices .....	5
I.2. Developments in Wholesale Prices .....	8
I.3. Inflation Expectations.....	11
<b>II. MONETARY AND EXCHANGE RATE POLICY</b> .....	18
II.1. General Framework of the Monetary and Exchange Rate Policy .....	18
II.2. Developments in CBRT Balance Sheet.....	19
II.3. Developments in Monetary Aggregates.....	23
II.4. Developments in Interest Rates.....	24
II.5. Developments in Foreign Exchange Markets.....	27
<b>III. DEVELOPMENTS IN FINANCIAL MARKETS</b> .....	29
III.1. The Banking Sector.....	29
III.2. The Securities Market.....	35
<b>IV. PUBLIC FINANCE AND DOMESTIC DEBT STOCK</b> .....	37
IV.1. Revenues.....	37
IV.2. Expenditures .....	38
IV.3. Consolidated Budget Deficit and Financing.....	39
IV.4. Domestic Debt Stock .....	39
<b>V. DEMAND AND PRODUCTION</b> .....	42
V.1. Demand Developments.....	42
V.2. Developments in Labor Market.....	46
<b>VI. BALANCE OF PAYMENTS</b> .....	51
VI.1. Developments in Foreign Trade.....	51
VI.2. Current Account.....	54
VI.3. Capital Account.....	55
<b>VII. DEVELOPMENTS IN THE WORLD ECONOMY</b> .....	58
<b>VIII. EVALUATION OF FUTURE DEVELOPMENTS</b> .....	64
VIII.A. INFLATION IN 2002.....	64

VIII.B. OUTLOOK FOR 2003	64
VIII.B.1. Accomplishments and Probable Risks with Fight against Inflation	64
VIII.B.2. Monetary Policy Strategy and Inflation for 2003	65
VIII.B.3. Growth, Demand and Inflation	65
VIII.B.4. Fiscal Discipline and Inflation	66
VIII.B.5 . Developments in Exchange Rate and Inflation	66

## GENERAL ASSESSMENT

*Implicit inflation targeting and Base Money were the basic nominal anchors of the monetary policy in 2002. The short-term interest rates, which are the main policy instruments of the Central Bank for stability objective, have been set after a comprehensive assessment of the effects of various macroeconomic variables on the future inflation developments. With the last of the six cut-down operations in 2002, overnight interest rate dropped down to 44 percent and overnight lending interest to 51 percent on November 11, 2002.*

*The numerical objectives specified for the monetary program and components of the Central Bank balance sheet have constituted another important aspect of the monetary policy implementation. Within this framework, the Base Money and Net International Reserves targets specified as performance criteria and the targets for Net Domestic Reserves specified as indicative targets in the Letters of Intent dated January 18, 2002 and July 30, 2002, have been attained.*

*The CBRT (Central Bank of the Republic of Turkey) continued with its 4-week maturity Turkish Lira Deposit Buying Auctions that it first held on April 1, 2002. Foreign Exchange Buying Auctions, which were temporarily interrupted on July 1, 2002, were not held in October-December 2002 period.*

*Thanks to the monetary, financial and income policies as well as the continued structural reforms, CPI inflation remained well below the 2002 target despite fluctuations observed in the financial markets. Annual WPI and CPI inflation, which were recorded as 88.6 and 68.5 percent by the end of 2001, came down to 30.8 and 29.7, respectively, by the end of 2002. The rate achieved in 2002 for WPI was the lowest of the last 16 years while that of CPI was the lowest of the last 20. Meanwhile, figures and other data pertaining to the first nine months of 2002 indicate that increase in GNP in 2002 will be well above the end-year estimation of 4 percent.*

*When inflation developments in the last quarter of 2002 are analyzed, it is observed that increase in the prices of food and apparel has fuelled into CPI inflation. However, deceleration in the increase in consumer durables and services sector prices has limited the effect of these developments on CPI inflation.*

*A look into the secondary market interest rates shows that developments in the interest rates of state securities were bound up with the election process. Within this framework, decrease in interest rates at ISE Bonds and Bills Market, which started as of the end of October, further, accelerated in the first half of November. The interest rates started to rise in the second half of December after showing no significant change in the second half of November and the first half of December. Parallel to the developments in ISE Bonds and Bills Market and cut-downs in interest rates, interest rates at 4-week maturity Turkish lira Deposit Buying Auctions decreased in November. A limited rise was observed in interest rates by the end of December.*

*An analysis of the money supply developments reveals that M1 and M2 monetary aggregates have increased by 5.8 and 1.8 percent, respectively, in December compared with the figures of September. The Currency in Circulation as a sub-item of M1 money supply, increased by 6.4 percent in real terms in the same period while sight deposits, which is another sub-item of M1 Money Supply, increased by 5.2 percent. Real increase in time deposits, as a sub-item of M2 money supply has been 0.5 percent. Meanwhile, M2X money supply has shrunk by 1.5 percent in real terms due to decrease in TL values of FX Deposit accounts.*

*Interest rates at the Treasury auctions increased in October and average compound interest rate reached 64.4 percent. The interest rates decreased substantially in November when average compound interest rate came down as low as 53.0 percent. The decreasing trend continued in December too and the rates dropped below the 50 percent level.*

*With the relative stability established after the elections, the exchange rates pursued a downward trend until the*

second week of December. With this slump, exchange rates came down even below the level expected by the economic units in November. As a result of the excessive fluctuations in the referred period and concurrent with the principles that it had announced earlier, the CBRT intervened in the exchange market through buying foreign exchange on December 2, 2002. While there was no change in the foreign exchange deposit accounts or TL deposit accounts in favor of the other, the sudden increase in the 6-month maturity TL deposits was evidence for the trust that the economic agents held for long-term stability in exchange rates.

The downward trend in exchange rates reversed for a rapid appreciation by the second week of December. By the end of December, the exchange rates had reached a level well above the pre-election period. In response to the excessive fluctuations mainly stemming from risk perceptions, the CBRT intervened in the market through selling foreign exchange, and the excessive volatility was eased.

September-December period was marked by contraction in credit volume. Despite the ease in political uncertainties after the elections held on November 3, 2003, increase in economic and political uncertainties in international markets fed into this contraction. In this period, contraction in credit volume mainly stemmed from the contraction in foreign exchange credits and specialized credits. Compared with September, the credit volume contracted by 5 percent in real terms, in December. While credits of public and private banks decreased by 5 percent in real terms in the same period, credits of the Fund banks contracted by 22 percent.

Compared with the same period of the previous year, budget surplus excluding interest and privatization increased by 37.5 percent in January-November 2002 period and reached 17.1 quadrillion Turkish liras. The 3 quadrillion Turkish liras, which was transferred from the CBRT's 2001 profit to the budget in May, constituted an important source for the improvement observed in the non-interest budget surplus in the first 11 months of the year. The non-interest budget surplus reached 1.8 quadrillion Turkish liras in November 2002.

Compared with the same period last year, the budget revenues increased by 48.1 percent in January-November 2002 period and reached 69.8 quadrillion while tax income increased by 50 percent and realized at 54 quadrillion Turkish liras.

In January-November 2002 period, consolidated budget cash deficit was 28.3 quadrillion Turkish liras. In this period, the Treasury acted as the net borrower in domestic borrowing and restarted to issue flexible rate securities as of the turn of 2002 with the aim of extending the maturity of borrowing. When the structure of the domestic borrowing is analyzed, it is observed that Treasury is the net payer in bonds and net borrower in bills. The Treasury used 16.6 quadrillion through bills in the same period.

The domestic debt stock, which had reached 122.2 quadrillion by the end of 2001, increased by 19 percent in November 2002 and rose to 145.3 quadrillion. The increase in domestic debt stock has remained limited until May owing to the IMF credit transferred to the Treasury accounts on February 7, 2002. However, political uncertainties at the end of May and announcement of a decision to hold early elections on November 3, 2002 led to shortening of maturities and increase in interest rates of domestic borrowing, which in turn triggered an increase in domestic debt stock.

Net external debt, which is another instrument used to finance budget deficit, materialized at 15.7 quadrillion in January-November 2002 period. The credit obtained from the IMF has been an important factor in this development.

Following the contraction in 2001, Turkish economy started to grow in 2002 again. Compared with the same period last year, GNP rose by 7.8 percent in the first quarter of 2002 and by 6.2 percent in the first three quarters of 2002. The GNP is estimated to grow by 6.5 percent in 2002 in comparison with the figures of the previous year.

When the contribution of demand components to GDP growth in the first quarter of 2002 is analyzed, it is

observed that all demand compounds have made positive contribution to the GDP. Increase in public expenditures and stock accumulation have been the main factors in growth in the first quarter of the year.

Compared with the same period last year, exports increased by 9.6 percent in January-October period and reached 28.3 billion US dollars, while imports grew by 15.5 percent and reached 39.7 billion US dollars. As a consequence, foreign trade deficit increased by 11.4 percent in 2002 in comparison with the figures in 2001 and reached 11.4 billion US dollars.

While current accounts run into deficit in the first half of 2002, the June-October period witnessed a surplus in current accounts. The rapid increase in imports due to growth in industry in the first half was the main source of this development. In the rest of 2002, current accounts were in surplus as a result of the increase in tourism and exports revenues. An analysis of January-October period as a whole reveals that increase in exports and tourism revenues have counterbalanced the rise in imports and thus, current accounts scored a surplus of 594 million US dollars.

Total capital inflow reached 918 million US dollars in January-October 2002 period while net direct investments realized at 491 million US dollars. Although the Treasury announced that it would allow a foreign capital inflow of 1.7 billion US dollars, capital inflow stemming from direct investments stayed at a mere 549 million US dollars. The difference between the amount actually utilized and the amount that was permitted may be attributed to the political uncertainty in this period and the decline in investor confidence.

No broad and robust pick-up was observed in the world economy in the third quarter of the year. Even in the United States that leads global economy, growth is mainly driven by consumption and investments have shown no significant increase since the turn of 2002. In the Euro area, growth rates stay below 1 percent and the risks hindering growth have not weakened. In Japan, where the structural problems are yet to be solved, economic activity was led by the increase in exports.

While the East Asian economies enjoy growth rates well above the global averages, the Latin American countries are experiencing a rather slow and vulnerable recovery process.

Generally speaking, the election process between September 2002 and December 2002, did not lead to a serious interruption in the steadfast implementation of the economic program. Supported by price stability-oriented monetary policy implementation, this brought along favorable macroeconomic developments besides a significant fall in inflation. Maintaining the consistent structure of tight fiscal and monetary policies, strict adherence to the program in the next term will influence the expectations and therefore, enable the targets to be attained despite external shocks.

## I. PRICE DEVELOPMENTS

The annual inflation, which was 88.6 percent in CPI and 68.5 percent in WPI in 2001, realized at 30.8 and 29.7 percent, respectively, in 2002. With these figures, CPI inflation came down to the lowest level of the last 16 years while WPI inflation scored the lowest level of the last 20. Actual inflation remained 5.3 points below the CPI inflation target and 0.2 points below the WPI inflation target.

With restoration of stability in the markets in August, the economic indicators started to improve while Turkish lira began to appreciate. Improvement in the economy accelerated in the last quarter, especially after the election process. The structural reforms that have been implemented since the adoption of the economic program and steadfast implementation of the economic program played an important role in circumventing the uncertainty period at the lowest cost.

Consequently, increase in all sectors, except for the food group, decelerated in the last quarter of the year. In October-December period, increase in CPI inflation excluding food realized at 6,3 percent, that is below the rate of increase in the first quarter of the year. In the same period, increase in WPI inflation excluding food remained at 4.9 percent, displaying a significant deceleration compared with the figures of the second and third quarters (Table I.1).

**Annual WPI inflation scored the lowest level of the last 16 years with 30.8 percent while annual CPI inflation became the lowest of the last 20 years with 29.7 percent. The actual inflation remained 5.3 points below the end-year CPI inflation target and 0.2 points below the end-year WPI inflation target.**

The gap between the rates of increase in CPI and WPI inflation in 2001 was largely bridged in 2002, however, the end-year WPI inflation slightly exceeded CPI inflation (Figure I.1), and this was mainly due to the fact that contribution of agricultural prices to WPI inflation was more than the contribution of food prices to CPI

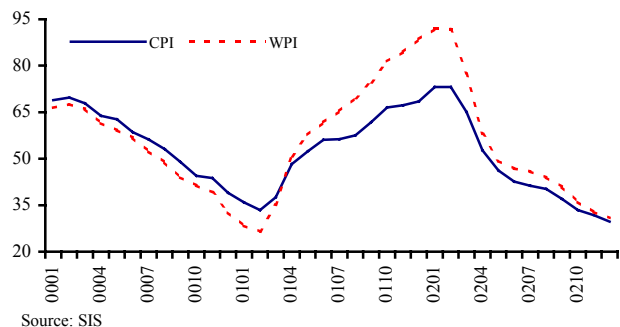
inflation. Thus, CPI inflation excluding food, which realized at 31.5 percent, while WPI inflation excluding food became 29.6 percent (Table I.1).

Table I.1. Annual and Cumulative Inflation %

	Weight (%)	Annual		2002			
		2001 Dec	2002 Dec	1. Quarter	2. Quarter	3. Quarter	4. Quarter
WPI	100,00	88,6	30,8	8,8	3,4	8,1	7,5
WPI (Public)	23,17	99,7	32,4	5,2	9,7	10,7	3,7
WPI (Private)	76,83	84,6	30,3	10,2	1,1	7,1	9,1
WPI (Exc. Agriculture)	77,78	96,3	29,6	4,6	7,5	9,9	4,9
WPI (Agriculture)	22,22	65,5	35,2	23,8	-8,9	1,9	17,5
CPI	100,00	68,5	29,7	8,4	3,2	7,3	8,0
CPI (Tradable)	58,16	78,1	30,1	9,9	2,3	4,7	10,5
CPI (Non-tradable)	41,84	59,4	29,4	6,8	4,3	10,0	5,5
CPI (Goods)	70,69	80,9	29,7	8,7	2,7	5,8	9,8
CPI (Services)	29,31	48,2	29,8	7,9	4,3	10,1	4,8
CPI (Administered)	20,72	92,0	31,3	7,5	5,3	9,2	6,1
CPI (Non-administered)	79,28	62,1	29,2	8,5	2,8	6,5	8,8
CPI (Food)	28,50	78,4	24,1	12,7	-7,8	4,6	14,1
CPI (Durable Goods)	7,33	65,6	45,0	24,7	3,8	9,8	2,1
CPI (Exc. Food)	68,91	65,6	31,5	7,1	6,9	8,0	6,3
CPI (Exc. Housing)	74,2	72,9	30,1	9,3	2,3	7,0	8,8
ER Basket (average)	-	113,6	15,8	-7,2	16,3	9,4	-2,0
Export Prices <sup>(1)</sup>	-	-5,8	5,4	-	-	-	-
Import Prices <sup>(1)</sup>	-	-5,0	6,0	-	-	-	-

Source: SIS, CBRT  
(1) June - June

Figure I.1. WPI and CPI; 1994=100 (Annual Percentage Change)

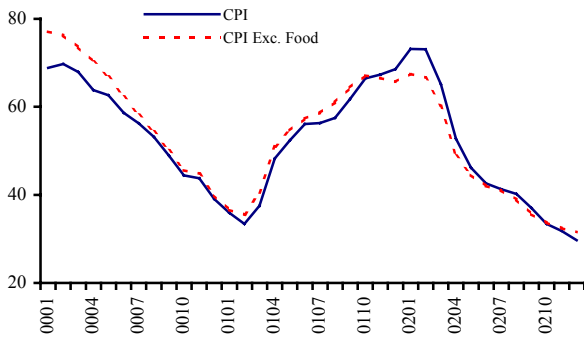


Source: SIS

When compared with the figures of the third quarter, it is observed that public prices in WPI have decelerated. However, in 2002 as a whole, public prices increased much rapidly in WPI than they did in CPI as the share of increase in fuel prices represented in WPI is larger than CPI.

Increase in food and agricultural prices accelerated significantly in the last quarter of the year due to seasonal factors. While the rate of increase in food and agricultural prices remained well below WPI and CPI inflation in the first three quarters of the year, it accelerated in October-December period due to the Holy Month of Ramadan and the Sugar Feast following it.

**Figure I.2. CPI and CPI Excluding Food; 1994=100 (Annual Percentage Change)**



Source: SIS

### I.1. Developments in Consumer Prices

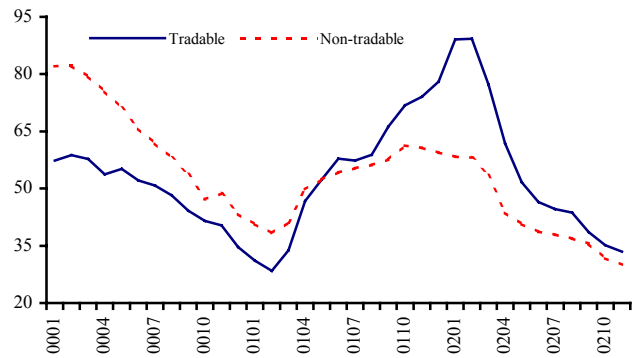
The consumer prices inflation was adversely affected by the food and clothing prices that increased in the last quarter of the year due to seasonal factors. Meanwhile, deceleration in the increase in prices of consumer durables and services sector has avoided further increase in CPI inflation.

#### Developments in the Prices of Tradables:

In the last quarter of the year, when exchange rate followed a stable course, increase in the prices of tradables was more than that of non-tradables, mainly because of the rise in the prices of clothing and food groups in October-December period due to seasonal factors. However, the end-year inflation rates of both groups have been close (Figure I.1.1). The exchange rate-based stabilization program pursued in 2000 failed to

decelerate the increase in the prices of non-tradable goods. However, increase in the prices of non-tradable goods also decelerated in 2002, which indicates that inflation expectations have been managed more successfully and stiffness of prices has been broken with the help of deficient domestic demand (Box I.1).

**Figure I.1.1. CPI Tradable and Non-tradable; 1994=100 (Annual Percentage Change)**



Source: SIS, CBRT

### Developments in the Prices of Goods and Services

An analysis of the prices of goods by quarters reveals that the highest rate of increase occurred in the last quarter. The increase mainly stemmed from rise in clothing and food prices due to seasonal factors. In services sector, increase in the prices of housing rents as well as in the services other than housing rents remained rather limited. Increase in housing rents decelerated significantly in the mentioned period, while increase in the prices of health and education services became the lowest of the four quarters. Increase in the prices of services including housing rents group followed a steady course throughout 2001 and 2002 (Figure I.1.2). While CPI inflation realized at 109.6 percent in the period that lasted for 22 months between February 2001- when the crisis broke up- and December 2002, housing rents swelled by 70,6 percent. Decline in the real incomes and economic stagnation were main reasons of this development.



Figure I.1.2. CPI Goods and Services Prices; 1994=100 (Annual Percentage Change)

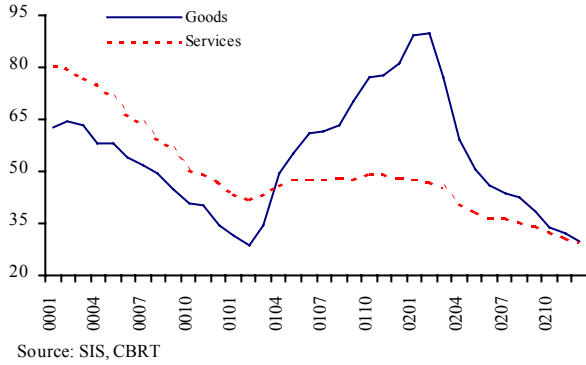
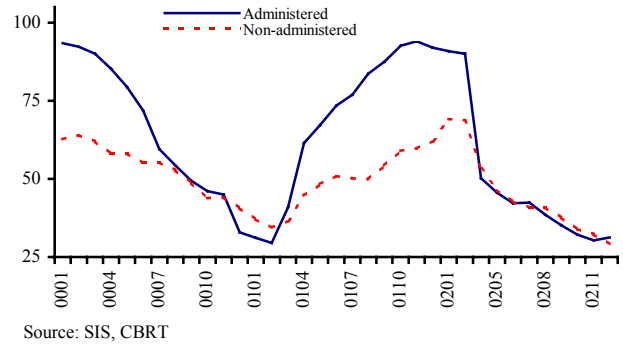


Figure I.1.3 CPI Administered and Non-Administered Prices; 1994=100 (Annual Percentage Change)



**Increase in fuel prices played an important role in developments regarding the prices of administered goods in October-December 2002 period.**

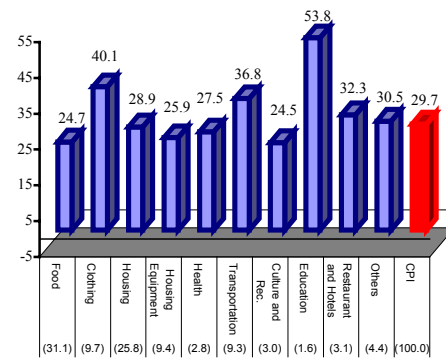
**Price Developments in Administered Goods:**

Increase in fuel prices played an important role in the developments regarding prices of administered goods in October-December 2002 period. Fuel prices, which were significantly rolled back in November, started to rise again due to the developments in international fuel prices in December. Meanwhile, the month of November also witnessed adjustments in public prices other than fuel prices and prices of products such as cigarettes, alcoholic drinks, sugar and tea have been increased. However, the fall in fuel prices in November has limited the effect of these adjustments on CPI inflation. In December, price adjustments mainly stemmed from the prices of fuel products. Consequently, prices of administered goods increased by 6.1 percent in October-December 2002 period and this rate indicates a lower level compared with the July-September 2002 period. In the same period, prices of non-administered goods increased by 8.8 percent. The end-year figures pertaining to increase in the prices of both administered and non-administered goods converged towards the general CPI inflation figure. Despite acceleration in prices in the third quarter, public price increases remained below the end-year inflation target with 31.3 percent. (Figure I.1.3).

**CPI Sub-items**

Education, clothing and transportation were the groups that recorded the highest rates of increase among all CPI items. Entertainment, food and furniture prices recorded the lowest rates of increase among CPI sub-items.

Figure I.1.4 CPI and Sub-items :1994=100 (Year-end Inflation)



**Developments in Food Prices**

The positive effect of food sector prices on inflation in the second and third quarters went into reverse in the fourth quarter. With the effect of seasonal factors, food prices recorded the highest rate of increase in October-December period. However, on general, food sector has

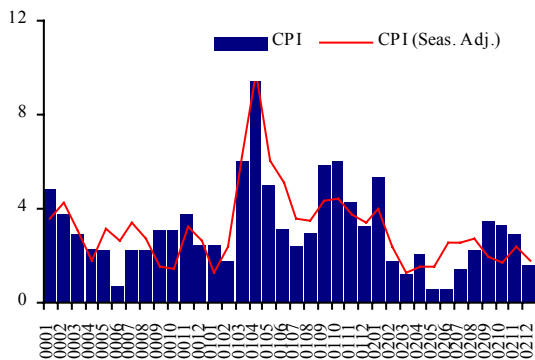
been the CPI item that recorded the lowest increase in 2002. Favorable weather conditions and abundant crop have affected food prices positively. In the last quarter, prices started to accelerate due to the Holy Month of Ramadan followed by the Sugar Feast, however the rise remained below the end-year CPI inflation (Table I.1.1).

Table I.1.1. CPI and Sub-items; 1994=100

	Annual		2002.			
	2001	2002	1. Quarter	2. Quarter	3. Quarter	4. Quarter
CPI	68,5	29,7	8,4	3,2	7,3	8,0
Food, Beverages, Tobacco	80,2	24,7	11,1	-5,6	4,6	13,7
Food	78,4	24,1	12,7	-7,8	4,6	14,1
Clothing and Shoes	65,2	40,1	-2,9	23,9	-0,2	16,8
Housing	59,6	28,9	6,6	5,4	7,9	6,3
Rent	39,7	29,0	7,2	5,3	7,6	6,2
Housing Equipment	72,7	25,9	9,9	3,9	7,7	2,4
Health	58,4	27,5	9,9	3,0	9,5	2,9
Transportation	77,5	36,8	14,6	5,4	9,8	3,1
Culture and Recreation.	61,7	24,5	6,8	5,9	5,4	4,4
Education	52,4	53,8	0,3	0,0	53,3	0,1
Restaurant and Hotels	46,2	32,3	9,4	6,7	6,6	6,3
Others.	81,2	30,5	11,6	3,0	8,9	4,2
Goods	80,9	29,7	8,7	2,7	5,8	9,8
Goods Exc. Food.	82,4	32,9	6,4	9,0	6,5	7,6
Services	48,2	29,8	7,9	4,3	10,1	4,8

Source: SIS, CBRT

Figure I.1.5. CPI and Seasonally Adjusted CPI; 1994=100 (Monthly Percentage Change)



Source: SIS, CBRT

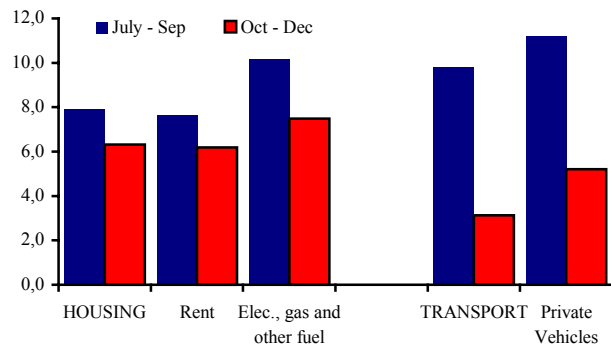
### Developments in Housing Group Prices

Deceleration in the increase in house rents in October-December period compared with July-September period has been the main factor that limited further increase in housing group prices (Figure I.1.6). However, electricity, heating and other expenses increased significantly in the last quarter because of the price adjustments in November. Still, the increase in house rents, which realized at 29.0 percent, made a positive effect on end-year CPI inflation.

### Developments in Furnishings and Transportation Prices

The increase in the prices of furnishings has been lower than the general CPI inflation due to annual exchange rate appreciation of 15.8 percent and weak domestic demand. Prices in this sub-item went up because of the adjustments in VAT rates in the first quarter and appreciation of exchange rates in third quarter.

Figure I.1.6. Housing and Transportation Price Increases; 1994=100



Increase in transportation sector prices realized 7.1 percentage points over the general CPI inflation in 2002. In January 2002, prices of private transportation vehicles increased by 27.1 percent due to tax adjustments and seasonal factors. Vigorous exports activities in automobile sector limited the effect of sluggish domestic demand on the prices and private transportation vehicle prices increased by 62.8 percent in 2002. Rise in fuel prices and its effect on transportation prices made a negative impact on transportation sector prices.

Under the light of these developments, seasonally adjusted consumer prices indices according to quarterly moving averages sustained its downward trend in the last quarter of the year. While the year-on-year CPI inflation increased by 29.7 percent in December, seasonally adjusted annualized general CPI inflation realized at 26.3 percent and CPI excluding food at 27.4 percent (Figure I.1.7).

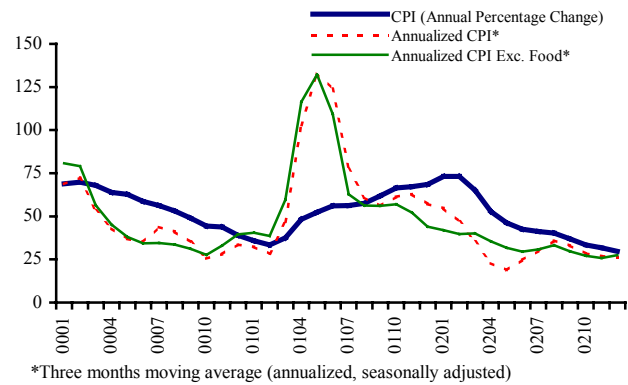
**The fiscal discipline provided by the firm policies helped improve the expectations that had been rigid for a long time and CPI inflation dropped down to historic lows.**

Consequently, fiscal discipline provided by the firm policies and enhanced credibility of the program helped improve the expectations that had been rigid for a long time and CPI inflation dropped down to historic lows. Sluggish domestic demand together with limited increase in food prices have been factors that supported downward trend in inflation. Moreover, the effect of appreciation in exchange rates in May-August has not been fully reflected on inflation. Lagged pass-through from temporary fluctuations in the exchange rates is believed to be the reason of the latter development.

**Holding onto the economic program is essential for the sustainability of improvement in economic indicators and downward trend in inflation.**

The inflation target for 2003 has been determined as 20 percent within the framework of the economic program. Holding onto the economic program is essential for the sustainability of improvement in economic indicators and downward trend in inflation. Carrying on with the fiscal and monetary discipline, drawing the strategies for income policy and public pricing in line with the inflation target and effecting reforms without delay are believed to ensure achieving the end-year CPI inflation target.

Figure I.1.7. Annual Inflation Trend CPI (Annual Percentage Change)

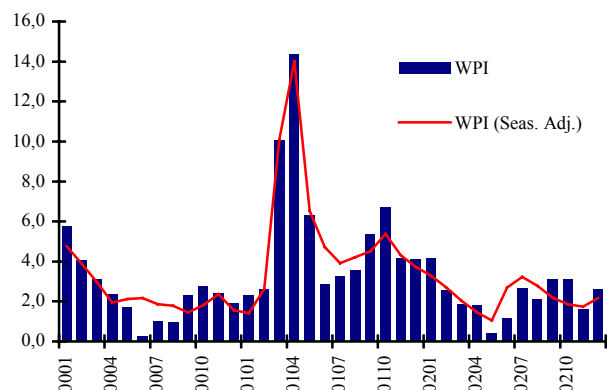


\*Three months moving average (annualized, seasonally adjusted)

## I.2. Developments in Wholesale Prices

The downward trend in WPI inflation continued in the last quarter of the year and the end-year inflation rate realized at 30.8 percent (Figure I.2.3). Following a period marked with political uncertainty that lasted between May-July, confidence was restored in the markets by August, which in turn positively effected the WPI inflation. Decline in Public Manufacturing Sector prices compared with the third quarter has been another factor that supported downward trend in annual WPI inflation (Figure I.2.2).

