

# **MONETARY POLICY REPORT**

**JULY 2002**



***CENTRAL BANK OF THE  
REPUBLIC OF TURKEY***

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## OVERVIEW

*In April-June 2002 period, monetary policy was conducted on the basis of market-determined foreign exchange rates, monetary base and implicit inflation target as being the nominal anchors. Within this framework, with the final target of attaining price stability, the Central Bank of the Republic of Turkey (CBRT) determined the short term interest rates considering the inflation expectations and predictions. Additional measures were also taken with the aim of enhancing financial market stability.*

*The short term interest rates are established in line with the developments in inflation and the movement of variables that might affect forthcoming inflation rate. The latest modifications to the short-term interest rates were made on April 30, 2002. CBRT changed the short-term interest rates – overnight borrowing rates in Interbank Money Market and ISE Repo-Reverse Repo Market to 48 percent down from 51 percent. Underlying the decision were several favorable macroeconomic developments leading to a decline in expected inflation. First, there was a sharp downward trend in actual inflation. Second, Turkish Lira appreciated vis-à-vis major currencies in the first four months of 2002. Third, there has been no sign of inflationary pressure on the demand side.*

*In the first half of the year, better-than-expected developments in the balance of payments, and the prolonged reversal in currency substitution led to excess supply of foreign currency. Taking this into account, and also contemplating the possible credibility effects – in the sense of sustainability of the economic program – of holding a sound reserve position, CBRT decided to increase the foreign currency reserves by holding foreign exchange buying auctions periodically starting from April 2002. In order to avoid the interference of this decision with the implementation of the flexible exchange rate system, two measures have been taken. First of all, establishment of exchange rates used as indicators have been reconstructed, and their measurement frequency has been raised to six times a*

*day. Secondly, a special foreign exchange auction system has been designed and implemented.*

*Changes in the required reserve ratios and liquidity requirements in March, which were aimed at contributing to stabilization of the financial system, became effective in May. The goal of these changes was to reduce the intermediation cost of financial institutions and providing more flexibility in liquidity management. Moreover, the new arrangement allows for a unique and clear implementation of required reserve ratio and liquidity requirement system. On July 1, 2002, CBRT put “late liquidity window facility” into practice assuming the post of the “lender of last resort”.*

*The favorable trend in the overall economy, which started in November 2001, continued through the first 4 months of the year. Due to tight fiscal and monetary policies and persistent structural reforms, the inflation expectations have decreased and price increases in May and June have stayed at historically low levels.*

*The decline observed in foreign exchange rates in the first quarter of the year also continued in April, however, announcements concerning overvaluation of TL, disagreements about harmonizing the Turkish legislation with the European Union, and other unfavorable political developments led to a significant depreciation in May and June.*

*It is clear that these developments in exchange rates will provoke a rise in inflation. Nevertheless, the precise extent will be a composition of several factors. Firstly, exchange rate pass-through occurs with some certain lag. Secondly, compared to the previous foreign exchange rate regimes, the floating exchange rate regime is expected to attenuate the effect of exchange rate movements on prices. Thirdly, the level of domestic demand is important. Fourthly, whether market perceives the movements in the exchange rate as temporary or permanent is important. If the economic agents realize that current economic program is “correct”, and thus robust to exogenous disturbances, recent adverse developments in exchange rates and*

interest rates will be temporary. Once this perception becomes prevalent, the risk about inflation will diminish.

According to CBRT survey of expectations, inflation expectation average for end-2002 CPI inflation has converged towards the CPI target. When the data pertaining to the second three-month period of 2002 are analyzed, it is observed that the expectations have fallen down to 35 percent, that is the end-2002 target. The expectation average according to the survey of the first period of June has remained below the end-year target. However, due to general economic and political uncertainties, inflation expectations picked up to 35,7 percent, slightly exceeding the inflation target, according to the average of the first period of July.

Volatility in the secondary market interest rates and the exchange rates indicate that risk perception is incompatible and well above the program requirements. Taking this into account, and also considering the lagged pass-through effects of depreciation of Turkish Lira in May and June on future inflation figures, no change has been made to the short-term interest rate since April 30, 2002.

Despite the adverse developments in the exchange rates, June CPI inflation remained below expectations, with the help of low domestic demand and the decline in food prices. Meanwhile, WPI inflation, which is more sensitive to public prices and exchange rates, remained slightly above the market expectations. As a consequence, program targets were met for the first half of 2002. CPI inflation remained as 12 percent in January-June period – even below the target. As of end-June, yearly inflation rate was down to 42,6 percent. Given the decrease in inflation in the first two quarters, the end-year inflation target of 35 percent is expected to be attained unless there are no extraordinary developments in the next six months. The annual WPI inflation sustained its slow-down trend in May-June period. While agriculture prices declined by 8.9 percent in the second quarter of the year, increase in WPI excluding agriculture increased compared to the previous month and reached 7.6 percent.

Rehabilitating the financial system is one of the main priorities of economic program in the aftermath of the February 2001 crisis. To this end, a banking operation was launched to improve the financial structure of the public and SDIF- owned banks. Within this framework, CBRT has provided these banks with liquidity through re-purchasing and repo transaction of government securities. Starting from February 2002, liquidity positions of SDIF and state owned banks improved due to early redemptions from the treasury, and finally their repo transactions with the CBRT have ended in April 2002.

Within the framework of “Strengthening of Banking Sector Program”, balance sheet size and the number of branches and employees of the state banks have been reduced. Moreover, the periodic reports published by Banking Regulation and Supervision Agency (BRSA) have contributed to the becoming of balance sheets of the SDIF and public banks more transparent. By Mid June, auditing and evaluation stages of the “Bank Capital Strengthening Program”, which is being implemented by the BRSA with the aim of provision of capital to private sector banks by public agencies, were completed. As of June 2002, private banks’ revised balance sheet data indicated a capital requirement of 224 Trillion Turkish Liras. Capital adequacy ratio reached 14.8 percent after the regulation process, up from its 14.2 percent level in pre-regulation period in 2001.

In this period, the indicative target and performance criteria implementation for monetary base, net domestic assets and net foreign reserve components of CBRT balance sheet has been maintained. Within this framework, the targets pertaining to these aggregates specified in the Letter of Intent submitted to the IMF on January 18, 2002 have been attained.

Starting from April, CBRT decided to conduct daily foreign currency buying auctions of 20 million US dollars. Afterwards, in order to compensate for the cumulative foreign exchange not bought at the auctions due to inadequate bids, the daily amount has been raised to 40 million dollars to be effective from the first auction

that follows the auction with inadequate bids. Extra liquidity created by the foreign exchange buying auctions has been sterilized by four-week TL deposit buying auctions in addition to the other operations at the Interbank Money Market. Lately, due to recent developments in the foreign exchange market, foreign exchange buying auctions have been temporarily abandoned. However, four week TL deposit buying auctions will continue.

The 3.002 trillion Turkish lira portion of CBRT's 2001 profit, which was to be transferred to the Treasury in accordance with the protocol between CBRT and Treasury dated 10th of May 2002, was used for coupon payments and early redemptions of the principals of government securities held by the CBRT.

Compared to March, the monetary aggregates M1 and M2 declined in real terms in June by 6,1 and 2,5 percentage points, respectively. However, M2X money supply increased by 1.8 percent in real terms, compared to the figures of March. The reason of the rise in M2X money supply in spite of the decrease in M2 money supply is the increase in TL equivalent of foreign exchange deposit accounts due to depreciation of TL vis-à-vis foreign currencies. The share of FX deposits in M2X money supply, which was 51.5 percent in end-March 2002, climbed up to 53.6 percent in June.

As for the Treasury auctions, average interest rates showed a tendency to decrease from January to June. This tendency manifested itself especially in April. Although the interest rates continued to decline in May, the interest rates in the beginning of the month were relatively high compared to the figures at the end of the month. The average compound interest rate climbed significantly at the auctions in June and stood at 72.3 percent. Observing the developments in ISE outright purchases and sales market, it can be inferred that the main reason underlying the increase in auction rates is the rising political uncertainty coupled with depreciation of Turkish Lira. In the meantime, trading volume has also declined, and average days to maturity of exchanged bonds fell down in the second half of June.

In June, exchange markets were driven by pessimistic expectations, rather than macroeconomic indicators. Despite favorable developments in inflation rate, signs of increased overall activity, and determined behavior of economic administration, Turkish Lira depreciated sharply in June. Expectations Survey of CBRT indicates an increase in interest rate and exchange rate forecasts in June. For example, June exchange rate forecasts for the end year 2002 has moved to 1.800.000 Turkish Liras, up from 1.750.000 in May. The fact that current and expected value of Turkish Lira declined without any visible deterioration in the current account or inflation expectations may mean that recent movements in the exchange rates were driven mostly by political uncertainties.

In the recent years, several legislative and operational measures have been taken to restrict direct interference of the political authority in the conduct of economic policies. It is believed that, in the near future, the market players will be convinced that stability can be achieved in floating exchange rate regime and adjust their moves according to this regime and realize that these measures have enhanced the immunity of economy to developments in politics.

Credit volume has been shrinking in real terms – due to both supply and demand side developments – since the end of 2000. However, due to decline in interest rates and modest recovery in the overall activity, real credits slightly increased in May. While credits extended by public and private domestic banks to real sector decreased respectively by 6 and 15 percent, in May 2002 compared to the year-end, the credits by foreign banks increased by 2 percent.

During January-June 2002 period, primary surplus rose 69.1 percent compared to the same period a year ago, reaching 10,6 quadrillion Turkish Liras, due to tight fiscal policies aiming at maintaining budget discipline. This remarkable improvement in the primary surplus was partly due to the transfer of 3 quadrillion portion of the profits of the CBRT to budget. In the same period, budgetary revenues increased by 56,2 percent, reaching 35,8 quadrillion, while the expenditures rose by 73

percent. Interest payments on domestic bonds, which increased by 83,9 percent, largely contributed to the rise in expenditures. In the same period, expenditures net of interest rose by 65 percent.

Domestic debt stock increased slightly by 0.5 percent reaching TL 122.8 quadrillion as of May 2002 from TL 122.2 quadrillion at the end of 2001. IMF credits which were transferred to the Treasury as of February 7, 2002; early redemption of the FX linked securities in CBRT's portfolio and securities in the portfolio of the banks that are with the Savings Deposit Insurance Fund (SDIF), and the reduction of the liabilities of the SDIF banks to the Central Bank were the main reasons limiting the increase in the domestic debt stock. Due to a rollover ratio above 100 percent for the market, domestic debt held by the market increased, while the domestic debt held by the public decreased.

Turkish economy showed signs of recovery and entered a positive growth period in the first quarter of 2002. Compared to the first quarter of 2001, GDP rose by 2,3 percent, GNP growth became 0,7 percent

The rate of growth is expected to accelerate in the second quarter. Needless to say, this statement is conditional on the ability to preserve the current state of confidence. Yet, adverse developments in the labor markets continue to be the main obstacle for the recovery of domestic demand – especially by curbing the private consumption.

In the January-April period of 2002, exports increased by 5,9 percent while imports rose by 0,1 percent with respect to the same period of last year. As a consequence, trade deficit decreased by 14,6 percent to 3,3 billion USD, and export to import ratio increased by 4,1 points to 75,9 percent.

Current account deficit was 120 million USD– lower than the figures of the previous year- in the first quarter of 2002. The decrease in current account deficit with respect to the same period of last year mainly stemmed from the 78,6 percent decline in trade deficit. However,

as the imports picked up in April, the first four-month current account deficit amounted to 665 million USD.

After the global contraction in 2001, economic indicators reveal a recovery of the world economy in the first half of 2002. The rapid first quarter growth of the US economy, combined with the positive economic developments for the second quarter, indicate that the US economy, an important determinant for the global economy, will continue to expand in 2002. Euro area economies experienced moderate growth rates in the first quarter. Strong recovery in the US economy is expected to have a positive effect on the Euro area growth in the next periods. In Japan, where structural problems still pose a threat for the economic growth, depreciation of the Yen prevented deepening of the economic contraction by increasing exports. Asian economies, which are directly influenced by growth in the US economy, exhibit positive growth figures and production developments. Notwithstanding positive developments in the global economy, Latin American countries raise concerns about the future. Economies of this region contracted in the first quarter of the year and recent figures indicate that recession will continue in the second half as well. While effects of the crisis in Argentina prevail, sustainability of the public debt in Brazil is still of concern. Conditional on the sustainability of expansionary economic policies in the US and Euro area, and the low level of oil prices, downside risks for the global economic growth is expected to diminish in the rest of 2002.

To sum up, determined monetary and fiscal policies and persistent structural reforms was the main factors for meeting the economic program targets in January-June period. Meeting the targets for both the monetary base and the primary surplus have been the underlying reasons of success in fighting against inflation. Despite the adverse developments such as recent sharp depreciation of Turkish Lira, acceleration of public goods price inflation, and political uncertainties, in light of the achievements up to date, end-year inflation target appears to be within reach.

## I.DEVELOPMENTS IN PRICES

The fiscal and monetary discipline introduced by the ongoing economic program produced an improvement in the fundamentals of the economy and the structural reforms that are being carried out serves to taking leaps towards the permanence of this improvement. In this context, the confidence created by the program reduced risk perceptions in the period between November 2001 and May 2002. Hence, in the same period, inflation expectations fell and the Turkish lira appreciated uninterruptedly.

In line with these developments the inflation figures of April and May scored historically low levels. However, in June, a significant rise in exchange rates due to political developments and in the public administered prices was observed. Despite these negative developments, the continued low domestic demand, the effects of the decline in food prices and the uncertainty about the permanence of these negative developments contained CPI inflation within expected range. WPI inflation realized slightly above the expectations, as exchange rate developments and public prices are generally more influential in wholesale prices. The degree of exchange rate pass-through in the next few months and rise in public prices pose a risk to inflation.

In the second quarter of 2002, the decline in food and agricultural prices beyond seasonal averages became influential in inflation figures. As the monthly rates of increase in CPI and WPI inflation have converged, the annual rates of inflation in these indices became closer starting from March. However, as the rise in exchange rates and public sector prices are more influential in WPI compared with CPI, the difference increased once again in June (Figure I.1). Annual inflation rates in WPI and CPI scored 46.8 percent and 42.6 respectively, in June 2002 (Table I.1).

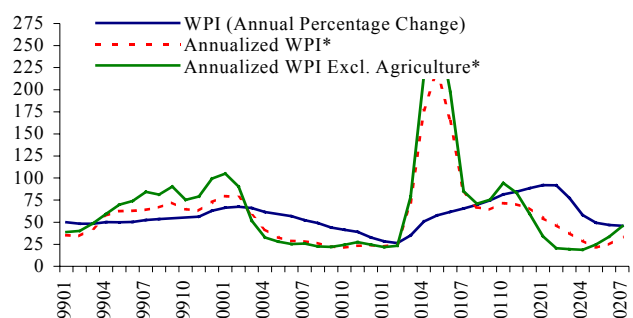
Table I.1. Annual and Periodical Inflation Rates

	Weight (%)	YEARLY			JAN-JUNE		
		2000 Dec.	2001 Dec.	2002 June	2000	2001	2002
WPI	100,00	32,7	88,6	46,8	18,5	44,5	12,5
WPI (Public)	23,17	24,7	99,7	44,6	14,5	59,3	15,3
WPI (Private)	76,83	35,7	84,6	47,7	20,1	39,3	11,4
WPI (Excluding Agriculture)	77,78	30,4	96,3	45,4	17,4	51,8	12,4
CPI	100,00	39,0	68,5	42,6	17,8	32,3	12,0
CPI (Tradables)	58,16	34,6	78,1	46,5	16,6	36,7	12,4
CPI (Non-tradables)	41,84	43,4	59,4	38,7	19,1	28,2	11,5
CPI (Goods)	70,69	34,6	80,9	45,8	15,9	38,6	11,7
CPI (Services)	29,31	47,0	48,2	36,6	21,4	22,1	12,5
CPI (Administered)	20,72	32,9	92,0	42,3	17,1	52,9	13,3
CPI (Non-administered)	79,28	40,7	62,1	42,8	18,0	26,6	11,5
CPI (Food)	28,50	52,0	28,1	44,6	13,7	30,6	4,0
CPI (Durables)	7,33	38,5	65,6	52,1	20,8	40,8	29,4
CPI (Excluding Food)	68,91	41,3	64,3	42,0	18,7	33,5	14,5
CPI (Excluding Housing)	74,2	35,7	72,9	44,7	17,0	33,6	11,8
Exch. Rate Basket (average)	-	22,2	113,6	31,2	13,8	75,8	8,0
Export Price Index	-	-1,0	-5,0	-5,6 <sup>(1)</sup>	-	-	-
Import Price Index	-	0,2	-5,8	-6,1 <sup>(1)</sup>	-	-	-

Source: CBRT, SIS  
(1) 2002 April

**In the second quarter of 2002, decline in food and agricultural prices beyond seasonal averages and the favorable developments in expectations became effective on inflation figures.**

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



\* Three Months Moving Average (Annualized, Seasonally Adjusted)

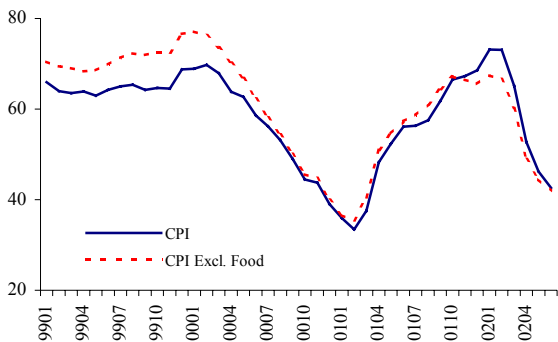


The rise in oil prices due to developments in international markets influenced public sector prices adversely in April and May, but the non-oil public prices increased in line with the inflation target. Meanwhile, acceleration in the non-oil public prices in June affected the inflation figures negatively.

**In April-June period, the highest contribution to the slow down in inflation came from agricultural prices in WPI and food prices in CPI.**

In April-June period, the highest contribution to the slow down in inflation came from agricultural prices in WPI and food prices in CPI (Figure I.2). However, decline was not confined to food and agriculture prices. The decline in food and agriculture prices beyond expected levels brought inflation below the program projections in the first six months of the year. In the same period, while the cumulative increase in agriculture prices was 12.9, the increase in WPI excluding agriculture was 12.4 percent.

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



Source: SIS

**I.1. Developments in Consumer Prices**

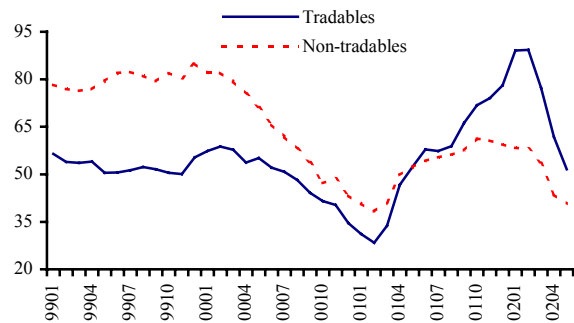
The slowdown in consumer prices, which started in February 2002, became more evident in the second quarter of the year. Food prices, which count 28.5 percent of the headline CPI, started to decline because of the increase in production and favorable weather conditions. While the cumulative food prices increased

by 4 percent in January-June period, the rise in CPI excluding food became 14.5 percent.

**Developments in Prices of Tradables and Non-tradables:**

The prices of the tradables were affected positively by the decline in the food prices but adversely from the seasonal rise in clothing sector prices. In the first half of the year, prices of tradables and non-tradables increased by 12.4 percent and 11.5 percent respectively, and the gap emerged between the prices of these groups at the end of the first quarter was filled to a great extent in the second quarter due to the decline in food prices.(Figure I.1.1).

Figure I.1.1. CPI Tradables and Non-tradables; 1994=100 (Annual Percentage Change)

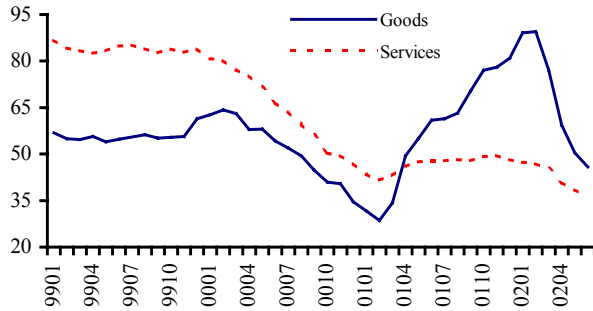


Source: SIS

**Developments in the Prices of Goods and Services:**

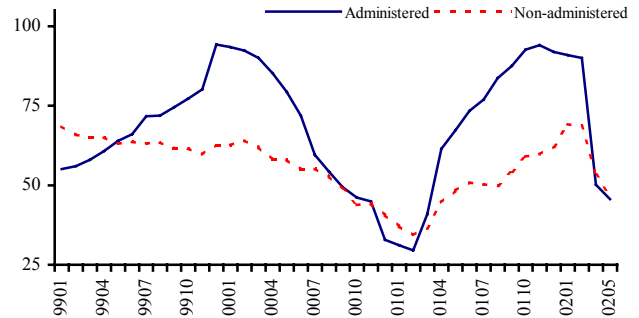
Increase in prices of goods surpassed that of services sector in the first quarter of 2002, however, this situation reversed in the second quarter. While inflation slowed down significantly in goods sector in May-June period mainly due to the decline in food prices, service sector prices remained rigid if not revealed boosts. When the cumulative increases in two groups are compared, it is observed that, the rise in services sector prices was observed to be 12.5 percent, while the rise in goods prices was only 11.7 percent. If the 6.4 percent increase in goods prices in January, which was to a great extent influenced by some temporary factors, is ignored, the difference between the inflation in goods and services prices can be observed more clearly.

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



Source: CBRT, SIS.

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



Source: SIS, CBRT

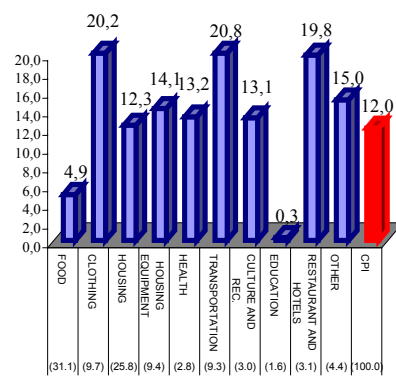
**Developments in Administered and Non-administered Prices:**

The administered prices were influenced particularly by oil price increases in the second quarter of the year. Administered prices, which increased by 7.5 percent in the first quarter, rose by 5.3 percent in the second quarter, mainly due to the acceleration in June and the cumulative increase for the first half reached 13.3 percent. Despite the appreciation of the Turkish lira in the first four months of 2002, the rise in the crude-oil prices in international markets led oil prices in Turkey to rise. The prices in fuel and fuel sub-group under CPI increased by 17.5 percent, which is a level well above the CPI increase of 12 percent in the same period. The administered prices excluding fuel only slightly increased between February and May. The postponement of price increases affected the financial position of the state economic enterprises and a significant speed up was observed in administered prices in June. Meanwhile, the non-administered prices rose by 11.5 percent in the first six months of the year. As a result, the difference between these two groups diverged at the end of the first quarter and started to converge towards each other in the second quarter again. In May and June, the annual increase was higher in non-administered prices, however the difference narrowed in June (Figure I.1.3).

**Food Prices**

Food prices, which displayed a climbing trend after November 2001, started to decline sharply after March 2002, mainly due to the favorable weather conditions. While food prices rose by 11.1 percent in the first quarter, they declined slightly in the second quarter and at the end of the first six months, lagged behind CPI increase and stood at 4 percent. (Table I.1.1).

Figure I.1.4. CPI and Selected Sub-items :1994=100 (January-June 2002 Period, Percentage Change)



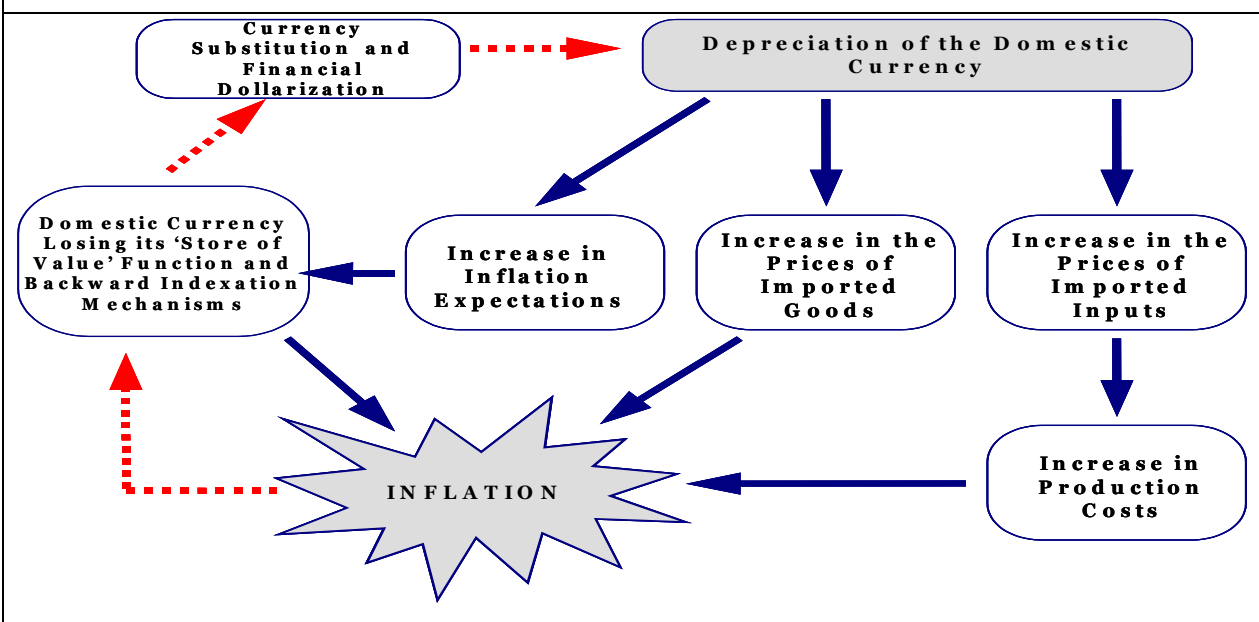
Source: SIS

**BOX. I.1 THE EXCHANGE RATE PASS-THROUGH IN THE FLOATING EXCHANGE RATE REGIME**

The domestic price level in an open economy is affected by international prices and exchange rate changes through the prices of tradable goods and services. The rise in exchange rates, first leads to an increase in the Turkish lira values of imported good prices, and then affects the domestic prices of all goods that are produced by using imported inputs. The effect of the increase in the exchange rates on domestic inflation rate is referred to as the pass-through effect.

It is a fact that the increase in the exchange rates in an economy with persistent inflation leads to higher inflation expectations and higher demand for foreign currency by reducing the confidence in the domestic currency. The increase in the demand for foreign currency, in turn, causes further rise in the exchange rate and cause an inflation-depreciation spiral. In countries, which experience high and chronic inflation rates, a large part of the savings are held in the form of foreign exchange and assets denominated in foreign currency become widespread. This situation not only increases the effects of the exchange rate changes on prices, but also renders the economy quite fragile to the developments in the exchange rates (Figure 1).

Figure 1: Exchange Rate Passthrough to Prices

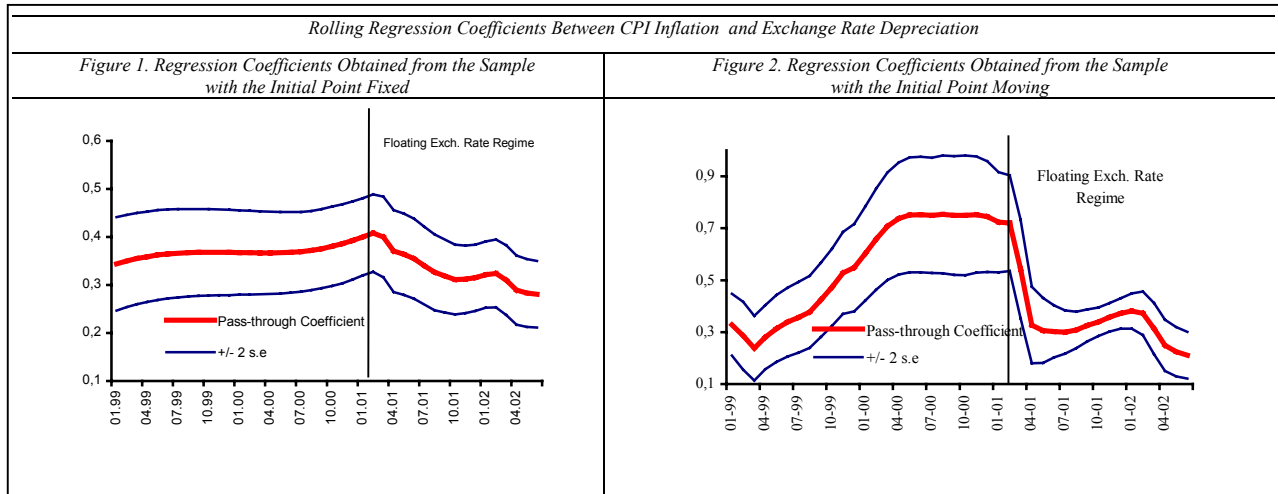


The degree of the pass-through from the exchange rate to prices depends on some structural factors such as the homogeneity of the product, the mark-up pricing behavior of the importers, the market share of the product, the level of competitiveness between domestic and foreign firms, the market share of the domestic economy in the world economy and the regulations affecting international trade. Besides these microeconomic factors, the degree of pass-through is affected by the total domestic demand. At times when the domestic demand is limited, instead of reflecting the cost increases to their prices that would lead to losing more customers, firms prefer sacrificing their profits to raising their prices, or reflect only a small portion of the increase in the exchange rates to their prices.

