

## I. DEVELOPMENTS IN PRICES

The most important factor behind the price increases in 2001 is the high depreciation of the Turkish lira after the crisis, which occurred in February. Another important development that was observed about the price indices is the Consumer Price Index (CPI) staying well behind the Wholesale Price Index (WPI). In the January-October period, the WPI rose by 73.8 percent, while this rate was 56.6 percent for CPI, which was 17.2 percentage points below the increase of WPI (Table I.1 and Figure I.1). Despite a dense pressure of costs resulting from the increasing exchange rates in the economy, a significant decline in domestic demand limited the reflection of increasing WPI to retail prices. A similar case was also observed in 1994, when domestic demand had seriously contracted.

**Other important development that has been observed about the price indices for 2001 was that the CPI stayed well behind the WPI.**

Increasing exchange rates caused prices of tradables to rise more than prices of non-tradables, which is in line with the expectations. When the prices are analyzed according to other type of classification, it has been observed that prices of services increased less than prices of goods. Prices of education, health and transportation increased significantly despite contracting domestic demand. However, due to low increases in rents with the effect of Rent Law that was adopted in 2000, the price increase in services sector was below the price increase of goods sector (Figure I.2).

On the other hand, due to direct pricing, taxes and especially price increases in fuel products, controlled prices rose faster than uncontrolled prices. Prices of consumer durables also inclined faster than CPI. The prices of these sub sectors have been affected from increasing exchange rates due to intense usage of imported inputs. Despite this fact, for the January-October period, prices of agricultural products and food prices increased slowly especially due to the

*Table I.1. Annual and Periodical Inflation Rates*

	Weighted (%)	DEC-DEC			JAN-OCT		OCT-OCT	
		1998	1999	2000	2000	2001	2000	2001
WPI	100.00	54.3	62.9	32.7	27.1	73.8	41.4	81.4
WPI (Public)	23.17	35.6	117.7	24.7	20.6	93.7	46.4	100.4
WPI (Private)	76.83	60.1	48.4	35.7	29.7	66.7	39.6	74.5
WPI (Excluding Agriculture)	77.78	47.8	76.9	30.4	26.2	86.6	43.6	92.9
CPI	100.00	69.7	68.8	39.0	30.8	56.6	44.4	66.5
CPI (Tradables)	58.16	62.9	55.3	34.6	27.5	62.7	41.5	71.8
CPI (Non-tradables)	41.84	78.6	85.1	43.4	34.2	50.9	47.3	61.3
CPI (Goods)	70.69	61.6	61.3	34.6	26.5	66.4	41.0	77.0
CPI (Services)	29.31	89.0	83.9	47.0	38.6	40.7	50.4	49.2
CPI (Pub controlled)	20.72	53.8	94.2	32.9	26.4	83.2	46.1	92.6
CPI (Not pub controlled)	79.28	74.0	62.6	40.7	31.9	49.2	43.8	59.1
CPI (Durables)	11.05	64.8	57.4	38.9	32.4	67.5	44.1	75.9
CPI (Excluding Food)	68.91	73.9	74.7	41.3	33.4	56.9	45.1	66.3
CPI (Excluding Housing)	74.20	63.9	60.9	35.7	28.7	59.0	42.4	67.7
Export Price Index	-	-3.5	-8.9	-1.0	-2.0*	-4.7*	-3.7*	-3.7*
Import Price Index	-	-6.2	3.1	0.2	0.5*	-3.4*	4.7*	-3.8*