Figure I.2.1. WPI and Seasonally Adjusted WPI; 1994=100 (Monthly Percentage Change)

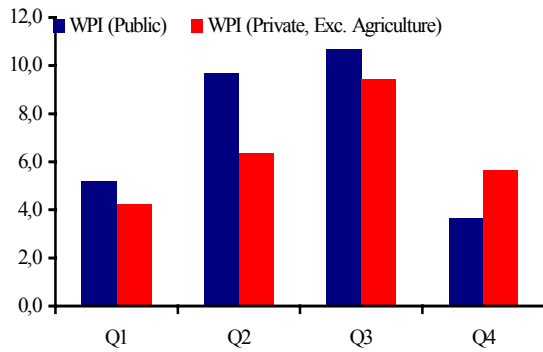


Source: SIS, CBRT

**Following a period marked by political uncertainty that lasted between May-July, confidence was restored in the markets by August, which in turn effected positively the WPI inflation.**

An analysis of breakdown of WPI inflation by public and private sectors reveals that public prices, which increased in the second and third quarters, slowed down in October-December period relatively and remained below the private sector price inflation excluding agriculture for the first time in 2002 (Figure I.2.2). Increase in public sector prices reached 32.4 percent by the end of 2002 while private sector prices excluding agricultural prices increased by 30.3 percent. When agricultural prices are left out, private sector prices inflation goes down to 28.1 percent and consequently, the spread between end-year inflation figures for public and private sectors diverges. The rate of increase in public prices in 2002 has been the second lowest rate after 2000 in 1995-2002 period.

Figure I.2.2. January-September Period WPI Public and Private Excluding Agriculture Prices (Percentage Change)



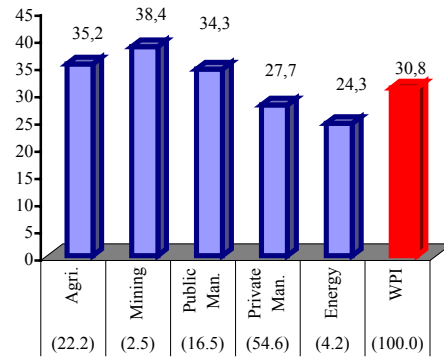
Source: SIS, CBRT

### Agricultural Prices

Thanks to the improvement in agricultural production, the accumulative increase in agricultural prices remained only at 15.0 percent in January-September period and realized at 17.5 percent in October-December period. Therefore, with the effect of acceleration in the last quarter, rate of increase in agricultural prices reached

35.2 percent by the end of the year, which is a level above the general WPI inflation. (Figure I.2.3).

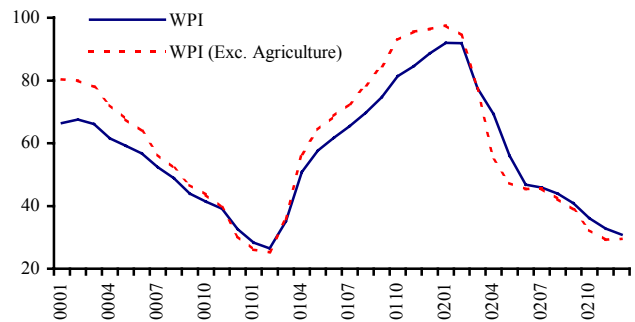
Figure I.2.3. WPI and Sub-items; 1994=100 (Year-end Inflation)



Source: SIS

The downward trend in WPI inflation excluding agriculture, which slackened due to political uncertainties in May-July period, continued until December 2002 (Figure I.2.4). By the end of 2002, WPI inflation excluding agriculture had reached 29.6 percent and remained below agricultural price increase of 35.2 percent.

Figure I.2.4. WPI and WPI Excluding Agriculture: 1994=100 (Annual Percentage Change)



Source: SIS, CBRT

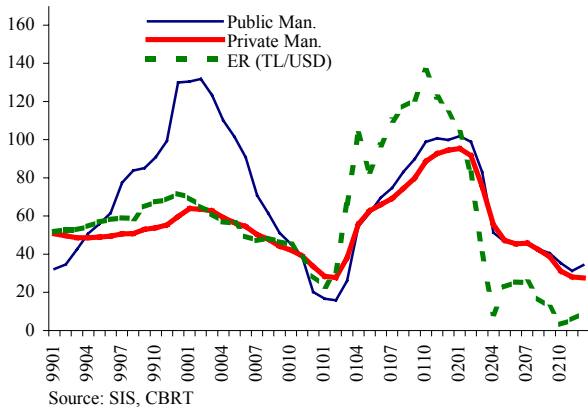
**With the effect of the acceleration in the last quarter, agricultural prices inflation reached 35.2 percent, which is level above the general WPI inflation.**

### Developments in Manufacturing Sector Prices

Manufacturing sector prices, which constitute 7.1 percent of WPI, is the sub-item that is most severely affected by the developments in exchange rates and expectations. When the course of manufacturing sector inflation in 2002 is studied, it is observed that the accelerated downward trend continued until May due to favorable developments as well as limited increase in public prices; however, because of the effect of political uncertainty on exchange rates and TL markets in May-July period, the downward trend in inflation slowed down relatively in the referred months (Figure I.2.5). Following a stable course in August-October period, exchange rates depreciated in November and December, which in turn supported the downward trend in manufacturing sector inflation in the last quarter of the year. Consequently, the total manufacturing industry inflation became 29.7 percent, remaining 0.9 percentage points below the WPI inflation of 30.8 percent (Figure I.2.3).

**Exchange rates, which followed a stable course in August-October period and depreciated in November and December with the ease of uncertainties pertaining to post-election period, has supported the downward trend in manufacturing sector inflation.**

Figure I.2.5. Exchange Rate, Public and Private Manufacturing Industry Prices; 1994=100 (Annual Percentage Change)

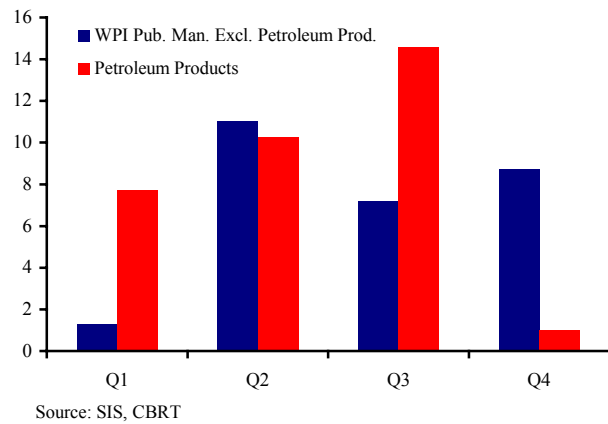


An analysis of the sub-items of private manufacturing sector reveals that rates of increase varies between within 12.9 and 63.1 percent range and the highest increase have been recorded in clothing, main metal, leather

goods and furniture manufacturing items. Notwithstanding the adverse effect of the increase in agricultural prices in the fourth quarter, increase in food and beverage production sector having the largest share in private manufacturing sector became 23.3 percent, well below the total increase in private manufacturing sector prices that equals 27.7 percent.

Increase in public manufacturing sector, which comprises 17.2 percent of the total manufacturing sector, realized at 34.3 percent, which is 6.6 percent above the end-year private manufacturing sector inflation. Excluding fuel products prices that accelerated in January-September period, end-year public manufacturing sector prices drops down to 31 percent (Figure I.2.6).

Figure I.2.6. 2002 Prices of Petroleum Products and WPI Public Manufacturing Excluding Petroleum Products; (Percentage Change)



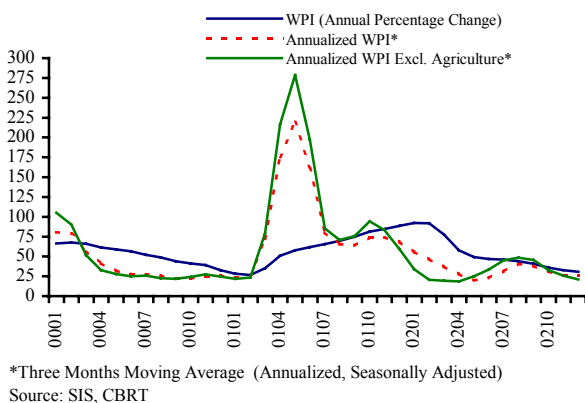
When the developments in public manufacturing sector prices are analyzed by quarters, it is observed that public manufacturing sector prices increased by 11.1 percent and 4.5 percent in June-September period and October-December period, respectively. Deceleration observed in the increase in public manufacturing prices in the last quarter owes to the fall in international crude oil prices as well as the decline in oil products manufacturing sector prices due to nominal appreciation of TL (Figure I.2.6). Actually, when oil products manufacturing sector is excluded, it is noticed that public manufacturing sector inflation has relatively accelerated in the last quarter.

### Energy Prices

The end-year inflation, which realized at 24.3 percent, became the lowest level recorded in 1995-2002 period. In January-December 2002 period, electricity-gas prices increased by 18.5 percent while water prices rose by 57.8 percent.

Briefly, the downward trend in WPI inflation continued in the fourth quarter of 2002 as well. Despite the rise in agricultural prices in the last quarter, the downward trend was sustained owing to the restoration of stability in August and relative slow-down in the increase in public manufacturing prices. Therefore, the end-year WPI inflation became 30.8 percent, remaining below the end-year WPI expectations of 31 percent.

Figure I.2.7. Annual Inflation Trend, WPI (Annual Percentage Change)



The upward trend in annual WPI inflation (seasonally adjusted, quarterly moving averages) observed since June was reversed in September and the downward trend continued till the end of the year. The seasonally adjusted year-on-year WPI inflation dropped down to 25.6 percent while year-on-year WPI inflation excluding agriculture came down to 21.1 percent in December (Figure I.2.7).

### I.3. Inflation Expectations

Analyzing the expectations for the fundamental economic variables is very important with respect to monetary policy decisions. The CBRT makes use of

three types of surveys to analyze the inflation expectations. These surveys comprise data pertaining to the inflation expectations of financial and real sector representatives for certain price indices. Besides inflation expectations, these surveys also help to monitor the expectations of the participants for financial and real indicators. It is evident that the election process, EU accession negotiations and the possibility of a military operation in Iraq have affected the expectations, however, their impact on October-December inflation has been restricted.

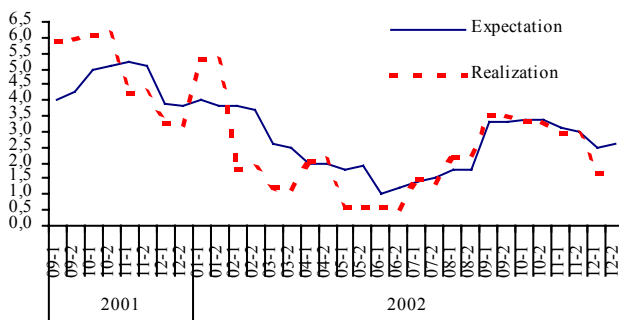
### Expectations about Consumer Prices

The CBRT uses the CBRT Expectations Survey in order to analyze the expectations for consumer inflation. The CBRT Survey of Expectations, which compiles data pertaining to the expectations and estimations of real sector and financial sector representatives for inflation and other macroeconomic indicators, was first conducted on August 3, 2001. The data is compiled by the State Institute of Statistics twice a month, once in the first week and once in the third week of the month, following the announcement of inflation figures. The survey participants are asked to state their expectations for one-month, two-months, end-year and twelve-month inflation. The bimonthly survey helps to monitor the effects of political and economic developments on expectations as survey participants are mostly from the public sector and the survey data is quantitative. The total number of participants in the second CBRT Survey of Expectations in December was 70 and 67 percent of the participants represented the financial sector and 33 percent the real sector.

Inflation expectations for the next 12-month-period started to decline in August and September owing to relative stability attained following the announcement of election schedule and adoption of laws intended for harmonization with EU acquis. The downward trend in inflation expectations for the next 12-month-period sustained in the last quarter. (Figure I.3.3). The decline in expectations for end-year inflation also continued in the referred period. (Figure I.3.2).

Owing to the vigorously implemented economic policies that are consistent with the inflation target as well as the favorable developments in the inflation trend, the end-year inflation expectations recorded as of September 2002 remained below the end-year inflation target (Figure I.3.2).

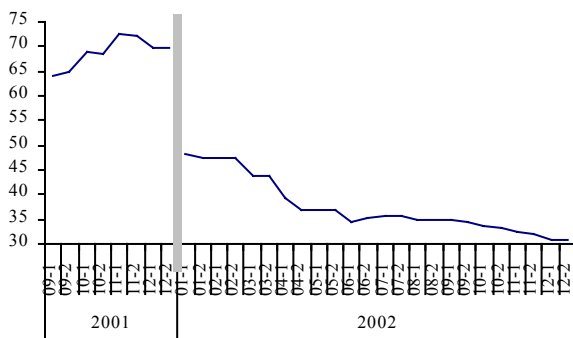
Figure I.3.1. CPI Inflation Expectation and Realization for the Current Month (Monthly, Percent)



Source: CBRT Expectation Survey

**The end-year inflation expectation remained below the end-year target according to the CBRT Survey of Expectations results of December 2002.**

Figure I.3.2. Expectations for the Year-end CPI Inflation (Percent)

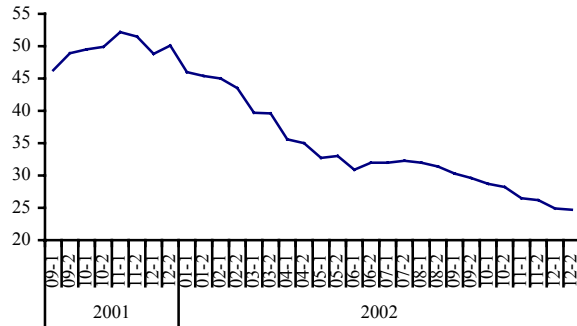


Source: CBRT Expectation

The inflation expectations for the next 12-month-period sustain the downward trend (Figure I.3.3). The expected inflation for the next 12-month-period revealed by the CBRT survey as 24.7 percent is above the 2003 end-year inflation target of 20 percent. However, the spread between the expectations and the target has converged

compared with the 15 points spread between those of 2003 and this well provides evidence for the success attained in decreasing inflation expectations in 2002.

Figure I.3.3. CPI Inflation Rate Expectations For The Next 12 Months (Percent)



Source: CBRT Expectation

### Expectations about Wholesale Prices

The CBRT uses the CBRT Business Survey in order to analyze the expectations for wholesale prices. The Business Survey was first conducted in 1987 with the participation of public and real sector participants. The qualitative question regarding the expectations for the next 3-month period was annexed to the survey in 1997. The answers of the real sector participants are used for analysis. The number of private sector companies participated in the Business Survey was 449 in December 2002.

When the quantitative inflation expectations provided by the Business Survey for the next 3 months are analyzed, it is observed that the up-down spread that increases in periods marked by uncertainty decreases when a relative stability is attained (Figure I.3.4). Although the Business Survey results of December point to a relative deterioration in the expectations, the survey also shows that the participants expect that the downward trend in wholesale prices will continue in the forthcoming months.

Figure I.3.4. Next 3-Month WPI Inflation Expectations (Percent)

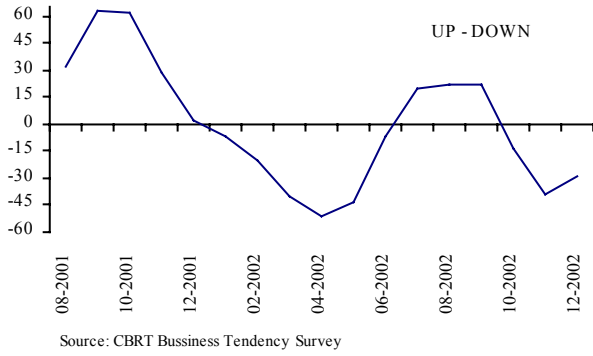


Figure I.3.6. Next 12-Month WPI Inflation Expectations (Percent)

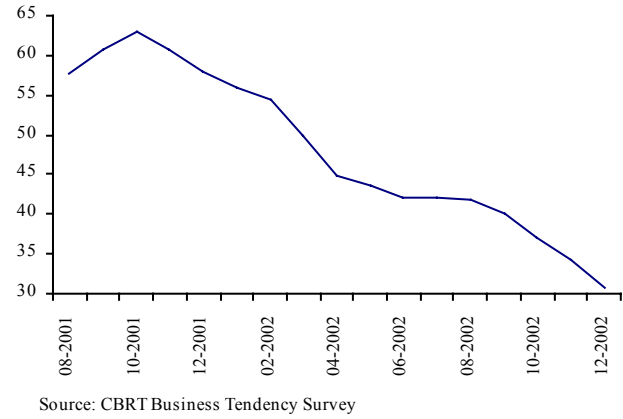


Figure I.3.5. Year-end Expected WPI Inflation (Percent)



The CBRT Business Survey shows that expectations for the next 12 month-period and end-year inflation pursues the downward trend that it started in 2001 (Figure I.3.5. Figure I.3.6). However, the end-year WPI inflation expectation, which was 35.0 percent, was well above the realized WPI inflation of 30.8 percent.

**The end-year inflation expectation has exceeded actual end-year inflation.**

According to the results of the Business Survey conducted in December, WPI inflation for the next 12-month period is expected to increase by 30.6 percent. The mentioned expectation was 34.3 percent in November.

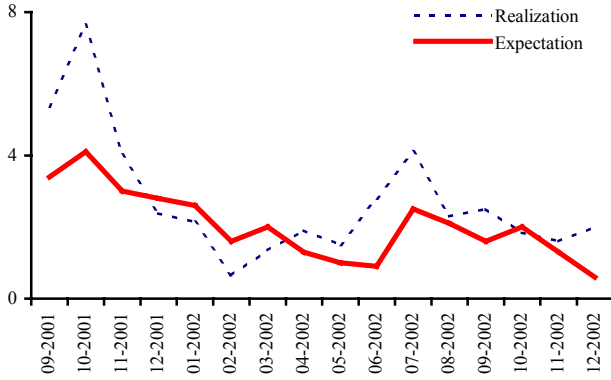
**Expectations about Manufacturing Sector Prices**

CBRT uses the Monthly Manufacturing Tendency Survey conducted by the State Institute of Statistics (SIS) to analyze the manufacturing sector prices inflation. The referred survey is conducted in order to inform the public and it reflects the expectations for production, sales and sale prices of the firms representing 70 percent of the total manufacturing production.

According to results of November survey, manufacturing sector prices, public prices and private sector prices were expected to inch by 0.8 percent, 1.1 percent and 0.6 percent, respectively in December 2002. However, the actual rates of increase have been 2.3 percent in manufacturing sector prices; 2.8 percent in public sector prices and 2 percent in private sector prices, which are all quite high compared with the expectations (Figure I.3.7). The difference between the expected increase and the actual increase mainly stemmed from the lagged effect of upward adjustments in TEKEL products and sugar on WPI inflation.



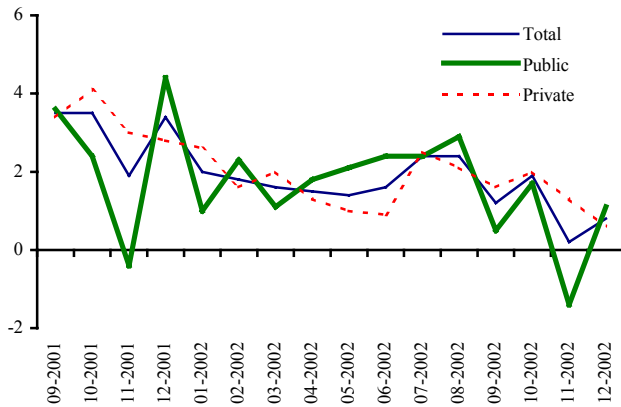
Figure I.3.7. Realizations and Expectations for the Private Sector Manufacturing Industry Prices (Monthly, Percentage Change)



Source: SIS Monthly Manufacturing Sector Tendency Survey

The expectations for manufacturing sector prices are estimated to be affected from the developments in international crude oil prices and changes in exchange rates in the forthcoming period.

Figure I.3.8. Expectations for Industrial Sector Prices (Monthly, Percentage Change)



Source: SIS Monthly Manufacturing Sector Tendency Survey

An overall analysis of the three referred surveys reveals that:

- i. The downward trend in inflation in the last quarter of 2002 was coupled with that of inflation expectations. The adverse effects of external shocks on inflation expectations have been limited.
- ii. According to the latest results of the CBRT Survey of Expectations, expected end-year inflation is above the end-year inflation target specified as 20 percent. However, this difference is believed to be made up with steadfast implementation of the program.

#### The downward trend in inflation expectations persisted in 2002.

Despite the favorable developments regarding inflation in October-December 2002 period and decline in inflation expectations, there are foreseeable risks to inflation in the months ahead. These risks can be summarized as follows:

- (i) Rise in international crude oil prices due to developments in Venezuela and the operation in Iraq are two external risks that might pose risk on the demand side.
- (ii) Increase in domestic demand that might exert inflationist pressure is the primary domestic risk in 2003.
- (iii) Another domestic risk is the upward pressure that might be exerted on public sector prices by a financial gap stemming from the failure to pursue the policies ensuring productivity.
- (iv) Increase in agricultural prices and food prices due to decrease in productivity as a result of seasonal factors poses another domestic risk to inflation.

### BOX I.1. A COMPARISON OF THE INFLATION PROCESSES OF 2000 AND 2002

Countries that have high and persistent inflation put into practice some stability programs in order to attain the inflation level of developed countries and to achieve price stability. When the experiences of countries are studied, it is observed that the exchange-rate-based stabilization programs (EBSP) started to be commonly used as of the end of 1970s. In countries where price stability failed to be achieved and inflation became the primary attribute of the economy, a strong relationship was established between the prices and the exchange rate due to “financial dollarization” and “currency substitution, which made EBSP implementations the favorite tool in disinflation process and the programs implemented became successful in decreasing inflation.

However, despite their success in decreasing inflation, it has been observed that the EBSPs have made the economies vulnerable to external shocks and ended up mostly in crises. Therefore, as of the end of 1980s, the number of EBSP implementations eroded gradually and monetary policies based on “floating exchange rate” became more common. While 85 percent of the developing countries were implementing EBSPs in the 1985, this rate rolled down to 30 percent in 2000<sup>(1)</sup>. Though abandoned afterwards, the EBSP that was adopted in 2000 became quite successful in the period it was implemented. A similar decline was observed again in 2002 under the scope of the still used “Transition Program for Strengthening Turkish Economy” that adopted “floating exchange regime”. Comparing two different disinflation programs used in 2000 and 2002 in terms of their economy policies, domestic demand developments, exchange rates, public price adjustment habits and external economic developments will shed light to the ongoing debates about the degree of success of different stability programs in decreasing inflation.

#### Economy Policies

The Exchange Rate-Based Stability Program that was put into practice in 2000 intended to decrease inflation through keeping under control the exchange rate. Whereas, the currently used “Transition Program for Strengthening Turkish Economy” adopts a monetary policy called the “Implicit Inflation Targeting” strategy that focuses on future inflation under floating exchange rate regime. In this strategy, targets consistent with the inflation target are specified for base money for each period, however, rather than the developments in base money, the future inflation developments are specified as the determining factors for monetary policy decisions. Therefore, the short-term interest rates, which were not at the CBRT’S disposal during EBSP period, are now widely used by the CBRT for the purpose of attaining the targeted inflation rate.

The practices regarding banking sector vary in these two programs. Both programs aim at attaining a healthy financial sector, however the fundamental steps towards this aim were mainly taken in the Transition Program for Strengthening Turkish Economy.

The two programs bear similar features in terms of fiscal discipline and income policies. Taking into account the adverse effects of high public sector borrowing requirement on the Turkish economy, both programs have taken measures to increase income with the aim of improving the public balance. Moreover, both programs have intended to implement radical structural reforms in order to decrease public expenditures. In terms of income policies, both programs have adopted the principle of determining the public worker wage increases in line with the inflation target.

#### Domestic Demand Developments

Domestic demand and economic growth indicators vary in the two economic programs. In the program implemented in 2000, recovery in domestic demand mainly stemmed from consumer durables and machinery-equipment, which is a common feature of exchange rate-based stability programs. Recovery in domestic demand was supported by expansion in domestic credit volume and short-term capital inflows<sup>(2)</sup>. However, a rapid contraction started in the economy after the November 2000 and February 2001 crises. While a certain level of revival was observed in production with the support of foreign demand and stock accumulation as of spring 2002, the low level of wages due to the income policy prevented the domestic demand from making a significant revival. Notwithstanding the sluggish domestic demand due to the crisis, 2002 has been a period in which expectations for a significant revival in domestic demand became widespread. Year 2000 was marked by a sizeable increase in consumption expenditures.

#### Exchange Rates

As mentioned before, the exchange rates were announced by the Central Bank a priori in the economic program of 2000, whereas in the program of 2002, the exchange rates were determined under market conditions. Compared with the figures of 2000, appreciation in exchange rate basket was more restricted in 2002<sup>(3)</sup>. In 2000, the exchange rates were announced by the CBRT at the turn of the year and were increased by regressive ratios throughout the year. However exchange rates followed a floating rate in 2002. The rapid appreciation in exchange rates in the crisis period was reversed thanks to the Government’s announcement that monetary and financial discipline would not be waived as well as the support of international institutions. In May-July period, the exchange rate basket shoot up as a result of the political uncertainty and the fear that the success achieved so far would be lost. Despite the hike in the exchange rate basket, increase in inflation has not been so rapid because of the fact that the pass-through effect of temporary fluctuations in exchange rates on inflation under floating exchange rate regimes is lagged<sup>(4)</sup>.

<sup>(1)</sup> IMF, World Economic Outlook, 2000.

<sup>(2)</sup> The Russian crisis, the demand, which was postponed in 1999 until 2000 due to natural disasters and decline in interest rates following adoption of the program, are the other factors that contributed to revival in demand.

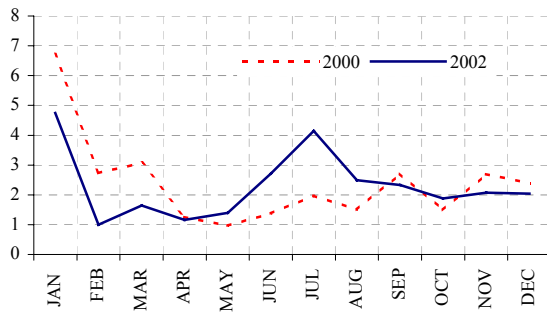
<sup>(3)</sup> The exchange rate basket of 1 US dollars + 0,77 EURO was calculated using CBRT monthly buying rates. Accordingly, end-year appreciation in exchange rates became 22.2 percent by the end of 2000 and 15.8 percent by 2002. Annual appreciation in exchange rates became 40.6 percent and 26.2 percent in 2000 and 2002, respectively.

<sup>(4)</sup> See: CBRT Monetary Policy Report (July 2002), Box I.1: The Exchange Rate Pass-through in the Floating Exchange Rate Regime

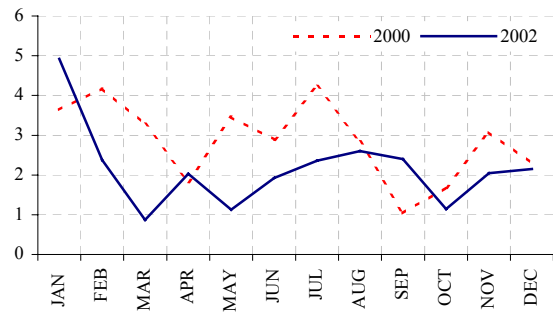
**Public Prices**

Public financing balance has been an important determinant in terms of inflation developments both in 2000 and 2002. Within the framework of the stability program of 2000, increase in public goods and services prices were provided to be determined in line with the targeted inflation rate. Quite similarly, increase in public sector prices in the first months of year 2002 remained at a level to support the downward trend in inflation. However, delay in certain price adjustments adversely affected the financial balance of State Economic Enterprises (SEEs). Accordingly, as of June, public price adjustments accelerated in order to attain the public financing balance targets. A close look into the seasonally adjusted data reveals that public controlled prices started to go up as of May and realized above the rates of 2000 (Figure 1.1). The same thing applies to the increase in the public manufacturing sector prices under WPI excluding petroleum products (Figure 2.1). When the manufacturing sector prices inflation is analyzed, it is observed that increase in public sector prices was 20.2 percent, remaining 13.4 percent below the private sector prices in 2000. Public sector prices, which realized at 34.3 percent in 2002, exceeded increase in private sector prices by 6.6 percent (Table 1).

**Figure 1.1: Administered Prices (CPI, 1994=100, Monthly Percentage Change)**

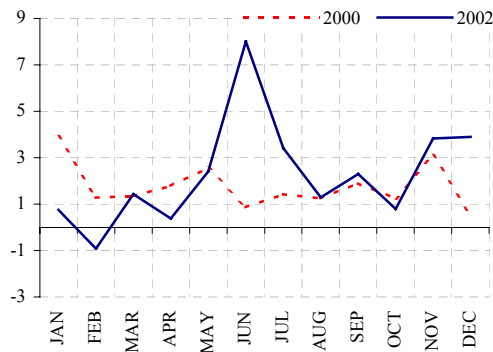


**Figure 1.2: Non-administered Prices (\*) (CPI, 1994=100, Monthly Percentage Change)**

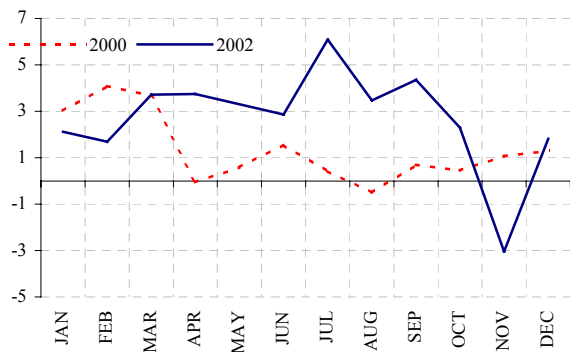


Source: SIS, CBRT  
(\*): Seasonally Adjusted by TRAMO-SEATS method.