Another important factor determining the degree and the speed of the exchange rate pass-through, besides domestic demand conditions, is the short and medium term exchange rate expectations of the price makers. In other words, if the firms expect that the changes in the exchange rates are temporary, they will not necessarily adjust their prices immediately following the increases in the exchange rate. They will raise their prices only if they are convinced that the increase in the exchange rate is of a permanent nature.

In Turkey, during the period between 1989-2000, a managed float regime, in which the exchange rate was determined according to the inflation, was implemented. This situation led to the indexation of prices to exchange rate movements, through which firms reflected the increases in exchange rates directly to their prices. However, as in the cases of Mexico, Brazil, Chile and Israel, Turkey has also experienced a decline in the degree of the pass-through with the adoption of the floating exchange rate regime.

In the following figure, the coefficients of a rolling regression are shown, which are calculated by using monthly data of 1995-2002 with a plus/minus 2 standard deviation band and which explain CPI inflation with annual foreign exchange rates and time trend. Two different rolling regression techniques have been utilized to see the time path of the pass-through effect. The graph on the left hand side takes year 1995 as a fixed initial point and contains the **foreign exchange coefficients** calculated by adding one more data each time, while the graph on the right hand side shows the **foreign exchange coefficients** obtained from a sample that has both the initial and last points moving. Although, the pass-through coefficients are sensitive to the choice of the initial point of the sample, independent from the initial point chosen, they display a significant decrease after February 2001, after which the floating exchange rate regime was adopted. This observation is also verified by the results of the empirical tests. As expected, the pass-through coefficients that are obtained from the sample that has both the initial and last points moving fluctuate more than the coefficients obtained from the sample with a fixed initial point do.



In the literature, there are four main hypotheses explaining the decline in the exchange rate pass-through to inflation (Garcia and Restrepo (2001)). First of all, it is claimed that the people's reaction to exchange rate shifts changes with the adoption of a floating exchange rate regime. According to this hypothesis, the firms in the countries that let their currencies float realise that the short-term increases in the exchange rates can be transitory and the exchange rate can return to its original level without exerting any pressure on costs. To put it differently, the presence of both up and down sided moves in the exchange rates in the short term, weaken the indexation of the prices to the exchange rate. In view of inflation, it is quite important that the exchange rate is stabilized especially in the medium and long term. Nevertheless, short-term fluctuations in the exchange rates, lead to a situation, in which price makers, instead of indexing their prices to the changes in the exchange rates, follow the economic developments more closely and make their price decisions accordingly. Thus, a credible inflation target may be more influential than the changes in the nominal exchange rates in view of firms' pricing behavior. In this respect, it is observed that the floating exchange rate regime leads to the rationalization of the pricing behavior of the firms and limits the exchange rate pass-through.

Secondly, it is claimed that with the development of derivative markets following the adoption of the floating exchange rate regime, price makers will be able to hedge against the exchange rate risk and not be forced to reflect the short term increases in the exchange rates on internal prices. Keeping in mind that the derivative market in Turkey is not yet well developed, this hypothesis is not quite relevant to account for the decline in the exchange rate pass-through in Turkey.

According to the third hypothesis, the profit margins of the firms are reduced owing to an increase in competitiveness and the decline in the pass-through to inflation is a result of efficiency gains stemming from increased competition in retailing. However, there is no evidence that competition in Turkey has increased enough to lead to a reduction in the profit margins of the domestic manufacturing industry (Metin et al. (2000)). Thus, this hypothesis is also not sufficient to explain the decline in the exchange rate pass-through experienced in Turkey since February 2001. Since the adoption of the floating exchange rate coincided with a deep economic recession in the case of Turkey, firms have reduced their profit margins in order not to lose any more of the demand for their products and became hesitant to pass the cost increases to prices. As is the case in Chile and Mexico, in Turkey also the output gap is expected to have an important role in explaining the decline in the degree of exchange rate pass-through.

A fourth hypothesis claims that nominal exchange rate increases following periods of real exchange rate misalignments, provide the necessary adjustment in relative prices without having large implications on the domestic price level. Keeping in mind that the floating exchange rate regime is generally adopted following periods of controlled exchange rate regime, during which the domestic currency is overvalued in real terms, this hypothesis is also useful in explaining the initial decline in the degree of pass-through following the adoption of the floating regime.

The floating exchange rate regime has been implemented for only 1,5 years in Turkey. This implies that there are still not enough observations to empirically analyze the effects of the floating exchange rate regime on the degree of the exchange rate pass-through. In a longer horizon, it will be possible to test which hypotheses stated above have more influence on the decline in the pass-through and assess whether the observed situation is of a temporary or a permanent nature. At present, it is not possible to claim that the floating exchange rate regime is an important determinant of the decline in the degree of pass-through. To what extent the degree of pass-through has declined and the main determinants of this decline could be better analyzed as the effects of the economic crises are completely over.

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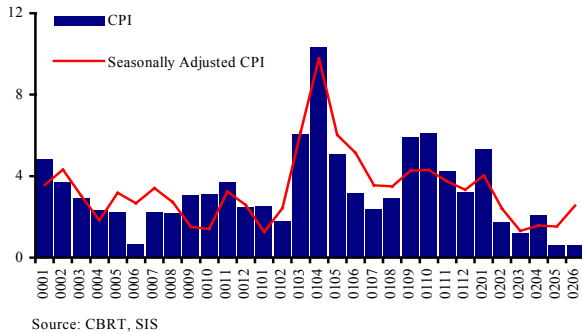
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Table I.1.1. CPI and Sub-items; 1994=100

	JUNE		JAN.-JUNE		JUNE-JUNE	
	2001	2002	2001	2002	2001	2002
CPI	3,1	0,6	32,3	12,0	56,1	42,6
Food, Beverages and Tobacco	1,6	-3,0	30,6	4,9	52,7	44,8
Food	0,1	-4,8	28,3	4,0	51,8	44,6
Clothing and Shoes	2,4	3,0	27,5	20,2	49,9	55,8
Housing	3,1	2,1	29,7	12,3	58,5	38,3
Rent	2,4	1,9	16,1	12,9	44,3	35,9
Housing Equipment	6,9	2,0	41,3	14,1	65,3	39,5
Health	3,0	0,5	27,3	13,2	46,6	40,8
Transportation	5,1	1,7	45,8	20,8	60,5	47,1
Culture and Rec. Activities	2,1	1,5	36,9	13,1	67,7	33,7
Education	0,0	0,0	0,8	0,3	28,1	51,7
Restaurant and Hotel	1,5	2,2	22,6	16,8	39,3	39,3
Other Goods and Services	5,5	1,0	52,2	15,0	73,2	36,9
Goods	3,3	0,2	38,6	11,7	60,9	45,8
Goods excluding Food	5,1	2,9	44,5	16,0	66,0	46,4
Services	2,8	1,4	22,1	12,5	47,8	36,6

Source: CBRT ,SIS.

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



Source: CBRT, SIS

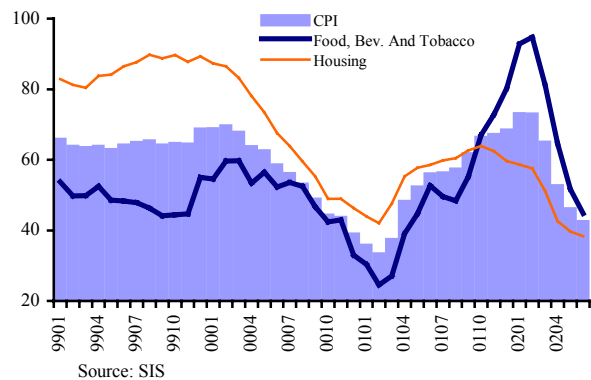
In the second quarter of the year, the food prices have been the factor that contributed to the slow down in consumer price inflation the most. While overall CPI inflation was 3.2 percent in this period, CPI excluding food was 6.9 percent. With the adverse effect of the weather conditions, prices of fresh fruits and vegetables increased beyond seasonal expectations in November 2001-February 2002 period. However, the favorable weather conditions and increasing agricultural production in spring contributed to the decline in the prices of fresh fruits and vegetables starting from March.

Domestic supply increased and contributed to the decline in prices of fresh fruits and vegetables because of the obstacles encountered with in exports of those products to EU countries.

### Durable Goods Prices

Durable goods prices rose by 3.9 percent in the second quarter and the cumulative increase in this group for the first half of the year reached 29.4 percent. The extraordinary increase in the prices in January limited the increases in the following months. Despite high rates of increase in exchange rates in May and June, increase in prices has been limited.

Figure I.1.6. CPI, Food and Housing Prices; 1994=100 (Annual Percentage Change)

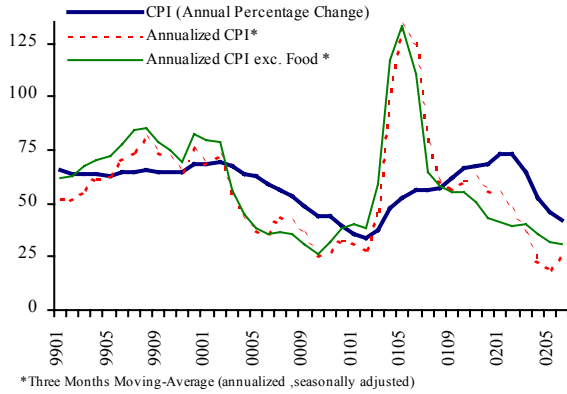


Source: SIS

### Housing Prices

House rents preserved their tendency that they showed in 2001 and in the first quarter of 2002 in the second quarter as well. The heating, electricity and other expenses of housing, however, increased significantly in the second quarter. Decline in natural gas prices in February was followed by an increase in May and June. While the increase in electricity, gas and other fuel items under the housing group increased by 3.2 percent in January-March period, this increase reached 5.2 percent in the second quarter. In the first half of the year, inflation in rents stood at 12.9 percent while it became 8.5 and 12.3 in electricity-gas and other fuels item and housing item, respectively.

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



To conclude, CPI inflation in the first half of the year stood at 12 percent, well below the program projections. As a result of the successful implementation of the monetary and fiscal policies in line with the economic program and the continuity of the structural reforms, the targets were achieved by the end of the first half of 2002. The slowdown in food prices beyond expectations carried the consumer price inflation below the program projections and by the end of June, annual inflation dropped to 42.6 percent in CPI. After the slowdown in the first two quarters, the year-end inflation target of 35 percent is expected to be achieved unless any extraordinary incident is to happen.

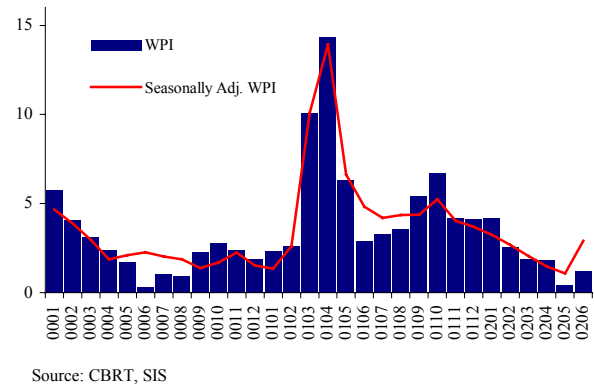
The inflation trend, annualized from the 3-month moving average of the seasonally adjusted CPI inflation, continued its slow-down in the first five months of the year. In June, a slight increase in trend was observed. While the annual CPI inflation by the end of June was 46.2 percent, annualized trend was 25.1 percent in CPI and 30.6 percent in CPI excluding food.(Figure I.1.7).

### 1.2. Developments in Wholesale Prices

In the second quarter of the year, WPI inflation continued its downward trend due to the same reasons with that of CPI inflation. In the mentioned period, decline in agricultural sector prices made the greatest contribution

to the decline in the WPI inflation rate. The rates of increase in agricultural sector prices were quite high in the first two months of 2002, but dropped below the seasonal averages after March. The rise in prices in manufacturing sector, which had slowed down in the first quarter of the year mainly due to the appreciation of the Turkish lira, the positive developments in inflation expectations and the slack domestic demand, became higher in the second quarter because of the acceleration in public price increases and the lagged effect of the exchange rate increases on manufacturing costs. The total increase in WPI in January-June period stood at 12.5 percent.

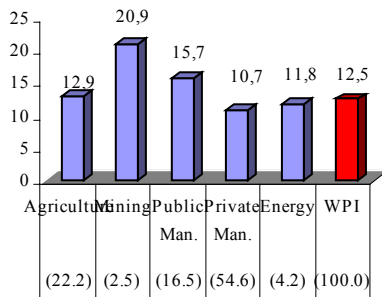
Figure I.2.1. WPI and Seasonally Adjusted WPI; 1994=100 (Monthly Percentage Change)



**In the second quarter of the year, downward trend in WPI inflation continued due to the similar reasons and in the same manner with CPI inflation.**

When breakdown of WPI inflation increases in private and public sectors are analyzed, it is observed that public sector price increases, which were quite low in January and February, have accelerated since March and have exceeded private sector price increases on a monthly basis since then. In the January-June 2002 period, public sector prices increased by 15.3 percent, while private sector prices rose by 11.4 percent.

Figure 1.2.2. WPI and Sub-items; 1994=100 (January-June 2002 Period, Percentage Change)

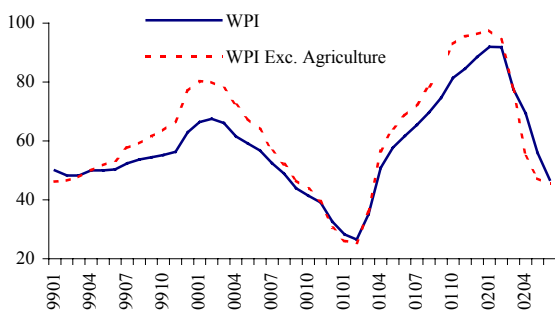


Source: SIS

### Agricultural Sector Prices

Agricultural sector prices displayed high rates of increase in January and February, mainly due to the contraction in agricultural production. Agricultural sector price increases, which have slowed down since March, realized below the last seven year averages in May and June and became the basic factor that limited further increase in WPI in the April-June period. Agricultural sector prices, which rose by 23.8 percent in January-March period, fell by 8.9 percent in April-June period. In the forthcoming months, although the slowdown in agricultural sector prices is expected to be limited relatively, agriculture prices are expected to affect WPI favorably owing to seasonal effects.

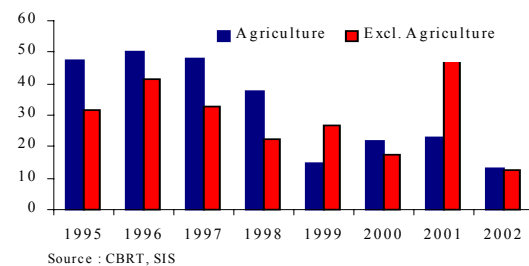
Figure 1.2.3. WPI and WPI Excluding Agriculture: 1994=100 (Annual Percentage Change)



Source: CBRT, SIS

The slowdown that started in November in WPI inflation, calculated excluding agricultural sector prices that are too vulnerable to supply, continued also in the April-June period. The rate of increase in WPI excluding agriculture stood at 12.4 percent, close to the 12.9 percent rate of increase in agricultural sector prices (Graph 1.2.4).

Figure 1.2.4. January-June Period Agriculture And WPI Excluding



Source : CBRT, SIS

### Agriculture Prices (Percentage Change)

**In the forthcoming months, agriculture prices are expected to continue to affect WPI favorably owing to seasonal effects, although the slowdown in agricultural sector prices is expected to be relatively limited.**

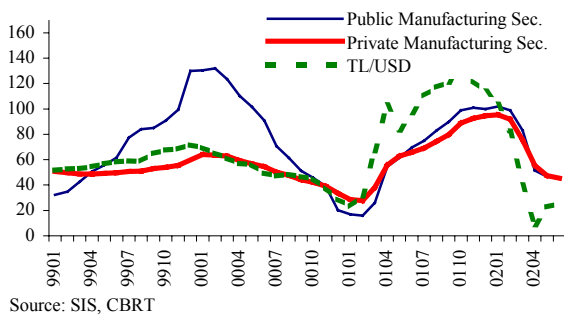
### Manufacturing Sector Prices

Manufacturing sector prices, comprising 71.1 percent of WPI, are quite sensitive to the developments in the exchange rate and expectations. Owing to the favorable developments in the exchange rates and expectations especially in the first quarter of the year, annual rates of increase in manufacturing sector prices have slowed down since the beginning of the year (Figure I.14). However, total manufacturing sector prices displayed a higher rate of increase in the second quarter compared with the first quarter mainly due to the acceleration in public sector prices. In the January-June period, the rate of increase in total manufacturing sector prices stood at 12.2 percent, staying below the 12.5 percent increase in WPI.

**Owing to the favorable developments in the exchange rates and expectations, especially in the first quarter of the year, annual rates of increase in manufacturing sector prices have slowed down since the beginning of the year.**

It is known that there is a strong relation between prices and exchange rates in private manufacturing sector that comprise sectors producing mostly export-oriented tradable goods using imported input. However, this relation is observed to have weakened following the adoption of the floating exchange rate regime (Box I.1). But still, the increases in prices of petroleum products, chemicals and sub-sectors of basic metal industries, which are known to be relatively more sensitive to the changes in the exchange rates, were observed to be higher. Owing to the commencement of the new season, increase in exports and opening of the new tourism season, price increases in the clothing and leather products sectors have been high. In the January-June period, private manufacturing sector prices increased by 10.7 percent, while price increases in clothing and leather products sectors stood at 31.1 percent and 23.1 percent, respectively. The monthly increase in agricultural prices, which have been following a course below the seasonal averages since April, limited the price increase in food and beverages sector that realized at 6.6 percent on a cumulative basis in the January-June period.

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



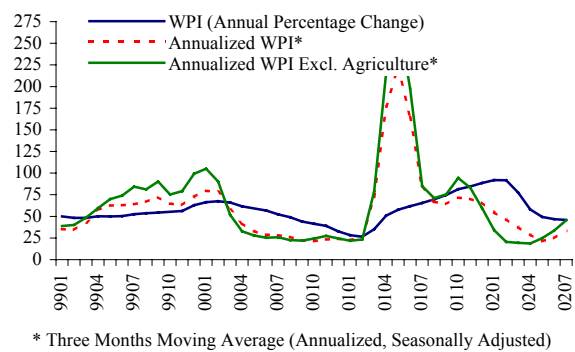
Increase in public manufacturing sector prices, which stood below the rate of increase in private manufacturing sector prices in the first two months of the year, has displayed a higher increase compared with the private sector manufacturing prices since March. While public manufacturing sector prices increased by 4.6 percent in January-March period and by 10.6 percent in April-June period. Private manufacturing sector prices increased by 4.2 and 6.2 percent, respectively, in the mentioned periods.

### Energy Prices

The monthly rates of increase in energy prices, which have slowed down since February, stood below the seasonal averages in April-June period. While the rise in energy prices was 11.8 percent in the first half of the year, it was 7.6 percent in electricity and gas prices. The item that induced increase in energy prices in this period was water prices which have risen by 36.1 percent since the beginning of the year. The increase in electricity prices has been limited following the high rate of increase in January. However, the financial problems of the State Economic Enterprises (SEEs), which are responsible for the production and distribution of electricity, may have an adverse affect on the prices in the forthcoming months.

To sum up, the WPI inflation has sustained its downward trend on an annual basis in the April-June period too. In the last quarter, agricultural sector prices, which displayed an increase quite below the seasonal averages, compensated for the manufacturing sector price increases that realized above expectations. As in the case of CPI, the annual inflation trend of WPI (deseasonalized, annualized three-months moving average), which has been falling since January, has started to increase in June. The deseasonalized and annualized WPI inflation climbed up to 24.1 percent in June. As agricultural prices displayed low rates of increase, even beyond seasonal averages, the annual inflation trend in WPI excluding agriculture rose to 32.4 percent (Figure I.2.6).

Figure I.2.6. Annual Inflation Trend, WPI (Annual Percentage Change)





Although the pass-through from the exchange rates to the manufacturing sector prices was limited in the April-June period compared with the previous periods, the high level of exchange rate and the continuous rise in public sector prices may adversely affect the WPI inflation in the forthcoming months. Yet, provided the economic program is implemented decisively, no pick-up emerges in domestic demand and the downward trend in agricultural prices owing to favorable seasonal effects continues, the end-year WPI target will be attained.

### 1.3. Inflation Expectations

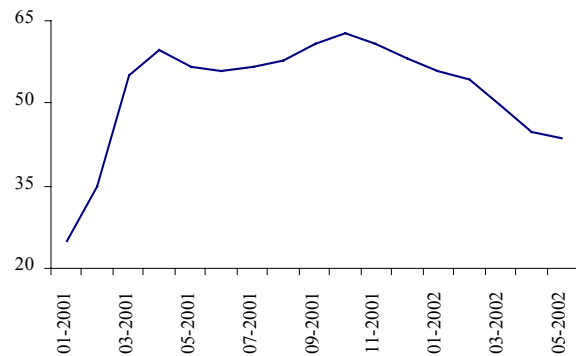
The Central Bank makes use of three surveys to analyze inflation expectations. One of the surveys, the CBRT Business Tendency Survey has been carried out since 1987 and it includes both the public and private sector firms in its sample. In May 2002, 463 firms participated in this survey. The second survey utilized to follow inflation expectations, the CBRT Inflation Expectations Survey, first conducted on August 3, 2001, aims at finding out the inflation expectations of the real and financial sectors. Expectations data are gathered twice a month, once in the first week and once in the third week of the month after the inflation rate of the previous month has been announced. In the survey, participants are asked to state their one-month, two-month, 12-month and end-year expectations. The number of participants in the Expectations Survey of the CBRT in the first half of July was 66, of which 74 percent was from the financial sector and 26 percent was from the real sector. The third survey used to follow inflation expectations is the SIS Monthly Manufacturing Sector Tendency Survey. The survey is conducted in order to inform the public within the shortest time possible and it compiles future production, sale quantities and sale prices expectations of the firms representing 70 percent of the entire manufacturing sector.

#### Expectations For Wholesale Prices

According to the CBRT Business Tendency Survey, expectations for next 12-month and year-end WPI inflation rates followed their downward trend that started in the last few months of 2001. (Figure I.3.1, Figure

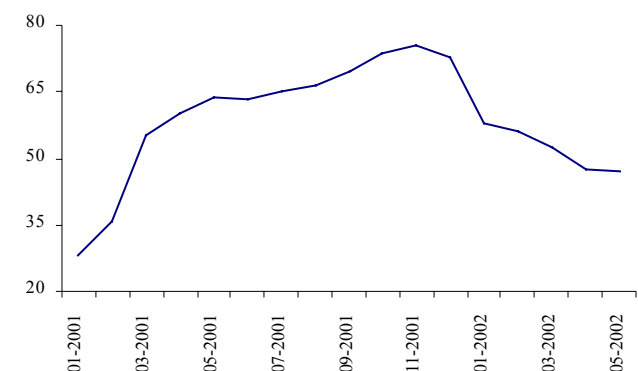
I.3.2). The factors, which contributed to the decline in WPI expectations have been the absence of growth in domestic demand, favorable exchange rate movements, and the confidence that the economic program will be fully implemented. The results of the survey conducted in May show that the average inflation expectation for the next 12 months has dropped down to 43.5 and for year-end to 47 percent. But still, these figures are well above the economic program's end-year WPI change prediction of 31 percent.

Figure I.3.1. Next 12-Month WPI Inflation Rate Expectations (Percent)



Source: CBRT Business Tendency Survey

Figure I.3.2. Year-end Expected WPI Inflation (Percent)

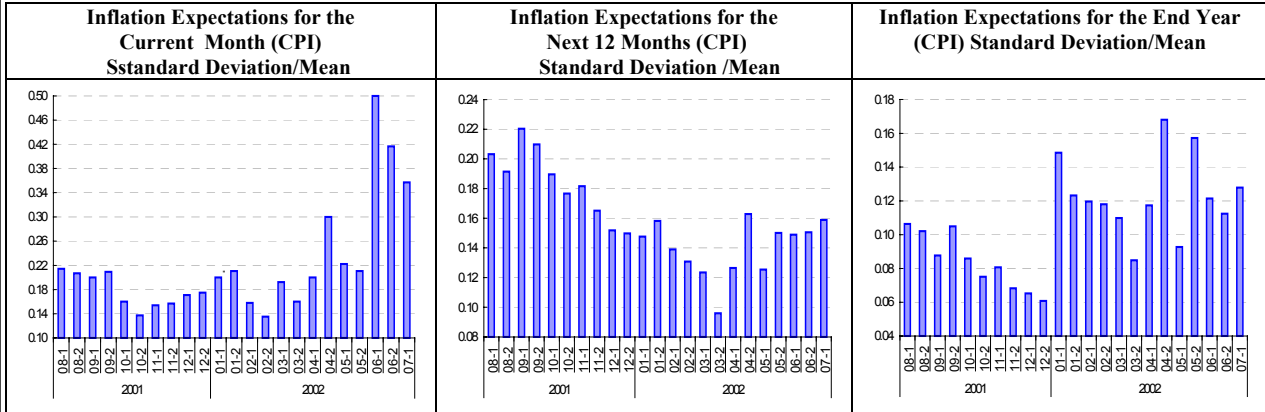


Source: CBRT Business Tendency Survey

**Average expected rate of change in WPI follows a decreasing trend, but still it is higher than the end-year change.**

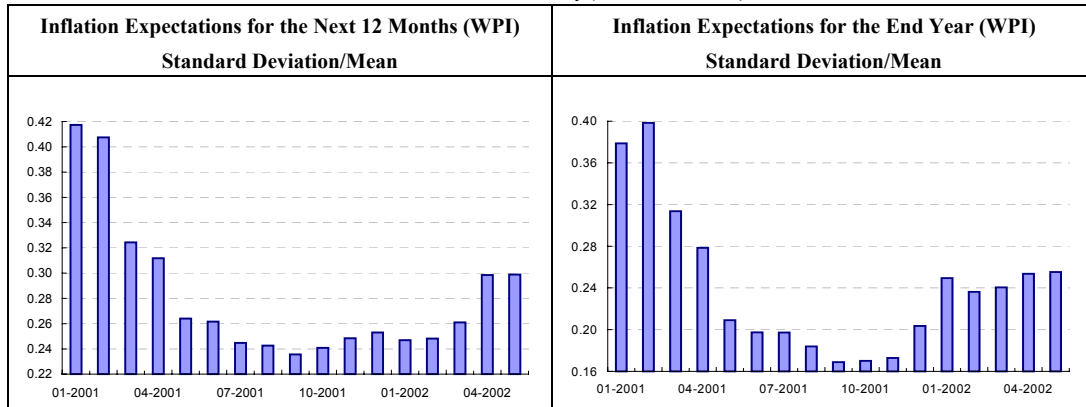
BOX 1.2 ECONOMIC UNCERTAINTY AND INFLATION EXPECTATIONS

CBRT EXPECTATIONS SURVEY



When the standard deviation/mean ratios from distribution of inflation expectations in the CBRT Expectations Survey are examined, it is observed that economic and political uncertainties have affected the standard deviation/mean statistic of the monthly inflation expectations. The developments in this statistic can be accounted for the fact that under persistent uncertainty environment, it becomes difficult to formulate a general outlook for the economy. In other words, in relatively stable periods the inflation expectations converge towards each other while in periods with increased uncertainty perceptions the inflation expectations of the agents diverge from each other. It's predicted that the standard deviation/ mean statistic of the distribution of the year-end expected inflation in CPI series would get smaller as the inflation realizations increase the likelihood that the year-end inflation target will be attained. Furthermore, the properties of the year-end expectations distribution give insights about the credibility of the inflation targets in the eye of market participants. However, insufficient number of observations and quick reaction of the survey to uncertainties, are impediments to generalize the conclusions of the CBRT Expectations Survey.

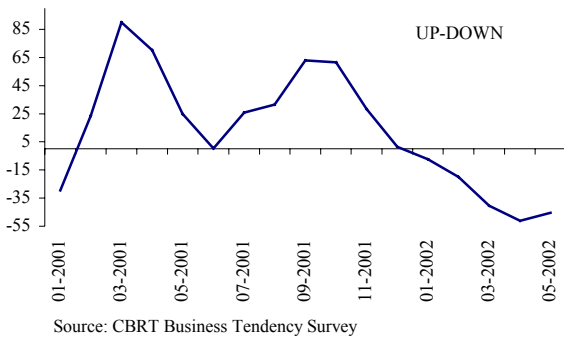
CBRT Business Survey (Quantitative Data)



Unlike the CBRT Expectations Survey for which economists are interviewed, the CBRT Business Survey contains expectations of both the industrialists and the economists and according to the results of the latter survey, there is a downward trend in WPI inflation expectations. However, increase in standard deviation/mean value with the decline in the change ratio of WPI expectations in the last few months indicate that the sharp downward trend in WPI expectations have been broken.

When the qualitative inflation expectations are analyzed, it is observed that the improvement trend that started in November 2001 continues. (Figure I.3.3). The deviation from the downward trend observed in the survey conducted in May is believed to have generated from the economic and political uncertainties. The deviations from downward trend in inflation expectations are not envisaged to continue unless the uncertainties persist.

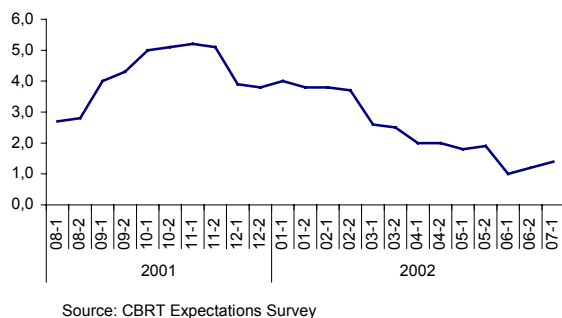
Figure I.3.3. Next 3- Month WPI Inflation Expectations (Percent)



### Expectations for Consumer Prices

According to the results of CBRT Expectation Survey, the downward trend in expected rate of change of CPI, which started in the last months of 2001, has extended to 2002. This downward trend can be attributed to the trust in the full implementation of the economic program, and staying of inflation rate below than expected levels. (Figure I.3.4).