**Figure 2.1: Public Man. Prices Exc. Petroleum Products (WPI, 1994=100, Monthly Percentage Change)**



**Figure 2.2: Petroleum Products Prices (WPI, 1994=100, Monthly Percentage Change)**



Source: SIS, CBRT

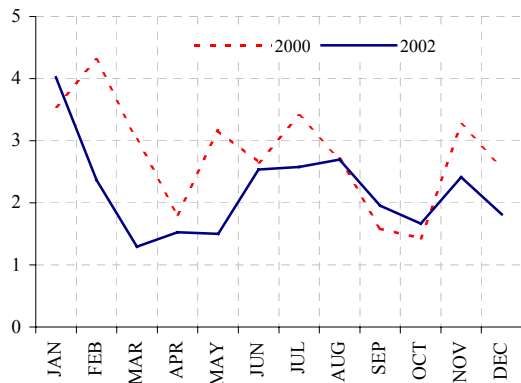
**External Developments**

Another important factor for inflation is the course of international crude oil prices that effect energy prices. Although the increase in international crude oil prices in the first nine months of 2000 was faster than the average values of 2002, this increase has not fuelled domestic prices unlike 2002. Like in all exchange rate-based stability programs, the program implemented in Turkey also caused a demand-pull growth that increased tax revenues and an improvement in public financing balance above expectations was achieved. Thus, the taxes levied on petroleum products was decreased and international crude oil prices that followed a high and fluctuating course were not reflected on domestic oil prices for the fear that they should interrupt the downward trend in inflation. However, in 2002, the developments in international crude oil prices were reflected on the domestic oil prices and taxes levied on fuel were adjusted according to inflation with the aim of achieving public finance balance targets. Consequently, in 2002, the prices in petroleum products sector, which comprises an important place in total manufacturing sector and uses crude oil as input, increased more rapidly than they did in 2000 (Figure 2.2).

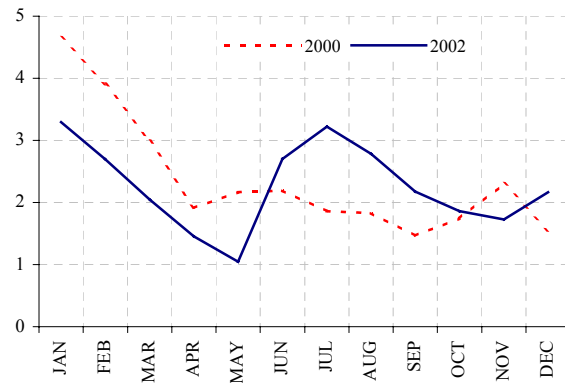
**Conclusions**

The two years compared in this box display similarities in terms of the courses of increase in seasonally adjusted monthly prices. Both years started with high rates of increase in prices<sup>(5)</sup>; however the seasonally adjusted inflation rates have rolled down rapidly afterwards.

**Figure 3.1: CPI (\*) (1994=100, Monthly Percentage Change)**



**Figure 3.2: WPI (\*) (1994=100, Monthly Percentage Change)**



Source: SIS, CBRT

(\*): Seasonally Adjusted by TRAMO-SEATS method

When consumer prices in the compared years are analyzed by goods and services sectors, it is observed that increase in services prices in 2002 has been slower than that of 2000. The disparity detected in increase in service prices, which is not open to foreign trade, mainly stemmed from the limited increase in demand in 2002 and the fact that price adjustments in health services and house rents were carried out in a more harmonious way with the inflation target (Table 1).

Besides all these developments, downward trend in inflation both in 2000 and 2002 slackened in the months following the spring season. This was mainly due to the rapid recovery in domestic demand in 2000 and to increase in exchange rates and public prices in 2002 (Figure 3.1 and Figure 3.2).

Giant leaps have been taken and inflation went down to historic lows in both years with the comprehensive economic programs. The current economic program differs from the one implemented in 2000 in two points: The current program is more resistant to external shocks and crises and it is much advantageous in terms of sustainability compared with the other program. Secondly, the structural reforms have been more successful in the new program compared with the previous one. Thanks to the radical structural reforms pertaining to banking sector and autonomy of the Central Bank, notable achievements have been made towards breaking both the resistance in expectations of inflation and inflationary inertia.

**Table 1: Selected CPI and WPI Items, Year-end Inflation**

	1995-99 Avr.	2000	2002
CPI	78.7	39.0	29.7
Food	73.4	36.1	24.1
Goods	74.9	34.6	29.7
Services	86.9	47.0	29.8
Administered	84.8	32.9	31.3
Non-administered	77.3	40.7	29.2
WPI	71.7	32.7	30.8
Agriculture	75.0	39.8	35.2
Public Man.	82.5	20.2	34.3
Private Man.	67.7	33.6	27.7

Source :SIS, CBRT

<sup>(5)</sup> The lagged effects of the adjustments made on public sector prices at the end of 1999 surfaced in January and February 2000 inflation figures. The VATs, which were temporarily cut down for certain sectors at the end of 2001, were inched up again in January 2002 and this has adversely affected the consumer durables prices that in turn fed into inflation.

## II. MONETARY AND EXCHANGE RATE POLICY

### II.1. General Framework of the Monetary and Exchange Rate Policy

In 2002, Base Money made up the nominal anchor of the monetary policy and targets were specified for Net International Reserves and Net Domestic Assets. Short-term interest rates were determined taking into account the future course of inflation.

The CBRT phased out its intermediary function in the Interbank Money Market and Foreign Exchange and Banknotes markets with the aim of enhancing the debt of interbank money and foreign exchange markets and ensuring the establishment of pricing mechanisms that perfectly reflect risk perceptions. Within this framework, the practice, which enabled the banks to borrow from other banks via the Central Bank's intermediation, was entirely abandoned. However, this abandonment does not create any kind of shortage in the amount of Turkish lira or foreign exchange liquidity that was available for the banks via these markets.

In 2002, the CBRT determined the short-term interest rates according to the inflation estimations. Within this framework, short-term interest rates have been inched down six times. With the last cut down effected on November 11, 2002, the overnight interest rate, which was 59 percent at the turn of 2002 dropped down to 44 percent, while overnight lending rate decreased from 62 percent to 51 percent.

The targets for the Base Money and Net International Reserves Items specified as performance criterion and Net Domestic Assets specified as the indicative target in the Letters of Intent dated January 18, 2002 and July 30, 2002, have been achieved (Table II.1.1 and Table II.1.2).

On April 1, 2002, the CBRT had started to hold Turkish lira deposit buying auctions with 4-week maturity in order to enhance its capability of mopping up the excess TL liquidity in the markets. The CBRT continued with this practice in October-December period line with its

monetary policy targets. In October-December 2002 period, the CBRT did not hold any foreign exchange buying auctions that were temporarily interrupted on July 1, 2001. However, the CBRT has announced that it might restart buying foreign exchange in case excess foreign exchange emerges in the markets as a result of the reverse currency substitution and strong balance of payments developments. In such a case, with the aim of increasing the foreign exchange reserves, auctions will be held in a manner not to undermine the spirit of the floating exchange rate regime and disrupt the long-term trend in exchange rates. The auctions will have preset conditions and will be announced to the public.

The CBRT will retain "Implicit Inflation Targeting Strategy" until the "Inflation Targeting Strategy" has been adopted. Therefore, the short-term interest rates will be used for the sole aim of achieving the inflation target and Base Money will continue to be the basic nominal anchor.

**Table II.1.1. Performance Criteria and Indicative Targets for Base Money and Net Domestic Assets (TL, Trillion)**

	Base Money		Net Domestic Assets	
	Ceiling (I)	Realization	Ceiling (I)	Realization
February 28, 2002(2)	8,250 <sup>(P)</sup>	7,823	26,100 <sup>(G)</sup>	24,318
April 30, 2002	8,900 <sup>(P)</sup>	8,680	27,700 <sup>(G)</sup>	25,197
June 30, 2002	9,089 <sup>(P)(3)</sup>	9,009	28,739 <sup>(G)(3)</sup>	26,374
September 30, 2002	10,600 <sup>(P)</sup>	10,104	31,139 <sup>(G)</sup>	28,551
December 31, 2002	10,850 <sup>(P)</sup>	10,720	33,139 <sup>(G)</sup>	28,603
February 28, 2002(2)	8,250 <sup>(P)</sup>	7,823	26,100 <sup>(G)</sup>	24,318

(1) The ceilings are calculated based on the averages of the values at the aforementioned dates and the values at the following 5-working day period.

(2) Taking into account of the holiday effect on the cash demand, the performance criterion on February 28, 2002 was calculated based on the averages of the values on February, 11-12 and March, 11-12.

(3) Due to the transfer of Pamukbank to SDIF, the abovementioned bank was held exempt from holding TL 161 trillion worth of Turkish lira required reserves. Therefore, the ceilings for end-of June that were determined on the Letter of Intent dated January 18, 2002 as TL 9,250 trillion and TL 28,900 trillion for Base Money and Net Domestic Assets were updated to TL 9,089 trillion and TL 28,739 trillion, respectively.

(P): Performance criterion, (I): Indicative target

**Table II.1.2. Performance Criteria and Indicative Targets for International Reserves (USD, Million)**

	Floor	Realization
February 28, 2002	-6,500	-4,907
April 30, 2002	-7,200	-4,926
June 30, 2002	-7,800	-5,755
September 30, 2002	-8,500	-5,889
December 31, 2002	-9,700	-4,614

## II.2. Developments in CBRT Balance Sheet

In October-December period, the most significant change was observed on the Base Money item as performance criteria that comprise the liability side of the CBRT balance sheet specified in the Stand-By Agreement. The rapid upward trend in Currency Issued item as of November has been an important factor that affected Base Money developments.

Table II.2.1. CBRT Balance Sheet Items (TL, trillion)

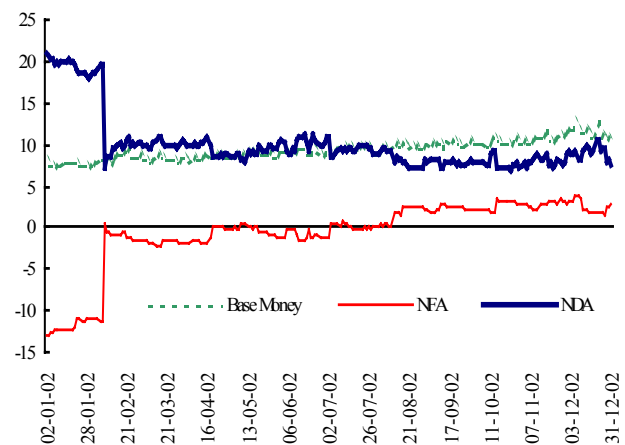
	09/30 2002	12/31 2002	12/31 CURRENT
	CONSTANT	CONSTANT	CURRENT
<b>I- BASE MONEY (a+b+c)</b>	10,632	10,427	10,427
a-Currency Issued	6,938	7,636	7,636
b. TL Required Reserves	1,585	1,672	1,672
c. Free Deposits	2,109	1,120	1,120
<b>II-NET FOREIGN ASSETS(A+B+C)</b>	2,834	3,931	2,940
A-Net International Reserves (1+2+3)	12,838	14,456	17,718
1-Gross Foreign Reserves	35,350	37,128	45,271
2-Gross International Reserve			
Liabilities	-22,513	-22,672	-27,553
- FX Deposits of Banking Sector	-9,051	-9,064	-10,719
- IMF	-10,962	-10,962	-13,436
3-Net Forward Position	0	0	0
B- Medium Term FX Credits (net)	2,013	2,020	2,293
C-Other	-12,017	-12,546	-17,070
<b>III-NET DOMESTIC ASSETS</b>	7,799	6,497	7,487
Treasury Debt	28,151	29,388	31,181
a-CBRT's Portfolio	28,325	29,448	31,241
b-Other	-175	-60	-61
Public Sector Deposits (TL)	-1,286	-272	-272
FX Deposits of Non-bank Sector	-6,016	-4,694	-5,460
Open Market Operations (net)	-6,779	-9,579	-9,579
Other	-5,314	-7,256	-7,256
Revaluation Account	-1,592	-1,109	-1,148
<b>NDA (1)</b>	7,799	6,497	
Treasury Liabilities to the IMF (2)	18,591	18,591	
Treasury FX denominated borrowing with an original maturity of less than 1 year (3)	2,725	2,508	
<b>NET DOMESTIC ASSETS (Prog.def) (1+2+3)</b>	29,115	27,596	

The rapid increase in Currency Issued sub-item of the Base Money item can be partly attributed to the seasonal factors. The religious holiday at the beginning of December was an important factor that swelled Currency Issued item. However, the rapid and persistent increase in demand for money in the last few weeks of the year is believed to stem from the relative stability restored in the markets following the elections and decrease in inflation. Within this framework, the rollback in currency issued

following the wage payments in November became another factor that affected increase in Base Money.

While developments in other two sub-items of the Base Money, the Free Deposits and the Required Reserves items, have been effective on the periodical fluctuations on Base Money, their effect on the average value has been more limited compared with that of Currency Issued item (Box II.1). Notwithstanding the rapid increase in the Base Money item in the last two months of 2002, the Base Money target was attained by the end of the year.

Figure II.2.1. Base Money, NDA and NFA (TL, quadrillion)

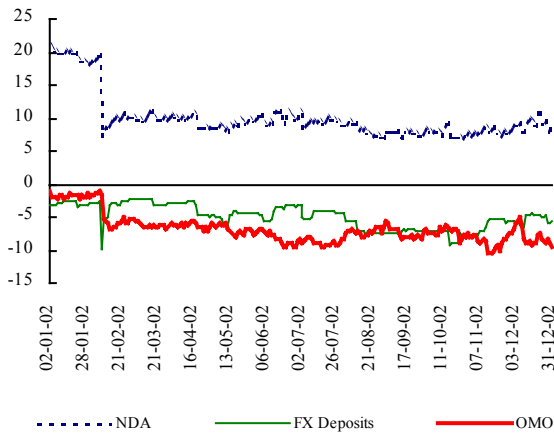


One of the two main sub-items under asset side of the CBRT Balance Sheet, the Net Domestic Assets, displayed an upward trend in October-December period, that fed into the increase in Base Money item. The decrease in Base Money item was accompanied by a significant fall in Net Domestic Assets following the religious holiday and this was mainly due to developments regarding Open Market Operations (net).

When Net Domestic Assets developments are studied by sub-items, it is observed that FX Deposits developments have supported increase while Open Market Operations (net) have made a decreasing effect. The CBRT Portfolio, which makes up almost the entire Treasury Debt item, moved according to revaluation in line with the developments in exchange rates and interest rates.

This item, which was 30 quadrillion at the beginning of October, exceeded 31 quadrillion as of the end of 2002. Likewise, rapid changes in exchange rates and interest rates on state securities in October-December period brought along fluctuations in “Other Items” and “Revaluation Account” items. The overall effect of Treasury Debt, Other Items and Revaluation Account has remained limited due to reverse movements.

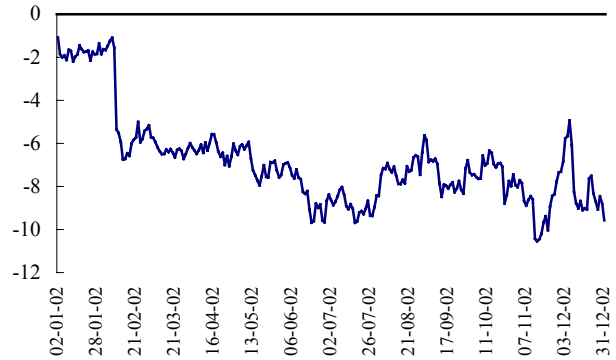
Figure II.2.2. NDA and Selected Sub-items (TL, quadrillion)



The October-December 2002 period was one that witnessed very high rates of increase in Open Market Operations (net) item under Net Domestic Assets. This account, through which CBRT’s forward transactions via Interbank Money Market and Open Market Operations are monitored, has displayed a course according to the amount of liquidity mopped up by the CBRT from the market. The amount of liquidity sterilized in the first few days of December dropped down to 5 quadrillion due to the increase in demand for liquidity that started in November. In the days following the religious holiday, the amount of liquidity mopped up inched up to reach 9 quadrillion. This significant rise in Open Market Operations (net) item is mainly due to the fact that the Treasury borrowed less than it paid. In the rest of 2002,

the free deposit holding preferences became a determining factor in developments regarding Open Market Operations (net) account.

Figure II.2.3 Open Market Operations (Net) (TL, quadrillion)



Net Foreign Assets item, which is a main item of the assets side of the balance sheet under Stand-By agreement, assumed positive values as of the beginning of July. Net Foreign Assets decreased significantly in December following an increase in October and November. As a whole, the October-December period was marked by notable increase in Net International Reserves. However, the effect of the increase in Net International Reserves on Net Foreign Assets has been negligible due to the negative movement in the “Others” item.

A brief summary of the balance sheet developments in terms of their contribution to Base Money changes is as follows: The Base Money increased by 12.8 percent in terms of averages of November and December. This increase, which is reflected on the assets side of the balance sheet as 12.1 percent, fed mostly into the increase in Net Foreign Assets. The contribution of Net Foreign Assets to Base Money increase has remained quite limited with 0.7 percentage points.

**BOX.II.1. EFFECTS ON BASE MONEY OF REQUIRED RESERVES PUT INTO PRACTICE IN MAY 2002**

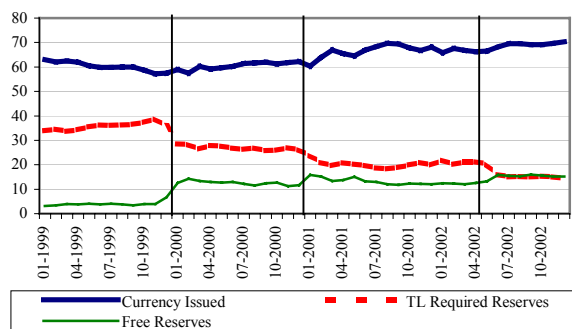
In the previous practices, TL reserve requirements used to be kept in a blocked account at the Central Bank. However, with the “Disinflation Program for the Year 2000” a flexible reserve requirement practice has been adopted in order to enable a more effective liquidity management. Therefore, effective from December 24, 1999, the reserve requirement ratio, which was 8 percent at the end of 1999, was marked down to 6 percent for the reserve requirement to be kept by the banks in the blocked accounts. The remaining 2 percent will be kept as free deposits for the obligation of liquidity ratio and in the context of weekly averages. Notwithstanding the changes made in the reserve requirement and liquidity ratio practices until May 2002, the banking system’s liabilities pertaining to TL deposits within the context of weekly averages still continued. The reserve requirement and liquidity ratio arrangements that were put into practice as of May 10, 2002, became very effective on the structure of the Base Money item of the CBRT Balance Sheet. With the new arrangement, the discrepancy between the deposit accounts and other liabilities have been terminated and a much simpler reserve requirement and liquidity ratio implementation has been introduced. The period for calculation, maintenance and reporting has been re-set as two weeks.

With the new arrangement introduced in May 2002, the free deposits are excluded from the liquid assets and reserve requirement is determined as 6 percent both for the deposits and other liabilities. Consequently, the ratio pertaining to required reserve and liability ratios under Base Money item for the banking sector has remained the same in total. In other words, there has been no change arising from the new arrangement in the average level of Base Money. As the new regulation enables maintenance of 3 percentage points of reserve requirement for two weeks, it has extended the coverage on which averaging will be based and in turn, became effective on the sub-items of Base Money. The main objective of the new regulation is to contribute to the deepening and effectiveness of the interbank TL and FX markets and to the sound progress of the financial sector towards the level of developed economies, without making a concession over the price stability target and weakening the control power of the Central Bank over monetary aggregates. Within this framework, it is targeted to reduce the intermediary costs of financial institutions and to provide more flexibility to enhance their liquidity management. The effect of the referred changes on Base Money can be summarized as follows: Three percentage points of the reserve requirements maintained as two-week averages are monitored under the Free Deposits item of the Base Money. The reserve requirement in Free Deposits, which was previously 2 percent of the deposits, increased to 3 percent after May 2002. Meanwhile, the required reserves maintained for Free Deposits item, which was as much as 6 percent of the non-deposit liabilities in the previous period, decreased to 3 percent after the new arrangement. These two opposing effects on Free Deposits aggregate, together has made an increasing effect on Free Deposits item as TL deposits comprise most part of the liabilities that constitute the base for the required reserves. The rest of the required reserves which is maintained in blocked accounts at the Central Bank and which is monitored under TL Required Reserves item of the Base Money, has diminished within the framework of the referred arrangement (Table 1). Consequently, with the effects of the new arrangement on the TL Required Reserves item and Free Deposits item, the Free Deposits aggregate, which used to be under the TL Required Reserves item, has reached almost the level of TL Required Reserves item (Figure 1).

**Table 1: Requirements Included In Sub-items of Base Money (percentage)**

		New Regulation	Previous Regulation
TL Required Reserves			
	Deposits	3	4
	Other Liabilities	3	0
Free Reserves			
	Deposits	3	2
	Other Liabilities	3	6
Total Requirement Ratio			
	Deposits	6	6
	Other Liabilities	6	6

**Figure 1: Shares of Sub-items in Base Money (percentage)**





The maintenance period of the liabilities calculated as weekly averages, which used to be one week, has been extended to two weeks with the new arrangement. This development has influenced the fluctuations in Free Deposits item through which the referred requirements are monitored in the Base Money item. When the period from the adoption of the floating exchange rate regime until the new required reserve implementation is compared with the post-May 2002 period, it is observed that the difference observed in Free Deposits item has been reflected on the Base Money to a certain degree as well. Fluctuation in Free Deposits item increased in the post-May 2002 period, while fluctuation in TL required reserves item displayed a limited decrease. These developments have naturally made an increasing effect on the Base Money. (Table 2)

**Table 2: Periodical Volatility of Base Money and its sub-items (a)**

	Average of the Monthly Periods <sup>(b)</sup>				Average of the Maintenance Period <sup>(c)</sup>			
	Base Money	Currency Issued	TL Required Reserves	Free Reserves	Base Money	Currency Issued	TL Required Reserves	Free Reserves
Average of the Monthly Periods <sup>(b)</sup>	% 3,74	% 4,73	% 1,75	% 17,17	% 2,44	% 2,57	% 0,48	% 17,39
Base Money	% 3,84	% 3,73	% 1,47	% 21,40	% 3,58	% 3,05	% 0,15	% 20,76

<sup>a)</sup> Coefficient of Variation is used for measuring volatility.

<sup>(b)</sup> For the monthly periods volatility is measured for each item within a month, then average of these volatility measures are computed.

<sup>(c)</sup> For the maintenance periods, volatility is measured for each item within the maintenance period, then average of these volatility measures are computed. As mentioned earlier, maintenance period was 1 week in the March 2001-May 2002 period and 2 weeks for the June 2002- December 2002 period.

**Table II.2.2. Contribution of Main Balance Sheet Items to Increase in Base Money**

	Monthly Average (TL, trillion)			Contribution to Base Money Growth (Percentage)	
	2001 Dec.	2002 Sept.	2002 Dec.	Dec. 2001-Sept. Sept. 2002	2002- Dec. 2002
Base Money	7,786	10,185	11,490	100	100
Currency Issued	5,296	7,036	8,074	73	80
TL Required Reserves	1,554	1,528	1,664	-1	10
Free Deposits	936	1,621	1,752	29	10
NFA	-12,274	2,350	2,423	609	6
NDA	20,060	7,835	9,067	-509	94
· Treasury Debt	32,871	29,408	30,496	-144	83
· Public Sector Deposits (TL)	-532	-1,061	-1,357	-22	-23
· FX Deposits of Non-bank Sector	-4,031	-7,191	-5,267	-132	147
· OMO (net)	-1,005	-7,437	-7,964	-268	-40

**Table II.3.1. Monetary Aggregates ( TL, Trillion)**

	2001	2002	2002	2002	2002
	DEC.	SEP.	OCT.	NOV.	DEC.
M1	11,073	13,707	14,107	15,023	14,259
Currency in Circulation	4,801	6,452	6,791	7,288	7,209
Sight Deposits	6,272	7,256	7,317	7,735	7,050
M2	46,986	55,883	57,735	59,573	61,195
Time Deposits	35,913	42,176	43,627	44,551	46,936
M2X	104,133	125,409	128,143	126,006	133,450
FX Deposits	57,147	69,526	70,408	66,432	72,255
M2XR	106,930	128,800	131,587	128,472	136,213
Repo	2,798	3,391	3,444	2,466	2,763
CPI (1994=100)	5,756	6,913	7,140	7,348	7,469
US Dollar	1,439,567	1,648,260	1,663,304	1,543,474	1,622,282

\*CBRT "Weekly Press Bulletin", the provisional data were used for the last Friday of each month.

### II.3. Developments in Monetary Aggregates

Compared with the figures of September, M1 monetary aggregate decreased by 3.7 percent in real terms as of December, while M2 monetary aggregate increased by 1.4 percent in the same period. The drop in M1 monetary aggregate stemmed from the decrease in sight deposits (Table II.3.2.). Besides, M2X money supply declined by 1.5 percent in real terms during this period due to the drop in FX deposits.

**Compared with the figures of September, M1 monetary aggregate dropped by 3.7 percent in real terms as of December, while the M2 monetary aggregate increased by 1.4 percent in the same period.**

While TL deposits increased by 1.1 percent as of December compared with the figures of end-September, TL value of FX deposits decreased by 3.8 percent because of the decline in exchange rates. In this period, the US dollar value of the FX deposits rose to USD 44.5 billion from USD 42.4 bill.

The share of FX deposits in M2X, which was 55.4 percent in end-September, declined to 54.1 percent in December. The decline in the share of FX deposits in M2X mainly stemmed from the drop in exchange rates in the last quarter.

**Table II.3.2. Monetary Aggregates, Real Percentage Change**

	ANNUAL			CUMULATIVE			COMPARED WITH SEPTEMBER		
	2002			2002			2002		
	OCT.	NOV.	DEC.	OCT.	NOV.	DEC.	OCT.	NOV.	DEC.
M1	6,9	9,4	-0,8	2,7	6,3	-0,8	-0,4	3,1	-3,7
Currency in Circulation	18,4	28,9	15,7	14,0	18,9	15,7	1,9	6,3	3,4
Sight Deposits	-1,9	-4,3	-13,4	-5,9	-3,4	-13,4	-2,4	0,3	-10,1
M2	1,7	2,5	0,4	-0,9	-0,7	0,4	0,0	0,3	1,4
Time Deposits	0,1	0,4	0,7	-2,1	-2,8	0,7	0,2	-0,6	3,0
M2X	-8,6	-7,1	-1,2	-0,8	-5,2	-1,2	-1,1	-5,5	-1,5
FX Deposits	-15,6	-14,4	-2,6	-0,7	-8,9	-2,6	-2,0	-10,1	-3,8
M2XR	-9,0	-8,7	-1,8	-0,8	-5,9	-1,8	-1,1	-6,2	-2,1
Repo	-21,0	-51,2	-23,9	-0,8	-30,9	-23,9	-1,7	-31,6	-24,6

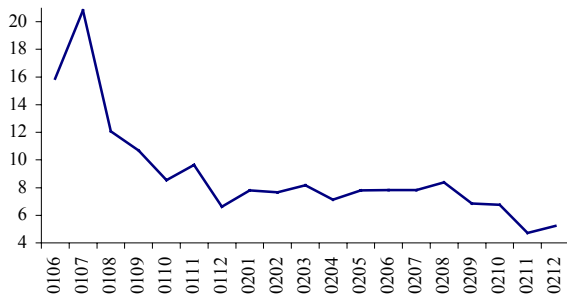
\*CBRT "Weekly Press Bulletin", the provisional data were used for the last Friday of each month.

With respect to the developments in term structures of TL deposits, the share of sight TL deposits in total TL deposits decreased by 1,6 percent compared to September 2002 and realized as 13.1 percent at the end of December. Moreover, the ratio of repo transactions to total TL deposits, which was 6.9 percent at the end of September, dropped to 5.1 percent in December.

**The share of FX deposits in M2X, which was 55.4 percent in end-September, declined to 54.1 percent in December.**

M2XR money supply, which includes M2X money supply and the repo transactions that banks carry out with their clients, decreased by 2.1 percent in real terms in the last quarter of 2002. The repo transactions, which had started to decline sharply due to the reduction in the short-term finance requirements of the public and the banks under SDIF after February 2001 crisis as well as the increase in withholding tax levied on repo transactions in August 2001, dropped by 24,6 percent compared to September. (Figure II.3.1).

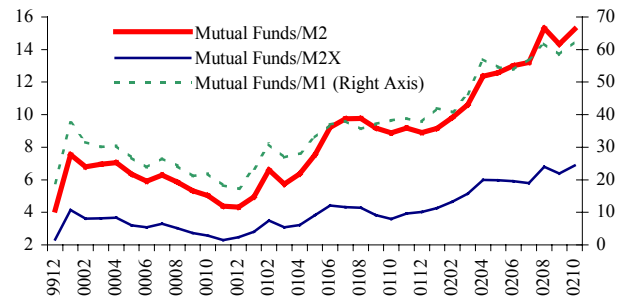
**Figure II.3.1. The Ratio of Repo Transactions to TL Deposits (Percentage)**



\*CBRT "Weekly Press Bulletin", the provisional data were used for the last Friday of each month.

It is observed that the economic agents have directed their savings overwhelmingly to mutual funds in recent years. Government securities and reverse repo transactions comprise 97 percent of the said funds. These investment instruments, which are quite similar to time deposits in terms of yield function, can be a substitute for M1 since they have high liquidity. Therefore, mutual fund developments affect the money supply developments. When the share of mutual funds in M2 money supply are analyzed, it is observed that this share maintained its upward trend (Figure II.3.2). The ratio of mutual funds to M2, which was 14.3 percent in September, rose to 15.3 percent in October. The ratio of mutual funds to M2X money supply, which was 6.4 percent in September, realized as 6.9 percent in October (Figure II.3.2).

**Figure II.3.2. The Ratio of Mutual Funds to M1, M2 and M2X (Percentage)**



\*CBRT "Weekly Press Bulletin" and CMB "Monthly Bulletin"

#### II.4. Developments in Interest Rates

The CBRT, which drafts its monetary policy in line with the inflation developments of the next period, cut down the short-term interest rates, its primary policy instrument, by two points on November 11, 2002. With the last revision, overnight borrowing and lending interest rates were set 44 percent and borrowing interest rate 51 percent. (Table II.4.1).