Figure I.3.4. CPI Inflation Expectation for the Current Month (Monthly, Percentage Change)



Inflation figures which realized below the expected levels in May and June incited July inflation expectations to decline. Exchange rate movements have been another factor that have affected inflation expectations. However, the impact of past and expected change in exchange rate is considered to diminish following the floating of the Turkish Lira.

**According to CBRT Expectation Survey June and July results, year-end inflation expectations converged towards the year-end targeted consumer inflation level.**

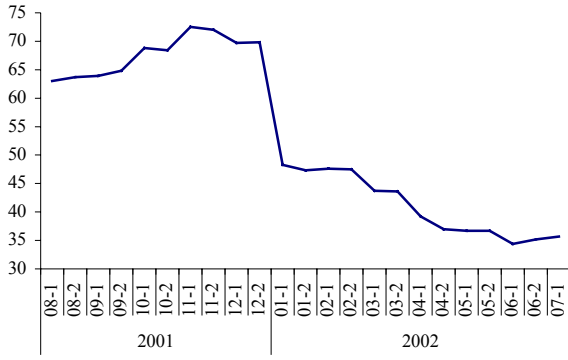
Figure I.3.5. CPI Inflation Rate Expectations for the Next 12 Months (Percent)



Expected average increase in CPI for the next 12 months retains its downward trend in 2002. The fact that the expected rate of increase in CPI inflation is lower than the expected year-end inflation rate indicates that the participants anticipate that the decline in inflation will persist.

Year-end consumer inflation expectation converges towards the targeted CPI inflation. According to the results of the first expectations survey of June, the average of expectations went below the targeted rate of change of CPI. However, the average expectation, which came out from the first survey of July as 35.7 percent, is slightly above the target level of 35 percent and this result can be attributed to the political and economic uncertainties. (Figure I.3.6).

Figure I.3.6. Expectations for the Year-end CPI Inflation (Percent)

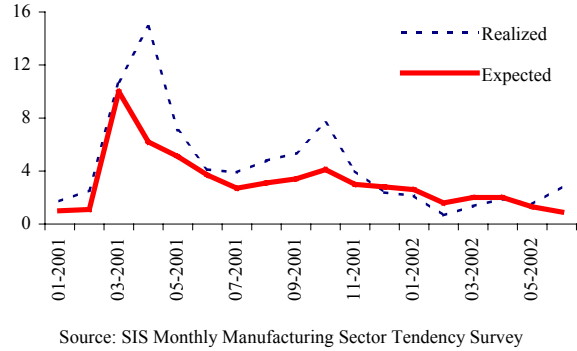


The data pertaining to the second quarter of 2002 gathered at CBRT Expectations Survey indicate that the expectations have been down to the 35 percent level, that is the year-end target. The resolutely implemented economic program, the favorable affect of agricultural sector and food prices on CPI and the lack of inflationary demand conditions are expected to support decline in inflation expectations. However, protracted uncertainty period is a risk factor for the downward trend in inflation expectations.

#### Expectations for Manufacturing Industry Prices

The downward trend in expectations for the manufacturing sector prices continued in 2002. According to the results of the June Manufacturing Industry Tendency Survey conducted by SIS, total manufacturing sector prices were expected to increase by 1.6 percent. The rates of increase were 2.4 percent public manufacturing industry and 0.9 percent in private manufacturing industry. In June, overall inflation rate was 3,8 percent while it was 5.2 percent in public sector and 2.8 percent in the private manufacturing industry sector. Therefore, the rates have been considerably high compared with the expectations. (Figure I.3.7)

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

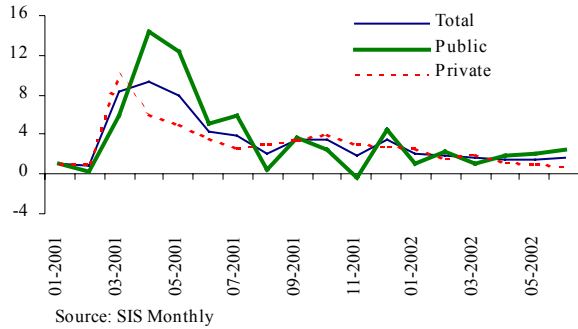


Developments in the foreign exchange rates and increases in public sector manufacturing prices that realized beyond expectations in the previous periods have been effective on the expectations regarding public sector prices and thus the downward trend in those expectations has been broken. Developments in domestic demand and realizations below expectations are believed to have been affective in the downward trend in expectations for private sector prices.

#### Recently, expectations for manufacturing sector prices were below the corresponding inflation realizations.

Due to finance-oriented price adjustments in the public sector, the rate of increase in public manufacturing sector differed from that of the private sector prices (Figure I.3.8). In the subsequent periods, these public sector price adjustments might pose significant risks to the downward trend in inflation expectations.

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



- (i) Risk premium influenced by the political uncertainties adversely affects the interest rates. This situation might lead to increase in inflation expectations and production costs.
- (ii) Depreciation of TL as well as acceleration in public price adjustments might affect the price developments in the period ahead.
- (iii) Developments in international oil and natural gas prices are of great importance to the domestic price developments.

To conclude, the following trends are observed when the three surveys about the inflation expectations are analyzed :

- i. Until July 2002, the downward trend in inflation expectations has continued in a rather heterogeneous way. However, in July, the inflation expectation figures diverged from this downward trend that started in October 2001.
- ii. According to the latest figures of CBRT Expectation Survey, expectations for the end-year inflation have been in line with the targeted end-year inflation rate of 35 percent. In the following months, should the economic program be implemented fully, inflation expectations are predicted to stay at the target level.

The nominal depreciation in Turkish lira coupled with recovery signs in the domestic demand in the last few months will be influential in shaping the expectations about public and private sector manufacturing industry price increases.

Notwithstanding the positive developments in inflation realizations and decline in expectations in the April-June period, there are some risk factors to the inflation outlook for the following months. These risk factors are :

## II. MONETARY AND EXCHANGE RATE POLICY

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

As of the beginning of 2002, the conduct of monetary policy with base money as the nominal anchor has continued under floating exchange rate regime with implicit inflation targeting. In this context, in order to attain its final goal - price stability, CBRT has been setting short-term interest rates in line with the inflation target and inflation forecasts. New steps have been taken in the financial front in order to achieve stability.

In determining short-term interest rates, beside inflationary expectations and the developments of the fundamental variables of inflation, pricing behavior of public and private sectors are also taken into account. In accordance with these evaluations and the fall in inflation and future inflationary expectations, CBRT reduced short-term interest rates on April 8 and April 30, 2002 (Table II.4.I).

In the previous period, remuneration of the required reserves were re-arranged to include not only TL deposits but also other liabilities and foreign exchange deposits with the aim of decreasing the intermediary costs of the banking system and enhancing the flexibility of the foreign exchange liquidity management. In the current period, in view of the fall in interest rates and broadened base subject to required reserves, required reserves ratio on TL liabilities were lowered to 22 percent as of May 24, 2002. Interest rates on required reserves for foreign exchange liabilities were decided to be determined weekly, based on 2 day-notice foreign exchange deposits. As of July 9, 2002, the interest rate to be applied on TL required reserves was increased by 3 points to reach 25 percent in order to decrease the intermediary costs of the banking system and to support effective and efficient functioning of the banks.

In order to provide smooth functioning of the exchange rate policy by removing excess fluctuations and

decreasing exchange rate risk, CBRT closely monitors the foreign exchange markets in accordance with its duty and competence. Within this framework, as of May 1, 2002, "Foreign Exchange, Banknotes and Forward Transactions Monitoring System" was put into effect to watch the daily foreign exchange and banknotes transactions of domestic and foreign banks and private financial institutions operating in Turkey. Furthermore, as of July 1, 2002, "late liquidity window facility" has been put into practice in accordance with the function of the CBRT as the "lender of last resort". Within this framework, CBRT lending rate between 16:00-16:30 hours was set at 65 percent. Moreover, as of the aforementioned date, gradual withdrawal process of the CBRT as a blind broker from the Interbank Money, Foreign Exchange and Banknotes Markets has been initiated without causing a liquidity limitation for the banks.

The unexpectedly positive performance of the balance of payments and the reverse currency substitution led to an excess foreign exchange supply in the first half of the year. In addition to the above reasons as well as taking into consideration the positive impacts of a stronger reserve position on reinforcing market confidence in the implementation of the program, CBRT started to conduct foreign exchange buying auctions as of April 1, 2002 in order to increase the reserve level. Two measures were taken in order to compensate for the adverse effects of the buying auctions on the functioning of the floating exchange rate regime. First, the method of determining indicative exchange rates was modified and calculations were started to be taken 6 times a day. Second, a special foreign exchange buying auction was designed and put into effect.

Within this framework, foreign exchange buying auctions were decided to be held as of April 2002 with a maximum daily auction amount of USD 20 million. In order to compensate for the cumulative foreign exchange amount that could not be bought due to no bidding or insufficient bidding, the daily auction amount was decided to be raised to USD 40 million starting from the first auction following the failed auction. In addition to existing instruments, TL Deposit Buying Auctions in the

Interbank Money Market with a four-week standard maturity are used to sterilize the excess liquidity in the market due to foreign exchange buying auctions. However, the recent developments in the foreign exchange market led to a temporary suspension of the foreign exchange buying auctions as of July 2002. However, TL Deposit Buying Auctions with four-week standard maturity will continue.

In accordance with one of the main priorities of the program, the goal to enhance financial stability, a banking operation was launched following the February 2001 crisis in order to improve the financial structure of the public and fund banks. To this end, the aforementioned banks that were granted state domestic borrowing notes by the Treasury were provided with liquidity in return for the outright purchase of the above notes by the CBRT through repo transactions. As the liquidity positions of these banks have improved with early redemptions of the Treasury, the repo transactions have gradually diminished as of February 2002 and were terminated in April 2002.

**The operation for the short-term financing of the public and fund banks by the CBRT that started following the February 2001 crisis has come to an end.**

Meanwhile, new regulations have been introduced to enable the CBRT to provide the private banks under "Recapitalization Program"-the program aimed at raising capital requirement ratios to international standards- with liquidity should they need so until the recapitalization process is completed. To this end, in order to meet their short-term liquidity needs, the abovementioned banks are privileged to make repo transactions with the CBRT.

**CBRT will continue to provide liquidity to private banks under "Recapitalization Program".**

The implementation of setting indicative target and performance criterion with respect to Base Money, Net Domestic Assets and Net International Reserves items of the CBRT balance sheet continued in April-June 2002.

In this respect, the targets set for the above items in the Letter of Intent dated January 18, 2002 have been attained (Table II.1.1 and Table II.1.2).

**Table II.1.1. Performance criteria and indicative targets for Base Money and Net Domestic Assets (TL, Trillion)**

	Base Money		Net Domestic Assets	
	Ceiling <sup>(1)</sup>	Realization	Ceiling <sup>(1)</sup>	Realization
February 28, 2002 <sup>(2)</sup>	8.250 <sup>(P)</sup>	7.823	26.100 <sup>(1)</sup>	24.318
March 31, 2002	-	8.207	-	25.259
April 30, 2002	8.900 <sup>(P)</sup>	8.680	27.700 <sup>(1)</sup>	25.197
June 30, 2002	9.089 <sup>(P)(3)</sup>	9,009	28.739 <sup>(1)(3)</sup>	26.374
Sep. 30, 2002	10.600 <sup>(1)</sup>		31.300 <sup>(1)</sup>	
Dec. 31, 2002	10.850 <sup>(1)</sup>		33.300 <sup>(1)</sup>	

(1) The ceilings are calculated based on the averages of the stocks of the dates mentioned and 5 working days immediately preceding each of these dates.

(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) Pamukbank has been exempted from the liability to deposit a required reserve amounting to TL 161 trillion with CBRT as it has been transferred to the SDIF. Therefore, the ceiling for base money for end-June, which was specified as TL 9,250 trillion in the Letter of Intent dated January 18, 2002, has been rectified to read TL 9,250 trillion; and Net Domestic assets set as TL 28.900 has been revised to read TL 28,739

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

	Floor	Realization
February 28, 2002	-6.500 <sup>(P)</sup>	-4.907
March 31, 2002	-	-5.292
April 30, 2002	-7.200 <sup>(P)</sup>	-4.926
June 30, 2002	-7.800 <sup>(P)</sup>	-5.755
September 30, 2002	-8.500 <sup>(1)</sup>	
December 31, 2002	-9.700 <sup>(1)</sup>	

(P): Performance criterion,

(1): Indicative target

**The targets for Base Money, Net Domestic Assets and Net International Reserves were achieved in April-June 2002 period.**

## **II.2. Developments in the Central Bank Balance Sheet**

The performance criteria and indicative targets on Central Bank balance sheet items specified in the Letter of Intent dated January 18, 2002 were achieved by the end of April and June (Table II.1.1 and Table II.1.2).

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

	29/03 2002	28/06 2002	28/06 2002
	CONSTANT	CONSTANT	CURRENT
<b>I- BASE MONEY (a+b+c)</b>	<b>8,425</b>	<b>9,029</b>	<b>9,029</b>
a-Currency Issued	5,563	6,592	6,592
b. TL Required Reserves	1,824	1,389	1,389
c. Free Deposits	1,039	1,048	1,048
<b>II-NET FOREIGN ASSETS (A+B+C)</b>	<b>-2,100</b>	<b>-151</b>	<b>-1,196</b>
A-Net International Reserves (1+2+3)	7,357	9,041	10,781
1-Gross Foreign Assets	30,304	31,346	36,674
2-Gross International Reserve Liabilities	-22,947	-22,305	-25,892
- FX Deposits of Banking Sector	-9,736	-9,278	-10,549
- IMF	-11,411	-10,962	-12,849
Use of Credit		-10,758	-12,610
SDR Allocation		-204	-239
- Other Liabilities <sup>(1)</sup>	-1,799	-2,065	-2,494
3-Net Forward Position		0	0
B- Medium Term FX Credits (net)	2,024	2,030	2,259
C-Other (FX Lending excluded) <sup>(2)</sup>	-11,481	-11,222	-14,236
<b>III-NET DOMESTIC ASSETS</b>	<b>10,525</b>	<b>9,180</b>	<b>10,224</b>
A- Treasury Debt	30,541	27,904	29,274
a-CBRT's Portfolio	30,588	28,165	29,535
aa. Gov.Dom.Debt Inst. prior to Nov.5, 2001	30,489	28,142	29,512
ab. Gov.Dom.Debt Inst. purchased from secondary market	99	23	23
b-Other	-47	-260	-261
B-Public Sector Deposits (TL)	-1,007	-1,043	-1,043
C-FX Deposits of Non-bank Sector	-3,099	-2,905	-3,319
D-Deposits of Public Funds	-164	-86	-86
E-Deposits of Non-bank Sector	-32	-24	-24
F-Cash Credits to the Banking Sector	762	761	764
G-Open Market Operations (net)	-6,214	-8,655	-8,655
H-Other	-9,941	-5,175	-5,175
I-Revaluation Account	-512	-1,598	-1,511
J-IMF Emergency (Treasury)	191	0	0
K-FX Lending <sup>(3)</sup>	0	0	0
NDA (1)	10,525	9,180	
Treasury Liabilities to the IMF (2)	13,236	15,456	
Treasury FX denominated borrowing with an original maturity of less than 1 year (3)	1,866	1,871	
<b>NET Domestic Assets (Program def.) (1+2+3)</b>	<b>25,627</b>	<b>26,507</b>	

1) Other Liabilities = Overdrafts + Letters of Credits + Short Term Credits + Dresdner Account(1 year)

2) Other=Dresdner Account(2 year)+Dresdner Account(3 year)+Assets and Liabilities in FX(net)

3) CBRT's FX lending, which was included in NFA before, has been put under the heading of NDA.

May 31, 2002. The IMF item under Gross International Reserves has been subdivided into "Use of Credit" and "SDR Allocation" items in order to maintain a detailed presentation under Net Foreign Assets. Similarly, the FX Deposits of the Public Sector item under Net Domestic Assets has been subdivided into "Reserve Tranche Facility" and "Treasury's Liabilities due to SDR Allocation" items. "Reserve Tranche Position" item has been inserted under Gross International Reserves.

In accordance with a protocol signed between the Treasury and the CBRT on May 10, 2002, TL 3,002 trillion portion of the CBRT'S profit to be transferred to the Treasury was utilized for the coupon and principal payments of the government papers that were previously issued to the Bank. This transaction both reduced the Securities Portfolio under the assets and profit under the liabilities in the CBRT balance sheet. Therefore, this transaction, whose impact is cleared by the reverse movements of two items under Net Domestic Assets, did not bring about monetization.

The movements in Base Money item, which constitutes the liability side of the CBRT balance sheet, have been mainly determined by the seasonal peculiarities of the currency issued sub-item in May and June, like in other periods of the year. The period including end-May and June has been a period in which factors other than the seasonal properties of the currency issued item have been influential in the developments in the base money item. Unlike preceding periods, the developments in the required reserves and free deposits sub-items started to be more influential in the size and seasonal movements of base money item in the said period. Currency issued, which is the most important sub-item of base money, displayed a high level of increase in the salary payment period of June. Whereas, the contraction in the currency issued has been limited and delayed in the following days. In this period, recovery in economic activity and tourism revenues beyond expectations has been the factors influencing the increasing demand for currency issued.

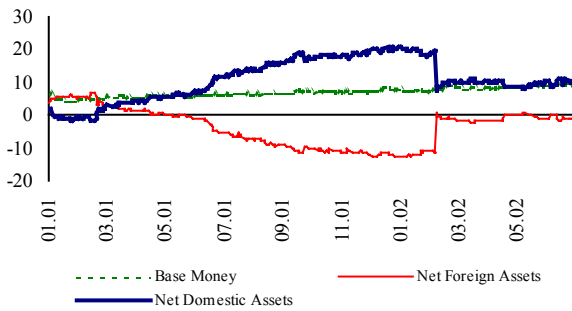
In this period, two important developments have been the main sources of the movements in required reserves and

With the aim of maintaining accord with the International Accounting Standards, some changes have been made on the CBRT balance sheet to be valid as of



free deposits that are the other two sub-items of base money. The first one of these developments is the new regulation on required reserves and liquidity ratios that went into effect starting from the tables dated 10 May, 2002. The second one is the gradual liquidation of the required reserves of Pamukbank and Tarihbank. The new regulation, which can be summarized as the abolishment of the distinction between deposits and other liabilities, expansion of the coverage on which averaging is based and the extension of maintenance period from one week to two weeks, is expected to influence the seasonal movements and the volatility of base money without changing its average level. As known, the factors such as seasonal movements in currency issued, tax payments and auction-redemption differences of the Treasury were among the causes of temporary liquidity imbalances in the banking sector. The new regulation enables a flexible liquidity management that allows the banking system to meet more of its short-term liquidity needs by its own sources under the assumption of rational preferences.

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



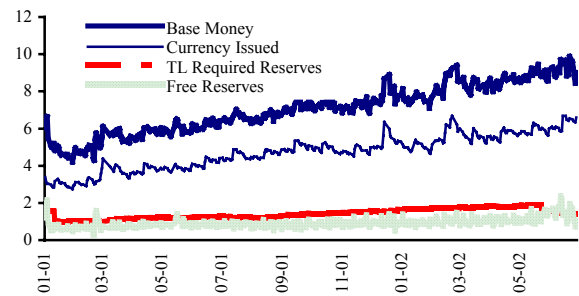
**The new regulation on required reserves and liquidity ratios is expected to influence the seasonal movements and the volatility of base money without changing its average level.**

Influenced by the aforementioned movements, the Base Money increased by 7 points by the end of June compared with the end-March figures. Affected by the salary payments, the Currency Issued, which is a sub-item of Base Money, displayed an increase in the middle of the month and then contracted towards the end of the month. Increase in Currency Issued was 18 percent at the

end of June compared with the end of March. Required Reserves item, decreased by 24 percent at the end of June compared with its end-March figure as a result of the above mentioned developments.

**Base Money rose by 7 percent as of end of June compared to its end-March value.**

Figure II.2.2. Base Money and its Sub-items (TL, quadrillion)



Net Domestic Assets, which is one of the two main determinants of the Base Money, declined by 0.4 percent in the same period. Securities Portfolio item of Treasury's Debts under Net Domestic Assets declined by 7 percent compared with its end-March value as a result of the profit transfer agreement signed between the Treasury and the CBRT. Open Market Operations (net) item moved in line with the liquidity withdrawal by reverse repo and became TL -8,655 trillion at the end of June. The "Other" item, which includes the CBRT's profits and losses, declined in absolute terms on May 10, 2002 as a result of the profit transfer agreement between the Treasury and the CBRT.

Figure II.2.3 NDA and its Important Sub-items (TL Quadrillion)

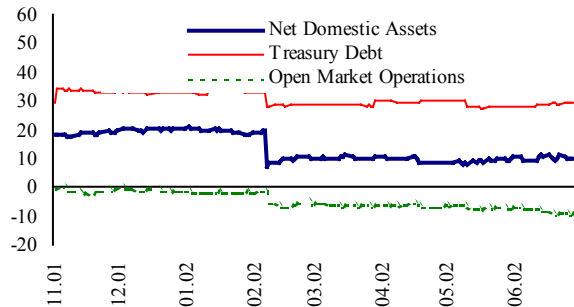
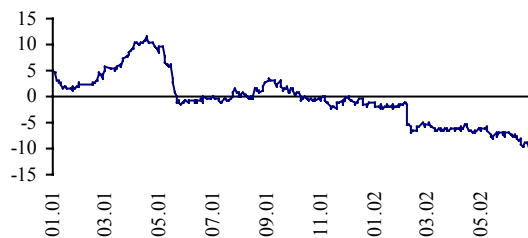


Figure II.2.4 Open Market Operations (Net, TL quadrillion)



\*(+) values indicate liquidity injection to the market

Net Foreign Assets, which is the second determinant of the Base Money and traced by fixed cross exchange rates, turned to positive by the release of IMF credit on April 18, 2002 and shifted from USD -1.459 million of USD at the end of March to USD 95 million at the end of April. CBRT purchased USD 795 million by foreign exchange buying auctions on April-June period. These foreign exchange buying auctions and the sale of foreign exchange to the Treasury for Treasury's external payments were the main determinants of the movements in the Net Foreign Assets, which shifted to USD -105 million at the end of June.

**The main determinants of the movements in Net Foreign Assets were foreign exchange buying auctions and the sale of foreign exchange to the Treasury for Treasury's external debt payments.**

With the agreement signed between CBRT and Treasury on May 6, 2002, the SDR 361,500,000 amount of IMF Emergency Loan, which was presented as the CBRT's liability has been presented as the Treasury's Liabilities as of June 21, 2002.

### II.3. Developments in Monetary Aggregates

As of June, M1 and M2 monetary aggregates increased by 8.5 and 3.1 percent in real terms, respectively compared with the end-March figures. The highest real increase was observed in M2X mainly due to the increase of the Turkish lira value of the FX deposits as a result of the depreciation of Turkish lira in last months (Table II.3.2).

**M1 and M2 increased by 8.5 and 3.1 percent in real terms, compared with the end-March figures respectively.**

Table II.3.1. Monetary Aggregates (TL trillion)

	2001 APRIL	2001 MAY	2001 JUNE	2001 DEC.	2002 APRIL	2002 MAY	2002 JUNE
M1	8,560	8,728	10,053	11,073	11,003	12,021	12,871
Currency in circulation	3,382	3,473	3,842	4,801	5,274	5,242	5,922
Sight Deposits	5,178	5,254	6,212	6,272	5,728	6,780	6,950
M2	37,861	38,256	40,366	46,986	50,757	52,130	53,345
Time Deposits	29,301	29,528	30,312	35,913	39,755	40,108	40,473
M2X	74,966	75,313	83,966	104,133	104,851	109,868	117,240
FX Deposits	37,105	37,057	43,601	57,147	54,094	57,738	63,896
M2XR	80,816	81,033	89,762	106,930	108,097	113,527	120,947
Repo	5,850	5,720	5,795	2,798	3,246	3,659	3,707
CPI (1994=100)	4,171	4,382	4,519	5,756	6,370	6,407	6,445
US dollar	1,224,807	1,111,611	1,267,415	1,439,567	1,349,897	1,412,893	1,602,733
EURO	1,103,795	955,985	1,078,950	1,268,115	1,210,453	1,324,305	1,577,410

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

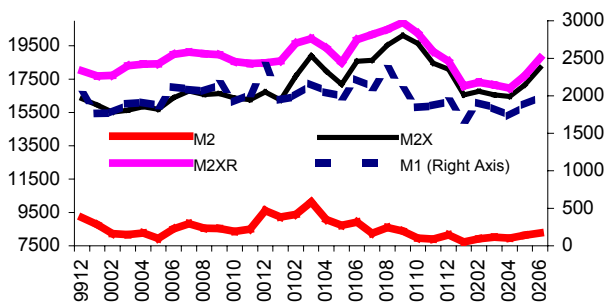
Table II.3.2. Monetary Aggregates, Real Percentage Change

	ANNUAL			CUMULATIVE			COMPARED WITH MARCH		
	2002			2002			2002		
	APRIL	MAY	JUNE	APRIL	MAY	JUNE	APRIL	MA Y	JUNE
M1	-15.8	-5.8	-10.2	-10.2	-2.5	3.8	-6.1	2.0	8.5
Currency in circulation	2.1	3.2	8.1	-0.7	-1.9	10.2	5.1	3.9	16.7
Sight deposits	-27.6	-11.8	-21.5	-17.5	-2.9	-1.0	-14.6	0.5	2.4
M2	-12.2	-6.8	-7.3	-2.4	-0.3	1.4	-0.7	1.4	3.1
Time deposits	-11.2	-7.1	-6.4	0.0	0.3	0.7	0.9	1.2	1.5
M2X	-8.4	-0.2	-2.1	-9.0	-5.2	0.6	-0.6	3.6	9.9
FX deposits	-4.5	6.6	2.8	-14.5	-9.2	-0.1	-0.4	5.7	16.3
M2XR	-12.4	-4.2	-5.5	-8.7	-4.6	1.0	-1.0	3.3	9.5
Repo	-63.7	-56.3	-55.1	4.8	17.5	18.3	-13.8	-3.4	-2.7

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

In June, TL deposits increased by 1.5 percent in real terms compared with end-March figures. The TL value of the FX deposits rose by 16.3 percent in the same period. However, the increase in the USD value of the FX deposits has been limited in this period and FX deposits reached USD 40.9 billion in June from its USD 40.3 billion level in March (Figure II.3.2). As a consequence, the share of FX deposits in M2X rose to 54.5 percent in June from its level of 51.5 percent at the end of March.

Figure II.3.1. Real Monetary Aggregates (TL, billion)

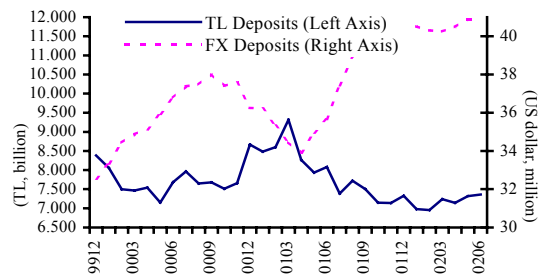


\* CBRT "Weekly Press Bulletin", The provisional data was used for the last Friday of each month.

The share of TL denominated sight deposits in total TL deposits did not change during the March- June period and amounted to 14.5 percent. The ratio of repo

transactions to total TL deposits was 7.8 percent at the end of June.

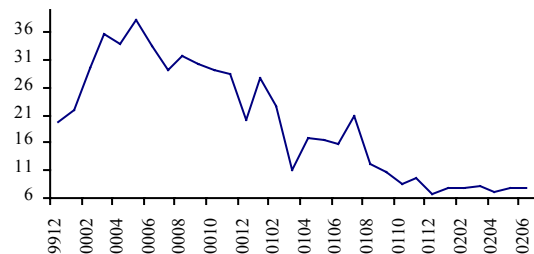
Figure II.3.2 TL Deposits and FX Deposits, real



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

M2XR, which includes M2X and the repo transactions between banks and depositors, increased by 9.5 percent in real terms compared with end-March figures. The rapidly decreasing repo transactions mainly due to the factors of the contraction in balance sheets of the banks after February crisis, the decrease in the short-term borrowing requirements of public and SDIF banks within the framework of the restructuring of the banking system and the increase in withholding tax on repo transactions after May 2001, started an upward trend in May 2002. The maturity of the repo transactions has generally been shorter than one month when the previous periods are considered. Therefore, the increase in the volume of repo transactions can be attributed to demand for short-term investment instruments due to increased risk perception (Figure II.3.3).

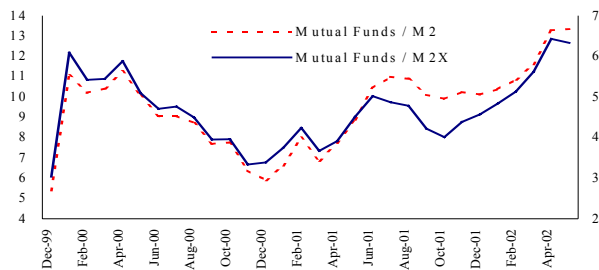
Figure II.3.3. The share of repo transactions in TL deposits (Percentage)



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

It is observed that economic agents have tended towards mutual funds in their investment decisions in recent years. More than 95 percent of the portfolio volume of these funds consists of government securities and reverse repo transactions. These investment instruments, which are quite similar to time deposits from a functional point of view, might be considered as a substitute for the subcomponents of M1 as they have a high degree of liquidity. In this respect, developments in the mutual funds are believed to be effective on developments in monetary aggregates. When the ratio of mutual funds to M2 is considered, it is observed that this ratio has an increasing trend (Figure II.3.4). While the ratio of mutual funds to M2 was 11.6 percent in March, this ratio reached 13.3 percent in May. Although the ratio of mutual funds to M2X declined in May compared with its level in April due to the depreciation of TL, this ratio went up to 6.3 percent as of May from its level of 5.6 in March.