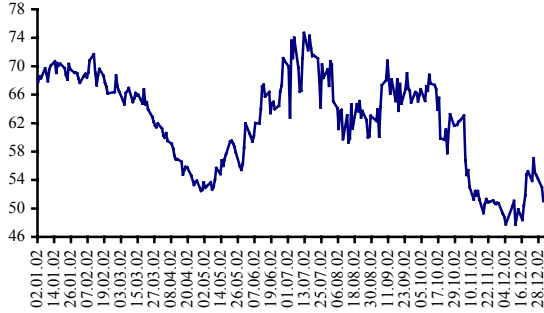
**Table II.4.1. CBRT Interest Rates (Simple, percentage)**

	March 14, 2002	April 8, 2002	April 30, 2002	August 5, 2002	November 11, 2002
O/N-Borrowing	54	51	48	46	44
O/N-Lending	61	58	55	53	51
1-Week Borrowing	55	52	49	46	44
Late Liquidity Window Borrowing*	-	-	-	5	5
Late Liquidity Window Borrowing*	-	-	-	63	61

\*As of June 1, 2002 the CBRT initiated the implementation of "late liquidity window" in the Interbank Money Market between 16:00-16:30 as a new TL liquidity facility from 1st July 2002. The interest rates within this facility were determined as 5 percent for borrowing and 65 percent for lending on June 1, 2002..

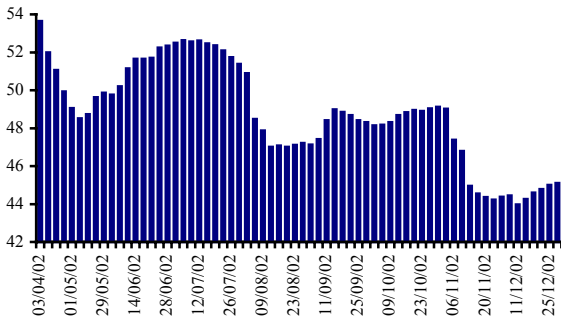
Low seasonally adjusted inflation rates of September and October, ongoing downward trend in inflationary expectations especially for year-end and for the next 12 months, substantial ease of fluctuations in financial markets observed in previous periods and an unlikely increase in domestic demand that might impose a pressure on inflation in the following period were among the key factors that led the CBRT to a cut in short-term interest rates.

**Figure II.4.1 Interest Rates at ISE Bonds and Bills Outright Purchases and Sales Markets (Weighted average, compound, percentage)**



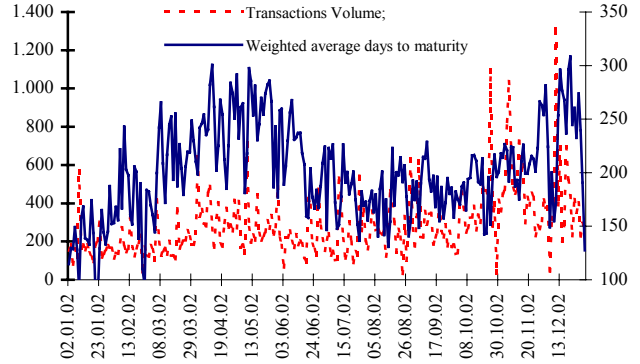
Interest rates in ISE Bonds and Bills Outright Purchases and Sales Market entered downward trend as of the end of October and this trend accelerated in the first half of November (Figure II.4.1). Interest rates, which remained almost unchanged at the end of November and in the first half of December, started to increase as of the second half of December. In line with the developments at ISE Bonds and Bills Outright Purchases and Sales Market and interest rate cuts, interest rates at 4-week Turkish lira deposit purchase auctions also dropped significantly in November (Figure II.4.2). The interest rates increased slightly at the end of December.

**Figure II.4.2 Interest Rates at 4-Week Turkish Lira Deposit Purchase Auctions (Simple, Percentage)**



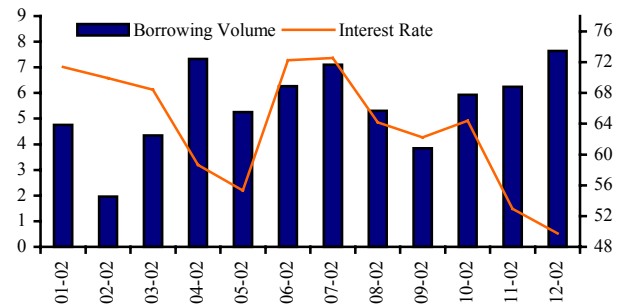
As seen in Figure II.4.3, the trading volume expanded especially in November during which sharp declines in interest rates were experienced. The number of working days to maturity also increased in November and December.

**Figure II.4.3. ISE Bonds and Bills Outright Purchases and Sales Trading Volume (TL, trillion) and Weighted Average Days to Maturity**



When the Treasury auctions are analyzed, it is observed that the interest rates increased in October and that average interest rate at auctions became 64.4 percent in this period. In November, interest rate at the Treasury auctions dropped drastically and averages interest rate of auctions realized as 53.0 percent. The downward trend in interest rates at auctions continued in December as well though in a slower pace.

**Figure II.4.4. Interest Rates at the Treasury Auctions (Percentage) and Borrowing Volume (Net, TL quadrillion)\***

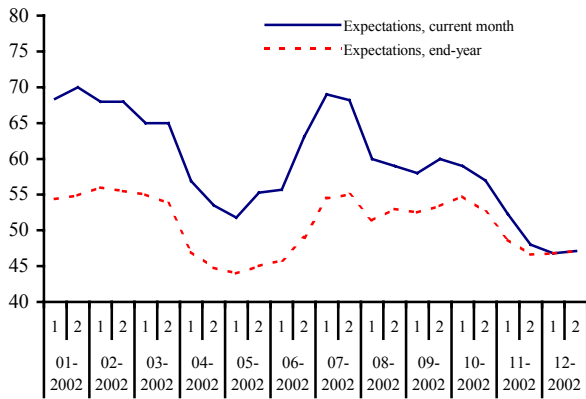


\*Auction interest rates are the average interest rates of the discounted bond auctions. The borrowing volume includes only the volume of the discounted bond auctions.

The three-month Treasury auction interest rate expectations for the current month and end-year, which were asked in the CBRT Survey of Expectations, revealed that a relatively stable environment was established in financial markets after the elections. This tendency in expectations for interest rates, which displayed a downward trend starting from the second half of September, manifested itself mostly in November.

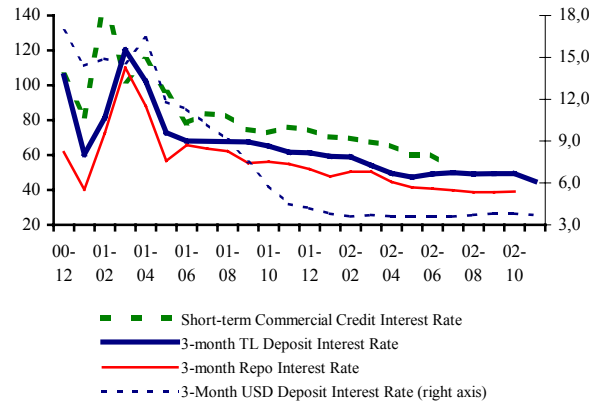
In the second half of December, a slight deterioration was observed in the three-month Treasury auction interest rate expectations. Due to these developments, the three-month Treasury auction interest rate expectation for the current month, which was 60 percent in the second half of September, became 47.1 percent in the second half of December. Moreover, the three-month Treasury auction interest rate expectations for the end-year were 53.4 percent and 47.1 percent, respectively for these periods.

**II.4.5. CBRT Survey of Expectations Three-Month Treasury Auction Interest Rate Expectations (Percentage, Compound)**



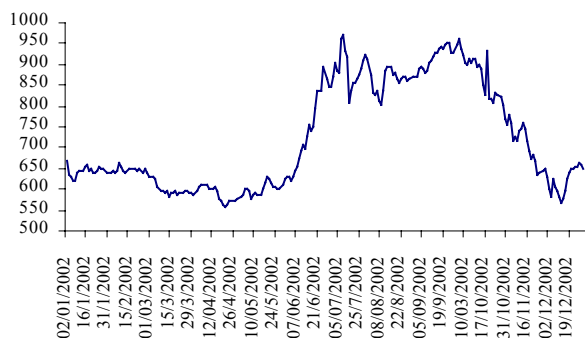
When the three-month TL deposit and FX deposit interest rates are analyzed, it is observed that the interest rates increased in September-October period. In November, on the other hand, especially the three-month TL deposit interest rate dropped, while repo interest rates showed a slight increase. As a consequence of these developments, the three-month TL deposits, which was 49.3 percent in September, decreased to 44.9 percent, while US dollar deposits dropped to 3,7 percent from 3.8 percent. Additionally, repo interest rate became 39 percent in the same period, increasing by 0.3 percent. Following a slight increase in June, interest rates on commercial credits dropped by 7.8 percent in July and realized as 52.4 percent.

**Figure II.4.6. Interest Rates on Commercial Credit, TL, FX Deposits and Repo (Percentage)**



When the yields of the Eurobond issued by the Treasury are compared with that of the benchmark securities having the same maturity, it is observed that the yield spread of Treasury securities has followed a downward trend starting from October. The yield spread, which signifies country risk in some sense, continued to decline until mid-December due to the developments in the markets. In the second half of December, the yield spread of Treasury bonds showed an upward trend. The yield spread of 30-year Treasury bonds was 100 base points (1 percent) lower compared to end-October.

**Figure II.4.7. Yield Difference (Base points, Turkey 15/1/2030- Generic Table for 30 years)**

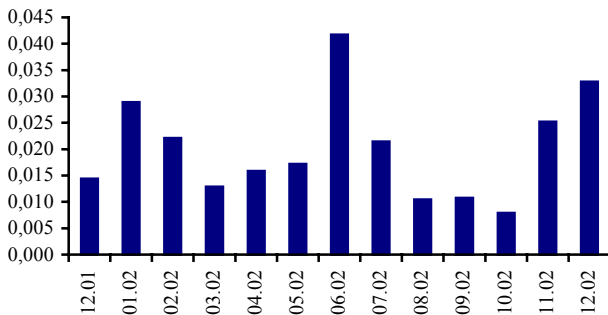


## II.5. Developments in Foreign Exchange Markets

Exchange rates displayed a downward trend between early June 2002 and mid-July. The said period during which an a parallel increase was observed in exchange rate expectations came to an end with the decrease in risk perceptions due to the announcement of the early election date at the end of July and favorable developments in the process of membership to EU. Consequently, exchange rates pursued a steady course until the Election Day.

With announcement made after the results of election that current economic policies would be adhered, Turkish lira appreciated until the second week of December. Attempts to meet the TL liquidity demand, which boosted pre-bairam holiday, via foreign exchange sales led to a sharp drop in exchange rates and as of November, the exchange rates fell even below the expectations of the economic agents (Figure II.5.3). The CBRT tried to ease the excessive volatility through its buying-directed intervention on December 2. In the same period, rapid increases were observed in 6-month and one-year TL deposits. It is considered that this development is a sign of recovery in economic agents' confidence in the stability of exchange rates in the long-term (Figure II.5.2).

Figure II.5.1. Monthly Exchange Rate Volatility

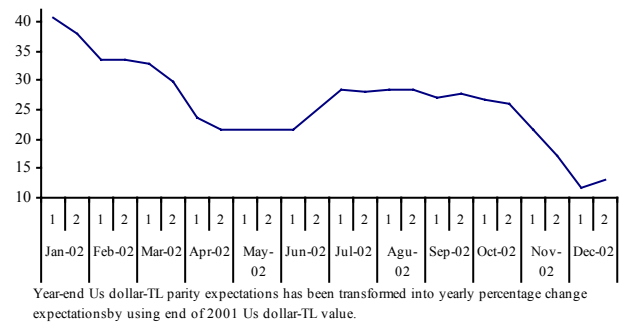


The ratio of the monthly standard deviation of the exchange rate to the monthly average of exchange rate is used to measure volatility.

Developments in the process of membership to EU as of the second week of December and a possible military operation to Iraq by the USA resulted in the rise of exchange rates above the level of pre-election within two

weeks. The level reached as of December in such a short time became even beyond the expectations that had deteriorated in mid-month. The CBRT intervened in the extreme volatility caused by the risk perceptions via exchange rate sale. As a result of this intervention, the excessive volatility in exchange rates eased.

Figure II.5.2. Expected Annual Appreciation of US Dollars in 2002\*



To sum of, the exchange rates pursued a considerable volatile course in the last quarter due to developments in risk perceptions. The essential factor, which affected the risk perceptions of economic agents, was the determination showed in sustaining the economic program. Moreover, developments in the USA's possible operation to Iraq affected the exchange rates starting from the last quarter of 2002

Figure II.5.3. Exchange Rate (TL/USD, Average of buying selling rates)



It is expected that risks concerning the possible operation to Iraq will continue to influence the foreign exchange markets in the beginning of 2003 as well.

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**Exchange rates pursued a considerable volatile course in the last quarter due to developments in risk perceptions**

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CBRT has announced that it will not intervene in exchange rates in 2003 as well, except severe fluctuations. CBRT also stated that in the event of excess foreign exchange in the market due to ongoing strong performance of balance of payments and a strong reverse money replacement, it may hold sale auctions based on rules in order to accumulate reserves in such a way not to affect long-term balance value of exchange rate determined by the market, as in 2002.

### III. DEVELOPMENTS IN FINANCIAL MARKETS

#### III.1. The Banking Sector

In December, the number banks under SDIF reduced to two and total number of banks to 54 after the sale of Milli Aydın Bankası (Tariş Bank). Moreover, with the decision of Supreme Council dated November 22, 2002, Pamukbank, whose partnership rights and management were transferred to its former owners, was taken over by SDIF on January 27, 2002 once again, following the negotiations conducted between the bank representatives and BRSA authorities.

Within the framework of “Istanbul Approach”, which was put into practice with the aim of restructuring of loans to financial sector and resolution of problematic banks, after the completion of required legal regulations, 176 firms applied and of those firms, loans of 29 firms amounting to USD 407 million were restructured.

Table III.1.1. Financial Markets-Main Indicators (TL, Trillion)

	28.12 2001	27.09 2002	27.12 2002
Deposit (Residents)	102,069	121,529	128,549
TL	44,922	52,003	56,294
FX	57,147	69,526	72,255
Repos (Savings Holders)	2,798	3,391	2,763
Credit to Non-Financial Sector by Deposit Banks	31,249	30,318	31,845
TL	17,544	15,977	17,409
FX	13,705	14,341	14,436
Consumer Loans	2,323	2,499	2,902
Credit Cards	2,445	3,493	4,099
FX Position (USD, Million)	-1,533	6	-236**
Past Due Loans/Tot. Credit (%)	16.9	25.5	26.0
Past Due Loans/Tot. Credit (%) - Excluding SDIF	13.9	23.1	22.3
Securities Portfolio/Tot. Deposit (%)	44.8	22.3	30.4
Securities in Non-Trading Port. /Total Deposit (%)	13.4	42.1	34.6
Credit/Deposit (%)	31.0	25.4	25.1
Public Bank Dep./Tot.TL.Deposits (%)	54.5	56.9	53.9
Public Bank credit/Tot.TL Credit (%)	23.6	23.2	22.8

\* 3.1 trillion TL loan of Pamukbank, which has been transferred to the SDIF as of June 19, 2002, is classified in transitory accounts, in June 2002.

\*\*Data on December 13, 2002.

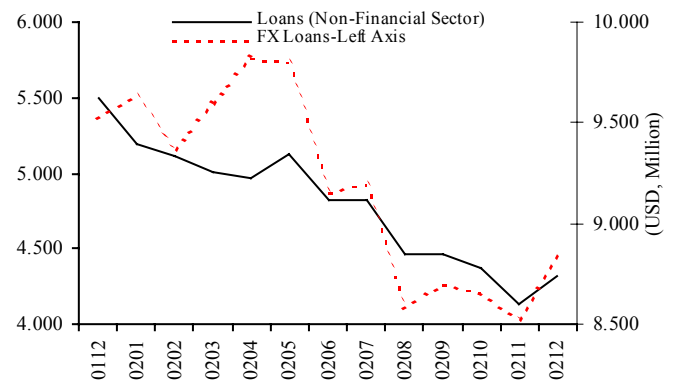
Source: CBRT Weekly Press Bulletin, Last Friday data of each month.

#### III.1.a. Credit

Because of the problems arisen in comparison of credit volume with the data of previous periods, a careful analysis should be made with respect to credit volume. In this context, the studies of the CBRT, BRSA and Banks' Union on data correction are continuing. The results of these studies will allow making more reliable analyses of credit developments.

In September-December 2002 period, credit volume contracted by 4 percent in real terms compared to September mainly due to decline in Turkish lira equivalent of FX loans, despite an increase in terms of US dollar, and specialized credits (Figure III.1.1) During this period, state-owned bank loans and private bank loans dropped by 5 percent and 4 percent in real terms, respectively, compared to September. Besides, credits of banks under SDIF declined by 24 percent in real terms.

Figure III.1.1. Loans to Non-Financial Sector (Discounted with CPI 94=100 Index. TL, Billion)



In December, overall credit volume contracted by 4 percent in real terms compared to September due to the decline in Turkish lira equivalent of FX loans and specialized credits. During this period, commercial credits in terms of Turkish lira increased by 4 percent in real terms.



In this period, while commercial credits in terms of Turkish lira increased by 4 percent in real terms compared to September, FX credits and specialized credits decreased by 7 percent and 9 percent, respectively.

In December 2002, FX loans in terms of US dollar rose to US dollar 8.8 billion, increasing by US dollar 134 million compared to September. The share of Turkish lira equivalent of FX loans in overall credits, which was 46.5 percent in September 2002, dropped to 44.7 percent in December due to appreciation of TL after November (Figure III.1.2).

Figure III.1.2. FX Loans

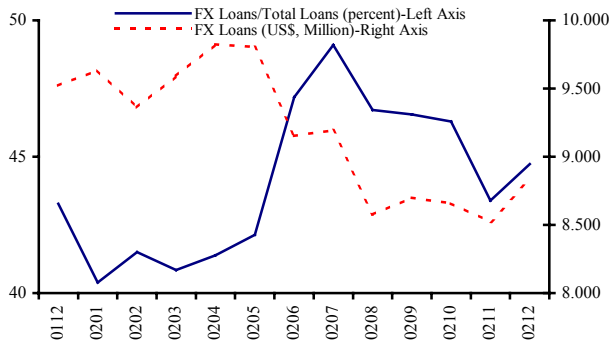


Table III.1.2. Deposit Banks Credit (TL, Trillion)

	Public	Private*	Foreign	Total
<b>28.12.2001</b>	7,389	22,575	1,287	31,249
TL	5,449	11,539	557	17,544
FX	1,940	11,036	730	13,705
<b>27.09.2002**</b>	7,040	21,401	1,876	30,317
TL	5,531	9,684	761	15,976
FX	1,509	11,717	1,115	14,341
<b>27.12.2002</b>	7,259	22,430	2,156	31,845
TL	5,664	10,814	931	17,409
FX	1,595	11,616	1,225	14,436

\* Including SDIF.

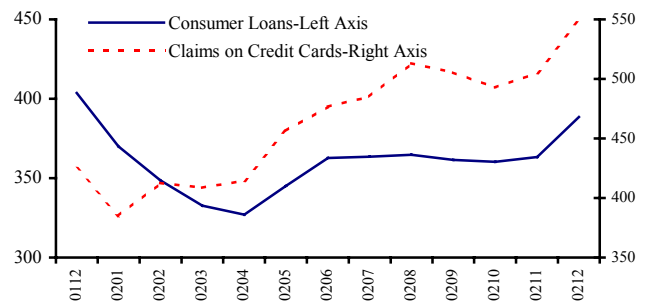
\*\* 3.1 trillion TL loan of Pamukbank, which has been transferred to the SDIF as of June 19, 2002, is classified in transitory accounts, in June 2002.

Source: CBRT Weekly Press Bulletin.

During September-December period, consumer credits increased by 8 percent in real terms compared to September due to drop in interest rates on consumer credits. The share of consumer credits in total credits, which was 8.1 percent in September, rose to 9 percent in

December. Moreover, claims of banks on credit cards increased by 9 percent in real terms in December 2002 compared to September (Figure III.1.3).

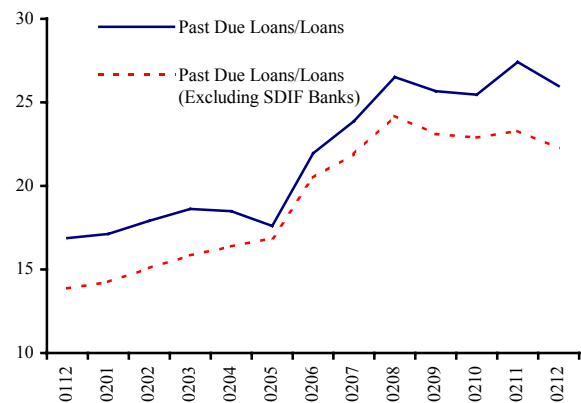
Figure III.1.3. Developments in Consumer Loans and Claims on Credit Cards (Discounted by CPI 1994=100, TL, Billion)



Consumer loans and claims on credit cards increased by 8 percent and 9 percent in real terms, respectively, during September-December 2002 period.

The share of past due loans in total credits, which was 25.7 percent in September 2002, rose to 26 percent in December (Figure III.1.4). In December 2002, the share of past due loans of the banks taken over by SDIF in total became 15 percent, while the shares of state-owned banks and private banks were 45 percent and 38 percent, respectively.

Figure III.1.4. The Share of Past Due Loans in Total Loans (Percent)



**In December 2002, 45 percent of past due loans belonged to state-owned banks.**

In October 2002, textile sector had the largest share in past due loans. The share of textile sector in past due loans realized as 22 percent in October.

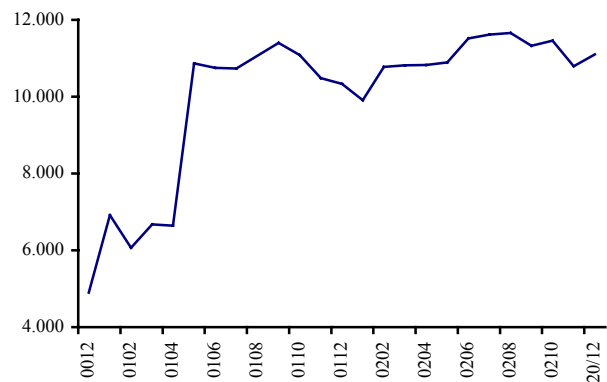
**III.1.b. Developments in Securities Portfolio and Securities in Non-Trading Portfolio of Banks**

With the revision made in Uniform Accounting Plan, securities portfolio and securities in non-trading portfolio of banks have been amended as “banks’ trading securities and securities available for sale” and “banks’ investment securities to be held till maturity” as of October 2002. Moreover, securities subject to repo transactions, which were accounted under securities in non-trading portfolio of banks since February 1, 2002, have been started to be accounted both under securities in non-trading portfolio of banks and banks’ investment securities to be held till maturity starting from December. Additionally, stocks that were accounted under securities in non-trading portfolio of banks have been placed in “securities in non-trading portfolio of banks.

Due to the amendments in accounting of these two items, banks’ trading securities and securities available for sale increased by 33 percent in real terms in December 2002 compared to September whereas banks’ investment securities to be held till maturity dropped by 20 percent in real terms. In December 2002, while investment securities to be held till maturity comprised a major portion of government securities of state-owned banks, a substantial portion of government securities held by private banks were composed of trading securities and securities available for sale. While the share of state-owned banks was 15 percent in deposit banks’ trading securities and securities available for sale, the share of private banks became 75 percent in December 2002. Besides, the shares of state-owned banks and private banks in deposit banks’ investment securities to be held till maturity were 75 percent and 23 percent, respectively

**With the revision made in Uniform Accounting Plan, securities portfolio and securities in non-trading portfolio of banks have been amended as “banks’ trading securities and securities available for sale” and “banks’ investment securities to be held till maturity” as of October 2002.**

*Figure III.1.5. The Sum of Securities Portfolio and Securities in Non-Trading Portfolio (Discounted by CPI 1994=100, TL Billion)*



*Table III.1.3. Developments in Securities Portfolio and the Securities in Non-Trading Portfolio (TL Trillion)*

	Public	SDIF	Private	Banking Sector
<b>2001 December</b>				
Securities Portfolio	28,817	5,127	16,308	45,776
TL	21,026	3,670	9,357	30,939
FX	7,791	1,457	6,951	14,837
Sec, in Non-Trad, Portfolio	702	82	12,077	13,683
TL	182	82	7,683	8,195
FX	520	0	4,394	5,488
<b>2002 September</b>				
Securities Portfolio	5,031	3,926	21,117	27,136
TL	1,193	3,884	11,417	13,051
FX	3,838	42	9,700	14,085
Sec, in Non-Trad, Portfolio	32,512	1,848	17,324	51,146
TL	24,057	1,595	11,463	36,104
FX	8,455	253	5,861	15,042
<b>2002 December</b>				
Securities Portfolio	5,762	4,474	31,820	39,106
TL	1,442	4,442	17,772	20,037
FX	4,320	32	14,048	19,069
Sec, in Non-Trad, Portfolio	33,075	194	10,244	44,417
TL	24,483	188	7,350	32,251
FX	8,592	6	2,894	12,166

Source: CBRT

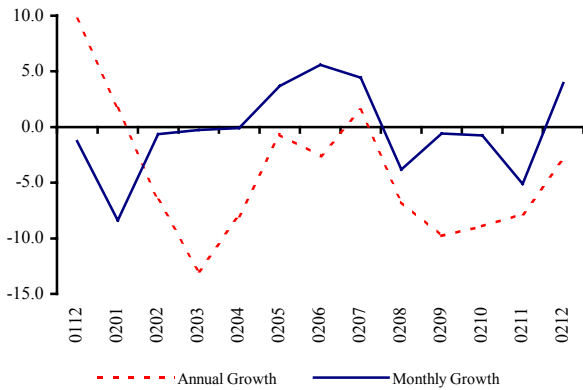
### III.1.c. Developments in Source Structure of the Banking Sector

Turkish lira deposits did show a minor volatility in real terms throughout 2002, though Turkish lira equivalent of FX deposits changed in line with fluctuations in exchange rates. Therefore, changes in Turkish lira equivalent of FX deposits and accordingly in exchange rates affected the developments in total deposits of residents in real terms.

In the last quarter of 2002, total deposits of residents reduced by 2 percent due to the appreciation of Turkish lira in November that stemmed from the drop in Turkish lira equivalent of FX deposits and became TL 129 quadrillions (Figure III.1.6).

**In the last quarter of 2002, total deposits reduced by 2 percent due to the drop in Turkish lira equivalent of FX deposits.**

Figure III.1.6. Developments in Total Deposits (Discounted by CPI94=100, Percent)

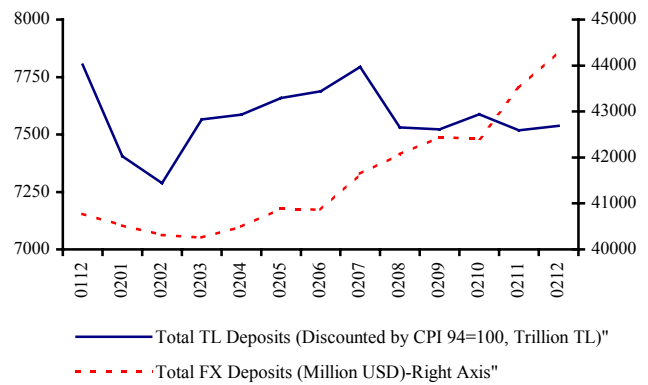


TL deposits remained unchanged in real terms in the last quarter of 2002 and realized as TL 56 quadrillions. In this period, the share of private banks in TL deposits rose to 45.2 percent from 42.5 percent, while the share of state-owned banks decreased to 53.9 percent from 56.9 percent. During the same period, the share of foreign banks in TL deposits increased to 0.9 percent from 0.7 percent.

FX deposits declined in real terms because of appreciation of Turkish lira in November. Moreover, FX

deposits became TL 72 quadrillion in the last quarter of 2002, declining by 4 percent. When FX deposits are analyzed in terms of US dollar, it is seen that this item displayed an upward trend throughout 2002 (Figure III.1.7).

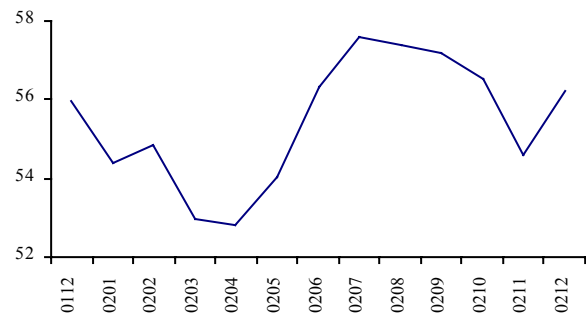
Figure III.1.7. Developments in TL and FX Deposits



With regard to the shares of the bank groups in FX deposits, the share of state-owned banks remained unchanged in the last quarter of 2002 and realized as 22.6 percent, while the share of private banks rose to 74.3 percent from 74.2 percent. Moreover, the share of foreign banks dropped to 3.1 percent from 3.2 percent.

The drop in Turkish lira equivalent of FX deposits in the last quarter of 2002 led to decline in the share of FX deposits in total deposits as well. The said share, which was 57.2 percent at the end of September, decreased to 56.2 percent in December (Figure III.1.8).

Figure III.1.8. The Share of FX Deposits in Total Deposits (Percent)



**BOX: III.1. NET INTEREST MARGIN IN TURKISH BANKING SYSTEM**

Net interest margin (NIM), which is simply defined as the difference between the interest rates on credits and deposits<sup>1</sup>, is accepted as an indicator of financial sector's performance in transferring funds (financial intermediary) to sectors having savings deficit from sectors having savings surplus. In general, expansion of NIM signifies inefficiency in financial intermediary functioning. Behind this assessment there lies the belief that the level of competition in banking sector determines NIM in an environment where the elements that determine the funding costs do not change.

Upsurge in reserve requirement ratios and other tax and cut ratios that determine banks' funding costs, leads to an increase in NIM because of banks' attempts to maintain profit rates at the same level via reflecting funding costs to interest rates on credits. On the other hand, if competition in banking sector is at an inadequate level, then rise in nominal interest rates lead to an increase in nominal interests on credits, thus raising NIM as well. It is observed that in developed and stable economies, NIM is usually at lower levels compared to unstable economies (Table).

**Table. Net Interest Margins for Some Countries between 1993-1998 (average, percent)**

Country	Australia	Austria	Belgium	Canada	Denmark	Finland	France	Germany	Italy	Japan	Netherlands	Portugal	Spain	Sweden	Switzerland	Turkey	UK	USA
NIM	2.36	1.71	1.21	2.46	3.02	1.74	1.24	1.92	2.65	1.35	1.82	2.38	2.77	2.32	1.37	11.28	2.24	3.56

Source: Gischer and Jüttner (2002)

Note: Net Interest Margin is calculated as the ratio of net interest income to total assets.