Figure II.3.4. Mutual Funds / M2 and Mutual Funds / M2X (percentage)



## II.4 Developments in Interest Rates

The last changes to the short-term interest rates, which are determined by the Central Bank considering the developments in inflation and the developments in the macroeconomic variables that affect future inflation, were made on April 30, 2002. Accordingly, the interest rate that the Central Bank uses in its O/N borrowing transactions in Interbank Money Market and ISE Repo-Reverse Repo Market was reduced to 48 percent from 51 percent (Table II.4.1).

Table II.4.1. Interest Rate Quotations of the CBRT (simple, percentage)

	Feb. 20, 2002	March 14, 2002	April 8, 2002	April 30, 2002
O/N-Borrowing	57	54	51	48
O/N-Lending	62	61	58	55
1-Week Borrowing	59	55	52	49

Favorable developments in inflation in the first months of the year, appreciation of Turkish lira in the first four months of the year, absence of a revival of domestic demand that may have a boosting effect on inflation, cruising of public prices in concordance with the year-end inflation target, positive effects of input prices on the inflation have been effective in the interest cut dated April 30, 2002. Meanwhile, another important factor on the interest rate cut of April 30, 2002 was the convergence of the inflation expectations towards the year-end target, mainly as a result of the resolute implementation of the economic program and achievement of the envisioned targets.

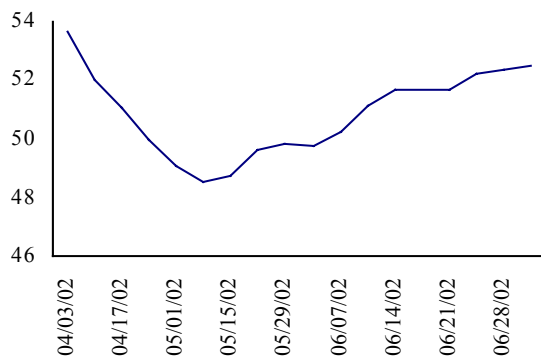
**The Central Bank cut its short-term interest rates on April 30, 2002 considering the appreciation of Turkish lira in the first four months of the year, absence of a revival of the domestic demand that may have a boosting effect on inflation, public price movements in accord with year-end inflation target and the convergence of the inflation expectations towards year-end target.**

The downward trend in inflation continued in May even when the seasonal factors are considered. Although there was no deterioration in economic fundamentals, rising uncertainty perception starting from mid-May brought about considerable volatility to the exchange rates and interest rates in the bond market. The CBRT Expectations Survey pointed out to a limited worsening in the inflation expectations starting from the second period of June. Despite this limited worsening, the inflation expectations contain the outlook that the year-end target is likely to be attained. Notwithstanding the favorable developments in inflation and the inflation expectations that are consistent with the year-end target, the Central Bank has not changed the short-term interest rates after April, 30, 2002 taking into consideration the

depreciation of Turkish lira in the last two months and possible effects of public price increases on future inflation. As it was stated in the "Introduction" section, wide acceptance of the currently implemented economic program by the economic agents as the optimal choice due to its outcomes, limits the possibility of the interruption of the program. It would not be too optimistic to expect that the risk perceptions would decline as this important point is understood more clearly. In such a case, the inflationary effects of the negative developments that are observed in the markets recently on inflation would be limited.

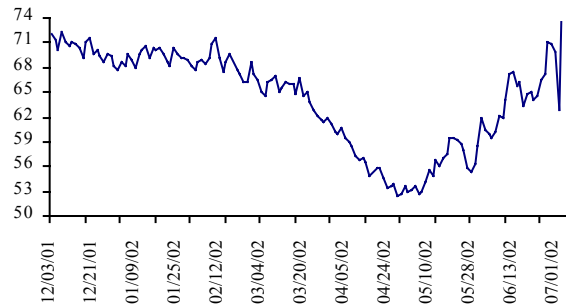
The Central Bank started to hold 4-week Turkish lira deposit buying auctions as of the beginning of April in order to enhance the effectiveness of its sterilization efforts. The interest rates in these auctions declined until May 8, 2002 parallel to the April 8 and April 30, 2002 interest rate cuts and the developments in other markets. The interest rates started to rise since then and went up to 52.5 percent on July 3, 2002 from its 48.5 percent level on May 8, 2002 (Figure II.4.1).

Figure II.4.1. 4-Week Turkish lira Deposit Buying Auction Interest Rates (simple, percentage)



The interest rates in ISE Bonds and Bills Outright Purchases and Sales Market displayed a declining trend until the end of April parallel to the macroeconomic developments, achievement of the fiscal and monetary targets of the economic program, favorable developments in inflation and the interest rate cuts of the Central Bank. This declining trend manifests itself most clearly in March and April (Figure II.4.2).

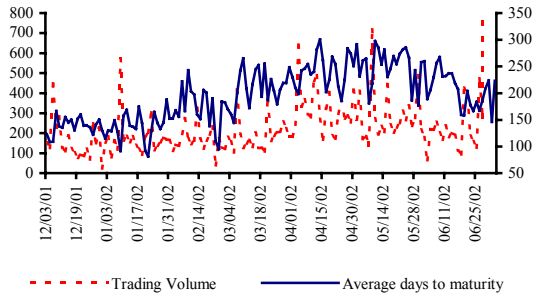
Figure II.4.2. ISE Bonds and Bills Outright Purchases and Sales Market interest rates (weighted average, compound, percentage)



**The bond and bills interest rates have started to climb due to the increased political uncertainty since mid-May.**

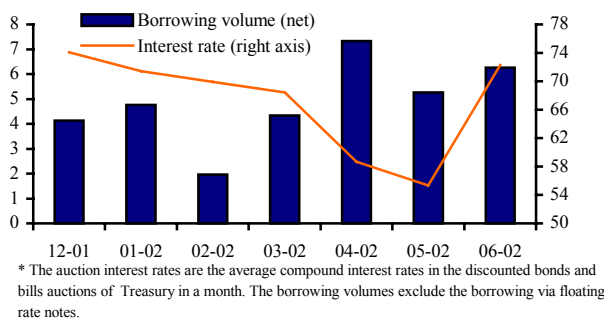
The increase in uncertainty perception since mid-March instigated rise both in foreign exchange rates and interest rates in ISE Bonds and Bills Outright Purchases and Sales Market. While the average interest rate on bills and bonds was 52 percent at the end of April, it reached 70 percent at the end of June with an approximate increase of 18 points (Figure II.4.2). In an environment where the economic agents are expecting a decrease in inflation in the near future, the main reason behind the rise in interest rates of bills and bonds is believed to be the increasing risk premium due to uncertainty perceptions. With the increase in the interest rates, a decline in transaction volumes coupled with a decrease in the days to the maturity of the bills and bonds has been observed starting from the second half of June (Figure II.4.3).

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



Similarly, it can be observed from the Treasury auctions that the average monthly auction rate has declined throughout the first six months. This trend is more apparent in April. Although the average monthly auction interest rates continued to fall in May, the interest rates in the auctions in the last period of the month turned out to be higher than the rates of the auctions in early May. The average compound interest rates increased significantly and reached 72.3 percent in June. (Figure II.4.4.)

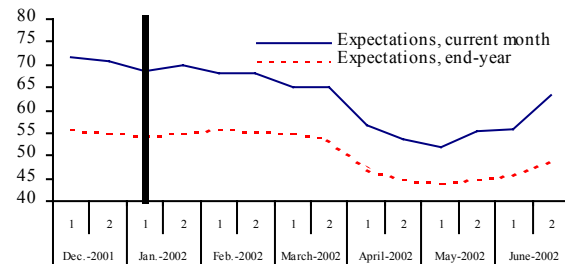
Figure II.4.4. Treasury Auction Interest Rates (percent) and Borrowing Volume(net, TL quadrillion)\*



The current month and year-end expectations of 3-month Treasury auction interest rates that reflect the market expectations of bonds and bills interest rates declined until the first period of May parallel to the achievement of the economic program targets, favorable developments concerning the inflation rate and decline in the short-term interest rates. However, deterioration in the expectations has been observed from the second period of May and this deterioration has become more

apparent in the current-month expectations. The current-month expectations, which declined to 51.8 percent in the first period of May, rose to 63.2 percent in the second period of June (Figure II.4.5).

Figure II.4.5. CBRT Survey of Expectations Three-Month Treasury Auction Interest Rate Expectations (percentage, compound)

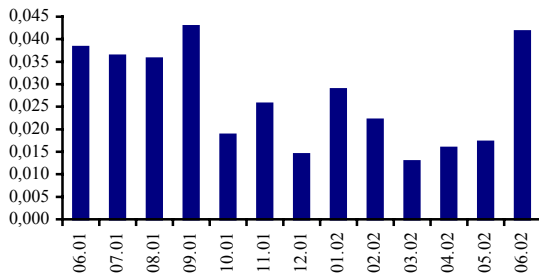


The O/N interest rate expectation, which declined to 47 percent in the first half of June, went up to 48 percent in the second half, which was the level of realized O/N interest rates in that period. In spite of the expectations for O/N interest rate which may be accepted as an opportunity or funding cost for investment in bonds and bills, the increase observed in the expectations for 3-month Treasury auction interest rates might be attributed to the increase in risk premium due to the uncertainty in the markets. Moreover, the increase in both the level and the volatility of the exchange rate affected the increasing trend observed in the interest rates as they are regarded as indicators of funding cost and uncertainty. The end-year expectation for Treasury auction interest rate, which was 44 percent in the first period of May reached 49 percent in the second period of June.

### II.5. Developments in Foreign Exchange Markets

Through the first quarter of 2002, resolute implementation of fiscal and monetary policies in line with the predetermined targets, increasing foreign financing possibilities, realization of structural reforms and developments in balance of payments beyond expectations brought along the desired stability to the exchange rates (Figure II.5.1). Stability in exchange rates and the appreciation of TL, which was achieved without interest rate changes towards affecting the level of exchange rate of FX interventions by the CBRT showed that the market confidence was instilled. Improvements in macroeconomic fundamentals further strengthened this favorable process. Stability in exchange rate markets continued until the end of April when Central Bank started to hold auctions in line with its previous aim and principles. The total amount of foreign exchange purchased by the Central Bank through daily auctions with USD 20 million daily purchasing amount was USD 281.2 million. As of the end of April, risk perception in markets started to increase and the TL began to depreciate because of the declarations concerning the worries about overvaluation of TL, disputes about laws intended for harmonization with EU legislation, conflicts between governing parties and other negative political developments. The effect of monthly current account deficit on foreign exchange rates is believed to be relatively limited in April.

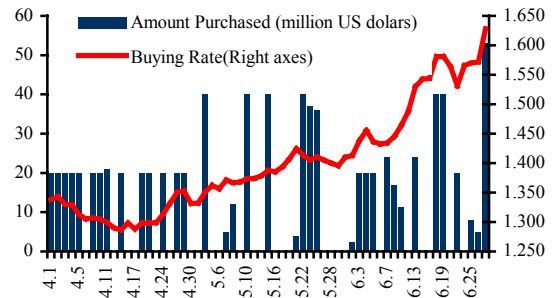
Figure II.5.1. Monthly Exchange Rate Volatility



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

Depreciation in TL continued through May as a result of the same effects. While USD/TL parity reached its February level in May, Euro/TL parity changed in favor of Euro and Euro appreciated more vis-à-vis TL compared with USD. In May when depreciation of TL was more moderate, Central Bank purchased USD 256.8 million via the FX purchase auctions in order to sterilize the excess liquidity in the foreign exchange markets. At the end of May, it was announced that foreign exchange buying auctions would be held in June as well and that the implementation initiated in May concerning the compensation for auctions in which the demand realized less than the predetermined level by increasing the amount correspondingly in the consecutive auction would also be valid in June auctions.

Figure II.5.2. FX Purchase Auctions



In June, exchange markets were not led by macroeconomic fundamentals but by the expectations seriously deteriorated by political uncertainties. Notwithstanding the promising inflation rates, increasing signs of the recovery and the implementation of fiscal and monetary policies without any concession from the targets, depreciation in TL accelerated in June. Increase in the expected level of interest rates and exchange rates revealed by the Central Bank Expectations Survey in June showed the deterioration more clearly. Year-end expected level of TL/USD parity climbed up to 1,800,000 in June from its 1,750,000 level in May. While the inflation expectations were still in line with the targets and there was no deterioration in current account movements parallel to the rising exchange rate, the obvious deterioration in both the current level and the

expected level of exchange rates indicates that the reason is the political uncertainty perception. As of June, as a result of the aforementioned developments, USD/TL and euro/TL increased 15 percent and 22 percent, respectively. Central Bank purchased 309.7 million USD dollars from the markets in June. The Central Bank announced that it would temporarily suspend the auctions in July due to the increasing effects of political uncertainty on the markets and the magnified results of these effects due to the contraction in the markets.

*Figure II.5.3. Exchange Rate(USD/TL, Average of Buying-Selling Rates)*



It is believed that the current deterioration in FX markets stemming from political uncertainty perceptions could improve again provided the political uncertainty scatters before doing serious damages to the economic fundamentals. The developments in June show that the economic agents position themselves according to the political developments that have direct but short-term effects on the economy rather than current macroeconomic indicators. As well known, in recent years, some reforms have been realized, which limited legally and functionally the direct intervention possibilities of political authorities in the economy. The markets have been convinced that stability could be lent in floating exchange regime and they adapted themselves to floating exchange rate conditions, and now it is believed that the markets would adopt a view that the arrangements that are being carried out would make the market less vulnerable to adverse political developments.



### III. DEVELOPMENTS IN FINANCIAL MARKETS

#### III.1. The Banking Sector

Important developments have been observed since “Banking Sector Restructuring Program” was announced in May 2001.

The resolution of the SDIF banks was mainly completed and public banks narrowed in size both in terms of balance sheet and the number of their branches and personnel. Moreover, with reports prepared by the Banking Regulation and Supervision Agency, the balance sheets of the public banks and SDIF banks became more transparent.

The resolution of the problems of the SDIF banks and public banks was an important development to maintain the stability of the financial markets that is also beneficial for the private banks. However, private banks lost their capital significantly with the increase in their non-performing assets and high loss from foreign exchange transactions after financial crises in recent years and adoption of floating exchange rate system in February 2001. When the critical importance of banks in financial stability and economic growth is considered, acceleration of the restructuring of the private banks, which are thought to be more active compared to the public banks from now on, gained priority.

The “Bank Capital Strengthening Program” implemented by BRSA with the provisional Article 4 of the Banks’ Act No. 4389 provides for addition of new capital to private banks by SDIF. The first phase of the program, namely the “audit and assessment phase”, has been completed and balance sheets of the private banks have been reviewed after a three-step audit.

After the balance sheets of 27 banks passed from the three-step audit, the capital needs of 25 out of these 27 banks- excluding Pamukbank and Milli Aydın Bank that were taken over by the SDIF- have been determined as TL 1,326 trillion. Fortunately, with the positive

developments in the first half of 2002, the total additional capital need of the banks dropped down to TL 224 trillion as of June 21. The developments that have promoted decrease in additional capital needs in 2002 include cash capital injection by banks, the collection of non-performing loans, the decrease in market risk due to banks closing their balance sheet open positions and the increase in the value of securities portfolio with decline in interest rates. The capital need is to be covered by the banks and SDIF contribution will be considered only if necessary.

**According to balance sheet of banks approved by BRSA, the additional capital need of private banks is TL 224 trillion.**

The asset size of the 25 private banks approved by BRSA after the audit phase of the bank recapitalization program has been determined as TL 102 quadrillion (Table III.1.1). The approved balance sheets reveal more clearly the impact of the economic crisis on loans and non-performing loans of 25 banks. Loans, which are accounted under credit item and are past due, have been transferred to non-performing loans and their interests and incomes as well as accrued income and discounts have been written-off.

It is observed that inflation accounting has had important effects on the non-monetary items such as subsidiaries, affiliates, and fixed assets. While the share of TL denominated items in balance sheet was 5 percent before inflation accounting and auditing, this share reached 9.6 percent after inflation accounting and auditing.

*Table III.1.1. Change on the Selected Asset Items (TL, Trillion)*

	Pre-Audit December 2001*	Post-Audit December 2001*
Loans	29.182	24.032
Past Due Loans (Net)	1.246	5.238
Past Due Loans (Gross)	2.334	7.821
Subs. Aff. and Fixed As..	11.468	10.942
Total Asset	105.692	102.119

\*With inflation accounting

Source: BRSA

The inflation accounting application has had impact on the own funds item of the liabilities (Table III.1.2). Reevaluation of paid-up capital and reserves items led to creation of a capital reserve.

**Table III.1.2. Change on the Owners Equity (TL Trillion)**

	Pre-Audit December 2001*	Pre-Audit December 2001**	Post-Audit December 2001**
Owners Equity+Profit	9.613	14.042	10.574
Capital Reserve	0	12.643	13.564
Profit (Loss) for Period	1,155	-2,130	-4,111
Profit (Loss) for Prev.Yr.	85	-3,837	-6,530

\*With inflation accounting

\*\* without inflation accounting

Source: BRSA

Despite the increase in the risk-weighted assets, capital adequacy ratio, which takes into account the amounts subject to market risk with inflation accounting, has increased. The capital adequacy ratio for the entire system, which was 14.2 percent and reached 14.8 percent after auditing. After reevaluation of balance sheets of banks with inflation accounting, capital reserves, which resulted from inflation accounting under owner's equity positively affected the capital adequacy ratio.

Pamukbank, whose capital adequacy ratio was under 0 percent, was taken over by Savings Deposit Insurance Fund on June 18, 2002 after the three-phase auditing according to the "Bank Capital Strengthening Program". As of December 2001, the bank's period loss was determined as TL 4 quadrillion, and the minimum resource required to reach the standard capital adequacy ratio of 8 percent was TL 2.9 quadrillion.

Three phase-audit carried out within the framework of the program on the balance sheets of the private banks demonstrated that amount of the past due loans of the banks were higher than it was shown in the pre-audit balance sheets. This result showed the necessity of restructuring of the debts to clean the non-performing assets of banks.

Exchange rates and interest rates on the secondary securities markets have increased due to the high political uncertainties that started in May. It is expected

that these developments will increase losses from foreign exchange operations and capital market operations on the balance sheets.

There has occurred a problem regarding comparison between the balance sheets of private banks covered by the recapitalization program and other banks in the banking sector and previous period balance sheets. By July 2002, all banks will prepare their financial tables according to inflation accounting. Therefore, comparing balance sheets with the data of the previous periods will be a problem for the banks.

#### **Developments in the number of Banks and Branches**

Weakened by the financial crises in recent years, Turkish banking sector has witnessed many mergers, sales and liquidations of banks provided for in the economic program and decrease in the number of banks has continued in the first half of 2002.

As a result of these developments, the total number of the banks, which was 61 at the end of 2001, dropped down to 57 in June 2002. When the breakdown of banks by is analyzed, the number of the deposit banks decreased from 46 to 43 and the number of the development and investment banks from 15 to 14 during this period. In June, of the total number of deposit banks, 3 were public banks, 20 were private banks and 5 were banks taken over by the SDIF.

#### **The decrease in the total number of banks continued in June 2002.**

The banking sector continued to decrease the number of branches and personnel with the aim of decreasing personnel and operating expenses at the beginning of 2002. While total number of the domestic branches was 6,909 at the end of 2001, it dropped to 6,835 in January 2002. During this period, the number of the personnel decreased from 140,785 to 136,970. The decrease in the number of the personnel in the sector was due to the cut downs in the number of personnel in the public banks and this process still continues.

BOX III.I. İSTANBUL APPROACH

Prior to 1980's, the policies used in banking crises included the direct intervention by the government, whereas after 1980's and especially in recent years, it was preferred to solve the problems within the market mechanism itself. The direct intervention method includes the direct control of interest rates and exchange rates, extension of loans to privileged sectors, and strengthening of the public banks in the banking sector which in fact may increase the fragility of the banking sector and lead to unfair competition. These problems would not be encountered when market-based methods such as asset management companies and corporate debt restructuring are used. In market-oriented systems, there is an independent agency to put into practice these methods and observe the results of them. The management and liquidation of non-performing assets, which is a market-oriented method, seeks a common solution to banking sector and real sector problems, and has been used in many countries, especially after the Asian crisis.

The recent financial crises in Turkey did not only disturb the structure of the financial sector but also adversely affected the real sector companies. While the non-performing loans of the financial sector are increasing, the real sector companies' possibilities to find new loans and to pay their debts are narrowed. Istanbul approach is a market-oriented approach aiming to find a solution to this problem. The "Law on Restructuring of Debts to Financial Sector" No.4743, which came into force and published in the Official Gazette on January 31, 2001, constitutes the legal framework of this approach.

The purposes of Law No.4743 is to enable the debtors who have been involved in a credit relationship with financial organizations and are going through a financial bottleneck to fulfill their repayment obligations and to continue to create value added with such measures as extending maturities, renewing the credit (loan), extending a new credit, reducing principal and/or interest, waiving interest, converting credits into participations in whole or in part within the time limits and conditions under the scope of the financial restructuring program. The "Financial Restructuring Framework Agreement" has been signed by creditors (financial institutions led by the banks) and debtors and this agreement has been approved by BRSA. In the next period, "financial restructuring agreements" will be signed by the creditors and debtors within three years and when needed, additional financing will be provided for the debtor, and the debt restructuring methods such as principal, interest rate deductions and waiving the interest payments and forming a new debt payment plan will be possible.

In order to restructure the non-performing loans of the banking system and to make the repayment of the claims easier, together with the tax exemptions, the Law No.4743 also introduces the possibility to establish asset management companies. The asset management companies established as a partnership will have the responsibility to make agreements with the real sector companies concerning the repayment of the debts. The main purpose of asset management is to recover the corporate debts in a rapid way and to achieve a high recovery rate. The countries, which have applied this method, imposed a discount rate on the market value of the assets. The restructuring of the banks' loans within the framework of the Istanbul approach and activation of the asset management companies will make the recovery of the banks' claims easier which in turn will lead to cancellation of the provisions and banks will start making profits..

Table III.1.3. Financial Markets-Main Indicators (TL, Trillion)

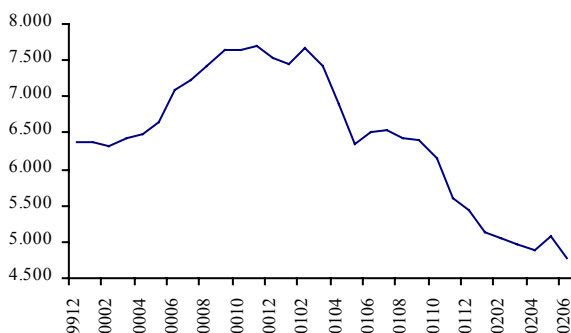
	26.12 2000	29.06 2001	28.12 2001	28.06 2002
Deposit (Residents)	55,209	81,684	102,06	113,444
TL	30,854	38,084	44,922	49,548
FX	24,355	43,601	57,147	63,896
Credit To Non-Financial Sector by Deposit Banks	25,689	29,452	31,249	30,796
TL	17,264	16,137	17,544	15,979
FX	8,425	13,315	13,705	14,818
Consumer Loans	4,619	3,182	2,323	2,376
Repos (Savings Holders)	5,977	5,795	2,798	3,707
Past Due Loans/Tot. Credit (%)	10.5	16.9	16.9	21.3
Past Due Loans/Tot. Credit (%) - Excluding SDIF	5.7	9.1	13.9	20.6
Securities Portfolio/Tot. Deposit (%)	21.8	45.5	44.8	21.7
Securities in Non-Trading Port. /Total Deposit (%)	8.5	13.9	13.4	43.7
Credit/Deposit (%)	46.5	36.1	30.6	27.1
Public Bank Dep./Tot.TL.Deposits (%)	58.9	51.5	54.5	54.5
Public Bank credit/Tot.TL Credit (%)	32.8	25.9	23.6	25.3

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

### III.1.a. Credit

Total credits shrunk significantly both in demand and supply sides after November 2000 crisis. The real credit volume, which continued its downward trend in 2002, slightly increased in real terms in May due to the decreasing tendency in interest rates and economic recession. However, when 3,1 Trillion TL portion of Pamukbank's loans was transferred to the transitory accounts, real credit volume shrunk substantially in June (Figure III.1.1).

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



Compared with the same month of the previous year., the total amount of credits extended by the deposit banks to the non-financial sector decreased, in real terms, by 12 percent and came down to TL 30.8 quadrillion in June 2002

### In June, credit volume dropped due to the decrease in loans Pamukbank that was taken over by Saving Deposit Insurance Fund.

When the breakdown of credits extended by the deposit banks in this period are analyzed, it is observed that commercial loans denominated in the domestic currency, specialized loans, and the loans denominated in the foreign currency have decreased by 21 percent, 8 percent and 3 percent in real terms, respectively.

Table III.1.4. Deposit Banks Credit (TL, Trillion)

	Public	Private*	Foreign	Total
<b>26.12.2000</b>	<b>8,423</b>	<b>16,405</b>	<b>861</b>	<b>25,689</b>
TL	6,767	10,116	381	17,264
FX	1,656	6,290	479	8,425
<b>30.03.2001</b>	<b>7,639</b>	<b>20,524</b>	<b>1,290</b>	<b>29,452</b>
TL	5,551	10,177	410	16,137
FX	2,089	10,346	880	13,315
<b>28.12.2001</b>	<b>7,389</b>	<b>22,575</b>	<b>1,287</b>	<b>31,249</b>
TL	5,449	11,539	557	17,544
FX	1,940	11,036	730	13,705
<b>29.03.2002</b>	<b>7,796</b>	<b>21,537</b>	<b>1,463</b>	<b>30,796</b>
TL	5,585	9,786	608	15,979
FX	2,211	11,751	855	14,818

\* Including SDIF banks

Source: CBRT Weekly Press Bulletin.

It is expected that rise in foreign exchange rates and interest rates due to political uncertainties which will adversely affect the confidence of the consumer and producer will cause deterioration in credit volume. Take over of the seventh biggest bank of the sector, Pamukbank, by the SDIF and transfer of administration of part of Yapı Kredi's-forth in the sector- shares to SDIF again, will be the factors that will influence credit volume in the forthcoming period.

While the credits extended by the public banks and private banks to the non-financial sector decreased by 6 percent and 15 percent in real terms as of June 2002

compared with the end of the previous year, the credits extended by foreign banks increased by 2 percent.

The loans denominated in foreign currency decreased due to appreciation of the Turkish lira after October 2001, and they have started to increase in real terms since March 2002 (Figure III.1.2). While the share of Turkish lira equivalent of the loans denominated in foreign currency in total loans was 43.3 percent by the end of 2001, this share came down to 40.9 percent in March 2002 and later increased to 48.1 percent due to total drop in the credit volume in June 2002. In June, depreciation of Turkish lira also caused Turkish lira equivalent of the loans denominated in foreign currency to increase. In US dollar terms, in June 2002 loans denominated in foreign currency decreased by USD 275 million and dropped to US 9.2 billion compared with the end of 2001.

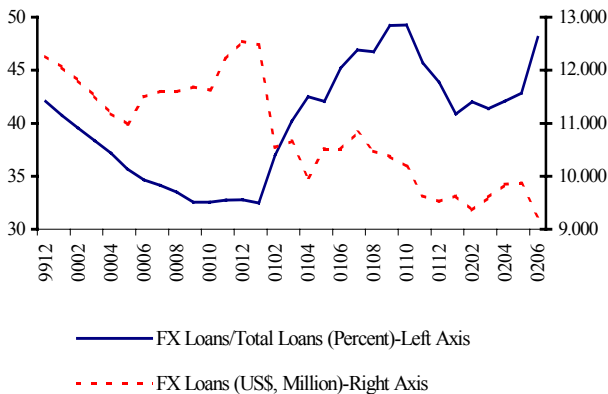


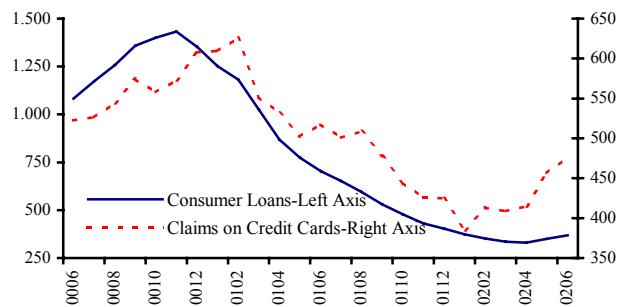
Figure III.1.2 FX loans

In the first months of 2002, consumer loans also contracted in both demand and supply sides similar to the course of total loans. In May and June, consumer loans increased in real terms partly due to the economic recovery and the decline in inflation. Despite this increase, consumer loans decreased by 9 percent in real terms in the first half of 2002. The share of consumer loans in total loans which was 7.3 percent by the end of 2001, climbed to 7.7 percent due to the increase of consumer loans and the decrease of credit volume in July 2002. In the period in question, claims on credit cards

also increased by 12 percent in real terms (Figure III.1.3).

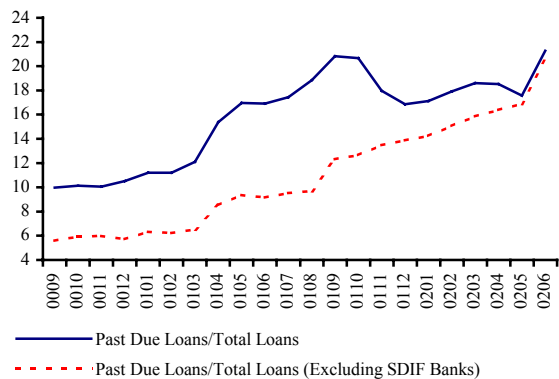
**Consumer loans decreased by 9 percent in real terms in the first half of 2002 despite the increase in May and June 2002.**

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



While the share of the past due loans in total loans dropped to 16.9 percent at the end of 2001, it climbed to 21.3 percent in June 2002 because of the effect of drop in the credit volume (Figure III.1.4.). In June 2002, compared with the end-2001 figures, the share of past due loans in total past due loans of the SDIF banks decreased from 16.6 percent to 6.9 percent and of public banks from 56.4 percent to 48.3 percent while this share in private banks increased from 23.6 percent to 42 percent

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



The share of past due loans of the SDIF banks in total past due loans came down to 2 percent in May 2002,

however after Pamukbank was taken over by the SDIF in June 2002, the share bounced to 6.9 percent. Until May 2002, the decrease in the past due loans share of the SDIF banks resulted from the transfer of significant part of the past due loans of these banks to the Collection Department.

**The share of past due loans of the SDIF banks in total past due loans came down to 2 percent in May 2002, but it bounced to 6.9 percent with Pamukbank's transfer to SDIF in June 2002.**

If restructuring of debts to financial sector can be successfully implemented as a common resolution proposal to firms that can not repay their debts on time, and banks that can not collect their claims, the main part of the past due loans problem of banks will be solved.

The largest share in past due loans belongs to the textile sector as of April 2002. The share of past due loans of textile sector in total past due loans was 25 percent in April.

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

Compared with the end of the previous year, the total amount of the securities portfolio and the securities in the non-trading portfolio of the banks increased by 12 percent in real terms in July 2002. The main reason of this increase is that repo transactions have been followed in the balance sheet since February 2002 and the repo transactions have been included in the non-trading portfolio.

**The total of the securities portfolio and the securities in the non-trading portfolio of the banks increased by 12 percent in real terms in July 2002 compared with the end of the previous year.**

Securities portfolio has been the item having the highest share in the asset side of the consolidated balance sheet of the banks in the period between May 2001 and January 2002 when government securities were given to

state banks and SDIF banks to obtain the stability in financial markets and to strengthen the banking system. After February 2002, the securities in the non-trading portfolio became the item having the largest share in the asset side of the balance sheet.

Table III.1.5. Developments in Securities Portfolio and the Securities in Non-Trading Portfolio (TL Trillion)

	Public	SDIF	Banking Sector
<b>2001 December</b>			
<b>Securities Portfolio</b>	<b>28,817</b>	<b>5,127</b>	<b>45,776</b>
TL	21,026	3,670	30,939
FX	7,791	1,457	14,837
<b>Sec. in Non-Trad. Portfolio</b>	<b>702</b>	<b>82</b>	<b>13,683</b>
TL	182	82	8,195
FX	520	0	5,488
<b>2002 December</b>			
<b>Securities Portfolio</b>	<b>4,719</b>	<b>1,937</b>	<b>24,633</b>
TL	1,771	1,628	12,476
FX	2,948	310	12,157
<b>Sec. in Non-Trad. Portfolio</b>	<b>32,103</b>	<b>1,998</b>	<b>49,614</b>
TL	23,552	1,993	34,547
FX	8,551	5	15,067

Source: CBRT.

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



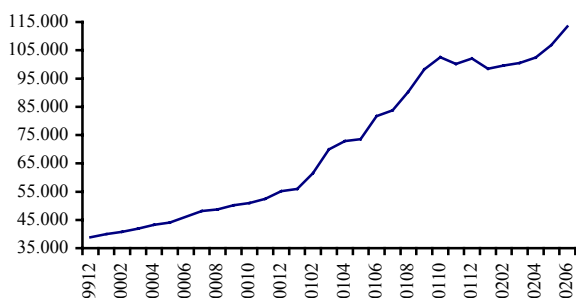
In February 2002, the transfer of government securities from securities portfolio to non-trading portfolio in accordance with the restructuring of the government securities, has not changed the total of the securities however altered the composition of the securities portfolio and the securities in the non-trading portfolio. Therefore, securities portfolio of the banks decreased by 52 percent in real terms and dropped to TL 24.6 quadrillion in June with respect to the end of the previous year.

The securities in the non-trading portfolio also increased by 224 percent and reached TL 49.6 quadrillion in June with respect to the end of the previous year.

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

Between September 2001 and April 2002, the total deposits of the residents showed a decreasing trend in real terms both because of the real decrease in Turkish lira deposits and the decrease in the Turkish lira value of foreign exchange deposits. In the first half of 2002, the total deposits decreased by 1 percent in real terms with respect to the end of 2001. However, in May and June 2002, the total deposits increased in real terms due to the increase in Turkish lira value of foreign exchange deposits because of the depreciation of Turkish lira..

Figure III.1.6. Total Deposits (TL, Billion)



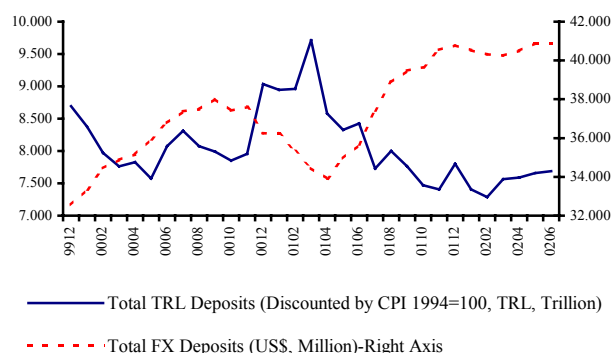
In June 2002, with respect to the end of the previous year, the Turkish lira deposits decreased by 2 percent in real terms due to the fast decline in the first months of the year. Bank groups' share in Turkish lira deposits did not change significantly in the first half of 2002. In June, the share in Turkish lira deposits was 54.5 percent for public banks, 44.5 percent for private banks including the SDIF banks and 1 percent for foreign banks.

**In the first half of 2002, the total deposits decreased by 1 percent in real terms.**

In the period between October 2001 and April 2002, the foreign exchange deposit accounts showed a decreasing trend in real terms. However, in May and June 2002, the

Turkish lira value of the foreign exchange deposits increased in real terms due to appreciation of foreign currencies vis-à-vis Turkish lira. Therefore, Turkish lira value of foreign exchange deposits did not change in real terms in the first half of 2002.

Figure III.1.7. Developments in TL Deposits and Foreign Exchange Deposits

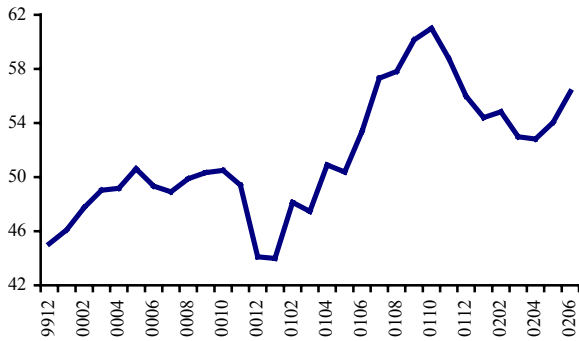


Foreign exchange deposits in US dollars, which amounted USD 40.8 billion by the end 2001, declined to USD 40.3 billion in March 2002, but then bounced back to reach USD 40.9 billion in June (Figure III.1.7).

With regard to the share of FX deposits in total FX deposits, public banks' share increased from 21.1 percent to 22.5 percent in June 2002. In the same period, private banks' share decreased from 76.2 percent to 74.6 percent and foreign banks' share increased from 2.7 percent to 2.8 percent.

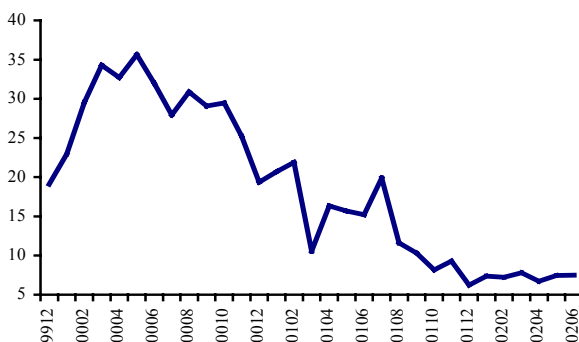
The share of foreign exchange deposits in total deposits, which was 56 percent at the end of 2001, decreased to 53 percent in April 2002 due to the appreciation of the Turkish lira and the recovery of the financial stability, but reached 56.3 percent again when Turkish lira depreciated again.

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



The total volume of banks' and other financial intermediaries' repo transactions with their customers decreased substantially in 2001 as the short-term financing requirements of SDIF and public banks have decreased and withholding tax rates on repo have been increased (Figure III.1.9). At the end of 2001, the repo volume dropped down to TL 2.8 quadrillion. In June 2002, the volume of repo transactions increased by 18 percent in real terms with respect to the end of 2001 and stood at TL 3.7 quadrillion. The share of repo transactions in total Turkish lira deposits, which was 6.2 percent at the end of 2001 reached 7.5 percent in June 2002.

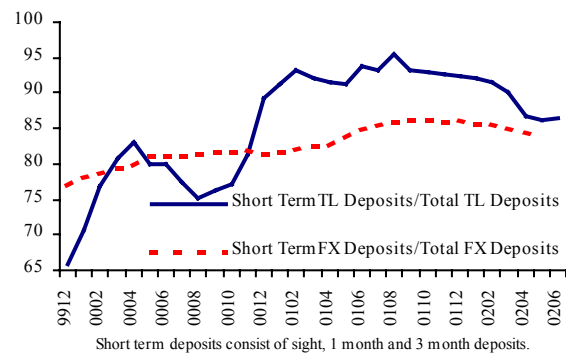
Figure III.1.9. The Ratio of Repo Transactions to Turkish lira Deposits (Percentage)



The maturity structure of deposits, which worsened in 2001 because of depositors' and banks' tendency towards shorter maturities, started to improve in the beginning of

2002 as the financial stability became more evident. The share of short-term deposits, which consists of three month deposits and deposits having maturity shorter than three months, in total Turkish lira deposits declined from 92.4 percent to 86.4 percent between December 2001 and June 2002. In the same period, the share of short-term FX deposits in total FX deposits decreased from 86.1 percent to 83.6 percent (Figure III.1.10).

Figure III.1.10. The share of short term TL and FX Deposits in the Total Deposits (Percentage)



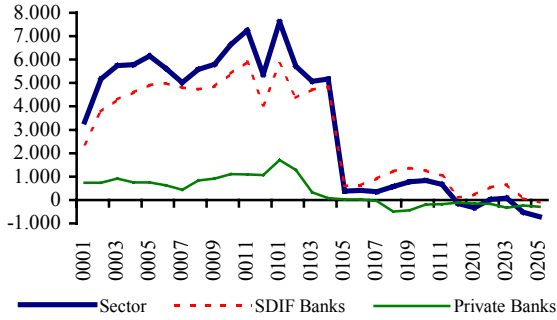
### Maturity of deposits started to become longer in 2002.

The foreign exchange net general position of banks in US dollars maintains its lower value compared with the previous period since March 2001. Banking sector had USD 159 million excess position in December 2001, and USD 713 million excess position in May 2002.

In the first five months of 2002, the net foreign exchange excess position of public banks rose from USD 142 million to USD 283 million, private banks from USD 106 million to USD 295 million. The banks under SDIF had USD 110 million open position at the end of 2001, however these banks had USD 96 million excess FX position in May 2002. In May 2002, foreign banks had USD 16 million; development and investment banks had USD 22 million excess foreign exchange position.



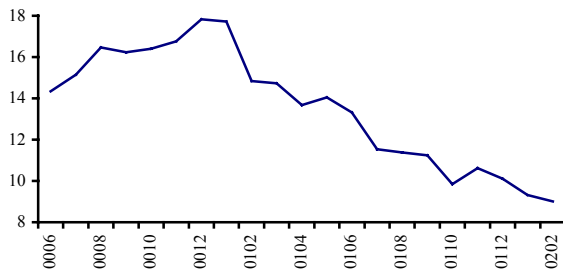
Figure III.1.11. The Foreign Exchange Net General Open Position of the Banking Sector (USD, Million)



Foreign credit from abroad, which is one of the funding sources of banks, continued to decrease due to economic and political instability.

Foreign credit used by the banking sector was USD 10.1 billion at the end of 2001 and decreased further to USD 9 billion in September 2002.

Figure III.1.12. Foreign Credit used by Banks (USD, Billion)

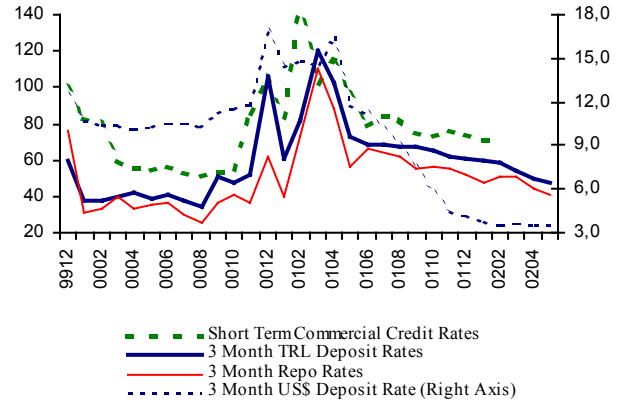


### III.1.d. Developments in Interest Rates

3 month weighted nominal TL deposit rates, FX deposit rates and repo rates sustained their decreasing trend in the period between December 2001 and May 2002. This decreasing trend observed at the beginning of 2002, can be attributed to the decrease in inflationary expectations and decline in interest rates on government securities. As of September 2002, the commercial credit rates of banks

also decreased with respect to the end of 2001. (Figure III.1.13).

Figure III.1.13. Commercial Credit, TL, FX Deposit and Repo Rates (Percentage)



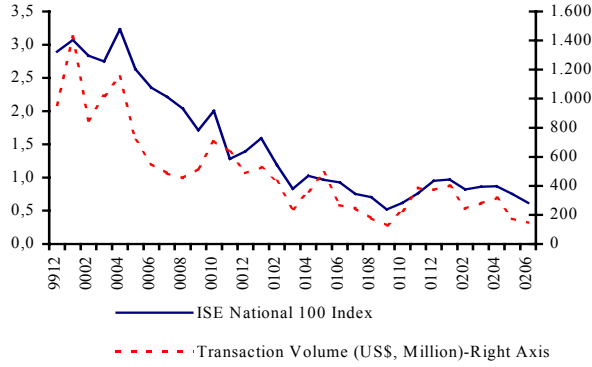
### III.2. The Securities Market

In June 2002, the ISE National 100 index and the transaction volume sustained its downward trend because of the increase in interest rates on government securities, volatility in exchange rates, economic slowdown and political uncertainty.

The ISE National 100 index dropped in the first half of 2002 by 39 percent in real terms. In the same period, service index, financial index and industrial index declined in real terms by 45 percent, 41 percent and 31 percent, respectively. As of June 2002, the decreasing trend in the trade volume also continued.

While the value of foreign investors' custody in ISE was USD 5.635 million at the end of 2001, it dropped down to USD 3.716 million in June 2002.

Figure III.2.1. İSE National 100 Index and Trade Volume (USD)



In this period, the ISE National 100 index also continued to decline in terms of USD (Figure III.2.1). While this index was USD 1 in December 2001, it decreased to a value of USD 0.6 in June 2002. In the first six months of 2002, service index declined from USD 0.6 to USD 0.4, financial index declined from USD 1.3 to USD 0.8 and industrial index declined from USD 0.8 to USD 0.6. Moreover, the daily average transaction volume that was USD 372 million at the end of 2001, decreased to USD 146 million in June 2002.

## IV. PUBLIC FINANCE AND DOMESTIC DEBT STOCK

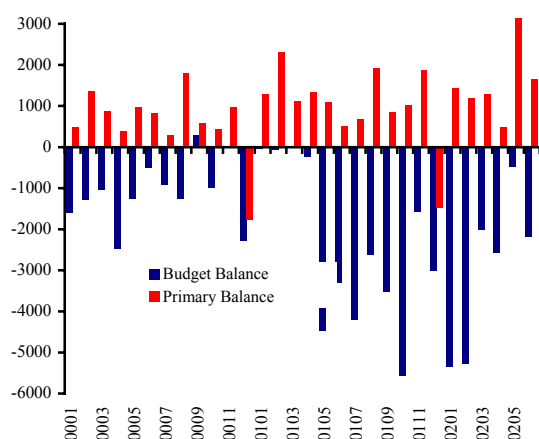
With the resolute implementation of fiscal policies, primary budget balance excluding privatization realized at TL 10.6 quadrillion in the January-June 2002 period by increasing 69.1 percent compared with the same period of the previous year. (Table IV.1.). It means that there is real increase in the primary budget balance excluding privatization. TL 3 quadrillion, transferred from the net proceeds of the Central Bank to the budget, played an important role in the good performance of the primary budget surplus in the January-June 2002 period. Primary budget surplus realized at 1.7 quadrillion in June 2002 (Figure IV.1).

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

	2001 January-June	2002 January-June
Revenues	22928	35821
Expenditures	31032	53696
Budget Balance	-8104	-17875
Primary Budget Balance	7638	10590
Primary Budget Balance Exc. Privatization	6263	10590

Source: Ministry of Finance.

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



### IV. 1 Revenues

While the budget revenues realized at TL 35.8 quadrillion in the January-June 2002 period increasing by 56.2 percent compared with the same period of the

previous year, the tax revenues realized at TL 25.5 quadrillion increasing by 53.9 percent (Table IV.1.1.).

The increase in tax revenues in January-June 2002 period, mainly generated from the domestic VAT, VAT on imports and petroleum consumption tax, which consist the largest share in indirect taxes.

The rate of increase in two components of direct taxes, the corporate tax and the income tax, is different. Compared with the same period of the previous year, income tax increased only by 11.7 percent in the January-June 2002 period. This situation mainly resulted from the withholding tax. After the economic crisis in 2001, rise in interest rates increased the withholding tax revenues. However, the decrease in the interest rates in 2002 caused a decline in the withholding tax revenues in 2002.

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

	2001 January- June	2002 January- June	Increase Rate (percent)
REVENUES	22928	35821	56.2
Tax Revenues	16561	25485	53.9
Income Tax	5380	6010	11.7
Corporate Tax	1143	2203	92.7
Motor Vehicle Tax	206	339	64.1
Domestic VAT	2790	4969	78.1
Motor Vehicle Purchase	118	123	4.5
Petroleum Consumption Tax	1915	4763	148.7
Bank. & Insuran. Trans. Tax	1024	505	-50.7
VAT on imports	2068	3690	78.4
Non-Tax Revenues	4368	6985	59.9
Privatization	1375	0	-100.0
Other	2993	6985	133.4
Special Revenues and Funds	1683	2785	65.5
Annexed Budget Revenues	316	566	79.2

Source : Ministry of Finance.

The increase in corporate tax revenues has been higher than the increase in the tax revenues. In January-June 2002 period, the corporate tax revenues increased by 92.7 percent compared with the same period of the previous year. Although the corporates were badly affected by the economic crisis in 2001, the corporates' advance tax payments stemming from their non-operating revenues, affected the corporate tax revenues

positively in January-June 2002 period, compared with the same period of last year.

Motor vehicle purchase tax increased only by 4.5 percent in the January-June 2002 period compared with the same period of 2001 due to the decrease in the automobile sales.

Increase in non-tax revenues was 59.9 percent in the January-June 2002 period compared with the same period of the previous year. While the total amount transferred to the budget from CBRT proceeds was TL 472 trillion in 2001, it climbed up to TL 3 quadrillion in 2002.

#### IV.2 Expenditures

Expenditures increased by 73 percent in January-June 2002 period compared with the same period of the previous year (Table IV.2.1.). Domestic debt interest payments, which increased by 83.9 percent, played an important role in this rise. Non-interest payments increased by 65 percent compared with the same period of 2001.

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

	2001 January-June	2002 January-June	Increase Rate (percent)
EXPENDITURES	31032	53696	73.0
NON-INTEREST EXP.	15290	25231	65.0
Personnel	6509	10793	65.8
Wages	919	1444	57.2
Other Personnel Expenditures	5591	9349	67.2
Other Current	1283	1996	55.5
Investment	975	1553	59.2
Transfer Expenditures	22264	39355	76.8
Interest Payments	15741	28465	80.8
Domestic Debt Interest Pay.	14242	26191	83.9
Foreign Debt Interest Pay.	1500	2274	51.6
Transfers to the SEE's	602	811	34.7
Tax Rebates	1001	2237	123.5
Social Security Institutions	2960	5448	84.1
Payments to Retirement Fund	1350	2635	95.2
Payments to SSK	430	1354	214.9
Payments to Bag-Kur	1048	1331	27.0
Unemployment Insurance Fund	132	128	-2.6
Agricultural Support	162	870	437.0
Other Transfers	1798	1524	-15.2

Source : Ministry of Finance.

As in 2000 and 2001, keeping the increments in salaries of public servants prevented the personnel expenditures from increasing too much. The high

increase in the tax rebates, transfers to social securities and agricultural support as well as interest payments increased the transfer expenditures.

The increase in the transfers to social security institutions in the January-June 2002 period can be attributed to increase in unemployment and the decrease in real wages as a result of the economic crisis lived in 2001. The total amount transferred to social security institutions in January-June 2002 period was TL 5.4 quadrillion and TL 2.6 quadrillion of this amount was transferred to the retirement fund.

The transfers made from the budget within the framework of direct revenue support boosted agricultural support payments in January-June 2002 period. The total amount transferred within this framework became TL 750 trillion in first 6-month period of the year.

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

The consolidated budget cash deficit realized at TL 14.1 quadrillion in the January-May 2002 period. In this period, the Treasury was in net payment position in domestic borrowing. The Treasury remained at net payment position in government bonds and net borrowing position in Treasury bills. In this period, the net borrowing in the Treasury bills was TL 6.2 quadrillion (Table IV.3.1.).

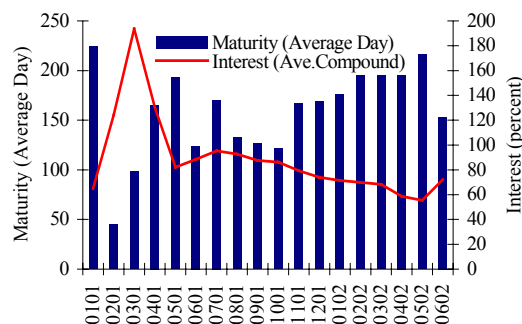
Net foreign borrowing realized at TL 13.2 quadrillion in the January-May 2002 period. The credits provided by the IMF played an important role in the increase in the net foreign borrowing in this period.

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

	2001 January-May	2002 January-May
Primary Budget Balance	7129	8932
Budget Balance	-4808	-15699
Cash Balance	-5614	-14117
Financing	5614	14117
Net Domestic Borrowing	4875	-507
Government Bonds	-6201	-6678
Treasury Bills	11076	6171
Guaranteed Debt Returns	0	0
Net Foreign Borrowing	-1544	13221
Other	2283	1403

Source : Treasury.

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



To extend the borrowing maturity, the Treasury started to hold floating rate note auctions by the beginning of 2002 again. With the increase in the credibility of the economic program, the Treasury auction interest rates went into a downward trend. The average compound interest rate, which was 71.4 percent in January 2002, dropped down to 55.3 percent in May 2002. (Figure IV.3.1.) Due to political uncertainties, the Treasury auction interest rate climbed up to 72.2 percent and the borrowing maturity shortened in June 2002.

#### IV.4. Domestic Debt Stock

Domestic debt stock, increased slightly by 0.5 percent reaching TL 122.8 quadrillion as of May 2002 from its TL 122.2 quadrillion level at the end of 2001. Transfer of IMF credits to the Treasury on February 7, 2002, the early redemption of the FX linked securities in Central Bank's portfolio and in the Savings Deposit Insurance Fund (SDIF) banks' portfolio, and utilization of these sources by the SDIF banks to reduce their liabilities to the Central Bank were the main reasons that led to the decline in the domestic debt stock. In this context, the effects of the IMF credits on domestic debt stock occurred in two ways. The first is the decline in the domestic debt stock and its financing requirement, and the other is the change in the interest and foreign exchange structure of the domestic debt stock (Table IV.4.1, Table IV.4.2). Since the Treasury borrowed at an amount greater than its repayments, the stock of

domestic debt to the private sector increased while the stock of domestic debt to the public sector decreased.

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

	2000		2001		2002*	
	Share		Share		Share	
	Amount	In	Amount	In	Amount	In
	Total		Total		Total	
CASH	29.6	81.2	58.3	47.8	64.9	52.9
Fixed Income	19.4	53.3	17.7	14.5	25.1	20.4
Flexible-rate	9.0	24.7	11.4	9.4	16.3	13.3
FX Denominated	1.2	3.2	7.1	5.8	7.6	6.2
FX Linked	0.0	0.0	22.1	18.0	15.9	12.9
IMF Credit	0.0	0.0	13.8	11.3	7.6	6.2
Swap/Tap	0.0	0.0	7.7	6.3	7.7	6.3
Public Sales	0.0	0.0	0.5	0.4	0.5	0.4
NON-CASH	6.8	18.8	63.8	52.2	57.8	47.1
Fixed Income	1.0	2.8	0.0	0.0	0.0	0.0
Flexible-rate	4.0	11.0	49.5	40.5	46.6	37.9
Interest linked	4.0	11.0	30.7	25.1	28.2	23.0
CPI-Indexed**	0.0	0.0	18.8	15.4	18.4	15.0
FX Denominated	1.8	5.0	12.4	10.1	10.8	8.8
FX Linked	0.0	0.0	1.9	1.6	0.4	0.3
TOTAL STOCK	36.4	100.0	122.2	100.0	122.8	100.0
Fixed Income	20.4	56.1	17.7	14.5	25.1	20.4
Flexible-rate	13.0	35.7	61.0	49.9	62.9	51.2
Interest linked	13.0	35.7	42.1	34.5	44.5	36.2
CPI-Indexed**	0.0	0.0	18.8	15.4	18.4	15.0
FX Denominated	3.0	8.2	19.5	16.0	18.4	15.0
FX Linked	0.0	0.0	24.0	19.6	16.3	13.3

\*: As of May 2002

\*\* : 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)

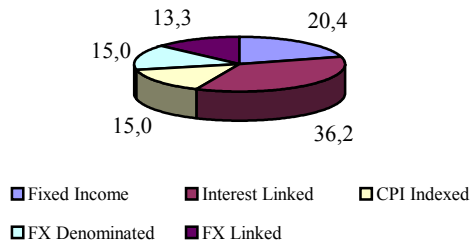
	2000	2001	2002
	December	December	February
1. PUBLIC SECTOR	12.2	80.6	70.6
a. CBRT	1.5	32.5	26.1
IMF Credit	-	13.8	7.6
Other	1.5	18.7	18.5
b. State Banks (*)	2.9	22.7	23.9
c. SDIF Banks	3.9	15.1	8.4
d. Other Public	4.0	10.2	12.2
2. MARKET	24.2	41.6	52.2
TOTAL (1+2)	36.4	122.2	122.8

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

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

As a result of the additional foreign financing, the share of the government domestic borrowing securities reached 36.2 percent increasing by 1.7 percentage points, the share of the CPI indexed securities came down to 15 percent decreasing by 0.4 percentage points, and the share of the FX and FX linked securities declined to 28.3 percent decreasing by 7.3 percentage points in May 2002. The share of the securities with fixed income in total domestic debt stock reached 20.4 percent increasing by 5.9 percentage points compared with the end of 2001 (Figure IV.4.1). Concerns about the sustainability of the domestic debt stock in medium term reduced with the issuance of government domestic borrowing securities with longer maturities replacing government domestic borrowing securities of SDIF banks in exchange for their deposit transfers in November and December 2001 and the restructuring of government domestic borrowing securities with their incurred interest that take place in the portfolio of the state banks in December 2001 and January 2002.

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



**The restructuring of the government domestic borrowing securities in the portfolios of state and SDIF banks has influenced the domestic debt service in 2002 positively and reduced the concerns about the sustainability of domestic borrowing.**

Government domestic borrowing securities held by the state banks were restructured in December 2001 and January 2002 and their maturity were extended. Moreover, the fact that the coupon payments of TL 7.1 quadrillion portion of the government domestic

borrowing securities totaling TL 23.1 quadrillion held by the state banks will be affected in the first half of 2003, soothed the concerns about the domestic debt interest payments in 2002 and increased the reliability of the fiscal policy.

In May 2002, TL 3 quadrillion portion of the net proceeds of the Central Bank transferred to budget was used for the early redemption of government securities held by the Central Bank, which means there was no cash transfer to the Treasury. That the amount transferred from the net proceeds of the Central Bank exceeds TL 750 trillion- that is the budget target- has reduced the additional financing requirement of the budget and had a positive impact on the domestic debt stock..

The downward trend of inflation figure since February reinforced expectations for the end-year inflation target, thus the optimistic expectations that emerged in the markets supported extension of the maturity of domestic borrowing and decrease in interest rates. However, adversely affected by the political uncertainty perceptions, maturity and interest rates in the auctions held in May went up. This uncertainty continued in June too and cost of domestic borrowing increased dramatically and domestic borrowing maturity decreased significantly.

**The perception of political uncertainty that emerged in May resulted in increase in the cost of domestic borrowing and shortening of the domestic borrowing maturity.**

In the period between January-June 2002, total payments to the market stood at TL 34.0 quadrillion while the amount of borrowing was TL 35.3 quadrillion. In this context, the rollover ratio reached 103.7 percentage points in this period with a 2.4 percent increase compared with December 2001 (Figure IV.4.2). However, the political uncertainty emerged in May affected the rollover ratio negatively and the rollover ratio dramatically decreased compared with the previous months. In June, the total domestic borrowing exceeded the total redemption in FX that led

to an increase in the rollover ratio in June. Meanwhile, the rollover ratio in terms of TL decreased in June and May. The reason behind this fall is the political uncertainty perception resulted in decreasing demand for TL government securities.