It is considered that perception of higher margin, which is calculated by finding the difference between interest rates on credits and deposits, as the indicator of inefficiency in countries with high inflation rates and during the high-inflation periods has some drawbacks. Therefore, direct use of NIM, which is calculated by using early-period data for Turkey (ex-ante), in other words, by deducting the total cost of deposits to the bank from actual credit interest rates may not be reliable. Hence, a different method in calculating net interest margin has been preferred here for a more consistent analysis, which is believed to be more appropriate for Turkey:

$$NIM = \frac{[1 + (i_c / 100)] - [1 + (i_{dc} / 100)]}{[1 + (i_{dc} / 100)]}$$

In this equation, "i<sub>c</sub>" represents interest rate applied on credits and "i<sub>dc</sub>" represents total deposits cost that also include banks' funding costs apart from interest.

It is observed that the indicator, which is calculated by this way was at an average of 15.5 percent between the years 1993-2000 (Figure 1)<sup>2</sup>. In 2001, short-term financing problems of state-owned banks and the banks under SDIF were settled in the framework of "Restructuring Banking Sector Program" and the process of setting the interest rates on credits and deposits of those banks in such a way not to allow instability in market conditions and in the system has been started. In 2002, net interest margin, which is calculated for Turkish banking system via the above-mentioned method, pursued a considerably low and stable course (at an average of 4.2 percent in the first nine months) compared to 2000 and previous years due to the drop in credit interest rates.

NIM, calculated as an alternative ex-post measure, "net interest income / interest bearing assets ratio", is much higher for private commercial banks when compared to the public banks, in year 2000 and before (Graph 2)<sup>3</sup>. With the help of the restructuring program, as private banks are becoming more efficient and private banks' share in banking system increased, NIM showed a decreasing trend.

<sup>1</sup> Apart from obtaining the difference between the two interest rates, two other basic methods are used in calculating net interest margin.

The formula, which is often employed in calculation of net interest margin using early-period data (ex-ante) is given below:

$$NIM = i_c - (i_d + odc)$$

In this equation, "i<sub>c</sub>" stands for the interest rate applied on credits, "i<sub>d</sub>" nominal interest rate on deposits and "odc" the elements that affect banks' funding costs other than deposit rates. Calculation of NIM by this method avoids affecting of NIM by the changes in funding costs that are beyond the control of banks. In the equation, which we will employ in calculation of NIM by using early-period data, the term "i<sub>d</sub> + odc" will be identified as "i<sub>dc</sub>". The following equation is used in the method, which NIM is calculated by making use of end-period data (ex-post):

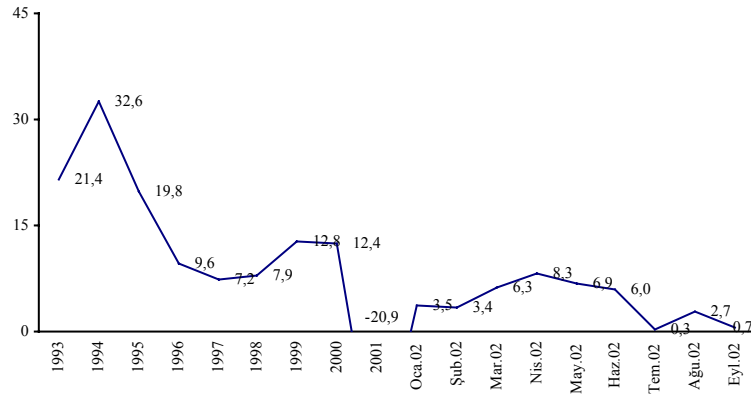
$$NIM = \text{Net Interest Income} / \text{Interest Bearing Assets}$$

Net interest margin, which is calculated by using end-period data, shows effective net interest margin.

<sup>2</sup> Figure 1 shows that interest margin dropped to negative levels in 2001. But this is a misleading result that stemmed from the excessive increase in interest rates applied to short-term deposits by state-owned banks and the banks under SDIF, which suffered liquidity shortage in February 2001 crisis during which banks had ceased credit operations.

<sup>3</sup> However, it is not possible to interpret the operation of state-owned banks with lower interest margin as a performance indicator, since it is known that the interest rate applied by state-owned banks to specialization credits is below the cost of resources. It can be said that official deposits held by state-owned banks plays a significant role in this misleading outcome. Accordingly, it was noted that net interest margins of these banks rose above 14 percent after the regulation that avoids state-owned banks' new duty losses was put into effect in 2001.

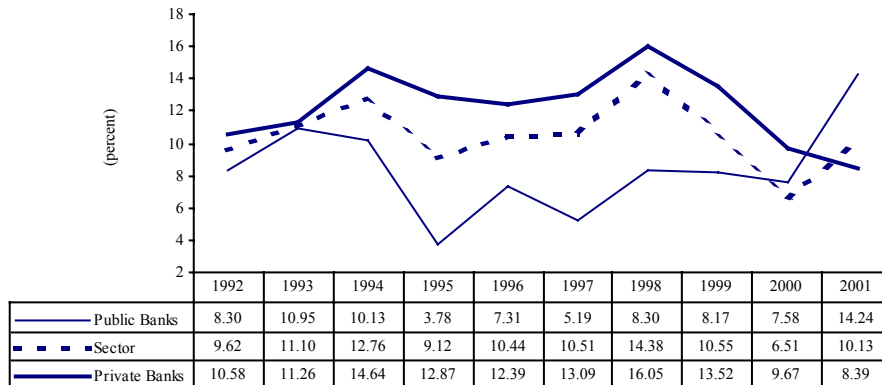
Figure 1. The Developments in the Net Interest Margin between 1993-2001 and in 2002 (Ex-ante)\* (percent)



\*Net interest margin is calculated using the new formulation we constituted for Turkey.

Source: CBRT Banking and Financial Institutions Department.

Figure 2. Developments in the Net Interest Margin between 1992-2001 (Ex-post)\* (percent)



\* Net interest margin is calculated as the ratio of net interest income to interest bearing assets  
Source: Turkish Banking Association

Due to instabilities in macroeconomic structure in general and especially because of high inflation, financial sector operates under more risky conditions and this leads to conducting of intermediary activities by banks with high interest margin. On the other hand, high levels of public sector deficits and financing of these deficits usually via domestic borrowing and high real interest rates lead to increase in credit rates indirectly and thus to the expansion of net interest margin.

Sources:

Monthly Bulletin, Banking and Financial Institutions Department (November 2002).

Gischer, Horst and D. Jüttner (2002) "Global Competition, Fee Income and Interest Rate Margins of Banks" Financial Management Association Conference, Copenhagen, June.

The maturity of TL deposits started to extend in the last quarter of 2002 (Figure III.1.9). The share of short-term deposits, which include three-month deposits and deposits having maturity up to three months declined to 88.1 percent from 89.8 percent in the last quarter of 2002. Maturity of FX deposits maintained its trend to shorten in the second half of 2002. The share of short-term FX deposits in total FX deposits rose to 85.1 percent from 84.9 percent in the last quarter. Additionally, the drop in repo transactions observed in the last quarter is considered a favorable development with respect to the decrease in inconsistency in balance sheets of banks.

Figure III.1.9. The Share of Short Term TL and FX Deposits in Total (Percent)

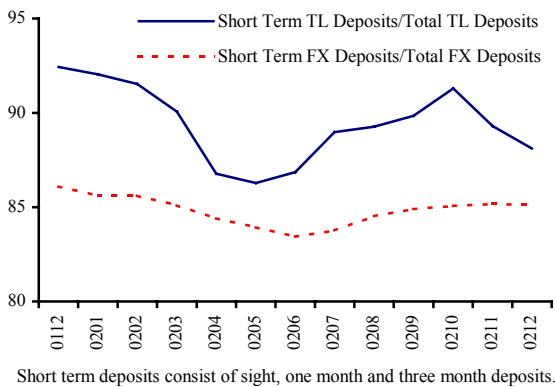
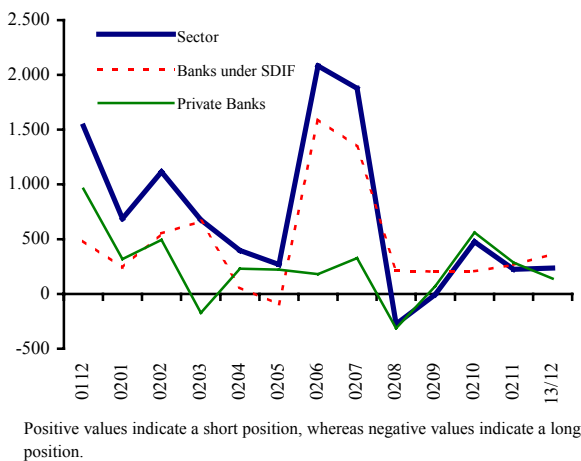


Figure III.1.10. The FX Open Position of the Banking Sector (Million USD)

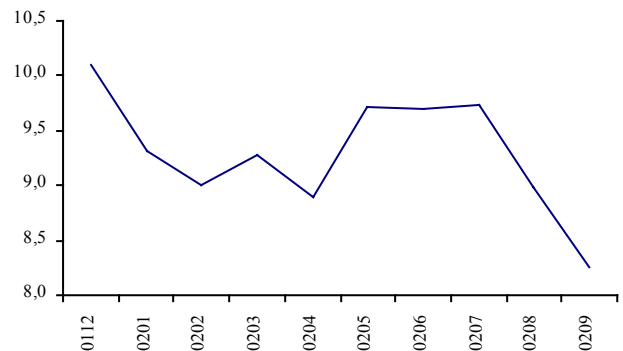


US dollar value of foreign exchange net general position of banking sector, which had realized at a low level in the first half of 2002, expanded by USD 2 billions in June 2002 due to the transfer of Pamukbank to SDIF (Figure III.1.10.). This open position decreased thanks to the supply of FX-indexed securities to the said Bank in August.

In August 13, 2002, open position of SDIF banks was USD 364 million, while open positions of private banks amounted to USD 139 million. The amount of net open position of overall banking sector was USD 236 million on the same date. Excess position of state-owned banks, which have been maintaining their position since August, realized as USD 210 million on August 13, 2002.

Foreign credits, one of the funding resources of banking sector, which were USD 9.7 billion in June 2002, dropped to USD 8.3 billion in September (Figure III.1.11).

Figure III.1.11. FX Credit used by the Banking Sector from Abroad (Billion USD)



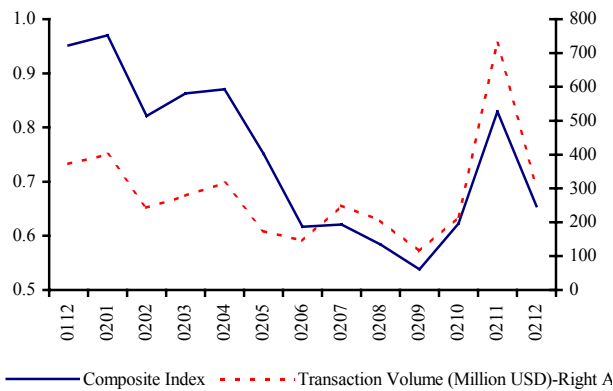
### III.2. The Securities Market

ISE National 100 index and trading volume maintained its downward trend in real terms in December 2002 as well, due to ongoing uncertainty in resolution of Cyprus issue, Iraq crisis and inadequate satisfaction of expectations for membership of Turkey to European Union in Copenhagen Summit.

In 2002, ISE National 100 Index dropped by 42 percent in real terms. During the same period, services index,

financial index and industrial index declined by 43 percent, 45 percent and 33 percent, respectively.

**Figure III.2.1. ISE Composite Index and Transaction Volume (In terms of USD)**



ISE National 100 Index continued its downward trend in terms of US dollar as well. ISE National 100 Index, which was 1 US dollar in December 2001, dropped to 0.7 US dollar by end-December 2002. Services index decreased to 0.4 US dollar from 0.6 US dollar, financial index to 0.8 US dollar from 1.3 US dollar and industrial index to 0.6 US dollar from 0.8 US dollar. Moreover, daily average trading volume, which was US dollar 372 million at the end of 2001, dropped to US dollar 304 million from in December 2002.

The worth of balances of keeping stocks owned by foreign investors, which was US dollar 5.635 million at the end of 2001, declined to US dollar 4.533 million in November 2002.

When we look at the stock markets of other developing countries in the last quarter, it is seen that Brazilian Bovespa Index rose by 30 percent, Russian Mos Times Index by 9 percent and Mexican Mxse IPC Gral in Index by 7 percent. On the other hand, South Korean Kospı Index dropped by 2.9 percent (Figure III.2.2). Developments in developing stock markets on annual basis are given below.

**Table III.2.1. Developments in Some Developing Countries' Stock Market Indices, 2002-2001 (percent)**

	In terms of local currency	In terms of USD
Malaysia	-10.2	-10.2
Thailand	+18.6	+22.6
Argentina	+92.9	-41.4
Brazil	-13.2	-39.3
Chile	-7.2	-13.7
Mexico	-1.7	-12.8
Israel	-26.2	-32.7
Turkey	-26.3	-35.8
Hungary	+9.5	+33.0
Poland	+5.9	+8.5
Russia	+42.6	+36.4

Source: The Economist

## IV. PUBLIC FINANCE AND DOMESTIC DEBT STOCK

In January-November 2002 period, primary budget surplus excluding privatization increased by 37.5 percent compared to the same period of previous year and reached TL 17.1 quadrillion (Table IV.1). The sum of TL 3 quadrillion, which was transferred to the budget from the 2001 net proceeds of CBRT in May, played a significant role in the improvement of primary budget surplus noted in the first eleven months of 2002. Primary budget surplus reached TL 1.8 quadrillion in November 2002 (Figure IV.1).

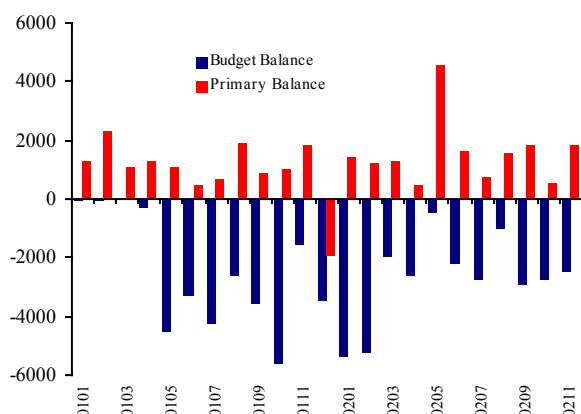
Since 2003 Budget could not be enacted due to early General Elections held on November 3, 2002, a provisional budget was prepared for January-March 2003.

Table IV. 1. Consolidated Budget Balances (TL Trillion)

	2001	2002
	Jan-Nov	Jan-Nov
Revenues	47118	69780
Expenditures	72670	99499
Budget Balance	-25553	-29719
Primary Budget Balance	13965	17094
Primary Budget Balance Exc. Privatization	12432	17094

Source: Ministry of Finance.

Figure IV. 1. Consolidated Budget Balance and Primary Balance (Monthly, TL Trillion)



### IV.1 Revenues

While the budget revenues reached TL 69.8 quadrillion in January-November 2002 increasing by 48.1 percent compared to the same period of last year, tax revenues rose by 50 percent and became TL 54 quadrillion (Table IV.1.1).

Table IV. 1.1. Consolidated Budget Revenues (TL Trillion)

	2001	2002	Increase Rate (percent)
	Jan-Nov	Jan-Nov	
REVENUES	47118	69780	48.1
Tax Revenues	36023	54023	50.0
Income Tax	10599	12392	16.9
Corporate Tax	3605	5438	50.8
Motor Vehicles Tax	388	678	74.9
Domestic VAT	6416	10394	62.0
Special Consumption Tax	-	4640	-
Petroleum Consumption Tax	4932	6353	28.8
Bank. & Insuran. Trans. Tax	1442	904	-37.3
VAT on Imports	4616	7800	69.0
Non-Tax Revenues	6849	10070	47.0
Privatization	1533	0	-100.0
Other	5315	10070	89.5
Special Revenues and Funds	3625	4548	25.4
Annexed Budget Revenues	621	1139	83.6

Source : Ministry of Finance.

With the enforcement of special consumption tax, 16 items of taxes, fees, funds and shares including primary tax elements such as petroleum consumption tax, additional VAT and motor vehicle purchase tax were abolished on August 1, 2002. As of August 2002, revenues from special consumption tax became TL 4.6 quadrillion. Major portion of this sum was comprised of special consumption tax on petroleum and natural gas products.

The rise in tax revenues in January-November 2002 mainly stemmed from domestic VAT and VAT on imports. Increase in imports due to the rise in production had a favorable effect on revenues from VAT on imports. Special consumption tax was another important tax element that affected performance of tax revenues in favorable manner.



The structure of tax revenues changed significantly in relation to the economic crisis in 2001. Thus, the share of indirect taxes in tax revenues, which was 58.3 percent in January-November 2001 period, reached 65.6 percent in the same period of 2002.

**The share of indirect taxes in tax revenues, reached 65.6 percent in January-November 2002 period.**

Income tax displayed a moderate increase of 16.9 percent in January-November 2002 period. This limited nominal increase mainly stemmed from the decrease in the withholding tax on interest revenues. In January-November 2002 period, corporate tax revenues increased by 50.8 percent compared to the same period of previous year mainly depending advance tax payments.

In January-November 2002 period, non-tax revenues rose by 47 percent. The total amount transferred to budget from CBRT net proceeds, which was TL 472 trillion in the preceding year, reached TL 3 quadrillion.

**IV.2 Expenditures**

In January–November 2002 period, total budget expenditures increased by 36.9 percent compared to the same period of previous year (Table IV.2.1), while non-interest expenditures rose by 58.9 percent.

In January-November 2002 period, personnel expenditures increased by 54.2 percent, while other current and investment expenditures rose by 55.5 percent and 66.9 percent, respectively. Public servants' salaries increased by gross TL 100 million per month for October-December 2002. However, TL 25 million of this monthly increase was paid in January 2003 in order to alleviate the burden on 2002 budget. Moreover, public servants' salaries were increased by 5 percent in January 2003.

Sizable increases realized in non-interest transfers such as tax rebates, transfers to social security institutions and agricultural support expenditures.

*Table.IV. 2.1 Consolidated Budget Expenditures (TL Trillion)*

	2001	2002	Increase Rate
	Jan-Nov	Jan-Nov	(percent)
EXPENDITURES	72670	99499	36.9
NON-INTEREST EXP.	33152	52686	58.9
Personnel	13455	20748	54.2
Wages	2159	2826	30.9
Other Personnel Expenditures	11296	17922	58.7
Other Current	3504	5450	55.5
Investment	3052	5095	66.9
Transfer Expenditures	52659	68205	29.5
Interest Payments	39518	46813	18.5
Domestic Debt Interest Pay.	36439	42268	16.0
Foreign Debt Interest Pay.	3079	4545	47.6
Transfers to SEE's	966	1287	33.3
Tax Rebates	2374	4828	103.4
Social Security Institutions	5904	9690	64.1
Payments to Retirement Fund	2925	4976	70.1
Payments to SSK	981	2097	113.8
Payments to Bag-Kur	1715	2382	38.9
Unemployment Insurance Fund	283	235	-17.0
Agricultural Support	449	1834	308.4
Other Transfers	3449	3754	8.8

Source : Ministry of Finance.

The increase in transfers to the social security institutions from budget in the first eleven months of 2002 mainly resulted from high level of health expenditures, increase in unemployment and the failure of these institutions in collecting adequate sum of premium. In January-November 2002 period, a sum of TL 9.7 quadrillion was transferred to social security institutions. Of this transferred amount, around TL 5 quadrillion pertains to Retirement Fund.

Transfers from budget, made within the framework of direct revenue support payments, played a significant role in the increase in agricultural support payments during January-November period. Accordingly, the total amount transferred from budget in this context became TL 1.5 quadrillion.

The increase in tax rebates during January-November period was due to VAT rebates on exports. This was related to improvement in exports.

### IV.3. Consolidated Budget Deficit and Financing

Consolidated budget cash deficit realized at TL 28.3 quadrillion in January-November 2002 period, during which the Treasury was in net borrower regarding domestic borrowing. Analyzing the structure of domestic borrowing, it is observed that the Treasury acted as a net payer in government bonds and a net borrower in Treasury bills. In this period, net borrowing in Treasury bills amounted to TL 16.6 quadrillion (Table IV.3.1).

Net foreign borrowing was TL 15.7 quadrillion during January-November 2002 period. Credits extended by IMF played a major role in this development.

#### Net foreign borrowing was TL 15.7 quadrillion during January-November 2002 period.

Table.IV. 3.1.Consolidated Budget Balance and Financing (TL Trillion)

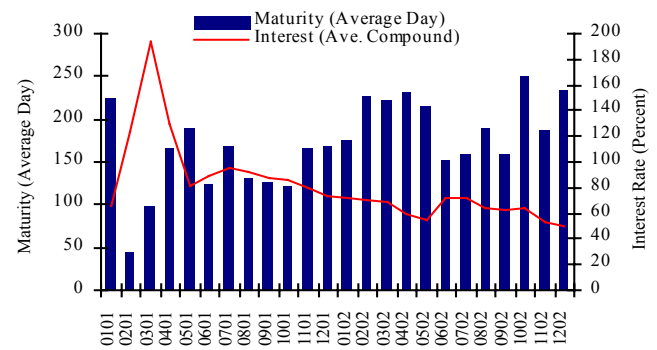
	2001	2002
	Jan-Nov	Jan-Nov
Primary Budget Balance	13965	17094
Budget Balance	-25553	-29719
Cash Balance	-26551	-28295
Financing	26551	28295
Net Domestic Borrowing	21541	14155
Government Bonds	9815	-2444
Treasury Bills	11726	16600
Guarantied Debt Returns	0	0
Net Foreign Borrowing	-4968	15670
Other	9977	-1529

Source : Treasury.

In order to extend the maturity of borrowing, the Treasury restarted issuing floating rate securities from early 2002 on. Although the Treasury auction interest rates went down until May 2002, due to the recovering confidence of markets in the current program, they rose

in June and July because of political developments. The Treasury auction interest rates have started to drop again as of August (Figure IV.3.1).

Figure.IV.3.1. The Treasury Auction Interest Rates and Maturity Structure



### IV.4. Domestic Debt Stock

Domestic debt stock, which was TL 122.2 quadrillion at the end of 2001, reached TL 145.3 quadrillion, increasing by 19 percent as of November 2002 (Table IV.4.1). Domestic debt stock increased only slightly until May 2002. The IMF credits transferred to the Treasury on February 7, 2002, had an effect on this very limited increase in domestic debt stock. This resource contributed to early redemption of FX linked securities in CBRT's portfolio and securities in the portfolio of banks under SDIF. The banks under SDIF used these resources to reduce their liabilities to CBRT. In this context, the effect of IMF credit on domestic debt stock manifested itself in two ways. The first one is the reduction in domestic debt stock and its financing requirement. The second one is the change in the structure of domestic debt stock in terms of borrowing instruments. Nevertheless, political uncertainty that appeared after May and the decision for early general elections to be held on November 3, 2002 led to shorter maturity and higher cost. This resulted in raising domestic debt stock.

**Table IV. 4.1. Domestic Debt Stock and Its Structure**  
(Amounts are in TL Quadrillion and Shares are in Percent)

	2000		2001		2002*	
	Amount	Share	Amount	Share	Amount	Share
		In Total		In Total		In Total
CASH	29.6	81.2	58.3	47.8	85.0	58.5
Fixed Income	19.4	53.3	17.7	14.5	35.7	24.6
Flexible-rate	9.0	24.7	11.4	9.4	16.5	11.3
FX Denominated	1.2	3.2	7.1	5.8	15.0	10.3
FX Linked	0.0	0.0	22.1	18.0	17.8	12.2
IMF Credit	0.0	0.0	13.8	11.3	9.6	6.6
Swap/Tap	0.0	0.0	7.7	6.3	7.7	5.3
Public Sales	0.0	0.0	0.5	0.4	0.5	0.4
NON-CASH	6.8	18.8	63.8	52.2	60.3	41.5
Fixed Income	1.0	2.8	0.0	0.0	0.0	0.0
Flexible-rate	4.0	11.0	49.5	40.5	47.1	32.5
Interest linked	4.0	11.0	30.7	25.1	28.7	19.8
CPI -Indexed**	0.0	0.0	18.8	15.4	18.4	12.7
FX Denominated	1.8	5.0	12.4	10.1	11.3	7.7
FX Linked	0.0	0.0	1.9	1.6	1.9	1.3
TOTAL STOCK	36.4	100.0	122.2	100.0	145.3	100.0
Fixed Income	20.4	56.1	17.7	14.5	35.7	24.6
Flexible-rate	13.0	35.7	61.0	49.9	63.7	43.8
Interest linked	13.0	35.7	42.1	34.5	45.3	31.2
CPI -Indexed**	0.0	0.0	18.8	15.4	18.4	12.7
FX Denominated	3.0	8.2	19.5	16.0	26.2	18.0
FX Linked	0.0	0.0	24.0	19.6	19.7	13.5

\* As of November

\*\* Indicates the CPI-Indexed part of the non-cash securities that take place in the Central Bank portfolio.

Source: Treasury

**Table IV.4.2. The Distribution of the Domestic Debt Stock According to Buyers (TL Quadrillion)**

	2000	2001	2002
	December	December	November
1. PUBLIC SECTOR	12.2	80.6	78.6
a. CBRT	1.5	32.5	28.0
IMF Credit	-	13.8	9.6
Other	1.5	18.7	18.4
b. State Banks (*)	2.9	22.7	24.2
c. SDIF Banks	3.9	15.1	10.9
d. Other Public	4.0	10.2	15.7
2. MARKET	24.2	41.6	66.7
TOTAL (1+2)	36.4	122.2	145.3

(\*) The duty loss accruals, which are not linked to paper amounts TL 15.1 quadrillion as of end of 2000.

Source: Treasury.

While the share of domestic debt stock held by public sector declined, the share held by private sector increased (Table IV.4.2).

During January-November 2002 period, structure of the domestic debt stock changed in terms of borrowing instruments. While the share of fixed income instruments increased, the share of FX-denominated, FX-linked, and flexible rate government securities declined.

Due to additional external financing, the share of interest-linked government securities reduced by 3.3 points in November 2002 compared to end of 2001 and realized at 31.2 percent. In the same period, the share of CPI-indexed government securities decreased to 12.7 percent dropping by 2.7 points, while the share of FX-denominated and FX-linked government securities came down to 31.5 percent by a drop of 4.1 points. Moreover, the share of fixed-income securities in total domestic debt stock rose by 10 points compared to the end of 2001 and reached 24.6 percent (Figure IV.4.1). There were two developments easing the concerns about medium-term sustainability of domestic debt stock. Firstly, government securities with longer maturity had been issued as a replacement for government securities held against the transferred deposits by the banks under SDIF in November and December 2001. Secondly, the government securities in the portfolio of state-owned banks with their accrued interest were restructured in December 2001 and January 2002. However, the developments in the second half of May led to debates on sustainability of domestic debt stock again. Following the decision for early general elections, uncertainties diminished and interest rates dropped. Primary dealer application started with ten primary dealer banks, which have been nominated in September. Nevertheless, uncertainties regarding Iraq operation and economic policies toward the end of the year created volatility in the cost of borrowing.

**Although the results of General Elections created a favorable atmosphere in October-December period, uncertainties about Iraq operation and economic policies led to volatility in interest rates in December.**

**Figure IV.4.1. The Distribution of Domestic Debt Stock as of November 2002 (Percent)**

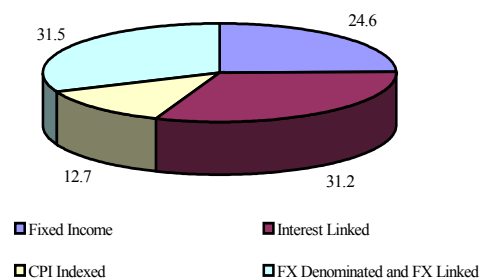
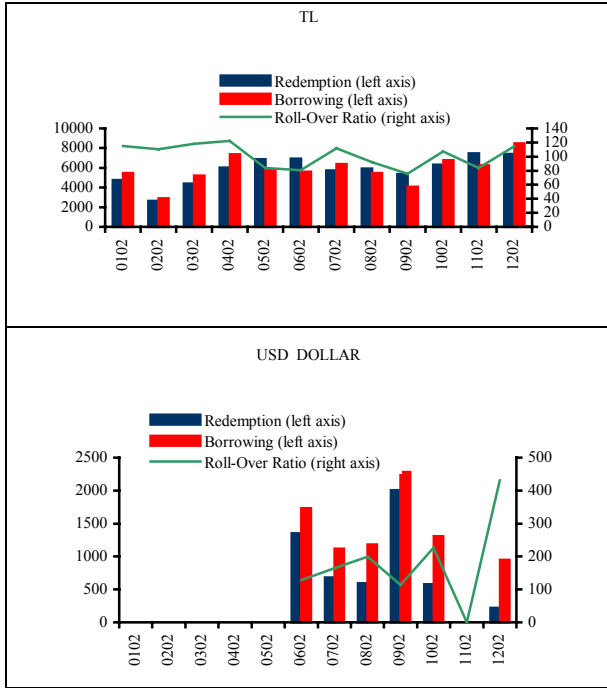


Figure IV.4.2. Roll-Over Ratio



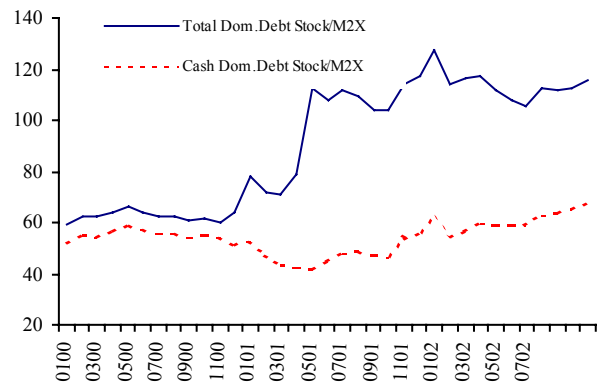
In May 2002, TL 3 quadrillion transferred to budget from net proceeds of CBRT was used for early redemption. Thus, no cash transfer was made to the Treasury. In this context, the fact that the amount transferred from net proceeds of CBRT was above the budget target of TL 750 trillion had a favorable effect on domestic debt stock.