When the ratio of the total and cash domestic debt stock to M2X in May 2002, which are indicators of the pressure of the debt stock on the financial markets, are analyzed, it is observed that both ratios have retained their levels compared with end-2001 ratios (Figure IV.4.3).

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

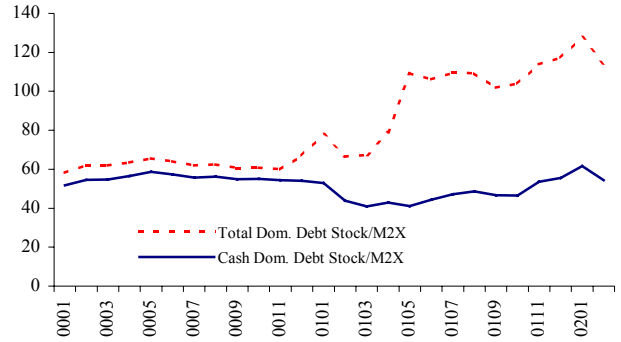
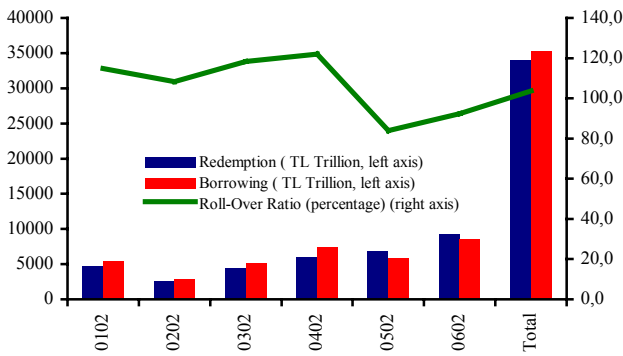


Figure IV.4.2. Roll-over Ratio



Source: CBRT

Despite the increase in non-interest expenditure in January–May period, the primary surplus has exhibited a good performance due to the increase in non-tax revenues. While the cost of domestic borrowing decreased and the domestic borrowing maturity increased in the first four months of the 2002, the political uncertainty perception that started in May caused shorter domestic borrowing maturity and increased interest rates.

## V. DEMAND AND OUTPUT

### V.1. Demand Developments

Turkish Economy entered into a deep recession period in 2001 due to the negative consequences of crises in financial markets. Following the crises in November 2000 and February 2001, interest rates rose rapidly and substantial amount of capital outflow took place while Turkish Lira depreciated extensively. These negative developments in financial markets resulted in the contraction of credit volume extended to the private sector in real terms.

This situation led to the deterioration of expectations of economic agents and thus, to the contraction of domestic demand. Compared with the previous year, GNP decreased by 9.4 percent in 2001 due to the rise in uncertainties in the economy and the contraction in domestic demand (Table V.1.1).

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

	2001					2002
	I	II	III	IV	Annual	I
Total Consumption Exp.	-2.4	-10.9	-10.2	-11.2	-8.9	-1.6
Private Consumption Exp.	-2.5	-11.5	-9.7	-11.7	-9.0	-2.0
Public Consumption Exp.	-1.3	-6.6	-15.0	-8.9	-8.6	2.4
Gross Fixed Capital Formation	-13.1	-32.1	-37.3	-38.7	-31.7	-24.8
Public Fixed Capital						
Investment	-5.8	-32.0	-23.4	-18.8	-22.0	-17.7
Private Fixed Capital						
Investment	-14.4	-32.1	-41.5	-50.2	-35.1	-26.3
Machinery-Equipment	-18.3	-44.4	-61.7	-69.0	-49.6	-41.2
Construction	-7.2	-8.9	-9.2	-9.2	-8.7	-2.5
Total Investment Expenditures	-29.0	-51.2	-38.4	-46.3	-42.1	3.3
Total Domestic Demand	-9.5	-23.9	-17.6	-21.4	-18.4	-0.6
Total Final Domestic Demand	-5.0	-17.0	-17.2	-18.9	-15.0	-6.8
Exports of Goods & Services	9.7	8.2	5.9	6.4	7.4	9.1
Imports of Goods & Services	-14.5	-31.0	-26.5	-26.0	-24.8	1.3
GDP	-0.8	-9.6	-7.4	-10.4	-7.4	2.3

Source: SIS

However, Turkish Economy realized a swift recovery and entered in growth period in the first quarter of 2002. GDP and GNP increased by 2.3 percent and 0.7 percent in the first quarter of 2002, compared with the same period of previous year, respectively (Table V.1.1). According to seasonally adjusted data, GNP and GDP increased by 5.3 percent and 2.8 percent in the

first quarter of 2002 compared with the same period of the previous year.

The stability of the exchange rate, the downward trend in the inflation rate and the positive atmosphere for 2002, which enhanced the belief that macroeconomic targets will be achieved, led to the improvement of expectations of economic agents. This situation influenced the production and sales decisions of private firms positively.

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

	2001					2002
	I	II	III	IV	Annual	I
Private Expenditure	-5.0	-14.9	-15.1	-16.5	-13.4	-6.4
Public Expenditure	-0.3	-3.1	-2.5	-3.0	-2.3	-0.5
Net Exports	9.8	16.9	10.6	12.1	12.3	2.9
Stock Changes	-5.3	-8.6	-0.3	-2.9	-4.0	6.3
GDP	-0.8	-9.6	-7.4	-10.4	-7.4	2.3

Source: SIS, CBRT

When contribution of demand components to GDP growth is analyzed, it is observed that growth in the first quarter of the year mainly stemmed from stock changes item followed by net exports item with 2.9 percent contribution. However, the contribution of net exports item to growth decreased substantially compared with previous year. The contributions of public and private expenditures to growth were negative in the first quarter of 2002 (Table V.1.2).

### **The growth of the economy mainly stemmed from the stock changes and the rise of exports.**

Contraction in domestic demand continued at a slower pace even though the economy entered into recovery period. Total final domestic demand decreased by 6.8 percent in the first quarter of 2002 compared with the same period of the previous year. Total domestic demand declined only by 0.6 percent at this period due to the rise in stocks. (Table V.1.1).

The negative effects of the contraction in economy in 2001 on the labor market continued during the first quarter of 2002. Unemployment rate, which was 8.5



percent in 2001 reached 11.8 percent in the first quarter of 2002. Moreover, real wage index per hour worked in manufacturing sector and real wage index per worker in production process decreased by 15.7 percent and 17 percent in this period. Real wages declined extensively in manufacturing industry in 2001, too. In addition to the rise in unemployment rate, the decline in real wages influenced the private consumption expenditures negatively.

Private consumption expenditures decreased by 2 percent in the first quarter of 2002 compared with the same period of the previous year (Table V.1.3). Negative developments in the labor market, the persisting high interest rates and the shrinking of credit volume extended to consumers by deposit banks in real terms led to the decline of private consumption expenditures. Moreover, in addition to the decline of real wages, the income of households, mainly the income of retailers and artisans, decreased due to the contraction in the economy. This situation also played a significant role in the contraction of private consumption expenditures. However, the contraction in private consumption expenditures slowed down in the first quarter of the year.

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

	2001					2002
	I	II	III	IV	Annual	I
PRIVATE CONSUMPTION	-2.5	-11.5	-9.7	-11.7	-9.0	-2.0
Food	1.5	-4.1	-4.9	-4.8	-3.4	0.3
Durable Goods	-20.3	-36.1	-31.1	-33.2	-30.4	-5.3
Semi-durable & Non-durable	3.8	-12.5	-9.9	-19.0	-9.0	-4.3
Energy-Transpor.-Communi.	2.6	-0.7	0.5	4.7	1.8	-3.8
Services	-1.9	-12.2	-9.1	-11.4	-9.1	-1.4
Ownership of Dwelling	2.2	2.1	2.1	2.0	2.1	2.0

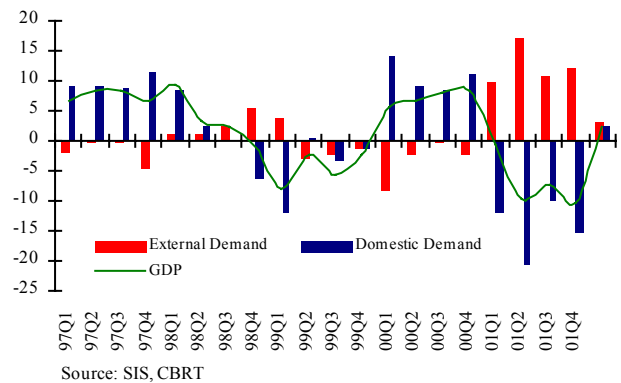
Source: SIS

In this period, expenditures for durable goods decreased by 5.3 percent compared with the same period of the previous year and became the expenditure item that contracted the most (Table V.1.3). Persistent high interest rates, the continuing decline in real credit

volume and negative developments in the labor market have been the factors that have led to this development. However, when the 36.1 percent decrease in expenditures for durable goods in the second quarter of the previous year is considered, this expenditure item is expected to increase in the second quarter of 2002 due to the base effect.

Meanwhile, compared with the same period of last year, in the second quarter of 2002, expenditures for half-durable and non-durable goods decreased by 4.3 percent, but food expenditures increased by only 0.3 percent.

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

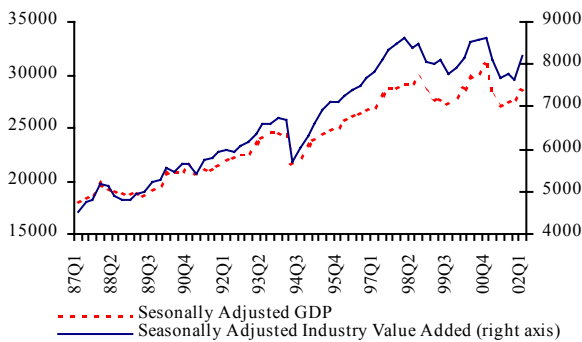


The rise in capacity utilization rates in the first five months of the year compared with the same period of the previous year and the substantial increase in industrial production in April and May indicates that domestic demand has begun to recover since the second quarter of the year. However, the observed increases in the exchange rate and interest rates and uncertainties in the economy since June might lead to the delay of the recovery of domestic demand in the second half of the year.

**The strengthening of the growth process in the economy depends on the recovery of the domestic demand and maintenance of confidence in the economy.**

When seasonally adjusted data is observed, it is seen that industry sector value added and GDP increased in the first quarter of 2002 compared with the previous period. (Graph V.1.2). The maintenance of the growth process in the economy is believed to depend on the recovery of domestic demand and preservation of the confidence in economy.

Figure V.1.2. Seasonally Adjusted GDP and Industry Sector Value Added



Source: SIS, CBRT

Private fixed capital investment expenditures decreased by 26.3 percent in the first quarter of 2002 compared with the same period of the previous year. The gradual decline in machinery-equipment expenditures was the main determinant of the decrease in private investment expenditures (Table V.1.1).

Contrary to the decrease in private and public investment expenditures, stock changes showed substantial amount of increase. Parallel to this development, total investment expenditures increased by 3.3 percent in this period.

Meanwhile, capacity utilization rate in manufacturing industry stood at 74.4 percent in the January-May period of 2002 that indicates an increase of 4.2 percent compared with the same period of the previous year. Moreover, total industry production increased by 7.2 percent in the January-May period of 2002 compared with the same period of the previous year. These positive developments are thought to influence investment expenditures in the second quarter of the year.

Goods and services exports increased by 9.1 percent in the first quarter of 2002 compared with the same period of the previous year. The contraction of domestic demand that forced private firms to compete in export markets and also the rise in tourism revenues resulted in the increase in goods and services exports.

The number of tourists, which came to Turkey increased by 4.5 percent during the January-May period compared with the same period of the previous year. The positive developments in the tourism sector is expected to influence goods and services exports and thus, growth of the economy positively.

On a year-on-year basis, goods and services imports increased by 1.3 percent in the first quarter of 2002. The contraction in domestic demand and the slow pace of increase in industrial production have been effective in this development. Imports, mainly raw materials and capital inputs, are expected to increase faster in the second quarter of the year due to the recovery of industrial production.

Public expenditures decreased by 4.5 percent in the first quarter of 2002. The decrease in public expenditures stemmed from the decline in public investment expenditures. The increase in public consumption expenditures, totaling 2.4 percent, contributed to the recovery of domestic demand in this period (Table V.1.4).

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

	2001					2002
	I	II	III	IV	Annual	I
Total Public Expenditures	-2.9	-18.8	-18.9	-13.6	-14.7	-4.5
Public Consumption	-1.3	-6.6	-15.0	-8.9	-8.6	2.4
Compens. of Employees	2.2	1.9	0.9	1.0	1.5	2.0
Purch. of Goods & Services	-9.4	-15.3	-29.8	-14.4	-18.0	3.5
Public Fixed Capital Inv.	-5.8	-32.0	-23.4	-18.8	-22.0	-17.7
Machinery-Equipment	-4.6	-65.4	-26.7	-32.3	-39.1	-15.1
Building Construction	-12.9	-2.1	-20.7	-27.3	-20.1	-17.9
Other Construction	-3.0	-8.2	-23.5	-0.8	-10.3	-21.0

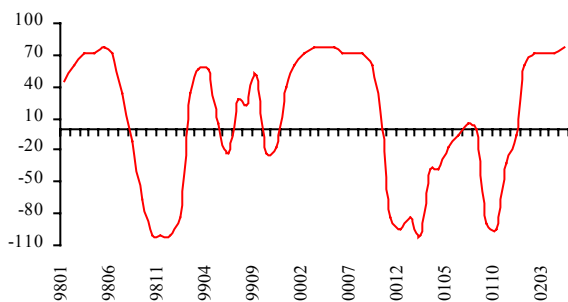
Source: SIS

**Negative developments in the labor market keep their significance as they still might lead to delay in revival of domestic demand and mainly private consumption expenditures.**

Demand and production expectations index, which is derived from the indicators of Business Tendency Survey conducted by the Central Bank of Republic of Turkey, (CBRT), realized a gradual development in favor of optimistic expectations in the first quarter of 2002. Expectations index kept its positive trend at a decelerating rate during the April and May of 2002 (Graph V.1.3). It is thought that the improvement in the expectations of private firms stems from the expectation that domestic demand will recover in the second quarter of the year. The recovery in domestic demand is believed to influence production and investment decisions of private firms positively in the second quarter of the year.

The growth of the economy is expected to accelerate in the second quarter of the year. However, the maintenance of the growth process depends on sustainability of confidence in the economy. Meanwhile, negative developments in the labor market are still significant factors that might jeopardize the recovery of domestic demand and mainly private consumption expenditures.

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



Source: CBRT Business Tendency Survey

### V.1.1. Production Developments

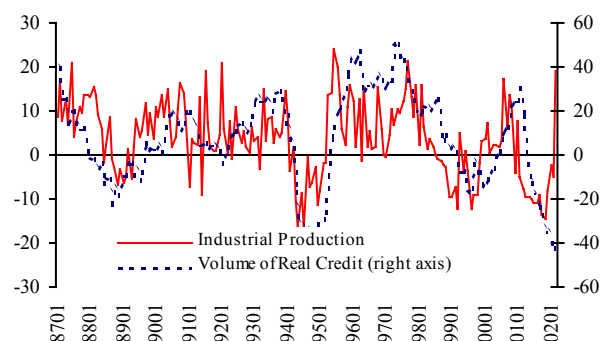
The agricultural production value added decreased by 1.5 percent in the first quarter of 2001 compared with the previous year's same period (Table V.1.5). This contraction in agricultural sector value added is mainly due to the slump in the production of fruits and farming sector. It is expected that the agricultural production

will show an increase in the second quarter of 2002 compared with the same period of last year.

### The industrial sector value added increased by 3 percent in the first quarter of 2002 compared with the previous year's same period.

On a year-on-year basis, the industrial sector value added increased by 3 percent in the first quarter of 2002 (Table V.1.5). As a result of the stability in the exchange rates, fall in the interest rates and recovery in the foreign demand, firms headed for foreign markets which in turn played an important role in the industrial sector value added improvement. However, the ongoing decline in the volume of real credits expanded to the private sector adversely affected the industrial sector value added. It is seen that there is a very close relationship between the year-on-year growth rates of industrial production and volume of real credits (Figure V.1.4). In order to determine the direction of the relationship between these two variables, Granger causality test has been carried out. The test results showed that there is a two-way relationship between the two variables. Accordingly, the expansion of the real credit volume has a positive effect on industrial production, which in turn improves the real credit demand.

**Figure V.1.4. Industrial Production and the Volume of Real Credit (Annual Percent Change)**



Source: SIS, CBRT

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

	2001					2002
	I	II	III	IV	Annual	I
AGRICULTURE	8.5	-2.9	-5.6	-13.6	-6.1	-1.5
TOTAL INDUSTRY	0.8	-10.1	-8.9	-10.7	-7.5	3.0
Manufacturing Industry	1.7	-11.0	-9.7	-12.0	-8.1	2.6
SERVICES	-1.5	-8.0	-5.5	-7.5	-5.8	2.2
Construction	-5.2	-5.8	-8.3	-3.6	-5.9	-2.7
Trade	-2.3	-12.1	-7.4	-14.3	-9.3	3.9
Wholesale and Retail	-2.3	-16.5	-12.6	-17.0	-12.7	3.1
Hotel & Restaurant Ser.	-2.2	14.0	20.1	0.8	10.0	9.2
Transportation - Communication	-2.3	-8.8	-4.5	-3.7	-4.9	1.7
Financial Institutions	-5.3	-10.0	-9.8	-14.2	-9.9	-7.4
Ownership of Dwelling	2.2	2.1	2.1	2.0	2.1	2.0
Business & Pers. Ser.	-0.3	-9.7	-7.8	-10.4	-7.4	2.1
Government Services	2.2	1.9	0.9	1.0	1.5	2.0
IMPORT TAX	-10.1	-32.1	-28.0	-28.4	-25.1	2.6
GDP	-0.8	-9.6	-7.4	-10.4	-7.4	2.3
GNP	-3.1	-12.1	-9.0	-12.3	-9.4	0.7

Source: SIS

The industrial production increased by 7.2 percent during January-May period in 2002 (Table V.1.6). Excluding the petroleum products, the improvement in the industrial sector production declines to 6.3 percent in the period in question. Meanwhile, total capacity utilization rate, which realized as 70.2 percent in January-May 2001 period, climbed up to 74.4 percent in the same period of 2002.

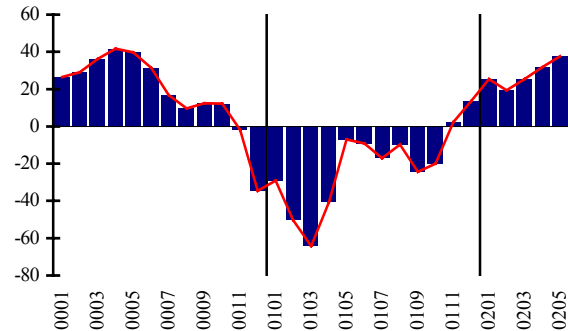
**Table V.1.6. Industrial Production (Annual Percent Change)**

	May		January-May	
	2001	2002	2001	2002
Total Industry	-9.4	11.0	-5.2	7.2
Mining	-12.8	-15.7	-3.2	-5.5
Manufacturing	-9.8	12.9	-5.6	8.3
Energy	-3.9	7.2	-2.6	4.5
Non-petroleum Industrial Production	-12.6	11.7	-7.6	6.3

Source: SIS Monthly Industrial Production Index

Business sentiment, which illustrates the expectations of private firms in the industrial sector about the ongoing course of the economy, turned to positive in November 2001 and continued its trend at an increasing rate in favor of optimists in May 2002 (Figure V.1.5). In this period, the downward tendency in the inflation rate and inflation expectations and stability in exchange rates are thought to have affected expectations positively.

**Figure V.1.5. Business Sentiment in Business Tendency Survey**



Source: CBRT Business Tendency Survey

Compared with the same period of the previous year, services sector value added increased by 2.2 percent in the first quarter of 2002 (Table V.1.5). The improvement in the industrial production, limited contraction of agricultural production and expansion of imports had an impact on the services sector added value. Trade sector value added rose by 3.9 percent compared with the previous year's same period. Influenced by the recovery in the industry sector, the value added of the wholesale and retail trade sector and transportation and communication sector increased by 3.1 percent and 1.7 percent respectively in the first quarter of 2002. Due to the depression in banking sector, the financial sector value added displayed the highest contraction rate with 7.4 percent among services sectors in the first quarter of 2002.

In the first quarter of the year, compared with the previous year's same period, the increase in the number of visiting tourists promoted a 9.2 percent rise in the value added of hotels and restaurant's, one of the sub-sectors of the trade sector. Meanwhile, ownership of dwelling's value added improved by 2.0 percent and affected the services sector's value added positively. The construction sector's value added decreased by 2.7 percent in the first quarter of 2002. Besides, according to the data announced by SIS, house construction permits with respect to construction area (m<sup>2</sup>) registered a high decrease of 49.4 percent, compared with the previous year's same period. The decrease in the

construction permits granted to buildings points out that the contraction of the construction sector value added will persist in the second quarter of 2002 (Box V.1.1).

### V.2. Developments in Labor Market

According to Survey of Household Labor Force (HLF) conducted by the SIS, in the first quarter of 2002, the labor force decreased by 0.5 percent (944 thousand people) compared with the same quarter of the previous year and realized as 22.929 thousand people. Total employment in the first quarter of the year decreased by 3.9 percent compared with the same period of the previous year and declined to 18.467 thousand people. Total employment declined in both urban and rural areas. In this period, 57.2 percent of the total employment was in urban areas while the 42.8 percent of the total employment was in rural areas. Therefore, unemployment rate, which was 8.6 percent in the first quarter of 2001, reached 11.8 percent in the same quarter of 2002. The number of unemployed people increased by 653 thousand people (36.1 percent) and reached 2,462 thousand people (Table V.2.1). In Turkey, 22.3 percent of the unemployed people (549 thousand people) are those who have lost their jobs and 20.1 percent are those who are for the first time seeking jobs. (495 thousand people).

**Table V.2.1. Labor Force and Employment**

	2000					2001		2002	
	Mid Y.	I	II	III	IV	Mid Y.	I	II	III
Labor Force	22.031	21.031	22.694	23.782	22.077	22.269	20.929		
Employment	20.579	19.222	21.127	21.875	19.742	20.367	18.467		
Urban	53,5	56,6	52,2	51,2	55,7	53,8	57,2		
Rural	46,5	43,4	47,8	48,8	44,3	46,2	42,8		
Number of Unemployed	1.452	1.809	1.567	1.907	2.335	1.902	2.462		
Unemployment Rate	6,6	8,6	6,9	8,0	10,6	8,5	11,8		
Urban	8,8	10,8	10,4	11,6	13,2	11,5	14,7		
Rural	4,0	5,6	2,7	3,9	7,0	4,8	7,5		
Educated Young Peop.	21,9	23,7	23,2	28,7	27	25,8	29,4		
Underempl./ L.	6,9	6,0	6,0	5,7	6,1	6,0	5,9		
Inactive Labor Force	13,5	14,6	12,9	13,7	16,7	14,5	17,7		

Source: SIS Household Labor Force Survey

While the urban area unemployment rate was 10.8 percent in the first quarter of 2001, this rate climbed up to 14.7 percent in the same quarter of 2002. Likewise,

the rural area unemployment rate increased from 5.6 percent to 7.5 percent in the first quarter of 2002. In 2001, economic contraction and negative performance in the agricultural sector caused a greater number of people to become unemployed and a sharp increase in the unemployment rate. It is observed that these negative developments in the labor market continued in the first quarter of 2002. Especially, unemployment rate of educated young people recorded a high level of 29.4 percent. This rate was realized as 30.7 percent in the urban areas.

### The negative developments in the labor market due to the economic crisis continued in the first quarter of 2002.

The rate of underemployed people, which is defined as persons who already have a job but who are still looking for a job and the persons who are working but who would prefer to work more hours in their current job or in another job, realized as 5.9 percent in the first quarter of 2002. In the same period, therefore, the inactive labor force, which is the sum of the underemployed and unemployed, increased by 3.1 points reaching 17.7 percent.

When the sectoral breakdown of employment is considered, it is observed that the share of agricultural sector was 30.5 percent in the first quarter of 2002. In the same period, the shares of industry and services were 19.8 percent and 49.7 percent, respectively. Compared with the same period of the previous year, while non-agricultural employment decreased in urban areas, it increased in rural areas.

**Table V.2.2. Employment by Sectors (Thousand Person, Aged 15**

	2000		2001				2002	
	Annual Average	I	II	III	IV	Annual Average	I	
TOTAL	20.579	19.222	21.127	21.875	19.742	20.367	18.467	
Services	9.738	9.326	9.321	9.435	9.467	9.416	9.185	
Construction	1.313	1.029	1.183	1.138	955	1.073	771	
Urban Employ.	11.013	10.872	11.037	11.209	11.001	10.953	10.557	
Rural Employ.	9.566	8.350	10.090	10.666	8.741	9.414	7.910	

Source: SIS Household Labor Force Survey

BOX V.1.1 CONSTRUCTION PERMITS AND CONSTRUCTION SECTOR VALUE ADDED

The developments in the construction sector carry important information with respect to the recovery or contraction tendencies in the economy. Construction sector has a significant share in both GNP and total employment. Besides, a recovery in the construction sector promotes basic metal, non-metallic minerals, wood products and furniture industries that are some of the sub-sectors of the manufacturing industry.

In terms of value added, construction sector contributes to GNP most in the third quarter of the year. The third quarter of the year, including the agricultural sector's contribution, is also the period, in which GNP reaches its highest level. What underlies this seasonality observed in the construction sector value added is the fact that summer is a more proper period for construction work (Figure 1).

The earthquake disasters experienced in Marmara Region in August and November of the year 1999 affected the construction sector adversely. Following the Marmara earthquake, since required legal arrangements for the construction sector were not fulfilled, granting construction permits was suspended until July 2002 and starting new constructions was not allowed in this period. This hindered a more rapid growth in the construction sector in 2000.

In order to keep up with the developments in the construction sector, the SIS announces three-month construction statistics under two main titles: construction permits and occupancy permits. Both statistics are classified with respect to the aim of utilization, such as house, apartment house, commercial building, medical and social building, cultural building, industrial building, administrative building, and other buildings. Besides, these statistics represent various measures in terms of surface area (m<sup>2</sup>), value (million TL), and number of dwelling units.

Construction permit is the license required to start the construction of a new building and occupancy permit is a license required to open the completed buildings for use. Therefore, while occupancy permits reflects past and current developments in the construction sector, construction permits contain information about future periods. Construction permits acquired in a given period are evaluated as a leading indicator of the future developments in the construction sector.

When construction permits, which are leading indicators of the construction sector value added, are analyzed seasonally, it is seen that highest values are attained in the last quarters of each year, except crisis periods (Figure 1).

In GNP calculations, actually finished portions of the buildings started to be constructed in the last year or previous years but remain incomplete, are included in the value added. It is assumed that a building that is started to be constructed will be completed within five years at most. After determining the completion ratio for each year through five years, the portion in terms of floor area constructed in that year is calculated for fully or partly completed buildings having occupancy permits. The calculated floor area for the year involved is multiplied by the m<sup>2</sup> unit cost and then the total cost is obtained. In order to reach total production value, dividends and indirect taxes are added to the total cost<sup>(1)</sup>. That's why the construction permits with respect to floor area is examined as an indicator for construction sector value added. Besides, construction sector value added is calculated by assuming that on the average 70 % of the buildings are completed within two- three years. The contribution of a building as a value added is realized with a lag of two or three year. Hence, construction permits data are leading indicators of construction sector developments for a two to three years period.

The construction permits was decreased by 52.6 percent in terms of number of buildings and 44.1 percent in terms of floor area (m<sup>2</sup>) in the first quarter of 2002 compared to the previous year's same period (Table 1). Construction sector was also adversely affected by the period of economic contraction started in 2001 and construction sector value added was decreased by 5.9 percent compared to the previous year. The contraction in the construction sector also continued in the first three months of 2002 and the sector's value added was reduced by 2.7 percent.

When construction permits and occupancy permits are analyzed, it is observed that these statistics continue to worsen in 2002 following the year 2001 (Figure 2). This circumstance states that the contraction in the construction sector continues also in 2002. Considering the fact that on the average the buildings under construction are completed within two or three years, the contraction in the construction sector will persist in the forthcoming years as well.

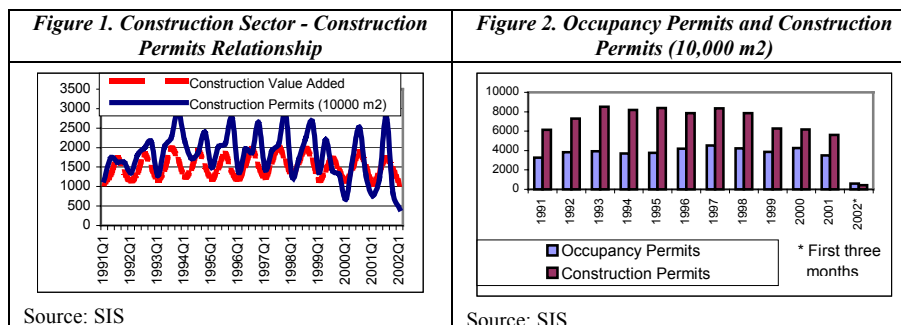


Table 1. Construction Statistics for the First Three Months

	Construction Permits			Occupancy Permits		
	2001	2002	Change %	2001	2002	Change %
Number of buildings	10,930	5,179	-52.6	13,782	9,867	-28.4
Floor area (m <sup>2</sup> )	7,689,024	4,294,758	-44.1	6,541,209	6,027,232	-7.9
Value (million TL)	1,134,126,860	941,094,691	-17	949,593,974	1,307,907,521	37.7
Number of dwelling units	39,420	17,486	-55.6	37,793	31,569	-16.5

Source: SIS

(1) See SIS Gross National Product Concept, Method and Sources (1994)

In Turkey, approximately 52.1 percent of the total employment was comprised of workers getting salaries or daily wages in the first quarter of 2002. In the same period, the share of self-employed was 30.4 percent while the share of unpaid family members was 17.5 percent. In the said period, compared with the same period of the previous year, the shares of self-employed people and unpaid family workers declined while the share of workers getting salaries or daily wages increased (Table V.2.3). In the first quarter of 2002, the total employment decreased by 755 thousand people compared with the same period of the previous year and almost 8 percent (61 thousand) of this amount was composed of workers getting salaries or daily wages (Table V.2.3). Out of 755 thousand people, 37 percent (275 thousand people) and 55 percent (418 thousand people) were self-employed and unpaid family workers, respectively. As it is enough clear from the figures, the decrease in the number of self-employed people and unpaid family workers led to the decline in the level of employment and thus, the increase in the unemployment rate.