During January-December 2002 period, while total redemption to the market was TL 69.8 quadrillion, total borrowing amounted to TL 69.7 quadrillion. In this context, the roll-over ratio declined to 100.8 percent dropping by 0.5 point compared to December 2001 (Figure IV.4.2). However, due to unfavorable developments in May, the roll-over ratio of the debt in terms of Turkish lira declined sharply compared to the previous months and realized at 75.6 percent in September. With the optimistic atmosphere emerged in the markets after the elections, maturity of borrowing in terms of TL extended and borrowing costs increased. While the roll-over ratio of the debt in terms of TL was

83.8 percent in November, it rose to 114.6 percent in December reaching its highest level since April. Since the Treasury had no repayment to make to the markets in terms of foreign exchange in November, there was no borrowing in terms of foreign exchange. However, in December, repayments to the markets totaled USD 220 million, while borrowings from the market amounted to USD 948 million. Thus, the roll-over ratio of debt in terms of FX realized at a high level of 430.9 percent in December stemming from the increase in the cost of borrowing in terms of TL toward the end of the year and the Treasury's intent to accumulate resources for the next period. Moreover, the roll-over ratio of borrowing in terms of exchange became 158 percent in 2002 and this led to a rise in domestic debt stock in terms of foreign exchange.

The ratio of total domestic debt stock to M2X is as an indicator of pressure on the markets by domestic debt stock in cash, dropped by about 2 points as of November 2002 compared to the end of 2001. Furthermore, the ratio of cash domestic debt stock to M2X, another indicator of pressure, increased by about 11.5 percent due to higher level of total borrowing compared to repayments to markets and the reflected exchange rate difference as a result of the coupon repayments of securities held in the portfolio of CBRT in August (Figure IV.4.3).

Figure IV.4.3. The Ratio of Domestic Debt Stock to M2X



## V. DEMAND AND PRODUCTION

Turkish economy re-entered in the growth period in 2002 following the contraction experienced in 2001. In the third quarter of 2002, GNP increased by 7.8 percent compared to the same period of previous year and by 6.2 percent in the first nine months of 2002 compared to the same period of 2001. It is predicted that GNP will grow by 6.5 percent compared to the previous year.

Table V.1.1. Main Expenditure Groups (Annual % Change)

	2001					2002			
	I	II	III	IV	Annual	I	II	III	First Nine Months
Total Consumption Exp.	-2.8	-11.4	-10.3	-11.0	-9.1	-1.6	2.2	3.5	1.6
Private Consumption									
Exn	-3.0	-12.0	-9.9	-11.3	-9.2	-1.9	2.2	2.6	1.1
Public Consumption									
Exn	-1.2	-6.5	-14.9	-8.9	-8.5	2.3	2.6	12.1	5.9
Gross Fixed Capital Formation	-12.9	-31.9	-37.1	-38.6	-31.5	-24.7	-1.2	6.9	-5.7
Public Fixed Capital									
Investment	-5.8	-32.0	-23.4	-18.8	-22.0	-17.8	3.1	29.6	9.5
Private Fixed Capital									
Investment	-14.1	-31.8	-41.2	-50.0	-34.9	-26.0	-2.7	-2.1	-10.5
Machinery-Equipment	-18.3	-44.4	-61.7	-69.0	-49.6	-41.1	2.7	15.4	-11.9
Construction	-6.5	-8.3	-8.6	-8.5	-8.0	-2.2	-8.8	-13.7	-9.0
Total Investment	-28.3	-50.7	-38.5	-46.8	-42.0	-0.2	61.7	26.9	29.1
Expenditures									
Total Domestic Demand	-9.7	-24.1	-17.7	-21.3	-18.5	-1.3	14.7	8.1	7.2
Total Final Domestic Demand									
Exports of Goods & Services	9.7	8.2	5.9	6.4	7.4	10.2	5.2	16.0	10.6
Imports of Goods & Services	-14.5	-31.0	-26.5	-26.0	-24.8	2.1	20.3	19.1	13.7
GDP	-1.0	-9.8	-7.5	-10.3	-7.5	1.8	8.8	7.9	6.5

Source: SIS

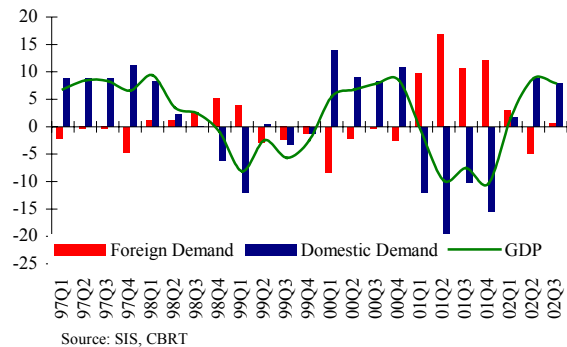
The current program has re-established confidence in financial markets. Easing of concerns over sustainability of domestic debt contributed to the upturn of confidence in the economy. Due to the recovery in confidence in the economy, interest rates dropped compared to the previous year. Moreover, private firms started to use foreign financial resources much more extensively with longer maturity and under better conditions during this period. Thanks to these favorable developments, economic agents' optimistic expectations increased and the Turkish economy entered in growth period earlier than expected.

Optimistic expectations of economic agents, primarily private firms, increased with easing of political uncertainties after the elections. In this context, the recovery period of economy is expected to continue in 2003 as well. However, it is assumed that Iraqi operation will lead to some problems with respect to the future of economy. In such case, upturn in economy will realize slower than expected in 2003.

### V.1. Demand Developments

Rapid growth of economy in the third quarter of 2002 stemmed from both domestic demand and foreign demand (Figure V.1.1).

Figure V.1.1. The Contributions of Demand Components to GDP Growth (Percentage Points)



When the contribution of demand components to GDP is analyzed, it is seen that the growth in the third quarter of 2002 arose from the increase in public expenditures and stock accumulation. Moreover, all demand components contributed to GDP growth in the third quarter of 2002 (Table V.1.2).

The contribution of stock accumulation to GDP in the third quarter dropped compared to the first half of 2002 and realized at 3.5 points. It is presumed that private firms renewed their manufactured goods stocks that shrank due to the contraction experienced in 2001. Therefore, it is predicted that the contribution of stock accumulation to growth will be at a low level in the last quarter of 2002.

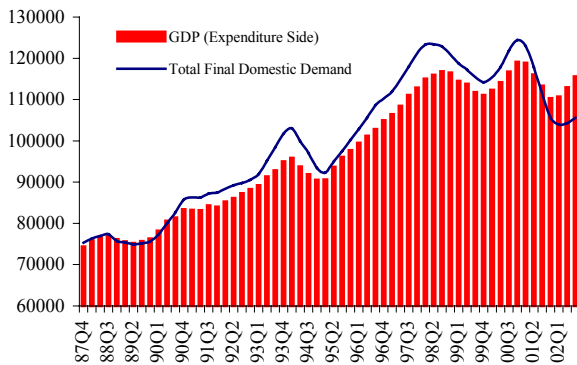
**Table V.1.2. Contributions of Demand Components to GDP Growth (Percentage Points)**

	2001					2002			
	I	II	III	IV	Annual	I	II	III	First Nine Months
Private Expenditure	-5.3	-15.1	-15.2	-16.3	-13.4	-6.3	1.0	1.5	-0.9
Public Expenditure	-0.3	-3.1	-2.5	-3.0	-2.3	-0.5	0.4	2.3	0.9
Net Exports	9.8	16.9	10.6	12.1	12.3	3.0	-4.9	0.5	-0.4
Stock Changes	-5.1	-8.5	-0.4	-3.1	-4.0	5.6	12.3	3.5	6.9
<b>GDP</b>	<b>-1.0</b>	<b>-9.8</b>	<b>-7.5</b>	<b>-10.3</b>	<b>-7.5</b>	<b>1.8</b>	<b>8.8</b>	<b>7.9</b>	<b>6.5</b>

Source: SIS, CBRT

Stock changes are followed by public expenditures with its contribution of 2.3 points. Besides, the contribution of net exports item to growth turned out to be positive due to the rapid increase in goods exports in the third quarter of the year. Private expenditures contributed to the growth of economy to some extent in the third quarter of the year.

**Figure V.1.2. Annualized GDP and Total Final Domestic Demand (1987 Prices, Billion TL)**



Source: SIS, CBRT

Despite those favorable developments, annualized data indicate that the level that GDP reached in the first nine months of 2002 was below the GDP level of the same period of 2000 (Figure V.1.2). This proves that despite high growth figures, recovery in domestic demand is still at low level. Furthermore, significant contribution of stock accumulation to growth eased the pressure on consumer prices, thus allowing the achievement of year-end inflation target.

**Table V.1.3. Private Consumption Expenditures (Annual % Change)**

	2001					2002			
	I	II	III	IV	Annual	I	II	III	First Nine Months
PRIVATE CONSUMPTION	-3.0	-12.0	-9.9	-11.3	-9.2	-1.9	2.2	2.6	1.1
Food	0.5	-5.0	-5.1	-3.6	-3.6	-1.3	-1.0	3.0	0.7
Durable Goods	-20.3	-36.1	-31.1	-33.2	-30.4	-6.9	6.4	1.9	0.2
Semi-durable & Non-durable	3.8	-12.5	-9.9	-19.0	-9.0	-1.4	0.9	1.9	0.4
Energy-Transpor.-Communi.	1.3	-1.9	-0.4	4.4	0.9	-2.9	1.8	-1.8	-0.9
Services	-2.1	-12.5	-9.3	-11.5	-9.3	1.6	10.7	8.8	7.5
Ownership of Dwelling	2.2	2.1	2.1	2.0	2.1	2.0	1.9	1.7	1.9

Source: SIS

Moreover, private consumption expenditures increased slightly by 2.6 percent in the third quarter of 2002 compared to the same period of previous year (Table V.1.3). Owing to this increase during the said period, private consumption expenditures rose by 1.1 percent in the first nine months compared to the same period of 2001. Continuations of unfavorable labor market developments of 2001 in 2002 as well are deemed to have a negative impact on private consumption expenditures.

**Table V.1.4. Public Expenditures (Annual % Change)**

	2001					2002			
	I	II	III	IV	Annual	I	II	III	First Nine Mont
Total Public Expenditures	-2.8	-18.8	-18.8	-13.6	-14.7	-4.6	2.8	19.7	7.3
Public Consumption	-1.2	-6.5	-14.9	-8.9	-8.5	2.3	2.6	12.1	5.9
Compens. of Employees	2.3	2.0	1.1	1.0	1.6	1.9	0.2	0.3	0.8
Purch. of Goods & Services	-9.4	-15.3	-29.8	-14.4	-18.0	3.5	5.6	28.0	13.9
Public Fixed Capital Inv.	-5.8	-32.0	-23.4	-18.8	-22.0	-17.8	3.1	29.6	9.5
Machinery-Equipment	-4.6	-65.4	-26.7	-32.4	-39.0	-15.3	13.8	72.1	19.9
	2001					2002			
Building Construction	-12.9	-2.1	-20.7	-27.3	-20.0	-17.9	27.1	34.0	22.9
Other Construction	-3.0	-8.2	-23.5	-0.8	-10.3	-21.0	-14.1	12.0	-3.4

Source: SIS

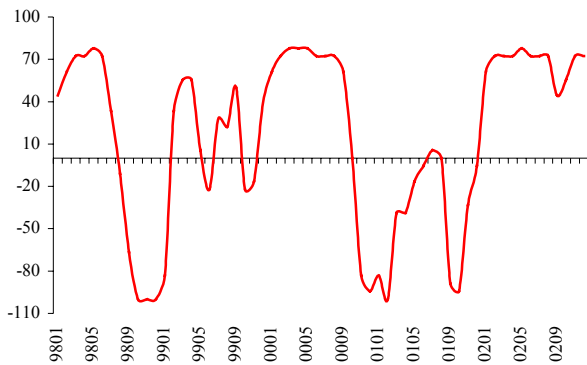
The recovery period of domestic demand is expected to continue in the last quarter too. On the other hand, it is predicted that private consumption expenditures will maintain its upward trend albeit at a lower rate. Therefore, it is presumed that support to production

provided by demand in the last quarter of the year will come from foreign markets.

In the third quarter of 2002, private investment expenditures decreased by 2.1 percent compared to the same period of the previous year due to decline in construction investments. Private machinery-equipment investment expenditures rose by 15.4 percent in this period, while private investment expenditures dropped by 10.5 percent in the first nine months of the year.

Public consumption expenditures increased by 12.1 percent in the third quarter of 2002 compared to the same period of the previous year because of the sharp increase in purchases of goods and services (Table V.1.4). In the third quarter of the year, public investment expenditures rose by 29.6 percent compared to the same period of 2001, contributing to the revival of domestic demand.

Figure V.1.3. Expectations Index for Demand and Production (Private Industry Sector, Next Three-Months Period)



Source: CBRT Business Tendency Survey

Goods and services exports boosted by 16 percent in the third quarter of 2002 compared to the same period of 2001. Goods exports increased, since private firms directed their production toward foreign markets due to inadequate domestic demand. Moreover, slight recovery in domestic demand and high rate of increase in

industrial production led to a sharp rise in imports in the third quarter of the year. In the third quarter of 2002,

goods and services exports increased by 19.1 percent compared to the same period of the previous year.

Expectations Index, which is prepared by aggregation of quarterly expectations of Business Tendency Survey maintains its positive progress in the last quarter of 2002 as well. Expectations Index had dropped due to the increase in political uncertainties in September. However, optimistic expectations of private firms started to rise again after the elections.

### V.1.1 Production Developments

The agriculture sector value added rose by 5 percent in the first nine months of 2002 compared to the same period of the previous year (Table V.1.5). This increase was farming-originated such as mainly cereals, leguminous seeds and other farming products. An increase in the agriculture sector value added is expected in the last quarter of 2002 as well, compared to the same period of the previous year.

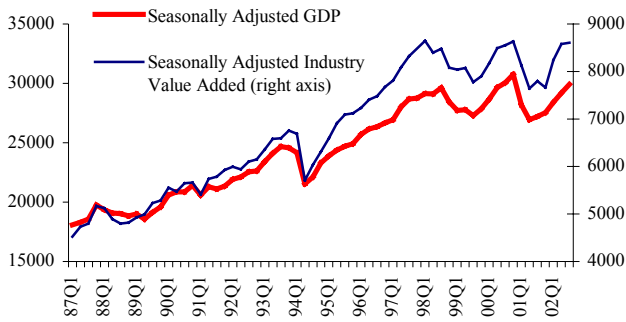
Industrial sector value added rose by 8.8 percent in the first nine months of 2002 compared to the same period of the year (Table V.1.5). Seasonally adjusted data reveal that both GDP and industrial value added rose in the first three quarters of 2002 (Figure V.1.4.). The fact that private firms have directed their production to foreign markets because of inadequate domestic demand played an important role in the rise in industrial sector value added. Because of the rise in industrial production in the first nine months of the year, imports, primarily intermediary and capital goods, increased as well. The increase by 15.5 percent in intermediary and investment goods in the first nine months of 2002 points out that the growth realized in January-October period will continue in the last quarter as well. Moreover, it is assumed that the increase of credits to private sector in real terms in the next period will have a favorable effect on the industrial sector value added.

Table V.1.5. GNP and Value Added by Sectors (Annual % Change)

	2001					2002			
	I	II	III	IV	Annual	I	II	III	First Nine Months
AGRICULTURE	5.8	-4.0	-6.0	-13.2	-6.5	-1.0	2.4	6.6	5.0
TOTAL INDUSTRY	0.8	-10.0	-8.9	-10.7	-7.5	2.8	12.6	10.5	8.8
Manufacturing Industry	1.7	-11.0	-9.7	-12.0	-8.1	2.3	13.7	11.8	9.5
SERVICES	-1.6	-8.1	-5.6	-7.6	-5.9	1.8	6.5	5.9	4.9
Construction	-4.8	-5.3	-7.8	-3.3	-5.5	-2.4	-5.9	-2.0	-3.4
Trade	-2.4	-12.2	-7.5	-14.4	-9.4	3.1	11.1	9.7	8.4
Wholesale and Retail	-2.5	-16.6	-12.7	-17.0	-12.8	2.3	14.8	12.2	10.2
Hotel & Restaurant Ser.	-2.3	13.8	20.0	0.7	9.9	8.5	-5.1	-0.1	-0.1
Transportation&Comm.	-2.6	-9.5	-5.0	-4.1	-5.3	1.2	8.0	5.1	4.8
Financial Institutions	-5.3	-10.0	-9.8	-14.2	-9.9	-7.4	-9.6	-3.2	-6.8
Ownership of Dwelling	2.2	2.1	2.1	2.1	2.1	2.0	1.9	1.7	1.9
Business & Pers. Ser.	-0.5	-9.9	-7.9	-10.4	-7.6	1.8	8.7	7.7	6.4
Government Services	2.3	2.0	1.1	1.0	1.6	1.8	0.2	0.3	0.8
IMPORT TAX	-10.1	-32.1	-28.0	-28.4	-25.1	-0.4	24.6	25.6	15.9
GDP	-1.0	-9.8	-7.5	-10.3	-7.5	1.8	8.8	7.9	6.5
GNP	-3.3	-12.3	-9.1	-12.3	-9.5	0.2	9.4	7.8	6.2

Source: SIS

Figure V.1.4. Seasonally Adjusted GDP and Industry Sector Value Added



Source: SIS, CBRT

The other development that led to rise in industrial sector was the slight increase in domestic demand. Especially the increase in private consumption expenditures in the third quarter of 2002, albeit at a low rate, compared to the same period of the previous year contributed to the rise in the industrial sector. Thanks to the optimistic atmosphere that appeared with respect to the maintenance of the current economic program with determination and stability in financial markets recovered with the announcement of election date, expectations of economic agents improved. Recovery in confidence in the economy and the fact that firms have

started to utilize foreign financial resources more efficiently on better conditions led them to increase their production and played an important role in the high-rated rise in the industrial sector value added.

**Industrial sector value added increased by 8.8 percent in the nine months of 2002 compared to the same period of the previous year.**

In January-November 2002 period, industrial production increased by 8.7 percent (Table V.1.6). Excluding petroleum products, the rise in industrial product drops to 8.3 percent. In January-December 2002 period, manufacturing industry average capacity utilization ratio rose by 4.6 percent compared the same period of the previous year and reached 76.2 percent. Moreover, the results of SIS Manufacturing Industry Monthly Tendency Survey for December indicate that firms are expecting a high upsurge in manufacturing industry production in December 2002 and January 2003 as well. Therefore, industrial sector value added is forecasted to increase at a high rate in the last quarter of the year.

Table V.1.6. Industrial Production (Annual % Change)

	November		January-November	
	2001	2002	2001	2002
Total Industry	-14.4	8.6	-8.9	8.7
Mining	-17.9	-4.0	-7.9	-9.0
Manufacturing	-15.7	9.8	-9.7	10.2
Energy	0.5	3.5	-2.2	5.4
Non-petroleum Industrial Production	-16.6	11.5	-11.3	8.3

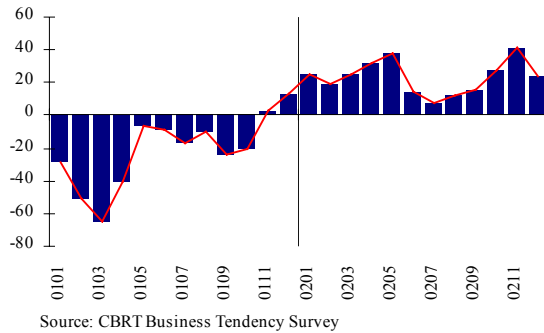
Source: SIS Monthly Industrial Production Index

In the business sentiment, which illustrates the expectations of private firms in the industrial sector on the course of economy, optimistic expectations restarted to increase in August and this increasing tendency continued in November as well. Removal of political uncertainties with the early elections in November resulted in business sentiment at its highest level of the last three years. However, the business sentiment maintained its course in favor of optimistic expectations, albeit at a lower rate, in December (Figure V.1.5). It is considered that likely effects of possible



Iraqi operation on the economy had an impact on the decline in optimistic expectations of firms.

Figure V.1.5. Business Sentiment in Business Tendency Survey



Thanks to the favorable developments in the financial markets resulted from the recovery of political stability, expectations on production and investment improved, while expectations on inflation receded rapidly. The fact that year-end inflation and GNP targets will easily be achieved had a positive effect on the expectations of private firms for the general course of the economy. Hence, investment expenditures tendency, one of the indicators in CBRT Business Tendency Survey, reached its most favorable level of the last five years in November. However, in December, investment expenditures tendency maintained its course in favor of those who answered “less” in a worsening manner.

Services sector value added rose by 4.9 percent in the first nine months of 2002 compared the same period of the previous year (Table V.1.5). The highest growth rate among services sectors was observed in trade and transportation-communication sectors. Recovery in agricultural and industrial sectors had a positive effect on services sector. Favorable developments in industry and foreign trade affected wholesale and retail trade value added positively. Nevertheless, construction and financial institutions sectors experienced an opposite development. According to the data announced by SIS, the area of buildings, which were granted construction permits, recorded a high drop of 55.6 percent in the first nine months of 2002 compared to the same period of the previous year. Fall in house construction permits points out a further decline in the construction sector value

added in the last quarter of 2002 as well. Trade and transportation-communication sectors recovered in line with the export-originated increase in production. On the other hand, it is considered that the spread of economic recovery to the other sectors will be possible by an increase in credit volume in real terms in upcoming periods and by the decline of opportunity costs due to drop in real interests.

## V.2. Developments in Labor Market

According to the SIS Survey of Household Labor Force (HLF), the labor force increased by 1.2 percent in the third quarter of 2002 compared to the same period of the previous year and reached 24,064 thousand people. In the third quarter of 2002, employment declined by 0.8 percent compared to the same period of the previous year and decreased to 21.691 thousand. Total employment increased in urban areas compared to the same period of last year, while decreasing in rural areas. In this period, 53.1 percent of total employment realized in urban areas whereas 46.9 percent in rural areas. Thus, the unemployment rate, which was 8 percent in the third quarter of 2001, reached 9.9 percent in the same period of 2002.

Table V.2.1. Labor Force and Employment

	2001				Mid-Year	2002		
	I	II	III	IV		I	II	III
Labor Force	21.031	22.694	23.782	22.077	22.269	20.929	23.086	24.064
Employment	19.222	21.127	21.875	19.742	20.367	18.467	20.869	21.691
Urban (%)	56.6	52.2	51.2	55.7	53.8	57.2	53.9	53.1
Rural (%)	43.4	47.8	48.8	44.3	46.2	42.8	46.1	46.9
Num. of Unemployed	1.809	1.567	1.907	2.335	1.902	2.462	2.217	2.373
Unemployment Rate	8.6	6.9	8.0	10.6	8.5	11.8	9.6	9.9
Urban (%)	10.8	10.4	11.6	13.2	11.5	14.7	13.5	14.0
Rural (%)	5.6	2.7	3.9	7.0	4.8	7.5	4.5	4.6
Educ. Young Peop. Unemp. Rate	23.7	23.2	28.7	27.0	25.8	29.4	27.2	31.1
Underempl./ L.Force (%)	6.0	6.0	5.7	6.1	6.0	5.9	5.8	5.0
Inactive Labor Force (%)	14.6	12.9	13.7	16.7	14.5	17.7	15.4	14.9

Source: SIS Household Labor Force Survey

The number of unemployed people rose by 466 thousand people and reached 2,373 million people compared to the same period of the previous year (Table V.2.1). 19.3 percent of unemployed people in

Turkey are those who lost their jobs and 23.9 percent are those who are seeking job for the first time.

The unemployment rate in urban areas became 14 percent in the third quarter of the year, increasing by 2.4 points compared to the same period of the previous year. Moreover, non-agricultural employment rose by 4.4 percent (584 thousand) in this period compared to the same period of the previous year. More people lost their jobs and thus the employment rate rose rapidly because of the economic contraction period and unfavorable performance of agriculture sector in 2001. However, re-entering of the economy in the growth period and the recovery in agriculture sector had a positive effect on labor force and the level of employment. The ongoing growth process is expected to have a positive effect on the employment level in the following periods.

**Ongoing growth process is expected to have a positive effect on the employment rate in the following periods.**

The unemployment rate of educated young people reached to a very high level of 31.1 percent in the third quarter of 2002. The said rate realized at 33.1 percent in urban areas.

Table V.2.2. Employment by Sectors

	2001				2002			
	I	II	III	IV	Mid-Year	I	II	III
<b>TOTAL</b>	19.222	21.127	21.875	19.742	20.367	18.467	20.869	21.691
<b>Agriculture</b>	6.268	8.222	8.676	6.432	7.217	5.624	7.219	7.908
<b>Industry</b>	3.628	3.584	3.764	3.843	3.734	3.658	3.907	3.944
<b>Services</b>	8.298	8.138	8.298	8.511	8.343	8.414	8.761	8.760
<b>Construction</b>	1.029	1.183	1.138	955	1.073	771	982	1.079
<b>Urban Employ.</b>	10.872	11.037	11.209	11.001	10.953	10.557	11.256	11.512
<b>Rural Employ.</b>	8.350	10.090	10.666	8.741	9.414	7.911	9.613	10.179

Source: SIS Household Labor Force Survey

The rate of underemployed people, which is defined as persons who are looking for another job though they already have a job and who would prefer to work additional hours in their current job was 5 percent in the third quarter of 2002. Thus, in the same period, inactive labor force rate, which is the sum of underemployed and

unemployed rate, rose by 1.2 points and reached 14.9 percent compared to the same period of the previous year.

Distribution of employment by sectors indicates that the share of agricultural sector in overall employment is 36.5 percent in the third quarter of 2002. In the same period, the shares of industrial and services sectors were 18.2 percent and 40.4 percent, respectively (Table V.2.2).

Table V.2.3. Employment by Economic Activity

	2001				Mid-Year	2002		
	I	II	III	IV		I	II	III
<b>Total</b>	19.222	21.127	21.875	19.742	20.367	18.467	20.869	21.691
<b>Workers Getting Salaries</b>	9.682	9.791	10.057	9.991	9.908	9.621	10.364	10.648
<b>Self-employed</b>	5.884	6.347	6.364	6.077	6.142	5.608	6.086	6.111
<b>Unpaid Family Worker</b>	3.656	4.989	5.455	3.673	4.318	3.238	4.418	4.932
<b>Percentage Distribution</b>								
<b>Workers Getting Salaries</b>	50.4	46.3	46.0	50.6	48.6	52.1	49.7	49.1
<b>Self-employed</b>	30.6	30.0	29.1	30.8	30.2	30.4	29.2	28.2
<b>Unpaid Family Worker</b>	19.0	23.6	24.9	18.6	21.2	17.5	21.2	22.7

Source: SIS Household Labor Force Survey

As of the third quarter of 2002, about 49.1 percent of total employment in Turkey are comprised of waged-workers and daily-waged workers. During the same period, the shares of self-employed and unpaid family workers was 28.2 percent and 22.7 percent, respectively.

Table V.2.4. Developments in Manufacturing Employment, Wages and Productivity (Annual Percentage Change)

	2001					2002			
	I	II	III	IV	Annual	I	II	III	First Nine Months
<b>Employment</b>									
(1)	-1.3	-9.0	-11.1	-11.3	-8.3	-6.7	0.2	3.4	-1.0
Public	-2.0	-5.5	-10.3	-7.2	-6.5	-11.4	-12.0	-7.5	-10.3
Private	-1.1	-9.6	-11.2	-12.1	-8.6	-5.9	2.4	5.4	0.5
<b>Wage<sup>(2)</sup></b>	-4.1	-14.6	-15.8	-20.5	-14.6	-15.9	-4.2	-2.9	-8.0
Public	4.3	-12.5	-15.2	-21	-12.5	-12.6	5.9	3.8	-1.6
Private	-5.9	-15.6	-15.9	-20.1	-15.2	-15.1	-3.2	-1.3	-6.9
<b>Productivity<sup>(3)</sup></b>	2.8	-0.5	2.2	0.1	1.0	9.7	11.0	8.4	9.7
Public	12.2	9.1	9.2	1.9	7.8	15.5	22.3	19.9	19.1
Private	0.7	-2.8	0.4	-0.7	-0.6	8.9	9.7	6.8	8.4

(1) SIS, Index for Production Workers in the Manufacturing Industry, 1997=100

(2) SIS, Quarterly Index for Real Wages per Production Hours Worked, 1997=100

(3) SIS, Quarterly Index for Partial Productivity per Production Hours Worked, 1997=100

In the first nine months of 2002, manufacturing industry employment index displayed a public sector-originated drop of 1 percent compared to the same period of the previous year. While public sector employment index decreased by 7.5 percent in the third quarter of 2002 compared to the same period of 2001, private sector employment index rose by 5.4 percent compared to the same period of the previous year (Table V.2.4). SIS Quarterly Industrial Production Index indicates that while private manufacturing industry production recorded a high rate of increase by 14.9 percent in the third quarter of the year compared to the same period of previous year. Public sector production rose slightly by 0.5 percent during the same period. This development provides an explanation to the decline in public manufacturing employment despite the rise in private manufacturing industry employment.

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**In the third quarter of 2002, real wages per hour in the manufacturing industry increased in public sector, while declining in private sector.**

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Reduction in real wages continued in the first nine months of 2002 as well. High rate of drop in real wages per hour in the first quarter of the year maintained its downward trend though at a slower pace in line with the economic recovery and declined by 8 percent in the first nine months of 2002 compared to the same period of the previous year. Real wages dropped in private sector in the third quarter of 2002, while increasing in public sector. On the contrary, productivity per working hour boosted both in public and private sectors. The increase in productivity in the manufacturing industry stemmed from the fact that the rise in productivity was more than the rise in employment.

**BOX V.1. THE RELATION OF STOCK ACCUMULATION WITH PRODUCTION AND PRICING BEHAVIOR**

A strong relationship is observed between changes in stocks of private firms operating in industrial sector and their production quantity and pricing behavior. It is assumed that the relationship of production plans of private firms and their final goods raw material stock accumulation mainly stems from the expectations on the level of demand for the next periods. This study aims at making a descriptive analysis by making use of CBRT Business Tendency Survey. Following relationships can be presented as the main reasons for stocking behavior of private firms:

- Expectations for a significant recovery in demand, private firms increase their production during the current period in order to meet the recovery in demand. Thus, they aim at meeting their sales that will increase rapidly in line with the revival in demand via their stock accumulations made in the previous periods.