Manufacturing industry employment continued to decline in spite of the positive developments in production in the first quarter of 2002. In this period, compared with the same period of the previous year, the manufacturing industry employment index decreased by 6.9 percent (Table V.2.4, Box V.2.1). This situation stemmed from both public and private sectors. In the first quarter of the year, real wages per hour in the manufacturing industry continued to decline both in public and private sectors. Meanwhile, productivity per hour increased both in public and private sectors

**In the first quarter of 2002, real wages per hour in the manufacturing industry continued to decline stemming from both public and private sectors..**

**Table V.2.3. Employment by Economic Activity (Thousand Person, Aged 15+)**

	2001					2002	
	Annual Average	I	II	III	IV	Annual Average	I
Total	20.579	19.222	21.127	21.875	19.742	20.367	1.8467
Workers Getting Salaries	10.198	9.682	9.791	10.057	9.991	9.908	9.621
Self-employed	6.138	5.884	6.347	6.364	6.077	6.142	5.608
Unpaid Family Worker	4.243	3.656	4.989	5.454	3.674	4.317	3.238
Percentage Distribution							
Workers Getting Salaries	49,6	50,4	46,3	46,0	50,6	48,6	52,1
Self-employed	29,8	30,6	30,0	29,1	30,8	30,2	30,4
Unpaid Family Worker	20,6	19,0	23,6	24,9	18,6	21,2	17,5

Source: SIS Household Labor Force Survey

The negative developments in the labor market in 2001 due to the economic crisis, continued in the first quarter of 2002. Compared with the last quarter of the previous year, the decrease in employment rate by 1,275 thousand people in the first quarter of the year and the sharp increase in the unemployment rate support this idea. It is expected that these negative developments in the labor market will restrict the contribution of the recovery in the domestic demand on economic growth in the first half of 2002.

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

	2001					2002	
	I	II	III	IV	Annual	I	
Employment <sup>(1)</sup>	-1,3	-9,0	-11,3	-11,3	-8,3	-6,9	
Public	-2,0	-5,5	-10,3	-7,2	-6,5	-11,1	
Private	-1,1	-9,6	-11,2	-12,1	-8,6	-6,3	
Wage <sup>(2)</sup>	-4,1	-14,6	-15,8	-20,5	-14,6	-15,7	
Public	4,3	-12,5	-15,2	-21,0	-12,5	-12,6	
Private	-5,9	-15,6	-15,9	-20,1	-15,2	-14,9	
Productivity <sup>(3)</sup>	2,8	-0,5	2,2	0,1	1,1	10,1	
Public	12,2	9,1	9,2	1,9	7,8	15,7	
Private	0,7	-2,8	0,4	-0,7	-0,6	9,4	

Source: SIS

(1) SIS, Index for Workers in the Manufacturing Industry, 1987=100

(2) SIS, Quarterly Index of Wages per Production Worked Hour, 1987=100

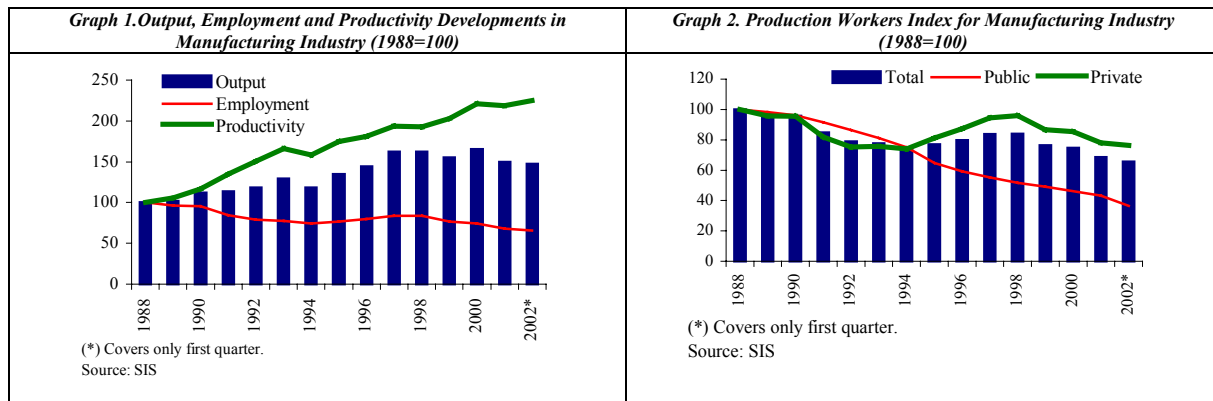
(3) SIS, Quarterly Index of Partial Productivity per Production Worked Hour, 1987=100

BOX: V.2.1 PRODUCTIVITY IN MANUFACTURING INDUSTRY

Productivity in a specific industry sector is generally measured as the ratio of output to input utilized for production. Even though a consensus on measurement of productivity does not exist, similar methods are employed for measurement of productivity in different countries. The choice of method for measurement of productivity depends on the interests of the researcher and the availability of data. Usually, productivity is measured as single-input productivity (the ratio of output to a single input) and multiple-input productivity (the ratio of output to two or more inputs). Another methodology in measurement of productivity is to find the ratio of value added to a single input or more inputs.

In Turkey, SIS publishes two different productivity indexes in order to examine productivity developments, one of these two is the productivity per worker index and the other is the productivity per hour worked index. Productivity per worker is calculated by dividing quarterly manufacturing industry production index by manufacturing industry employment index, while productivity per hour worked is calculated by dividing quarterly manufacturing industry production index by hours worked in production in manufacturing industry index. Therefore, productivity indexes are affected by developments in production and changes in employment in manufacturing industry and hours worked in production.

According to the data published by SIS, manufacturing industry productivity per worker and productivity per hour worked increased by 10.8 percent and 10.1 percent in the first quarter of 2002 compared to the same period of the previous year, respectively. The number of production workers and number of hours spent for production decreased by 6.9 percent and 6.3 percent in the same period. Meanwhile, manufacturing industry production index rose by 3.2 percent. As a result of these developments, productivity level in manufacturing industry bounded sharply (Table V.2.4, Graph 1).



Negative consequences of the contraction in economy in 2001 on the labor market continued in the first quarter of 2002, too. The number of production workers kept declining in both public and private sectors. It is observed that employment in the public manufacturing industry decreased uninterruptedly in the last few years. The steady decline in the share of public sector in manufacturing industry production and policies, which aimed at decreasing employment in public sector, is the main determinant of this outcome. Moreover, employment in private sector also decreased steadily in 1997-2001 period (Figure 2). In other words, private sector could not fill the posts vacated by the public sector and even contrary to that employment in private sector also decreased. The increase in unregistered employment in private sector is thought to be the main reason of this situation. Previous research on this issue shows that unregistered employment increased extensively in private sector during the 1990s and even in some years exceeded the registered economy.<sup>(1)</sup>

Consequently, primary reasons of the productivity increase in the first quarter of 2002 are the recovery in industrial production and the decline in the number of workers and the number of hours worked for production. However, as mentioned earlier, it is better to be careful while evaluating the productivity indexes due to the presence of unregistered employment. It is thought that unregistered employment increases especially during crisis periods. This situation indicates that the rise in registered employment might be delayed, although industrial production shows signs of recovery and thus, it is highly probable to estimate the productivity level higher than its actual level.

<sup>(1)</sup>See; Bulutay, T (1995) Employment, Unemployment and Wages in Turkey, ILO/SIS, Ankara.  
Boratav, K., A.H. Köse ve E.Yeldan "Globalization, Distribution and Social Policy: Turkey, 1980-1998" CEPA Working Paper Series I, number 20.  
Yentürk, N (1997) "Wage, Employment and Accumulation in Turkish Manufacturing Industries (in Turkish), Friedrich Ebert Stiftung, İstanbul.



## VI. BALANCE OF PAYMENTS

### VI.1. Developments in Foreign Trade

In 2002, January-April period, exports and imports rose by 5.9 and 0.1 percent respectively compared to the same period of the previous year and the foreign trade deficit stood at USD 3.3 billion with a decline of 14.6 percent. Thus, in the same period, the proportion of exports covered by imports realized as 75.9 percent. This figure pointed out an increase according to the same period of 2001.

The real appreciation of Turkish Lira beginning from November 2001 and recovery trend observed in the economy affected imports positively on March and April. On a year-on-year basis, exports increased by 11.1 percent and 32.3 percent on March and April, respectively after decreasing trend observed on the first two months of 2002. USD 4 billion import volume in April, has been the highest amount since January 2001 and it was evaluated as the confirmation of revival in the economic activity.

**In March and April, imports increased due to the real appreciation of Turkish Lira and the increase in industrial production.**

Table VI.1.1. Foreign Trade (USD Million)

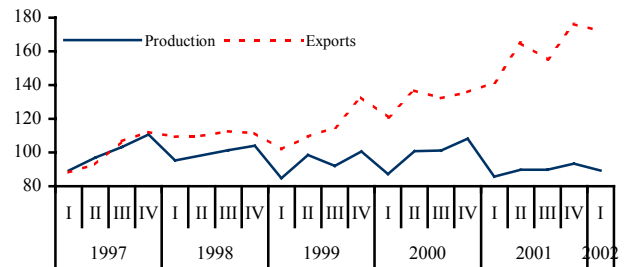
	April			January-April		
	2001	2002	Percentage Change	2001	2002	Percentage Change
EXPORTS	2616,1	2738,2	4,7	9914,3	10498,9	5,9
Agriculture	165,9	129,2	-22,2	675,8	624,1	-7,7
Fishing	1,5	3,2	108,1	8,8	13,4	52,4
Mining	24,4	31,5	29,1	98,7	112,6	14,0
Manufacturing	2422,7	2572,4	6,2	9123,5	9736,3	6,7
Other	1,4	2,0	38,5	7,5	12,6	67,2
IMPORTS	3038,0	4020,0	32,3	13813,0	13828,3	0,1
Consumption	360,9	409,0	13,3	1406,4	1257,5	-10,6
Investment	557,7	706,9	26,7	2336,9	2015,0	-13,8
Intermediate	2076,2	2888,2	39,1	9924,0	10461,0	5,7
Crude oil	279,8	264,7	-5,4	1207,7	1155,4	-4,3
Other	43,2	15,9	-63,2	145,7	62,3	-57,2

Source: SIS

When the breakdown of imports by sub-items is analyzed, it is observed that the consumption and the

investment goods imports decreased by 10.6 and 13.8 percent, respectively in the first four months of 2002 while the intermediate goods excluding crude oil rose by 7.1 percent as a result of revival in industrial production. In the first four months of 2002, amount of crude oil imports grew by 6 percent compared to the same period of the previous year, however the value of crude oil imports narrowed by 4.3 percent due to decrease in prices in the world market.

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



Source: SIS

According to the Business Survey conducted by the CBRT, it is expected that domestic markets would keep its recovery trend in the following three months. Improvement in production and sales expectations for the next three months continue. Therefore, in line with the revival in the domestic demand, it is projected that import demand will keep its upswing trend for the next three months. The collection of VAT on Imports implies that imports will keep its rising trend in May and June compared to the previous year. In case of reduction in the excess volatility in exchange rates and interest rates, it is expected that import will maintain its increasing trend in the second half of the year.

In spite of gradual increase in the domestic market demand and the real appreciation of Turkish lira in the first four months of 2002, manufacturing goods exports, which constituted 92.7 percent of total exports, rose by 6.7 percent in the first four months of 2002 compared to the same period of the previous year. The main reason of this increase was that firms directed their products to international markets instead of domestic markets

because of the rapid contraction in domestic demand occurred in 2001. This situation manifests itself most boldly in the automotive sector. The ratio of automotive sector exports in the total production, which was 73 percent in 2001, climbed up to 76.8 percent in January-May period of 2002.

The slowdown of growth in the OECD countries, which constituted 64 percent of our total exports, the contraction in financing facilities, rising financing cost and the deterioration of export prices restricted the rapid growth in exports.

Figure VI.1.2. Monthly Exports and Imports (USD Billion)

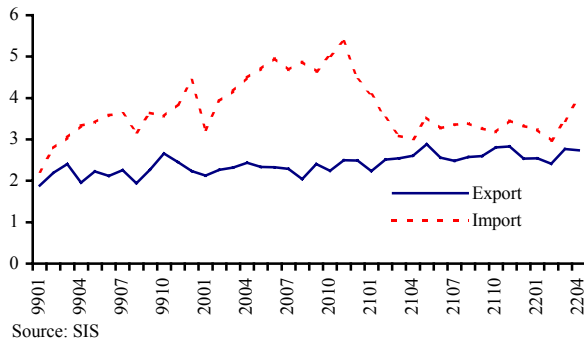
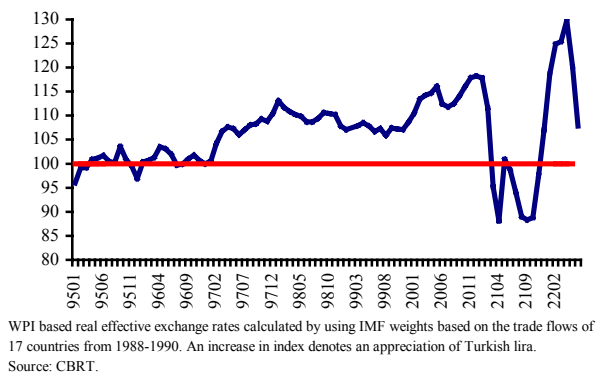


Figure VI.1.3. Real Effective Exchange Rate (1996=100)

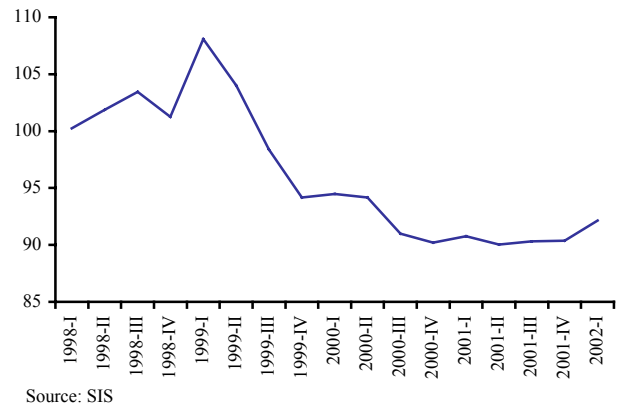


The terms of trade which were deteriorating since 1999 upturned relatively in the first four months of 2002. In this period, according to the average of four months, import and export prices fell by 8.8 and 7.5 percent, respectively.

As indicated by the IMF World Economic Outlook projections, the recession in the world economy, which has been persisting since the second half of 2000, is

expected to recover in the second half of 2002. The US economy, which constitutes almost one third of the world trade and imports, grew by 5,6 percent in the first quarter of 2002 and its current account deficit increases rapidly. Considering the spillover effects, these improvements mentioned above give a positive signal of recovery in global recession. Consequently, the recovery process in the world economy is also expected to make a positive impact on exports in Turkey.

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



According to the Business Survey May results, gradual increases were observed in volume of goods sold in the foreign market and new orders received from the exports markets in the last three months. Naturally, it is observed that the rising trend related to export expectations in favor of optimists proceeded for the next three months. In fact, according to the Turkish Exporters Association reports, the rate of increase in exports realized as 5.9 percent in the first half of 2002.

Figure VI.1.5. Exports Expectations for the next Three Months (Percentage) (Optimists minus Pessimists)

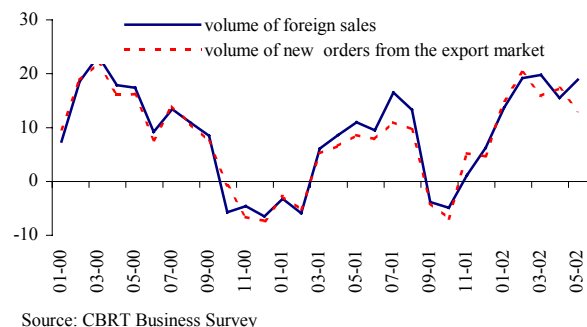


Figure VI.1.6. Manufacturing Import Volume and Production Indices (1997=100)

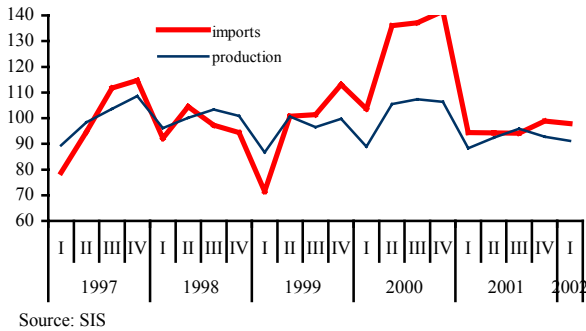
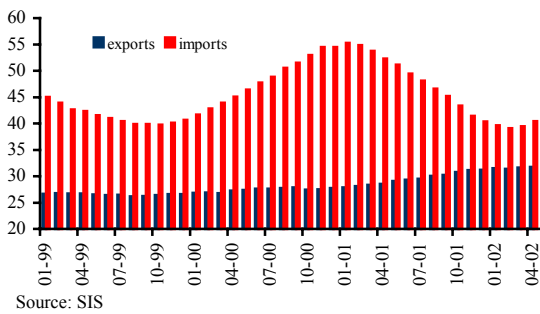


Figure VI.1.7. Exports and Imports (Annual, USD Billion)

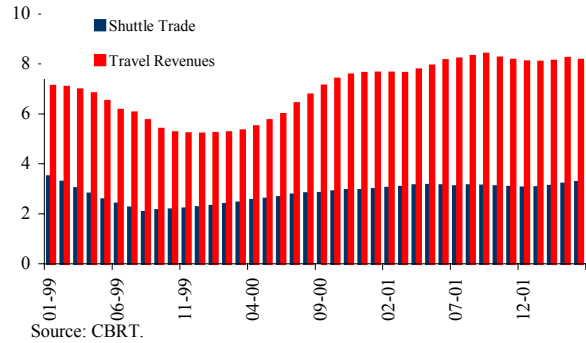


## VI.2. Current Account Balance

Current account balance gave a USD 120 million deficit during the first quarter of 2002. The main reason behind the decline in current account deficit compared to the same period of 2001 is the 78.6 percent decrease in foreign trade deficit. However, rising imports widened foreign trade deficit in April and hence increased the current account deficit to USD 665 million in the first four months of the year. As reduction in income was higher than reduction in expenditures of other goods and services, the deficit in other goods and services became USD 555 million, which in turn contributed to the growing current account deficit.

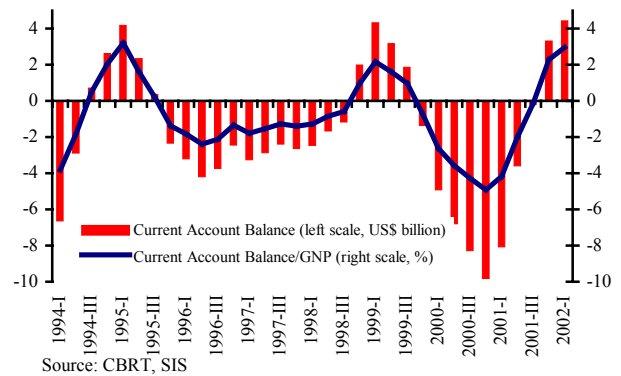
**Current account deficit expanded as a consequence of the substantial widening of the foreign trade deficit in April.**

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



Services revenues decreased in the first four months of 2002 compared to the same period of the previous year. Other private and official service incomes followed their declining trend and came down by 72.2 percent in January-April period. Travel revenues, meanwhile, rose by 5.1 percent in the same period and restricted the fall to an extent. While the number of foreign visitors increased by 2.7 percent in the same period, their average spending rose by 21.6 percent.

Figure VI.2.2. Current Account Balance (Annual)



Interest payments and other expenditures were the main determinants of services expenditures. Although long-term interest payments soared in the first four months of 2002, short-term interest payments decreased significantly and total interest payments were realized as USD 1.4 billion.

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

	April		January-April	
	2001	2002	2001	2002
Foreign Trade Balance (fob)	58	-653	-1988	-1184
Other Goods and Services Balance	328	-31	748	-555
Transfers Balance	263	238	1416	1074
Current Account Balance	649	-446	176	-665
Capital Flows	-814	926	-3871	1565
Foreign Direct Investment (Net)	53	13	1627	70
Portfolio Investment (Net)	-549	601	-3417	545
Long-Term (Net)	-575	88	-1083	526
Short-Term (Net)	257	224	-998	424
Net Errors and Omissions	-227	140	-1250	-1149
Shuttle Trade	311	384	1077	1303
Travel Revenues	555	474	1292	1358
Workers' Remittances	197	151	1126	644
Other Invisible Items				
Revenues	597	352	3029	1354

Source: CBRT

Unrequited transfers continued their downward trend – which started in the second half of 1999- in January-April period of 2002 as well. Decline in workers' remittances by 42.8 percent resulted in a 24.2 percent contraction in the unrequited transfers in the same period.

### VI.3. Capital Flows

Capital inflow in the first four months of 2002, realized as USD 1.6 billion, reserves and the IMF credit.

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

	April		January-April	
	2001	2002	2001	2002
GEENERAL GOVERNMENT	-777	-123	-747	449
Bond Issues	-615	0	-169	938
Medium and Long-Term	-162	-123	-578	-489
Short-Term	0	0	0	0
BANKS	-209	-452	-1633	-1205
Bond Issues	0	0	0	-112
Medium and Long-Term	-140	-147	-482	-186
Short-Term	-69	-305	-1151	-907
PRIVATE SECTOR	-442	316	-582	393
Bond Issues	0	0	0	0
Medium and Long-Term	-283	322	-22	974
Short-Term	-159	-6	-560	-581
OTHER	614	1185	-909	1928
Securities (Liability)	85	467	-3207	815
Foreign Direct Investment (Inside the country)	45	20	1919	75
Other	484	698	379	1038
NET CAPITAL INFLOW	-814	926	-3871	1565

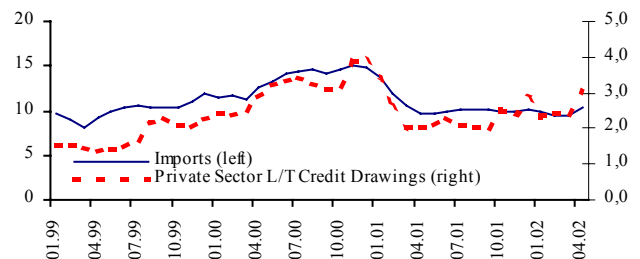
Source: CBRT

Residents purchased USD 1.1 billion worth securities abroad in the January-April period. The main motive

behind this behavior, which originates from domestic banks' purchase of Turkish eurobonds, might be that Eurobond prices have been rising since October 2001. Non-residents' purchase of domestic securities has been generating net capital flows since December 2001. A sizable inflow has occurred when non-residents purchased government debt securities. Bond issuance by the Treasury dominated the first half of the year. Treasury borrowed 1.5 billion USD in the first quarter and 750 million euro in May, total issuance amounting to approximately 2.2 billion USD, and total redemption in the January-April period reached 512 million USD.

### Treasury's eurobond issuance dominated the liabilities part of portfolio investments.

**Figure VI.3.1. Private Sector Long-Term Credit Drawings (quarterly, USD billion)**

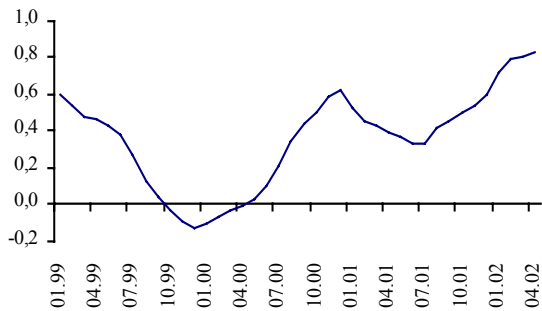


Source: CBRT.

Non-bank private sector, which is the main consumer of long-term credits, started to redeem the credits that were extended in the previous year, however reduced its demand substantially for new credits because of the fall in imports (Figure VI.3.1). Private sector's drawings of long-term credit in the January-April period reached 3.4 billion USD, generating a net capital inflow of 974 million USD when the redemptions are deducted. The same sector was the main repayer in short-term foreign exchange and trade credits.

Foreign exchange deposits of Turkish workers abroad with the Central Bank increased by 227 million USD in the January-April period. The annualized amount of inflows to this account has shown a notable upward trend since the second half of 2001.

Figure VI.3.2. FX Deposits with the Central Bank (annual, USD billion)



Source: CBRT.

Domestic banks constitute the main sector generating short-term capital flows. Short-term credits extended by the banks and repayments in annualized terms fell to one third of previous year's amounts as of April 2002. Banks paid 644 million USD in net terms in the first four months of 2002. No increase is expected in the short-term foreign borrowing in the next period because there is no strong evidence that credit demand will grow and the banks have sufficient domestic funds to fulfill any possible credit demand. Meanwhile, 2.9 billion USD were recorded as inflow due to the drop in domestic banks' foreign exchange reserves deposited in their correspondent banks.

In February, 8.7 billion USD IMF credit debited in Treasury's account, while 6.1 billion USD worth SRF redemption was made from the Central Bank account in the same month. In April, 1.1 billion USD IMF credit recorded under Treasury's account. In sum, the net amount of IMF credit used in the first quarter was 3.7 billion USD. Central Bank reserves rose by 3.4 billion USD due to the surplus in the balance of payments.

In line with the developments discussed above, forecasts for the following period can be summarized as follows: Imports and travel revenues will be the main determinants of the current account balance. Exports are expected to continue its performance that it has delivered in the first half in the second half as well. On the other

hand, restricting effect of the domestic demand contraction on imports curtailed to a great extent. The degree of import growth will depend on the size of the revival of industrial production and consumption expenditure.

Main source of capital inflow anticipated for the year 2002 is the credit to be drawn up in the framework of the Stand-by agreement signed with the IMF. Other capital inflow would depend mostly on the stability of exchange rates and interest rates as well as the degree of reduction of the pressure of debt structure on the domestic demand.

Table VI.3.2. Foreign Debt Indicators

	2000	2001	2002-Q1*
Foreign Debt Stock			
USD	119.7	115.1	117.5
Ratio to GNP	59.4	78.6	78.2
Short-Term Foreign Debt Stock			
USD	28.3	16.2	14.5
Ratio to Reserves	122.9	85.2	72.7
Medium Long-Term Foreign Debt Stock (USD)			
International Institutions	11.4	22.2	24.9
Private Creditors	71.2	69.0	70.5
Commercial Banks	28.2	26.9	27.3
Short-Term Debt and Medium Long-Term Repayments			
USD	43.5	32.6	31.0
Ratio to Reserves	189.0	171.3	155.8
<u>Debt Service Ratio</u>	<u>35.7</u>	<u>40.6</u>	<u>38.8</u>

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

Source: CBRT.

Short-term debt to reserves ratio, an indicator for market vulnerability, improved during the first quarter of 2002. In addition, sum of short-term debt and medium long-term repayments to reserves ratio recovered during the same period as well. Taking into account the first quarter realizations, it is expected that signs of improvement will be more evident at the end of the year and vulnerability of the market will relatively diminish through the year-end. At the same time, debt service ratio fell during the first quarter of 2002.

## VII. DEVELOPMENTS IN THE WORLD ECONOMY

Economic indicators pertaining to the first half of 2002 show that an overall recovery in the world economy is being observed after a contraction in 2001. The rapid growth of the US economy, which is one of the main determinants of the global economic developments, in the first quarter of the year and positive economic indicators for the second quarter point that the US economy will continue to expand in 2002. The negative developments in the stock market are not expected to reverse this positive trend. Although at a slow pace, the Euro area economies achieved growth in the first quarter of the year too. The strengthening of the growth process of the US economy is expected to influence the growth in euro area positively in the forthcoming periods. The low level of Japanese yen slowed down the negative consequences of the economic contraction by increasing the exports in the Japanese economy, where structural issues still create significant downside risks for the growth of the economy. It is thought that the Japanese economy, which seems unable to grow by its internal dynamics in short-term, might recover from the contraction with the help of the growth of the global economy. In Asian economies, which are directly affected by the growth of the US economy, growth figures and production developments are observed to realize as positive. In contrast to the positive developments in the global economy, developments in the Latin American countries create concerns about the future economic developments in these countries. The economies of this region contracted in the first quarter of the year and recent figures indicate that recession will continue in the second half of the year too. The effects of the crises in Argentina still continue and sustainability of public debt of Brazil is being questioned. It is expected that the downside risks for the growth of the global economy will diminish on condition that economic policies that support the growth process in the US economy and euro area in the rest of 2002 will continue and oil prices will stay at this low level as estimated.