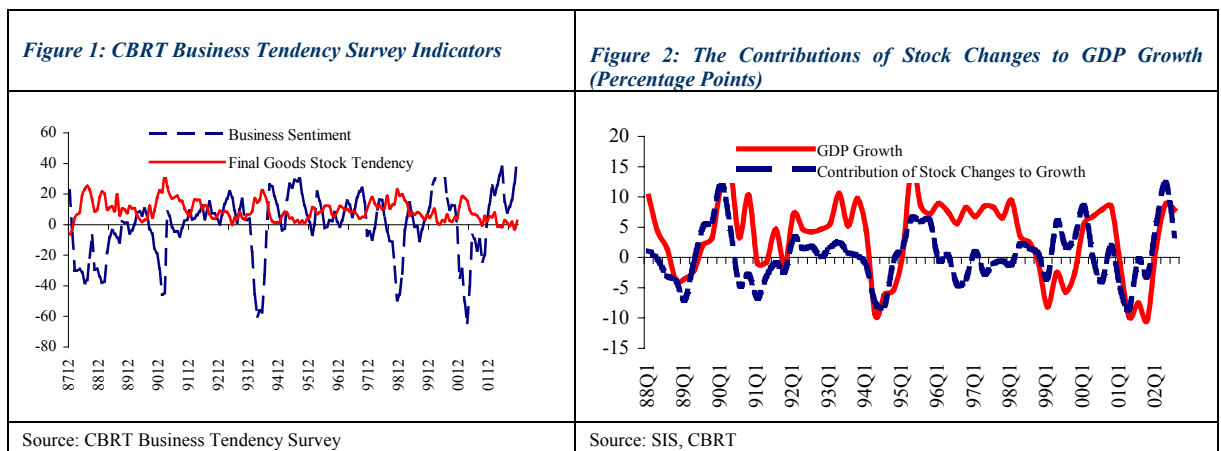
- Moreover, it is considered that private firms, which expect a significant recovery in demand and a rapid upsurge in their quantity of production, prefer to increase their final goods raw material stocks starting from the current period in order to be prepared for the expected increases in production in the forth-coming periods.

- It is believed that financing conditions of private firms are highly significant while making their decisions on production and investment. It is also considered that private firms make manufactured stock accumulation by increasing their production at times during which the optimistic expectations of private firms for the level of demand continue and their financing conditions are favorable. Moreover, it is observed that at times when optimistic expectations prevail, private firms used to make raw material stock accumulation by speeding up intermediary goods imports, if the value of domestic currency is high against foreign currencies.

- Deterioration of expectations of private firms on the general course of economy and/or increase in uncertainties in economy lead them to make a reduction in their stocks. It is believed that private firms used to slow their production choosing to keep their resources in cash and/or to invest them in short-term financial instruments.

Business Sentiment and Final Goods Stock Quantity Tendency from CBRT Business Tendency Survey can be analyzed in order to understand the relation of the expectations of private firms on the general course of Turkish economy and their stock accumulation behavior. The said tendencies point out a strong but at the same time a negative correlation between the expectations of private firms and final goods stock accumulation. In other words, it is observed that at times when a contradiction is expected in domestic demand and when economic uncertainties rise, final goods stocks of private firms increase and it is assumed that private firms prefer to operate with low final goods stocks (Figure 1).

Contraction in domestic demand and drop in sales lead to increase in manufactured goods stocks. Therefore, the rise in final goods stocks is a reliable indicator of a severe contraction in domestic demand for private firms. CBRT Business Tendency Survey indicators support the view that higher level of final goods stocks compared to the previous years leads to deterioration in expectations of private firms (Figure 1).



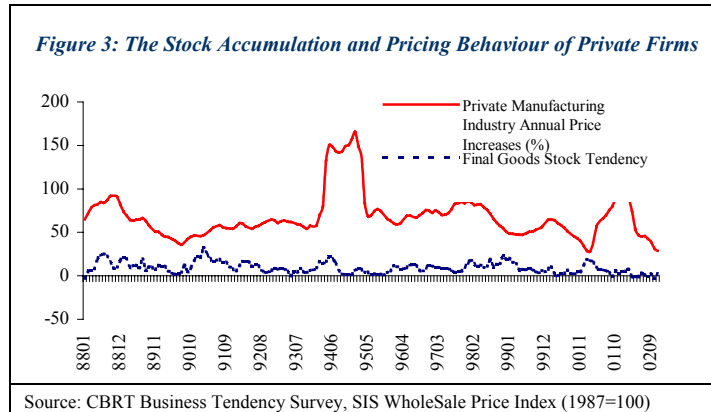
(1) CERİTOĞLU, Evren, (2002), “2002 Yılıın İlk Yarısında Stok Birikiminin GSYİH Büyümesine Katkısı”, TCMB Araştırma Genel Müdürlüğü, Tartışma Tebliği, No:12, <http://www.tcmb.gov.tr/~research/work/wp11.pdf>.

When the contribution of demand components to GDP is analyzed, it is noted that the demand component, which makes the major contribution to the GDP growth at times when economy enters in growth period after suffering a deep contraction, is stock change (Figure 2). Private firms, which dissolve their final goods stocks by slowing down their production at times when the economy has entered in a contraction period, renew their final goods stocks that have reduced rapidly in the preceding periods by boosting up their production during the times when their optimistic expectations on demand rise. Therefore, stock change was the component that made the major contribution to the growth of the Turkish economy in the first nine months of 2002 (Table V.1.2.).

The years when stock change stands as the demand component that make the major contribution to the economic growth are those which price increases are lower than the preceding years. For instance, in 2002, private manufacturing industry prices realized at a considerably lower level compared to the previous years. Being a determinant in the growth of the economy instead of a significant recovery in domestic demand, stock change had an effect on the slowdown of price increases in private manufacturing industry as well as the achievement of the current program and favorable developments in cost elements.

It is deemed that there is a negative correlation between final goods stocks of private firms and the pricing behavior (Figure 3). Besides, a negative correlation is observed between price increases in private manufacturing industry and final goods stocks quantity tendency. Price increases in private manufacturing industry decelerate during the times when the level of final goods stocks rises compared to the preceding years. It is considered that private firms tend not to increase their sale prices instantly in order to dissolve their final goods stocks that have been produced with lower costs in the previous periods.

Consequently, it is noted that there exists a close relationship between the stock accumulation decisions and production and pricing behavior of private firms operating in manufacturing industry sector in Turkey. In this context, final goods stock quantity tendency, one of the indicators in CBRT Business Tendency Survey, is considered to be a helpful leading indicator to foresee the production and pricing decisions of private firms.



Final stocks of private firms decrease and their optimistic expectations on the general course of the economy rise during the periods when domestic demand is vivid. This situation primarily leads private firms to boost their production. They increase their sale prices at the times when final goods stocks reduce drastically due to the continuance of revival in domestic demand. On the other hand, private firms consider the increase of their final goods stocks as a contraction in domestic demand and this leads to deterioration in their expectations for the course of the economy. It is deemed that private firms tend to reduce their production quantity and do not increase their sale prices instantly during the periods when domestic demand remains at a low level and final goods stocks increase.

## VI. BALANCE OF PAYMENTS

### VI.1. Developments in Foreign Trade

In the January-October 2002 period exports reached US \$28.3 billion with an increase of 9.6 percent and imports were US \$39.7 billion indicating a 15.5 percent increase as to the same period of the previous year. Thus, foreign trade deficit reached US \$11.4 billion by increasing 33.3 percent according to the same period of the year 2001.

The increase in exports has been in an accelerating trend since July. While growth rate of exports in the second quarter of 2002 was 3.4 percent as to the same period of the previous year, it increased to 17.2 percent in the third quarter. The increase in October according to the same month of the past year was 19.2 percent. Industrial production and import developments of the OECD countries, with a substantial share within total exports indicate that a revival trend in such economies seem rather weak. On the other hand, due to exports switching to relatively more vigorous markets than stagnant markets, Turkey's exports have been relatively less affected from the adverse foreign market conditions. For example, exports to the UK and Russia in the January-October period of the year 2002 have increased by 33.4 percent and 50.6 percent, respectively. Furthermore, exports to the United States which have decreased substantially after the September 11 attack began to pick up in June and has increased the growth rate in October.

Table VI.1.1. Foreign Trade (USD Million)

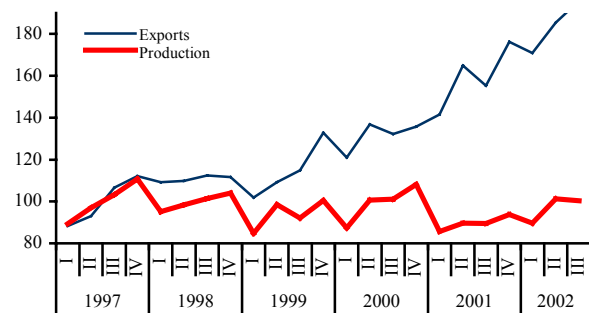
	October			January-October		
	2001	2002	Percentage Change	2001	2002	Percentage Change
EXPORTS	2812.5	3353.2	19.2	25832.2	28311.3	9.6
Agriculture	279.1	298.9	7.1	1822.1	1545.1	-15.2
Fishing	2.7	3.2	22.1	21.4	31.8	48.4
Mining	32.9	30.5	-7.3	288.1	287.4	-0.2
Manufacturing	2494.7	3017.2	20.9	23680.5	26416.9	11.6
Other	3.2	3.4	8.9	20.1	30.1	50.2
IMPORTS	3364.5	4613.8	37.1	34398.9	39735.0	15.5
Consumption goods	332.1	467.9	40.9	3407.9	3870.0	13.6
Capital goods	409.0	774.8	89.4	5704.1	6267.9	9.9
Intermediate goods	2586.7	3223.8	24.6	24975.6	29169.6	16.8
Crude oil	294.9	393.8	33.6	3353.2	3386.5	1.0
Other	36.7	147.2	300.9	311.3	427.5	37.3

Source: SIS

Progressive real depreciation of the Turkish lira in May, June and July is considered to have a positive effect on exports in the third quarter of the year. Moreover, the appreciation of the euro against the US dollar since March had an increasing effect on exports. In the August-October period, inspite of euro/US dollar rate displaying a flat progress, due to the euro/US dollar rate being much higher to the same period of the previous year, exports in euros have increased in terms of US dollars.

In line with the increase in agricultural production, exports in the agricultural sector began to increase. The growth rate of exports for the agricultural and forestry sectors, which is calculated according to the three-month moving averages, has been decreasing since past September, however, showed an increase in September and October of the year 2002.

Figure VI.1.1. Manufacturing Export Volume and Production Indices (1997=100)



Source: SIS.

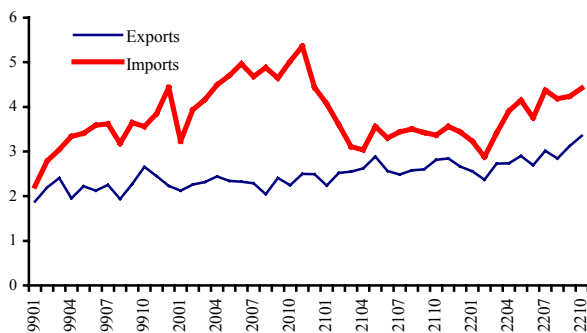
In spite of the high increase in the industrial production, private consumption expenditures in the third quarter of the year expanded by 2.6 percent, while total fixed capital investment expenditures decreased by 2.1 percent. However, due to limited domestic demand, producers are considered to be more inclined to foreign markets.

Manufactured industry sector exports, comprising 93.3 percent of total exports in January-October period, have recorded a strong upward trend in the third quarter of the year. Growth rate of manufactured industry products

exports, which is calculated according to the three month moving averages, has been 19.5 percent in October.

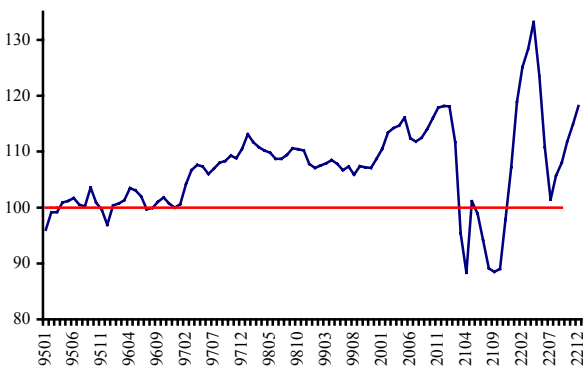
In the January-October period the commodities that had the most contribution to the increase in exports were as follows; knitted and unknitted clothings, vehicles and their spare parts, electrical appliances and machinery, commodities of iron or steel. During the same period, the share of the said commodities within total exports were 42.7 percent. Export commodities of iron and steel, which increased by 46.7 percent in the first ten months of the year, decreased by 0.8 percent in October.

Figure VII.2. Monthly Exports and Imports (USD Billion)



Source: SIS.

Figure VI.1.3. Real Effective Exchange Rate (1995=100)



WPI based real effective exchange rates calculated by using IMF weights based on the trade flows of 17 countries from 1988-1990. An increase in index denote an appreciation of Turkish lira.

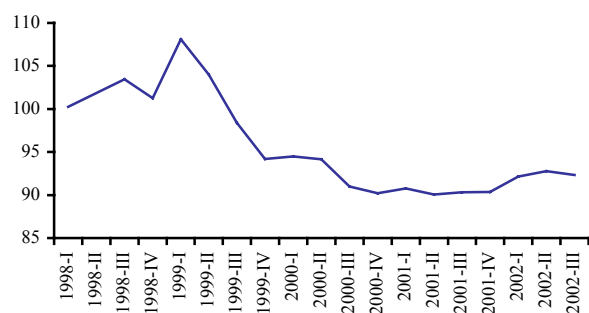
Source: CBRT.

Export prices in the third quarter of 2002 increased by 1.1 percent as to the previous quarter. During the same period, while export prices of agricultural and forestry

sectors dropped by 7.8 percent, export prices of manufactured industry sector increased by 2.3 percent.

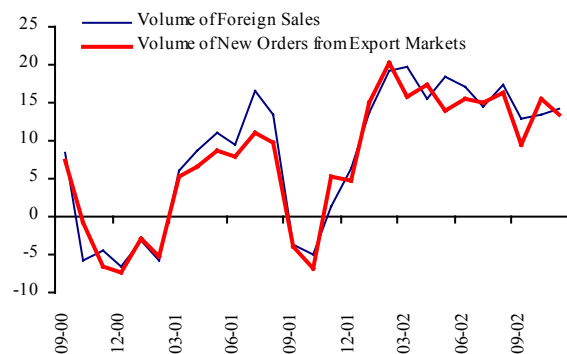
According to the November data of the CBRT Business Tendency Survey, rapidly deteriorating export prospects after May displayed more of a flat trend in the months ahead. According to the survey, in September and October a significant recovery has been observed in the export orders, however this trend weakened in November. On the other hand, average price tendency for new export orders since August has deteriorated.

Figure VI.1.4. Terms of Trade (Export Prices/Import Prices)



Source: SIS.

Figure VI.1.5. Export Expectations for the Next Three Months (Percentage) (Optimists minus Pessimists)



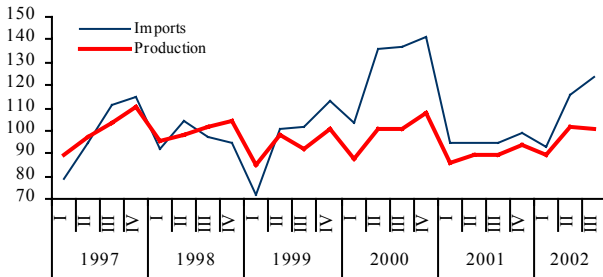
Source: CBRT Business Tendency

According to the outcome of the Business Tendency Survey, as a restraining factor of exports orders for the next three months, price competition increased its significance compared to the previous year, whereas external cyclical developments hold an important part.

As a matter of fact, indicators for euro zone and OECD countries exhibit that the revival tendency of these economies are rather slow. For this reason, in the short term existing tendency of exports to these countries are expected to be maintained.

Imports increased by 15.5 percent in the January-October period as to the same period of the previous year reaching US \$39.7 billion. Since approximately three fourths of imports are intermediate goods, import demand is affected from the developments in the manufacturing industry production. The manufacturing industry production, which has been increasing since March, has also increased demand for imports. However, the increase in the manufacturing industry production, which is calculated by three-month moving averages, has slowed since July and has been on the average around 12 percent. The growth rate of imports has been in line with the manufacturing industry production.

**Figure VI.1.6. Manufacturing Import Volume and Production Indices (1997=100)**



Source: SIS

Capital goods imports began to increase considerably as of the second half of the year. The increase in capital goods imports, which is calculated according to the three month moving averages, reached 24.9 percent in September and 55.2 percent in October. The high rate of increase of investment good imports is expected to have a positive effect on domestic investment expenditures in the next period.

Together with the recovery of the economy it is observed that consumer expenditures also resurged. As a matter of fact, in the third quarter of 2002 the consumer goods imports recorded a greater rate of increase as to the increase of the past quarter. The rate of increase of the consumer good imports, calculated according to the three-month moving averages, has increased to 41.5 percent in October. On the other hand, slackening of the rate of increase of the industrial production has also decreased the rate of imports for intermediate goods.

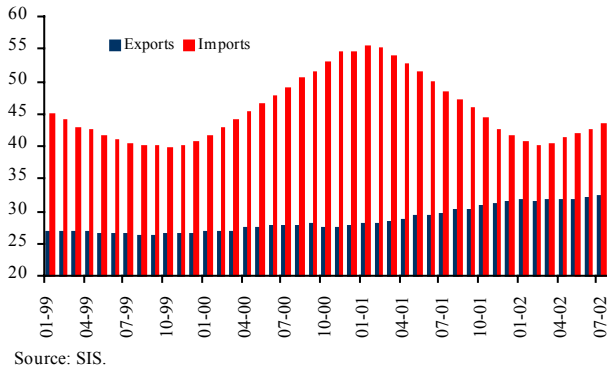
In the January-October period, imports of boilers, machines, mechanical appliances, imports of iron and steel, also of plastics and like had the most contribution to the increase in total imports.

Import prices increased by 3.1 percent in the third quarter of 2002 as to the previous quarter. In the same period, while capital goods import prices increased by 1.9 percent, intermediary goods prices by 4.9 percent, crude oil and natural gas import prices by 8.8 percent, consumer goods import prices decreased by 3.3 percent.

According to the November data of the Business Tendency Survey, the data regarding the production volume and the orders expected from the domestic market in the next three months period, which has increased in October has persisted in November. The upward trend of the planned investment expenditures for the following 12 months, which is observed since the second half of 2002, has been maintained in November confirming the increase in investment goods imports. According to the survey, however the raw material inventory volume is expected to increase in the following three months.



Figure VI.1.7. Exports and Import (Annual, USD Billion)



World crude oil prices in the third quarter of the year increased by 6.9 percent as to the previous quarter but dropped in October and November by 2.7 and 11.1 percent, respectively. However, in December the prices of a barrel of Brent petroleum increased by 16.7 percent as to the average of the previous month reaching US \$28.23.

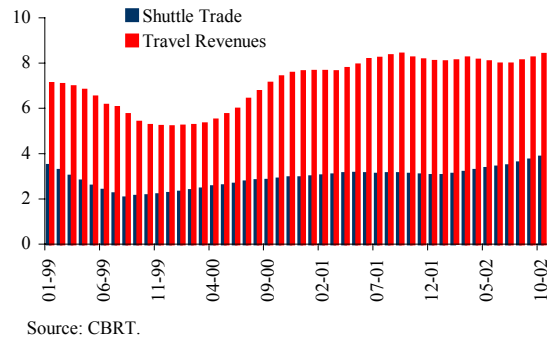
## VI.2. Current Account

As a result of high rate of increase in imports in line with the growth of industrial production, current account balance in the first half of the year 2002 had a deficit of US \$948 million. However, in June-October period especially as a result of the increase in tourism revenues there was a constant current account surplus

**The increase in imports has been compensated by the increase in exports and tourism revenues, thus the current account balance in January-October had a surplus of US \$594 million.**

In the January-October period, shuttle trade increased by 31.7 percent reaching US \$3.4 billion. However, Russia declared in 2002 that commercial goods above 50 kilograms or US \$1000 will be charged with customs duty effective in the year 2003. This development is expected to have a negative effect on shuttle trade in 2003.

Figure VI.2.1. Shuttle Trade and Travel Revenues (Annual, USD billion)



The average expenditure level of the tourists arriving in Turkey, which has been declining since the beginning of the year 2001, has maintained this trend over 2002. On the contrary, as a result of a substantial increase in the number of foreign visitors especially in the second half of the year, tourism revenues increased by 4.1 percent as of January-October period.

The downward trend in other service revenues persisted. Other private official service revenues in the first ten months of the year diminished by 53.5 percent and the interest revenues declined by 13 percent, influenced the balance of services negatively. At this period, other services expenditures and interest payments diminished by 9.5 percent and 15.1 percent, respectively. The major reason behind the decline of the interest payments lies in the decrease of the short term loan interests.

Figure VI.2.2. Current Account Balance (Annual)

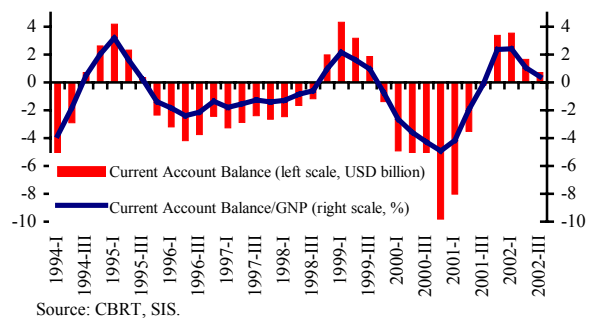


Table VI.2.1. Balance of Payments (USD million)

	October		January-October	
	2001	2002	2001	2002
Foreign Trade Balance (fob)	-48	-563	-3916	-5651
Other Goods and Services Balance	397	778	4147	3470
Transfers Balance	271	298	3147	2775
Current Account Balance	620	513	3378	594
Capital Flows	321	771	-10232	918
Foreign Direct Investments (Net)	537	240	2647	491
Portfolio Investments (Net)	-113	514	-4070	-746
Long-Term (Net)	311	-156	-561	1839
Short-Term (Net)	-414	173	-8248	-666
Net Errors and Omissions	-1177	-737	-4646	-2126
<i>Shuttle Trade</i>	295	412	2547	3354
<i>Travel Revenues</i>	825	979	7482	7788
<i>Workers' Remittances</i>	179	122	2253	1689
<i>Other Invisible Items Revenues</i>	423	499	6159	4358

Source: CBRT.

In the first half of the year 2002 the declining trend in the unrequited transfers continued. However, as this trend was reversed, the increase in July, August and September was by 0.7 percent, 22.4 percent and 10 percent, respectively. Nevertheless, except for the low rate of increase in July, the deterioration of the workers' remittances continued in January-October period.

### VI.3. Capital Account

In January-October period of the year 2002 capital inflows has been US \$918 million.

At this period net direct investments were US \$ 491 million. In spite of the foreign capital permission for US \$1.7 billion in January-October period, only US \$ 549 million of capital inflows resulting from direct investments has been realized. The substantial reason for the difference between actualized and permissions, is considered to be the political uncertainty developed during this period and as a result the uncertainty of the foreign investors

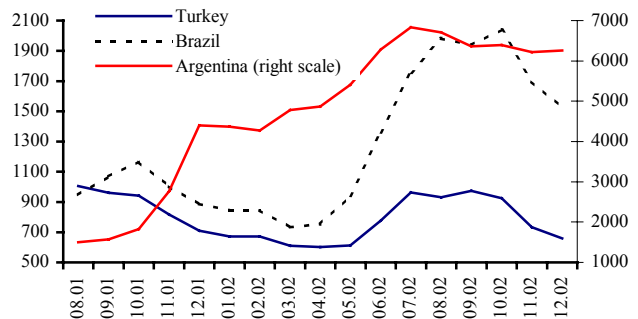
Table VI.3.1. Net Capital Flows by Sectors (USD million)

	October		January-October	
	2001	2002	2001	2002
GENERAL GOVERNMENT	-211	-69	-1482	58
Bond Issues	0	0	-169	493
Medium and Long-Term	-211	-69	-313	-435
Short-Term	0	0	-1000	0
BANKS	-961	245	-7711	-1564
Bond Issues	0	0	-3	-187
Medium and Long-Term	284	-181	-877	-516
Short-Term	-1245	426	-6831	-861
PRIVATE SECTOR	-182	5	-1205	2207
Bond Issues	0	0	0	0
Medium and Long-Term	160	79	198	2224
Short-Term	-342	-74	-1403	-17
OTHER	1675	590	166	217
Securities (Liability)	0	371	-3717	544
Foreign Direct Investment (Inside the country)	541	246	3029	546
Other	1134	-27	854	-873
<b>NET CAPITAL INFLOW</b>	<b>321</b>	<b>771</b>	<b>-10232</b>	<b>918</b>

Source: CBRT

Consequently, concerns over the Brazilian economy, loss of confidence in the accounting records of large US corporations giving rise to uncertainties in the international markets and as a result of these factors following a floating course for spreads (the difference of the yield for international bonds to US Treasury long-term bonds), avoided the Treasury to borrow from the international markets from May till December.

Figure VI.3.1. Secondary Market Bond Spreads (monthly average)



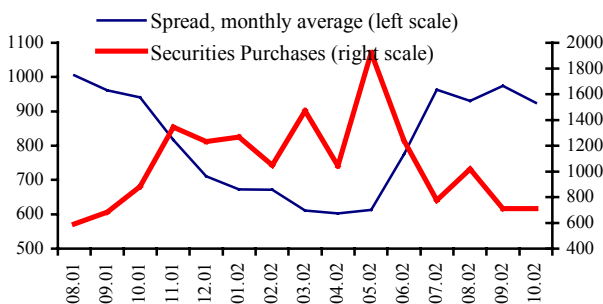
Source: JP Morgan.

The Turkish bond spreads, which have been increasing since May 2002, followed a downward trend in October and November, and displayed a stagnant phase in December (Figure VI.3.1). These circumstances, decreasing the borrowing costs of the Treasury from the international markets are expected to raise capital inflows. As a matter of fact, the Treasury issued a eurobond worth US \$500 million in the beginning of November with a maturity date of January 2008.

Moreover, a drop in the spreads of the Argentinian and Brazilian bonds in the last couple of months is expected to bring confidence back in the developing countries, thus increasing the inflow of capital to Turkey as well.

In January-October period, capital outflows driven from portfolio investments was US \$ 746 million. In the said period, while foreign security portfolios increased by net US \$544 million, residents purchased securities worth US \$1.6 billion from abroad. Since eurobonds issued by the Treasury are generally purchased by the banks from the secondary markets, residents purchasing securities depend on the bond spreads of Turkey's secondary market. Within this framework, the drop in the bond spreads of Turkey in November and December is expected to increase the purchase of securities by residents from abroad.

Figure VI.3.2. Turkey's Bond Spreads and Securities Purchases Abroad by Residents

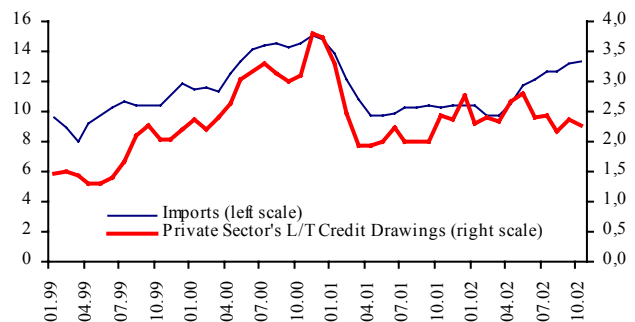


Source: CBRT, JP Morgan.

In the January-October period, as a result of the long term credit drawings being above repayments, net long term capital inflows reached US \$1.8 billion. The major reason of this development is the increase in long term loans used mainly in financing imports by the private

sector excluding banks. In the January-October period of the year 2002, private sector excluding banks has utilized 77 percent of the total long term loans. Consequently, for the January-October period of 2002 long term international loans were at a level of US \$12 billion.

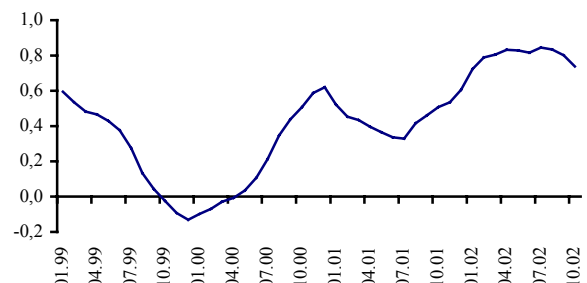
Figure VI.3.3. Private Sector Long-Term Credit Drawings (quarterly, USD billion)



Source: CBRT.

Since August 2001 there has been an increase in the foreign exchange deposit accounts opened at the Central Bank by Turkish workers living in foreign countries. During the January-October period, foreign exchange deposit accounts with more than one year maturity increased by net US \$566 million. Moreover, with the facility provided at the end of the year 2001 to open foreign exchange deposit accounts with a maturity of one year, short term foreign exchange accounts reached net US \$696 million at the same period.

Figure VI.3.3. FX Deposits with the Central Bank (Annual, USD billion)



Source: CBRT.

In the January-October period of the year 2002 the most striking matter of the short term capital movements was

the decrease in short term loans obtained by banks from international markets at a rate of 75.8 percent as to the same period of 2001. After the February 2001 crisis a large drop in domestic loans in real terms and the growth of banks' liquid assets are the decreasing factors of short term loans from international markets. In spite of the low increase in both commercial and consumer loans in December, decrease in real terms continued with respect to end of year 2001, which is considered to be the restricting factors for banks with a tendency towards short term international resources.

In the January-October period, due to the IMF credits transmitted to Central Bank accounts and foreign exchange purchases in the first half of the year, official reserves increased by US \$5.8 billion. At the same time the credit drawings from the IMF were net US \$6.4 billion.

As of the end of December the Central Bank reserves increased by US \$8 billion with respect to the end of 2001 and reached US \$26.7 billion.

current account revenues in the third quarter of the year caused a large amount of deterioration in the debt service ratio. Furthermore, the improving trend of the ratio of short term debt to reserves and the ratio of total repayments of short term debt and medium-long term debt to reserves in the first half of the year 2002 was maintained in the third quarter.

There are some factors that could possibly have a negative effect on the current account revenues in 2003. In line with the positive developments in the production and domestic demand in 2003, continuation of the increase in import demand is expected to be an expanding factor in foreign trade deficit. Additionally, the growing possibility of US operation on Iraq could generate an adverse affect on tourism. Moreover, Russia's arrangement for shuttle trade in 2003 is expected to have a negative effect on shuttle trade.

*Table VI.3.2. Foreign Debt Indicators*

	2000	2001	2002-III*
<b>Foreign Debt Stock</b>			
USD	119.7	115.2	127.5
Ratio to GNP	60.0	80.9	76.6
<b>Short-Term Foreign Debt Stock</b>			
USD	28.3	16.2	14.1
Ratio to Reserves	122.9	85.2	66.4
<b>Medium Long-Term Foreign Debt Stock (USD)</b>			
International Institutions	91.4	98.9	113.4
Private Creditors	11.4	22.2	30.1
Commercial Banks	28.3	27.0	28.6
<b>Short-Term Debt and Medium Long-Term Repayments</b>			
USD	43.5	32.6	25.1
Ratio to Reserves	189.0	171.3	118.5
<b>Debt Service Ratio</b>	<b>37.0</b>	<b>43.0</b>	<b>28.4</b>

\* GNP is annualized and converted into USD by using average exchange rate.

Source: CBRT.

Debt service ratio in the first half of 2002 exhibited a significant improvement. However, the increase in the

## VII. DEVELOPMENTS IN THE WORLD ECONOMY

In the global economy the data declared by the third quarter of the year is far from giving the impression of an introduction to an extensive and a strong invigorating process. In the global economy's leading country the US growth continues to depend on consumption, while investments since the beginning of 2002 has not signified an increase. In the US economy where unemployment level is still not decreasing, contribution of consumption in growth for the next period is doubtful. On the other hand, while growth in the Euro zone displayed a level less than 1 percent, risks within the recovery process did not weaken. Although it is still too soon for the results of ECB's interest decrease but in case of this decision being ineffective, is meant both in the US economy as well as the Euro zone, in a great extent a decrease in the potential to utilize monetary policy towards growth. Under these circumstances, budget deficits in the US and euro zone economies restricts fiscal policies to be used for growth purpose. On the other hand, in Japan still with unresolved structural problems, increase in exports in the third quarter has endorsed economic growth. However, it is predicted that the economy tightened in the year 2002. On the other hand, through the Chinese economy's strong increase in exports volume and strong growth performance, as a result the South Asian economies had a growth highly above the global average. Latin American countries followed a slow and a fragile recovery process. Brazil and Mexico, with the largest economies of the region, depending on the developments of the inflation had to tighten their monetary policies. Thus, these circumstances develop other obstacles along the growth path of such economies. This delicate process of the global recovery seems most probable to be adversely affected from the Iraqi intervention. However, after the Iraqi operation and the risks of the consequences abolish, while consumer and investment confidence is re-established once again in large economies then global recovery can resume pace.

### *United States of America*

The growth rate of the US economy in the third quarter of the year was 4 percent. According to the second quarter growth has been higher, while looking at the sub-items it can be noticed that investments are still not in line with the revival in consumption. The main source of growth came from consumption expenditures by 4.2 percent and public expenditures followed by 2.9 percent. In spite of low interest rates the non-increase in investments and under the circumstances where unemployment is increasing, growth maintained through consumption expenditures and public expenditures has put forth difficulties in optimistic expectations for the future. When considering that with the 75 percent capacity utilization rate which is less than the historical average of 82 percent by October, investment expenditures in short term is hardly expected to increase. Monetary policy does not have the margin to stimulate investments and consumption through interest rates. Furthermore, considering the present budget deficit also losing grounds as a potential policy instrument for growth, risks are maintained as a serious problem regarding growth in the US economy. The effect of the non-approved tax cut package on growth as a result has a substantial significance. In spite of the risks the hike perceived in the manufacturing industry PMI index in December and the increase in the consumption confidence index of the University of Michigan since October points to the fact that growth continued in the fourth quarter of the year. Depreciation of the US dollar in the past couple of months having a positive effect on the trade balance is expected to contribute to growth.

### *Europe*

The recovery tendency of the European Union (EU) countries is rather slow. The increase of GDP for the Euro zone in the third quarter as for the last quarter was 0.3 percent and to the same quarter of the previous year was 0.8 percent. While there were no indications of an increase as for the previous year in Net Exports and

Gross Fixed Capital, an increase of 0.5 percent in household consumptions has been the most significant dynamics of growth.

In spite of a limited recovery in December, confidence in the business world of manufacturing industry and services sector in the last quarter of the year 2002 and the first quarter of 2003 points to the fact that growth will continue to be weak. Moreover, the deterioration observed in the consumption confidence in December, especially in Germany, indicate that it is difficult for the household consumption expenditures in the first quarter of 2003 to follow a tendency to support the growth process.

**Table VII.1. World GDP Growth Rates (Annual Percentage Change)**

	2001	2002 (Forecast)	2003 (Forecast)
World	2,2	2,8	3,7
Developed Countries	0,8	1,7	2,5
U.S.A.	0,3	2,2	2,6
Canada	1,5	3,4	3,4
Euro Area	1,5	0,9	2,3
Germany	0,6	0,5	2,0
France	1,8	1,2	2,3
Italy	1,8	0,7	2,3
U.K.	1,9	1,7	2,4
Japan	-0,3	-0,5	1,1
Developing Countries	3,9	4,2	5,2
Developing Asian Countries	5,6	6,1	6,3
Newly Industrialized Asian Countries*	0,8	4,7	4,9
ASEAN-4**	2,6	3,6	4,2
China	7,3	7,5	7,2
India	4,1	5,0	5,7
Developing Countries in America	0,6	-0,6	3,0
Argentina	-4,4	-16,0	1,0
Brazil	1,5	1,5	3,0
Chile	2,8	2,2	4,2
Mexico	-0,3	1,5	4,0
EU members	-	3,0	4,1
Turkey	-7,4	3,9	5,0
Czech Republic	3,3	2,7	3,2
Hungary	3,8	3,5	4,0
Poland	1,0	1,0	3,0
Bulgaria	4,0	4,0	5,0
Romania	5,3	4,3	4,9
CIS	6,3	4,6	4,9
Russia	5,0	4,4	4,9
Africa	3,5	3,1	4,2
Middle East	4,2	3,5	4,6

\* Newly Industrialized Asian economies are Hong Kong, Korea, Singapore and Taiwan.

\*\* ASEAN-4 includes Indonesia, Malaysia, the Philippines and Thailand.

Source: IMF, World Economic Outlook, September 2002.

As a result, revival at the euro zone is expected after the second quarter of 2003 and contrary to the increase of

GDP in the previous year domestic demand is expected to be overlying net exports.

From the second quarter of 2003, relatively diminishing uncertainties and implementing economic policies supporting the confidence environment is expected to stimulate new investments at the euro zone and manipulate growth. Within this framework, in December the European Central Bank (ECB) decreased reference interest rates by 50 basis points to 2.75 percent. The reason behind ECB's decision was for a rapid decrease the inflationary pressure and to present the existence of adversities regarding the possibilities of economic growth in the euro zone.

**Figure VII.1. Euro-US Dollar Parity**



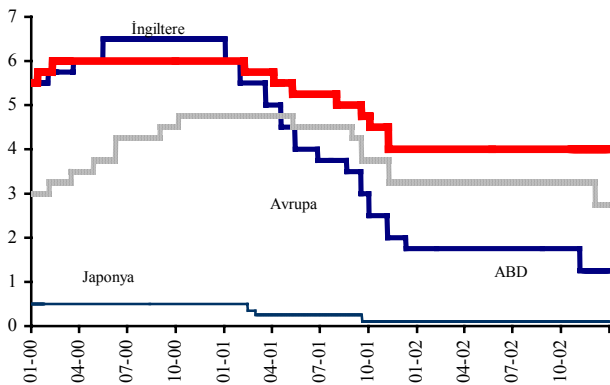
In spite of the stagnation of the economic activities at the euro zone since the midst of 2002, inflation continued to be rigorous. The annual increasing rate of the harmonized index of consumption prices (HICP) for the euro zone throughout the year 2002 was above the targeted level of 2 percent. However, as a result of the appreciation of the euro against the dollar and weak domestic demand caused regression in the past couple of months. According to the ECB, the effects of these factors on the inflation will be severely seen in 2003 and in spite of the uncertainties of the Iraqi case the effects of crude oil price increases on the general price level will be temporary and will not have an impact on the inflation target.

As a result of various approaches of countries regarding the fiscal policies of the euro zone uncertainties become

evident. The European Commission, which had previously declared its prediction at 0.9 percent for the ratio of budget deficit/GDP, now increased this ratio to 2.3 percent. Especially Germany's confronting difficulties in order to ensure fiscal discipline and France's reluctance on this subject have influenced the changes in the predictions.

The unemployment rate, following a flat course since 2001 was 8.4 percent for the euro zone and 7.7 percent for the European Union in November 2002. It is revealed that the unemployment rate in the future will increase to some extent as a result of stagnant economic activities, declining productive workforce in the years 2001 and 2002 and increasing costs on account of increase in salaries.

Figure VII.2. Main Central Bank Interest Rates (Percentage)



Source: Corresponding central banks.

England, not a member of the European Monetary Union, exhibits a better performance compared to the euro zone. GDP in the third quarter of 2002 as to the previous quarter increased by 0.9 percent and as to the same quarter of the past year increased by 2.1 percent. In spite of the affirmative conduct in public and household consumption expenditures, the decreasing exports and investments is considered to be affecting economic growth adversely.

The annual increasing rate of the consumption price index, excluding the mortgage interests, which is the price index target of the Central Bank of England, was 2.8 percent in November. As a result of low interest

rates, real estate prices reaching high levels is expected to put pressure on consumption prices.

### Japan

In the first half of 2002 a slight revival was observed in the Japanese economy. In the first half of the year with the help of the relatively weak Japanese yen exports hiked. On the other hand, low levels of stocks have also been an incentive to increase production. Consequently, the increase in GDP in the second quarter of 2002 has been 2.5 percent. On the other hand, firms' confidence and profit expectations regarding the general conduct has increased. However, the appreciation of the Japanese yen by 10 percent in the second half of the year has slackened the increase in exports.

Table VII.2. CPI Inflation for Selected Country Groups (Annual Percentage Change)

	2001	2002	2003
		(Forecast)	(Forecast)
Developed Countries	2,2	1,4	1,7
U.S.A.	2,8	1,5	2,3
Canada	2,5	1,8	2,1
Euro Area	2,6	2,1	1,6
Germany	2,4	1,4	1,1
France	1,8	1,8	1,4
Italy	2,7	2,4	1,8
U.K.	2,1	1,9	2,1
Japan	-0,7	-1,0	-0,6
Developing Countries			
Developing Asian Countries	2,5	2,0	3,1
Newly Industrialized Asian Countries*	1,9	1,1	2,2
ASEAN-4**	6,6	6,2	5,5
China	0,7	-0,4	1,5
India	3,8	4,5	5,1
Developing Countries in America	6,4	8,6	9,3
Argentina	-1,1	29,0	48,0
Brazil	6,8	6,5	4,3
Chile	3,6	2,1	2,8
Mexico	6,4	4,8	3,7
EU candidates	21,2	16,8	11,9
Turkey	54,4	47,1	28,6
Czech Republic	4,7	2,7	3,0
Hungary	9,2	5,5	5,2
Poland	5,5	2,1	2,3
Bulgaria	7,5	6,4	4,3
Romania	34,5	24,2	19,1
CIS	19,9	14,6	10,7
Russia	20,7	15,8	11,0
Africa	13,1	9,6	9,5
Middle East	8,0	9,4	9,2

\* Newly Industrialized Asian economies are Hong Kong, Korea, Singapore and Taiwan.

\*\* ASEAN-4 includes Indonesia, Malaysia, the Philippines and Thailand.

Source: IMF, World Economic Outlook, September 2002.

Stock prices dropped to a level, which had not been reached for many years. Firms profitability rate has been adversely affected as a result of deflation and recent

strengthening of the Japanese yen. These circumstances and the restructuring process of the private sector caused investments to remain weak.

The unresolved structural problems in the Japanese economy has caused suspicion in the Japanese and international economic units. For example, as was declared in November 2002 a detailed new banking plan was to be announced has not been put into force yet. Thus, causing the international rating institution Fitch to decrease the country's credit rating.

**Table VII.3. Current Account Balance for Selected Country Groups (Percent of GDP)**

	2001	2002 (Forecast)	2003 (Forecast)
Developed Countries	-0,8	-0,8	-0,9
USA	-3,9	-4,6	-4,7
Canada	2,8	1,7	1,9
Euro Area	0,4	1,1	1,0
Germany	0,1	1,9	2,1
France	1,8	1,9	1,4
Italy	0,1	0,2	0,2
UK	-2,1	-2,1	-2,3
Japan	2,1	3,0	2,9
Developing Countries			
Developing Asian Countries	3,0	2,6	2,1
Newly Industrialized Asian Countries*	6,0	5,7	5,5
ASEAN-4**	5,9	3,8	2,1
China	1,5	1,5	1,0
India	-	0,1	-
Developing Countries in America	-2,8	-1,9	-1,6
Argentina	-1,6	10,8	15,4
Brazil	-4,6	-3,8	-3,6
Chile	-1,9	-1,6	-2,0
Mexico	-2,9	-2,8	-3,2
EU candidates	-2,6	-3,4	-3,5
Turkey	2,3	-0,8	-1,0
Czech Republic	-4,6	-5,2	-4,6
Hungary	-2,2	-3,8	-3,7
Poland	-4,0	-3,6	-4,2
Bulgaria	-6,1	-5,6	-5,5
Romania	-5,9	-5,1	-4,9
CIS	7,5	4,9	4,3
Russia	10,3	7,0	6,3
Africa	0,3	-1,7	-1,6
Middle East	7,6	4,4	3,2

\* Newly Industrialized Asian economies are Hong Kong, Korea, Singapore and Taiwan.

\*\* ASEAN-4 includes Indonesia, Malaysia, the Philippines and Thailand.

Source: IMF, World Economic Outlook, September 2002.

Nonetheless, deterioration of domestic demand has impeded discarding the enduring deflationist process. In October and November annual consumption prices dropped 0.8 percent. In addition to the deflationary process, the low level of the consumer confidence has increased the savings tendency of the household and

decreased consumption expenditures. Owing to the non-performing loan problems of the banking sector causing reluctance to open credit to consumers, has also a negative effect on this situation. On the other hand, as for the increase in layoffs especially in the banking sector, unemployment rate reached a record high after the World War II.

In the beginning of the month of November, the Central Bank of Japan brought some changes to the previous implementations in order to provide more liquidity to the ailing banking system. Thus, the Central Bank while increasing the monthly bond-purchasing amount by 20 percent to JPY 1.2 trillion increased the interval of the amount of potential reserves available to banks from JPY 10-15 trillion to JPY 15-20 trillion. However, the effects of the changes on the monetary policy have not been seen on the markets and macroeconomic balances yet.

### Asia

In spite of the global stagnation the Asian economies maintained their high growth rate in the third quarter. In the regional economies growth is rather supported by the increase in exports. As the low growth rate especially in the US economy and global stagnation continues, the growth rate of these countries in medium term is expected to reach the global growth rate. As the exports of the Chinese economy in the last quarter of the year increased by 30 percent, predictions indicate that the growth rate for 2002 will be 8 percent. In the third quarter of the year, growth in the South Korean economy along with the increase in consumption expenditures and exports leaped to 5.8 percent. In the third quarter Taiwan economy had a growth rate of 4.8 percent, however, in connection to the slowdown of the US economy in the last quarter exports dropped sharply. It is predicted that the growth rate of Taiwan will be 3.4 percent for 2002.

### Latin America

The deteriorating conditions of the financial markets, the slow growth of the US economy than anticipated and the distortion of the terms of trade of non-oil exporting countries have been the most detrimental factors



effecting the performance of the Latin American economies. Recovery in the region is weak but has begun. Large economies such as Mexico and Brazil are faced with high inflation rates and gave priority for the control of inflation in their monetary policy. It is predicted that the growth rate in the region at least in the first half of 2003 as well will proceed below the global growth rates.

In spite of high real interest rates and the presence of risks regarding domestic debt, growth rate in the Brazilian economy was 2.4 percent in the third quarter of the year. However, it is evident that growth is a result of the depreciation of the BRL, increase in exports revenues and increase in agricultural value added. On the other hand, the depreciation of the BRL obstructs the course in reaching the inflation target. Even though the Central Bank increased the short-term interest rates to 25 percent, inflation expectation of the market for year end 2002 and for 2003 was still high. In spite of the affirmative developments in various areas including the financial markets in Argentina, the growth process has not displayed a distinctive recovery. In relation to the banking sector, even though the restrictions of the crisis period have been lifted, stability in the financial markets have not been adversely effected, in fact the deposit volume started to increase while interest rates dropped. Peso gaining stability had a positive effect on the inflation rate. Mexico having the largest economy of the region had a considerably slow tendency of recovery. The Mexican economy, highly influenced by the US economy and as a result of the effects of the crises in the region, has exhibited a relatively low growth rate. In addition to the low growth rate, inflation rates displayed above end year target. The slow recovery of the US economy and in such economies interest rates subject to further increase by the Central Bank in order to fight inflation are not expected to have high growth rates in 2003.

### ***Russia***

The growth rate of the Russian economy maintained its low level as to the level of 2001. The growth rate, basically led by domestic demand, is expected to be 4

percent in 2002. Due to high rates of increase in wages and increase in transportation and energy costs, firms investment tendencies dropped significantly. High dollarization in the country and the ruble gaining strength in real terms against the dollar contribute to the process of decreasing inflation. On the contrary, the depreciation of the ruble against the euro in real terms had a negative effect on Russia's competitive power in the international markets. In spite of the increase in exports, due to the increase in crude oil prices and a greater increase in imports caused foreign trade surplus to diminish by 20 percent in the first three quarters of 2002 as to the same period of the previous year. The positive course of the economic growth is expected to be maintained also in 2003.

### ***East Europe***

The transition economies of Eastern Europe in the third quarter of 2002 as to the previous performances had a lower growth rate. Such countries, in order to prevent excessive appreciate of their currencies resorted to decreasing the interest rates. Especially in Poland and the Czech Republic, due to the weakening of the inflationary pressures, reduction in the interest rates was possible. On the other hand, budget and current account deficit persists in the regional countries. While current account deficits are heavily financed by foreign direct investments, governments are working on the necessary measures to reduce budget deficits.

The growth rate of the Hungarian economy in the third quarter was 3.5 percent annually and 3.2 percent for the January-September period. Through the support of the expansionary monetary and fiscal policies, increase in domestic demand and especially in consumer expenditures in the third quarter have contributed to growth. However, deterioration in capital accumulation was perceived at this period. The increase in imports also through the contribution of the over-valued Hungarian currency the forint, increased current account deficit during the January-October period of 2002 as to the same period of the previous year approximately by EUR 1.9 billion reaching EUR 2.7 billion. The Hungarian government through implementing tight monetary policy

as from 2003 plans to reduce the ratio of budget deficit to GDP by half.

While the growth rate in the Czech Republic in the first two quarters was 2.8 percent and 2.5 percent, respectively, it dropped to 1.5 percent in the third quarter. The deterioration in the growth rate resulted mainly from the flood disaster that occurred in the beginning of August and from the increase in foreign trade deficit. Due to consumer prices being below the targeted range of 3-5 percent, in order to prevent the over-valuation of the Czech krone, the Central Bank of the Czech Republic has decreased the interest rates.

The growth rate of the Polish economy in the first three quarters of the year was approximately 1 percent. The growth rate was below expectations due to a negative impact from the weak economic activities in the EU economies. However, current data on retail sales and industrial production put forth the revival tendency of the economy. Low food prices, no pressure through wages on account of high unemployment rate and stable course of the Polish currency the zloty, gives rise to the inflation rate be under the target range of 2-4 percent. In November the inflation rate dropped below 1 percent consistent to the expectations.

### ***Crude Oil Prices***

Crude oil prices, owing to the expectations in relation to the Iraqi operation and the petroleum workers strike in Venezuela, increased by 16.5 percent in December 2002 as to the preceding month reaching the highest level in two years.

In the meeting on December 12, 2002, OPEC member countries increased the existing ceiling on daily production level from 21.7 million barrels to 23 million barrels. Moreover, OPEC has taken necessary measures in order for the crude oil barrel prices to proceed within the range of US \$22-28 and declared that in this context the current capacity is available.

Crude oil prices on a large extent depend on the developments in Iraq and the effects of the strike on the petroleum supply in Venezuela.

In the Gulf War of 1990 crude oil prices increased to US \$40 a barrel and by the end of the war in a very short period returned to the pre-war level. Similar performance is expected of crude oil prices in 2003 in a probable operation organized by the US against Iraq. OPEC, on the Extraordinary Meeting of January 12, 2003 raised the petroleum production quota from 23 million barrel a day to 24.5 million barrels taking effect on February 1, 2003. However, low crude oil stocks especially in the US and despite the increased quotas, total crude oil production below total demand generates an ascending pressure on oil prices.

## VIII. EVALUATION OF FUTURE DEVELOPMENTS

In this section, general monetary policy and developments of inflation in 2002 together with the evaluation of the year 2003 are summarized in the light of recent developments.

### VIII.A. INFLATION IN 2002

The fiscal and monetary discipline in the context of the economic program together with the comprehensive structural reforms has paved the way to fight inflation. As a result, macroeconomic indicators beginning from the end of the year 2001 signify a rapid recovery. Thus, a fall in inflation expectations and a decreasing trend in inflation began.

In 2002, the Central Bank has set the short-term interest rates, the main instrument of the monetary policy in 2002, only for the goal of price stability. The Central Bank, in line with the principles announced at the beginning of the year, pursued forward-looking policy. Following the positive developments in inflation in 2002, short-term interest rates were cut 6 times. O/N borrowing rates were reduced from 59 percent to 44 percent and weekly borrowing rates were cut from 62 percent to 44 percent. Exchange rates stabilized after August and the expectation of the new government adhering to the stability program has restored confidence. Furthermore, the developments on the European Union membership has been perceived positive, especially by the residents and foreign investors and the Turkish lira appreciation till the beginning of December has put forth a distinctive revival in the expectations for the overall conduct of the economy since September.

CPI inflation rate with 29.7 percent in 2002 was below the end-year target of 35 percent. Consumer inflation in 2002 was at its lowest level in the last 20 years and at the same time was below end-year expectations of 31 percent.

By all means, the implemented monetary and fiscal policies in 2002 and the structural reforms are the most important factors underlying the success of fighting inflation. Moreover, other macroeconomic developments such as weak domestic demand in 2002 have also contributed to the fall in inflation. Output displayed a high amount of increase as a result of the revival of exports and accumulation of stocks. On the other hand, while the increase in consumer expenditure was quite restricted, investment expenditures declined. The falling real wages and rising unemployment rate, especially in urban areas, were the factors holding household consumption demand under pressure in 2002.

Another reason leading the actual inflation rate to be under the target was that the annual cumulative increase of TRL/USD rate remained only at around 14 percent and the foreign exchange rate fluctuations restricted the speed of pass-through from the exchange rates to prices. In addition to the fact that rise in food product prices were at its lowest level in 15 years has also contributed inflation to remain below the target.

### VIII.B. OUTLOOK FOR 2003

#### *VIII.B.1. Accomplishments and Probable Risks with Fight against Inflation*

In addition to significant accomplishments and positive developments in price stability beginning of the year 2003, there are certain risks. As a result of the elections establishing a stable government, entering a growth process, considerably settlement of the floating exchange rate regime even though not at its desired level yet providing the Central Bank to focus on inflation and significantly relinquishing inflationary expectations as to the beginning of 2002 were the primary positive developments. As for the results of the CBRT Expectations Survey for the second half of the month of December, the inflation expectations for the next twelve months maintaining the declining process as of September, have dropped to 24.7 percent. As a matter of fact, in the beginning of the year 2002 while there was a 13 point difference between end year inflation expectations and targeted inflation rate, the difference

dropped to less than 5 points in the beginning of 2003 displays the enhancement of confidence to the implemented program.

The risks that might be effecting inflation in 2003 can be divided into two groups caused by policies implemented by means of external shocks and economic developments. The most evident probable external shock is the developments with Iraq. The Iraqi operation at least for a certain time will create a pressure on the exchange rates and petroleum prices, which will have a negative impact on the Turkish economy. The most significant factor to minimize the negative effects of such an operation on inflation and the economy in general would be to carry on hastily with the structural reforms and to convince the markets and the public that the public fiscal discipline would be maintained. Other risks originating internally would be as follows; the increase in domestic demand creating inflationary pressure, ineffectual of breaking the habit of backward linked pricing, degeneration of fiscal discipline, defects in the reform process primarily in the banking reforms and unfavorable management of inflationary expectations.

### ***VIII.B.2. Monetary Policy Strategy and Inflation for 2003***

In 2003, the monetary policy, as was also in 2002 will be constituted within the main aim of price stability indicated in the Central Bank Law and the short term interest rates being the essential monetary policy instrument will be used efficiently only and solely in order to reach the inflation target. "Implicit inflation targeting" strategy will be maintained before going on to inflation targeting and monetary base will perform again an additional task of being an anchor.

However, it is impossible to fight inflation solely through monetary policy. Nonetheless, attaining a permanent success in fighting inflation seems impossible without establishing a discipline in public finance and implementing the reform process, which directly effects expectations without interruption. Thus, maintaining an uninterrupted fiscal discipline and reforms will be the

characteristic factors in the success of fighting inflation in 2003.

### ***VIII.B.3. Growth, Demand and Inflation***

GDP growth for the year 2002 is expected to be around 6.5 percent, essentially because stocks increased to their normal level as a result of high exports performance and positive demand expectations, in spite of the delay in the recuperation of the European economy, and increase in consumption and investment expenditures remained limited. Growth for the year 2003 is foreseen as 5 percent, which is essentially expected from the increase in investment and consumption expenditures, along with the increase in exports.

The inflationary pressure of the probable demand increase in 2003 on a large extent depends on such demands composition. In case the total supply level is not modified, it is evident that the growth of total consumption expenditures will create an inflationary pressure. However, the increase in investment expenditures will give rise to an increase in potential production level, thus demand with regard to consumption constituting an effect on prices will be compensated.

According to the Expectations Index, prepared by compiling the expectations for the next three months period of the indicators of the Business Tendency Survey, developments along optimistic expectations has accelerated in the third quarter of 2002.

At this point, as much as the public sector pricing together with salary and wage policies, private sectors pricing and revenue policies has gained significance. At the markets, public prices together with especially public salaries and wage increases is an indicator of sincerity in fighting inflation, which influences expectations directly. On the other hand, the private sector not perceiving the revival of the domestic demand as an opportunity to increase the profit margin is utmost significant both in respect of fighting inflation and in respect of minimizing the costs of fighting inflation.

In this respect, as looking over the real wages of the third quarter of 2002, it is noted that while the real wages of the public sector has increased, the private sector has deteriorated. In accordance to reaching the inflation target and overcoming the rigor in inflation in 2003, implementing the revenues policy compatible with the inflation target will be the primary matter of the public sector.

#### ***VIII. B.4. Fiscal Discipline and Inflation***

With respect to the current program, the basic indicator of fiscal discipline is the primary surplus target. Achieving the primary surplus target consistent with the economic program will diminish the sustainability of domestic debt issue, which will result in reduction in risk premium. Reduction in risk premium will initiate a process, which will facilitate the sustainability of domestic debt by leading to drop in interest rates. Lessening of the problem of sustainability of domestic debt means to smooth the progress of both economic recovery and fight against inflation by improving both the expectations and confidence about the economy.

In this context, in countries where the sustainability of domestic debt stands as an issue because of large quantity of debt stock, high primary surplus usually becomes a supportive factor for growth rather than an obstacle to it. Therefore, in Turkey, where the sustainability of domestic debt appears as one of the crucial problems, loose monetary policies that aim at adjusting income distribution or speeding up growth will produce opposite results. Therefore, not only income distribution will deteriorate, but also the economy will fail to grow because of increasing interest rates.

#### ***VIII.B.5. Developments in Exchange Rate and Inflation***

It is observed that in Turkey, although tradition of considering exchange rates as nominal anchor is being gradually abandoned with the adoption of floating exchange rate regime, exchange rate-price relationship has not weakened much yet.

Even though it is noted that the effect of exchange rates on prices are less for the time being due to the transmission to floating exchange rate regime and achievement in fight against inflation, exchange rates still lead the variables that determine the prices in the medium and long-terms in Turkey. In other words, a leap in exchange, which has been perceived as permanent, imposes an upward pressure on inflation.

However, important clues have been found in Turkey, which prove that in the last period, changes in exchange rates do not have an immediate effect on inflation as in the past. These changes are reflected on the inflation after a certain time. It is considered that this change may be permanent even in case of a recovery in demand. Moreover, with the floating exchange rate regime, economic agents began to find out that exchange rate does not always move upward, but it can move downward as well. Consequently, the difference between temporary and permanent movements has acquired importance.

At this point, a possible Iraq operation is of great importance. Considering the fact that economic agents used to wait for a while before they reflect the increases in costs to be arisen from the increase in exchange rates to prices, in order to determine whether the said increase is temporary or not, an operation, the possibility of a pressure to be imposed by short-time operation on inflation in floating exchange rate regime is not highly slim.

Even though it can be said that the weakening, which is under the influence of transmission to prices from exchange rates, partly stemmed from the stagnation in domestic demand, the said weakening is considered to be permanent, free from demand conditions, since economic agents have learned the playing rules of floating exchange rate regime and the credibility of the policies in effect has enhanced.

Consequently, 2003 inflation target was set 20 percent in the framework of the economic program. Despite the likely internal and external shocks that have been underlined above, the said target can only be achieved by

supporting the current monetary policy by (i) maintaining fiscal policy, (ii) setting public pricing and income policies that are consistent with inflation target, and (iii) ongoing necessary structural reforms without delay.