### *United States of America*

The US economy attained a 6.1 percent growth in the first quarter of the year. However, it is observed that the contribution of inventory accumulation to the growth of the economy is still high. Following the high growth rate, economic indicators for April and May demonstrate that the upward trend in the economy keeps its pace. Meanwhile, the economic indicators point to a vulnerable and slow recovery rather than a strong upturn from the economic recession. The June data of consumer confidence index show that expectations are still vulnerable. The Michigan University consumer confidence index decreased to 90.8 percent at June from 96.9 percent in May. Moreover, it is observed that the new employment opportunities are created in April and May. The maintenance of this positive trend will support the recovery of consumer confidence index. The negative developments in the stock market are thought to be affective on the decline in consumer confidence index. Moreover, the negative developments in the stock market also have the probability to disturb the investment expenditures of firms. FED, considering the vulnerability of growth process, decided to keep interest rates at 1.75 percent level. The downward trend of the inflation rate created the opportunity for FED to implement policies that support growth of the economy. Core inflation increased by 0.2 percent at May after its 0.3 percent rise in April.

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**US economy grew by 6.1 percent in the first quarter of 2002. It is expected that this upward trend would continue in the second quarter.**

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### *Europe*

The European economies, which contracted in the last quarter of the previous year, grew by 0.2 percent in the first quarter of 2002. The reason of this moderate increase is the contraction of domestic demand by 0.5 percent in that period. The increase in exports due to the recovery of global demand limited this negative development.

The industrial production increased by 0.6 percent in the first quarter of 2002 after having decreased during 2001. The recovery in the European economies indicates that they will reach the potential growth trend in the second quarter of 2002. Moreover, consumption is likely to strengthen throughout the year due to higher wage settlements, an increase in net job creations and low real interest rates.

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

	2000	2001	2002
World	4,7	2,5	2,8
Developed Countries	3,9	1,2	1,7
U.S.A.	4,1	1,2	2,3
Canada	4,4	1,5	2,5
Euro Area	3,4	1,5	1,4
Germany	3,0	0,6	0,9
France	3,6	2,0	1,4
Italy	2,9	1,8	1,4
U.K.	3,0	2,2	2,0
Japan	2,2	-0,4	-1,0
Developing Countries	5,7	4,0	4,3
Developing Asian Countries	6,7	5,6	5,9
Newly Industrialized Asian Countries**	8,5	0,8	3,6
ASEAN-4***	5,1	2,6	3,3
China	8,0	7,3	7,0
India	5,4	4,3	5,5
Developing Countries in America	4,0	0,7	0,7
Argentina	-0,8	-3,7	-10/-15
Brazil	4,4	1,5	2,5
Chile	4,4	2,8	3,0
Mexico	6,6	-0,3	1,7
EU members	4,9	0,4	3,1
Turkey	7,4	-6,2	3,6
Czech Republic	2,9	3,6	3,3
Hungary	5,2	3,8	3,5
Poland	4,1	1,1	1,4
Bulgaria	5,8	4,5	4,0
Romania	1,8	5,3	4,5
CIS	8,3	6,2	4,5
Russia	9,0	5,0	4,4
Africa	3,0	3,7	3,4
Middle East	5,3	4,5	3,1

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

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

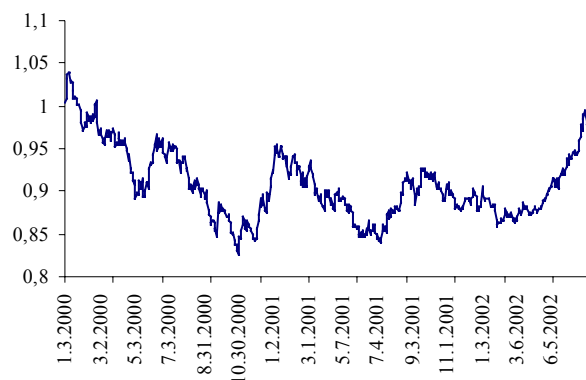
Source: IMF, World Economic Outlook, April 2002

In May, the consumer price index increased by 2 percent compared with the same month of previous year and remained in the target band. Nevertheless, the ECB fears for core inflation, which realized as 2.6 percent in the

same month. Therefore, it is believed that the ECB would tighten monetary policy according to the inflationary pressure of economic growth.

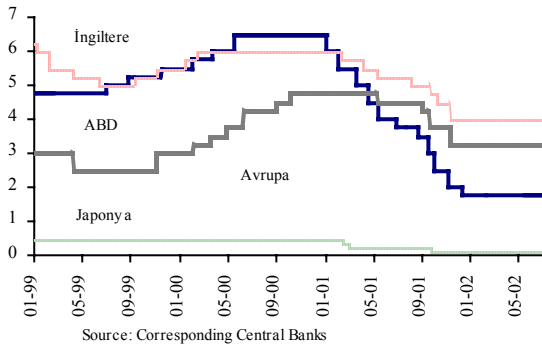
It is observed that since April, euro has appreciated against US dollar. The US dollar/euro parity rate, which was at 0.88 level in March, accelerating during the second quarter of 2002 and reached 0.98 at the end of June. It is considered that there are three reasons behind the depreciation of US dollar that accelerated in mid-June. First, expectations about the recovery of US economy are getting more moderate. Second, there are negative developments in US stock exchange markets. Third, there is a doubt about the finance of the growing current account deficit.

**Figure VII.1. The USD-Euro Parity**



The British economy weathered the global slowdown relatively well compared to the euro area. Slowdown in the United Kingdom bottomed out in the last quarter of 2001, and the economy recorded 0.1 percent growth in the first quarter. As the unemployment rate was not high, the consumer confidence remained at optimistic levels, and interest rates were at low levels, domestic consumption expenditure was able to compensate for the weak exports and investment expenditure. Investment in the services sector—the sector that constitutes almost two thirds of the economy—is likely to increase from the second quarter on. Meanwhile, the manufacturing industry production is expected to rise since the depletion of inventories halted. As a result of the successful monetary policy, the rate of inflation remains below the target level of 2.5 percent.

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



### Japan

There is no concrete indication that recovery is on the way in the Japanese economy, which once again experienced a recession since the second quarter of 2001. The Bank of Japan returned to the zero interest rate policy in March and started to provide much more liquidity to the financial markets. However, weak banking system has not been successful to convert this liquidity into domestic credit expansion. It is vital that the non-performing loan problem in the system be overcome in order for the amount of bank credit to recover.

### Recovery in the Japanese economy depends to large extent on the recovery in the world economy and depreciation of the Japanese yen.

Japanese economy was hit by the slowdown in the US economy, while trying to curb the deflationary environment. Japanese firms faced important problems because of several factors, namely, the relatively strong Japanese yen during end-2000, the crash of the global technology products market and in turn the falling export revenues.

Leading indicators of the Japanese economy imply that a strong recovery could not be achieved. Since the Japanese economy lacks policy instruments that could work in the short-run, recovery depends to a large extent on the recovery in the world economy and depreciation of the yen. Likewise, as observed recently, the Japanese government and the central bank are in favor of a weaker yen. A rapid recovery in the demand of the US and Europe, and a more competitive yen might reduce the

effect of the recession in the country. Nonetheless, there is possibility that South East Asian countries –being competitors of Japan– might retaliate, as the weak yen policy could deteriorate the competitiveness of these countries.

Widely accepted profit-based wage system in Japan brings about a reduction in the salaries and wages of workers as profits of firms decline. At present, the weak consumer confidence and falling wages and employment altogether imply that the rebound of the Japanese economy would rely on the recovery in the world economy rather than the expenditures of households.

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

	2000	2001	2002
Developed Countries	2,3	2,2	1,3
U.S.A.	3,4	2,8	1,4
Canada	2,7	2,5	0,9
Euro Area	2,4	2,6	1,9
Germany	2,1	2,4	1,5
France	1,8	1,8	1,5
Italy	2,6	2,7	2,2
U.K.	2,1	2,1	2,4
Japan	-0,8	-0,7	-1,1
Developing Countries	6,1	5,7	5,8
Developing Asian Countries	1,9	2,6	2,5
Newly Industrialized Asian Countries**	1,1	1,9	1,3
ASEAN-4***	3,0	6,6	6,6
China	0,4	0,7	0,3
India	4,0	3,8	4,1
Developing Countries in America	8,1	6,4	8,2
Argentina	-0,9	-1,1	25-30
Brazil	7,0	6,8	6,1
Chile	3,8	3,6	2,3
Mexico	9,5	6,4	4,3
EU members	24,7	21,1	17,7
Turkey	54,9	54,4	49,1
Czech Republic	3,9	4,7	4,0
Hungary	9,8	9,2	5,4
Poland	10,1	5,4	3,2
Bulgaria	10,4	7,5	4,5
Romania	45,7	34,5	25,2
CIS	25,0	19,8	13,4
Russia	20,8	20,7	14,1
Africa	14,2	12,6	9,3
Middle East	9,8	8,0	9,5

\* 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, and April 2002.



## Asia

Recently published data in Asian countries, except Japan, point to a gradual upturn. Both production and exports started to rise after late 2001 as a result of the inventory adjustments in the US and the rise in the prices of electronic products in the global markets. Exports resumed to rise once again, in some cases after prolonged periods of decrease, in Korea, Malaysia, Singapore, and Taiwan. Positive outlook contributed to the improvement in the consumer confidence and the retail sales rose in China, Korea and Taiwan. However, the outlook for the rest of the year regarding exports and overall economic situation still depends on the global recovery and especially the improvement in fixed investments in the US.

**Table VII.3. Current Account Balance to GDP ratio for Selected Country Groups Percentage**

	2000	2001	2002
Developed Countries	-1,0	-0,8	-0,8
USA	-4,5	-4,1	-4,1
Canada	2,5	2,7	1,8
Euro Area	-0,2	0,7	0,8
Germany	-1,0	0,5	0,5
France	1,8	2,5	2,5
Italy	-0,5	0,4	0,7
UK	-1,8	-1,8	-2,1
Japan	2,5	2,1	2,9
Developing Countries			
Developing Asian Countries	2,8	3,1	2,2
Newly Industrialized Asian Countries**	4,5	6,3	5,8
ASEAN-4***	7,9	5,7	3,4
China	1,9	1,7	1,1
India	-0,9	-	-0,5
Developing Countries in America	-2,4	-2,9	-2,4
Argentina	-3,1	-2,1	4,2
Brazil	-4,1	-4,6	-3,7
Chile	-1,3	-1,4	-1,8
Mexico	-3,1	-2,8	-3,0
EU members	-5,2	-2,9	-3,6
Turkey	-4,9	1,4	-1,2
Czech Republic	-5,6	-4,7	-4,8
Hungary	-2,9	-2,4	-2,9
Poland	-6,3	-4,0	-4,2
Bulgaria	-5,8	-6,4	-5,9
Romania	-3,7	-5,9	-5,3
CIS	13,3	8,4	4,9
Russia	17,4	11,3	7,2
Africa	0,7	-0,5	-2,6
Middle East	12,1	6,9	2,5

\* 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, April 2002.

## Latin America

There is no obvious sign of a growth process started in the Latin American countries. The Brazilian economy, one of the big economies in the region, contracted by 0.7 percent in the first quarter of 2002 compared with the same period of last year. It is claimed that the most important cause of the recession in the economy is keeping of interest rates at high levels by the Brazilian Central Bank in order to fight against inflation. The central bank revised its inflation forecasts and raised the year-end inflation estimation to 4 percent, yet it has not changed the interest rates. The increase in the industrial production in April that did not occur in all but only in some limited number of sectors has failed to reverse the worsening business climate. As a matter of fact the unemployment rate climbed to 8.5 percent in May, which had also increased in April. Besides these negative occurrences, suspects have emerged on the sustainability of the debt stock. Moody's converted the foreign credit mark of Brazil from stable to negative in the beginning of June. This caused the spreads on Brazilian securities to rise.

The Argentine economy still does not exhibit any sign of recovery. The data released in June indicate that GNP declined by 16 percent in the first quarter of 2002. The decline of domestic investment by 46 percent over the same period is the most impressive indicator of the damage caused by the crisis. There are two critical points in the agenda of the Argentine economy in the following days: the first is whether they will sign a new arrangement with the IMF, and the second is if they will cancel the legislation preventing the deposit withdrawals. Even both problems are solved in a reasonable way, the Argentine economy is not believed to recover in a short period.

The Chilean economy, another important member of the region, is also in a contraction. Rising unemployment rate is accompanied by declining industrial production. The most update data released in May shows that the industrial production declined by 3.8 percent compared with the last year.

The Mexican economy follows other countries in the region as it has contracted by 1.6 percent over the same

period. Since the Mexican economy is heavily influenced by the events in the American economy, it is thought that the Mexican economy will be subject to negative impacts resulting from the depreciation of US dollar against other currencies.

### ***Eastern Europe***

Fundamental economic indicators in the Eastern European countries paint a relatively healthier picture. They maintain to be the attraction point for foreign investors by experiencing growth rates higher than world average, running current account deficits financed by foreign direct investments, low public account deficits and strong reserve positions. The fact that the investment growth rate was above the GDP growth rate and the indication that this situation would continue in the near future together imply that these economies are likely to attain high growth rates. Another noteworthy issue is that these economies attained high growth rates in a period when imports significantly contracted in the European Union.

The Polish economy has been experiencing weak growth rates since 2001. Gross domestic product decreased by 0.5 percent in the first quarter of 2002 following a growth rate of 1.1 percent in 2001. Factors such as the inability to improve the flexibility in labor market, high corporate tax rates, and relatively weak foreign direct investment were behind the relatively small growth rate compared to other countries of the region. In addition to these fundamental problems, tight monetary policy implementation during the last quarter of 2001 and the first quarter of 2002 was also a constraining factor on growth. The National Bank of Poland, together with the demand of the government, cut interest rates several times in the first half of the year that totaled to 3 percentage points. Falling inflation expectations and smaller than expected growth rates were the main reasons behind the Central Bank's decision.

Low export level due to weak external demand and strong currency, and flat domestic investment are likely to pose problems for the Hungarian government that came to power in April. The inflation rate, which has been on a downward trend for the last one year, rose to 6.1 percent in April. National Bank of Hungary, considering that there might be the possibility of not

attaining the year-end target of 4.5 percent, raised its policy rates by half percentage point to 9 percent.

The growth rate in the Czech Republic fell to 2.5 percent in the first quarter of 2002 because of the slowdown in export growth. Foreign direct investments play a role in improving productivity and raising wages, while supporting domestic demand as well. This outcome could compensate for the weakness of exports. Czech Crown appreciated vis-à-vis the euro by 16 percent as of end-May compared to end-2001. It is expected for this reason that the current account deficit as a ratio of GDP would rise in 2002.

### ***Crude Oil and Commodity Prices***

Crude oil prices relatively stabilized. The geopolitical factors creating risks directly on oil supply lost their significance. Crude oil prices increased in the first half of May and in the rest of that month it decreased rapidly. Global crude oil demand is recovering gradually. It is observed that the contraction of the crude oil demand of OECD countries ended in the second quarter of 2002. Due to the global growth prospects, it is expected that crude oil demand would accelerate in the course of the year. The World crude oil production increased moderately in May. At the meeting on 26 June 2002, OPEC decided to maintain the prevailing production level and keep the crude oil prices per barrel at 20-25 US dollar band during the third quarter. OPEC announced that they could increase the production in the last quarter in line with demand, but they will make a decision about this subject at the meeting on 18 September 2002.

***Table VII.4. World Commodity Price Developments (US \$. Annual Percentage Change)***

	1999	2000	2001	2002
Manufactured Products	-1,9	-5,1	-2,4	-0,5
Crude Oil	37,5	57,0	-14,0	-5,3
Basic Non-Oil products	-7,0	1,8	-5,5	-0,1
Food	-15,6	-0,5	3,0	3,9
Beverage	-21,3	-16,6	-19,1	3,9
Agricultural Products	2,3	2,0	-7,2	-4,6
Metal Products	-1,5	12,1	-9,5	0,3
World Trade Prices Deflator	-2,0	0,3	-3,5	-1,5

Source: IMF, World Economic Outlook, April 2002.

## VIII. ASSESSMENT OF INFLATION OUTLOOK

In this chapter of the Monetary Policy Report, developments after the April 2002 report are assessed in line with the course of inflation in the next months. Moreover, an evaluation of the prospects for inflation in 2002 is also incorporated.

A medium-term strategy was set up to curb inflation within the framework of the present economic program. This strategy aims at reducing the inflation rate, progressively, to 35 percent at the end of 2002, 20 percent at the end of 2003 and 12 percent at the end of 2004 with the help of monetary and fiscal policies as well as structural reforms that improve efficiency and productivity in the economy.

### VIII.A. MAIN FACTORS DETERMINING INFLATION

#### *VIII.A.1. Developments in Aggregate Demand and Supply*

GDP rose by 2.3 percent in the first quarter of 2002 with respect to the same period of the last year. The growth rate in GNP was 0.7 percent because of the fall in the net factor income from abroad.

Expectations regarding the prospects for the economy turned into positive and both exchange rates and interest rates relatively stabilized in the first quarter of 2002. As a reflection of these favorable developments, industrial production resumed to increase; yet no parallel development was observed in aggregate demand.

Private consumption expenditure recorded a fall off by 2 percent in the first quarter compared with the same period of the last year. However, it is observed that the rate of fall in consumption expenditure in the first quarter of 2002 slowed compared to the previous quarter. The drop in employment, real wages and consumer credit were still effectual on consumer expenditure.

*Table VIII.A.1.1. Contributions to Growth (percentage)*

	Private Consumption	Public Consumption	Private Fixed Capital Investment	Public Fixed Capital Investment	Inventory Changes	Net Exports	GDP Growth
I-2001	1.8	-0.1	-3.1	-0.2	-5.3	9.8	-0.8
II-2001	-7.7	-0.6	-7.2	-2.5	-8.6	16.9	-9.6
III-2001	-6.6	-1.1	-8.5	-1.5	-0.3	10.6	-7.4
IV-2001	-7.3	-1.0	-9.2	-2.0	-2.9	12.1	-10.4
2001	-6.1	-0.7	-7.3	-1.6	-4.0	12.3	-7.4
I-2002	-1.5	0.2	-5.0	-0.7	6.3	2.9	2.3

Source: SIS, CBRT

A similar situation applies to the private sector fixed investment, which decreased by 26.3 percent in the first quarter of 2002. Although this rate is quite high, the fact that the same rate was 50.2 percent in the previous quarter implies a gradual recovery in investments.

The January-May period witnessed positive developments on the production side. In this period, total industrial production rose by 7.2 percent compared to the same period of last year. Inventory building behavior of firms and positive developments in exports were the main factors behind the rise in production. The contribution of inventory building to GDP growth was 6.3 percentage points in the first quarter.

In the first four months of the year exports were 5.9 percent higher than a year earlier, while, the downward tendency in imports observed since last year seems to come to an end with the 32.3 percent rise in April compared to April 2001. The increase in production mirrored itself in especially intermediate good imports, which rose by 5.7 percent in January-April period. In line with these developments, the contribution of net exports of goods and services to the GDP growth became to be 2.9 percentage points in the first quarter. However, because of the rising imports as a result of higher production, the probable contribution of net exports to growth is expected to remain more conservative in the remainder of the year.

The fact that the economic program has been operating in a very determined manner contributed to the upturn in expectations observed since November 2001. The expectation index for the next three months, which was built by aggregating some demand and production indicators of the CBRT Business Tendency Survey,

showed a strong improvement in the first quarter, while it recorded a moderate progress in April and May. The business confidence progressed in favor of optimistic during the same period.

In spite of these positive developments, the political uncertainty perception, which appeared after June, imposed a pressure on both exchange rates and interest rates by raising the risk premium. The issue of how various agents of the economy would evaluate the above-mentioned uncertainty behavior is gaining importance as it has an effect on the prospects for economic activity.

The facts that the finished good inventories reached normal levels and that raw material inventories tend to build up for the next three months as of May are in line with the view that inventory buildup would stimulate growth. However, rising interest rates due to the uncertainty perception may lead to a postponement in production and investment decisions of firms. The continuation of firms' inventory buildup behavior depends on the extent that they evaluate the persistence of the present uncertainty environment.

The prorogated downward tendency in real wages and the high and rising unemployment rate are considered to be the main impediments against private consumption growth. As these impediments vanish, the growth in industrial production would keep its pace and spread to all sectors.

#### ***VIII.A.2. Developments in Exchange Rate***

Beginning from April, the Central Bank held scheduled FX purchase auctions, which do not contradict the floating exchange rate regime and the long run value of the Turkish lira. In July, due to political uncertainty perceptions the reverse currency substitution process halted. Although this development in reverse currency substitution is considered to be a temporary situation, the scheduled auctions were postponed for a temporary period. In May and June, the Turkish lira depreciated by 16.3 percent on a cumulative basis vis-à-vis exchange rate basket consisting of 1USD+0.77 Euro.

In the second quarter of 2002, additional foreign financing from the IMF and Treasury's borrowings from international markets contributed to foreign exchange supply. On the foreign exchange demand side, gradual improvement in import demand as a consequence of slow improvement in economic activity did not exert upward pressure on the exchange rate. Yet, emanating from uncertainty perceptions, the level and the volatility of exchange rate have increased.

In the May-June period, depreciation of the Turkish lira affected the rate of change of WPI. The impact of depreciating Turkish lira was felt mostly in the prices of public manufacturing industry sector. However, this effect was not distributed homogenously across sub-sectors of the manufacturing industry. The heterogeneity of pass-through effect is attributed mainly to the diverse rigidities and demand conditions in the sectors.

In the third quarter of 2002, excess foreign exchange supply is predicted to persist given seasonal factors and receipts from the tourism sector. No serious upward pressure on the exchange rate originating from the aggregate demand side is expected. Lastly, uncertainty perceptions will be the leading determinant of the extent of the pass-through of exchange rate movements on the inflation.

#### ***VIII.A.3. Developments in Public Prices***

In the first and the third quarters of 2002, public sector pricing policy was carried out generally in line with the inflation target. However, delayed price adjustments were executed in June, which raised the rate of increase of the public sector prices. SEE price adjustments, aimed at maintaining the fiscal financial targets, are projected to continue in the next months. In the second quarter of 2002, public manufacturing sector prices increased by 10.6 percent on a cumulative basis. Administered price adjustments carried out in June, and the surge in the oil prices, being a key input, stemming from the depreciation of Turkish lira were the determinants of this relatively high rate of change in public sector manufacturing prices.

In line with the economic program, public finance discipline is maintained. Consolidated budget primary surplus realizations were above the targeted levels. However, in some other public sector balances the fiscal targets were not met. To account for the gap between the targets and realization public sector prices, which were previously below the scheduled levels so as not to jeopardize the disinflation process, were increased in line with the previously scheduled levels. Meanwhile, continuing efforts in restructuring of the economic environment, banking sector especially, have enhanced the credibility of the economic program. The belief that structural reforms and economic program will be maintained, will diminish the negative impacts of probable shocks hitting the economy. In this respect, year-end inflation target of 35 percent increase in CPI is considered to be feasible.

#### ***VIII.A.4. Global Economic Conditions***

World economic recovery, led by the economic growth in the US, started in the beginning of 2002. Signs of economic recovery have recently emerged in the euro area. Expansionary fiscal policies pursued by the US, active role of automatic stabilizers in the EU, and simultaneous interest rate cuts by the central banks of the industrialized economies, such as the EU and the US supported the global economic recovery.

The US economy, leading the economic recovery, with its rising current account deficit also poses the main risk to the global economic recovery, which still seems to be fragile. Furthermore, recent trade restrictions by the US and retaliation of main trading partners of the US threaten the sustainability of global economic recovery.

US economic growth was mainly driven by replenishment of inventories but the inventory buildup has come to an end. In the second quarter of 2002, economic growth would be lower due to the phasing out of this process. However, the economic recovery will be sustained that can be inferred from better than expected output growth registered in manufacturing sectors. Recent decline in the tax rates improved disposable income of the households, which would increase

consumption demand. Yet, investment outlook is still indefinite. Especially, the fall in the stock prices resulting from the worsening of firms' profit prospects, poses a negative outlook for investment.

Within the EU, the pace of economic recovery is not homogenous. However, as a general tendency, weak domestic demand is the main impediment to the sustainable economic growth path of EU economies. In the first quarter of 2002, growth was driven by the increase in net exports. Low levels of unemployment, high rate of increase in food and oil prices and a weak euro adversely affected the disposable income. However, consumer and business confidence surveys published in May revealed that there has been a slight improvement in the economic outlook. Appreciation of euro vis-à-vis USD may increase import demand.

In line with the previous reports, developments in international oil prices are considered to pose the greatest risk to the global economic outlook. Oil prices which increased rapidly in the January-April period, started to fall gradually after April. International oil prices, which were presenting a stable picture while the report was being written, may start to increase due to excess demand following the global economic recovery. Political developments in Middle East and Iraq still pose the greatest risk to crude oil prices.

#### ***VIII.A.5. Developments in Prospects for Inflation***

According to the CBRT Expectations Survey results of the first period of July, expected year-end CPI inflation rate was on the average 35.7 percent. Beginning from January, declining expectations converged to targeted level, and maintained that level in June and July surveys. According to the CBRT Tendency Survey May results, average year-end WPI inflation expectation was 47 percent. Insufficient domestic demand and the less-than expected inflation rates of the last two months were effective in these developments. However, protracted uncertainty period regarding the outlook of the economy, may curtail the declining trend in the inflation expectations. Political uncertainties through increasing

risk premium might have adverse impact on interest rates and exchange rates.

The CBRT is also following the inflation expectations of the financial and real sectors. In the first half of July, the year-end inflation expectation of the real sector and financial sector were 36.3 percent and 35.3 percent respectively. The average of the inflation expectations of the financial sector was 35.3 percent. Therefore, inflation expectations and predictions of both sectors are in line with the year-end target.

Sustaining the efforts to implement the current economic program without any digressions will prevent any cost-push or demand-pull inflationary pressures. Besides, pricing and income policies of the private and public sectors coherent with the inflation target will be effective in achieving the inflation target without output losses.

#### ***VIII.A.6. Fundamental Assumptions and Possible Risks***

In this part, factors that are essential to the course of inflation in the following period will be examined.

Between October 2001 and April 2002, appreciation of Turkish lira by 18.6 percent vis-à-vis the exchange rate basket, composed of 1 USD+0.77 euro, resulted in a fall in the rate of change of WPI. However, in May and June due to uncertainty perceptions, Turkish lira depreciated. The upward trend in the level and the volatility of exchange rate is expected to have an adverse impact on inflation. The length of the uncertainty period and the pressure from demand side will condition the extent of pass-through. In this respect, aggregate demand recovery and protracted political uncertainty are predicted to strengthen the pass-through from the exchange rate to inflation. Increasing volatility is estimated to weaken the pass-through. Continued efforts towards implementation of the economic program and stabilization of the exchange rate level of exchange rate would help the exchange rate level to stabilize.

Following February 2001 crisis, domestic demand fell sharply contributing to the disinflation process. In the

first quarter of 2002, deficient domestic demand and the source of growth being the inventory accumulation helped to the slow-down in inflation. In the second half of 2002, domestic demand is expected to recover gradually as a result of the improvement in the agriculture sector income and increasing revenues from tourism. Under the assumption that demand growth would be gradual, inflation is not expected to be adversely affected by demand side developments.

An important risk to the disinflation outlook is the continuation of political uncertainty perception and the consequent fear that the program will be abolished. If the uncertainties regarding economic outlook persist risk premium would increase. As a result, domestic demand and supply conditions, which show signs of improvement, will be affected adversely by rising interest rates and exchange rates.

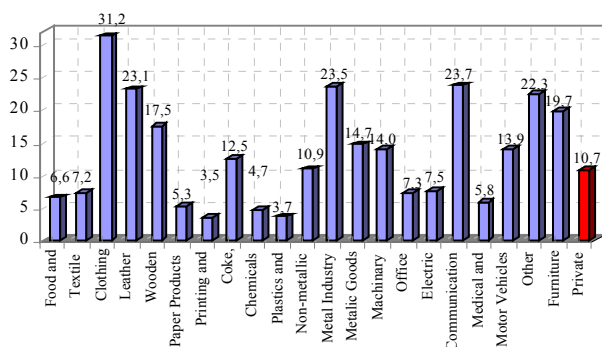
Another important potential risk for 2002 is movements in international oil prices. It is assumed that international oil prices will maintain their stable path until the last quarter of 2002. In the last quarter of 2002, demand for oil would increase in winter in the northern hemisphere. Domestic energy prices being determined in line with movements in exchange rate and international oil prices will be adversely affected by the possible hikes in petroleum prices.

Public price adjustments are also a risk factor for price developments. The rates of increase in administered prices, which have been in line with inflation developments, are lower than the scheduled rate. However, to maintain the public fiscal targets, administered prices would have to be increased at the scheduled rate. Still, most of the price adjustments are projected to be in line with rate of change of WPI, while energy prices will be indexed to the international prices. As a result, public price adjustments through their lagged effects on other prices via input cost level, and distorted relative price structure, will adversely affect subsequent inflation figures.

The rates of changes in the private manufacturing prices exhibited a differentiated behavior in the January-June

period. In the second quarter of 2002, private manufacturing sector price level increased by 10.7 percent on a cumulative basis, while the rate of change of prices in the sub sectors ranged from 3.7 percent to 31.1 percent (Figure VIII.A.6.1). Such a distorted distribution can be attributed to different pass-through coefficients across industries, inflexibilities and different demand conditions. These high and different rates of increase may pose risks to the disinflation period.

**Figure VIII.A.6.1. Private Manufacturing Price Increases by Sub-Items: January-June Period (percentage)**



Determined implementation of the tight fiscal and monetary policies helped to attain the goals set by the economic program. Attaining both targets set for the monetary base and consolidated budget primary surplus have been the main factors that facilitated the disinflation process. Besides the policies being implemented, the favorable developments in the agricultural and food prices have been supportive in reaching gradually the inflation target. However, since agriculture and food prices are the most volatile components of respective price indices, it is not always possible to precisely estimate the future faith of these prices. Therefore, the future course of food and agricultural sector prices is important for the inflation realizations.

Despite the current uncertainties and risks, the contribution of favorable price developments in the first half and continued implementation of tight fiscal and monetary policies will be the key contributing factors to reach the target.