\*January-August, August-August

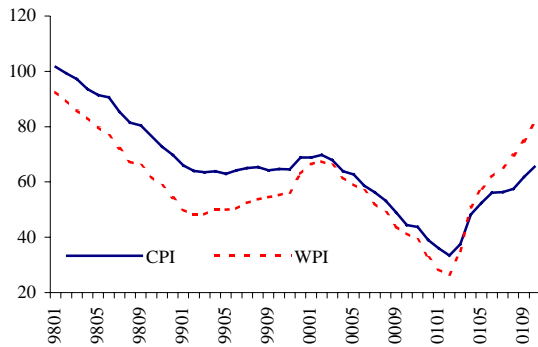
Source: SIS, CBRT

*Table I.2. Monthly Inflation Rates*

	2001											
	Jan.	Feb.	March	April	May	June	July	Aug	Sept.	Oct.		
CPI	2.3	2.6	10.1	14.4	6.3	2.9	3.3	3.5	5.4	6.7		
WPI (Public)	1.4	1.8	12.3	21.5	6.9	5.8	4.4	5.0	5.3	5.3		
WPI (Private)	2.7	2.9	9.3	11.8	6.1	1.7	2.8	2.9	5.4	7.3		
WPI (Excluding Agriculture)	1.6	2.3	11.3	17.2	7.0	4.7	4.1	4.9	5.4	6.8		
CPI	2.5	1.8	6.1	10.3	5.1	3.1	2.4	2.9	5.9	6.1		
CPI (Tradables)	1.1	1.4	7.7	13.1	6.5	2.8	1.5	1.6	7.4	7.6		
CPI (Non-tradables)	3.8	2.2	4.5	7.7	3.7	3.5	3.3	4.3	4.4	4.6		
CPI (Goods)	1.8	1.3	7.7	13.9	6.0	3.3	1.9	2.1	7.2	7.7		
CPI (Services)	3.7	2.6	3.4	4.5	3.3	2.8	3.2	4.6	3.6	3.1		
CPI (Pub. Controlled)	5.3	1.5	12.1	16.0	4.6	5.1	4.0	5.4	4.9	4.2		
CPI (Not controlled)	1.7	1.9	4.3	8.6	5.4	2.4	1.8	2.2	6.2	6.7		
CPI (Durables)	3.2	2.3	5.8	10.4	6.0	6.8	3.3	5.3	6.0	4.0		
CPI (Excluding Food)	2.9	1.8	5.8	10.2	5.1	3.7	3.1	4.0	5.7	4.2		
CPI (Excluding Housing)	2.1	1.4	6.0	11.7	5.7	3.1	1.8	2.5	6.3	7.3		
Export Price Index	3.8	-1.9	-1.0	-1.5	-1.6	-1.9	4.5	-5.0	-	-		
Import Price Index	2.2	1.2	0.9	-2.9	-0.9	-3.3	0.9	-1.4	-	-		

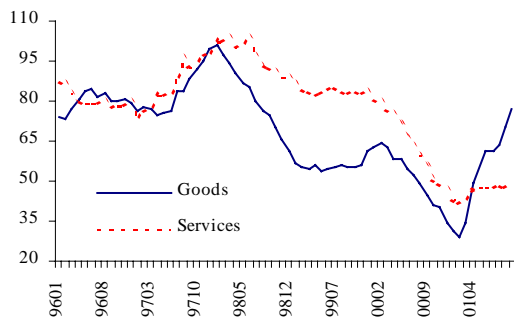
Source: SIS, CBRT

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



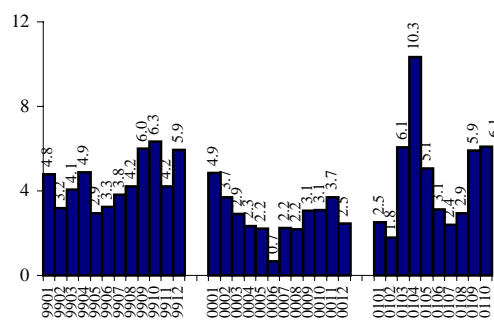
Source: SIS

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



Source: SIS, CBRT

**Figure I.1.1. CPI; 1994=100**  
(Monthly Percentage Change)



Source: SIS

contribution of seasonality during the summer, compared to the general index. Within the considered period, increase in WPI excluding agriculture was realized as 86.6 percent, which was 12.8 percentage points above the general index. It was observed that prices of the public sector that has a share of 23.17 percent in total wholesale prices increased by 93.7 percent, which is significantly higher than the price increases of 66.7 percent of the private sector that has a share of 76.83 percent in the total index.

**The ending of the previously arranged export agreements and contracts will enable the effect of exchange rate increase on declining export prices to be observed more effectively in the coming future.**

It has been observed that prices of exports and imports declined significantly in US \$ terms. As of August, export and import prices declined by 3.7 percent and 3.8 percent respectively on an annual basis. Despite the devaluation of the domestic currency, the decline in the export prices remained restricted. Cost pressure due to exchange rate increase with increasing public prices and imported inputs caused exporting firms not to decrease their prices on the basis of foreign currencies. In addition to this, the ending of the previously arranged export agreements and contracts will enable the effect of exchange rate increase on declining export prices to be observed more effectively in the coming future.

### ***1.1. Developments in Consumer Prices***

The consumer price increase that occurred in 2001 was the common result of the two opposite effects. The first effect is the increasing wholesale prices due to a surge in costs and the second effect is related to insufficient domestic and foreign demand.

After leaving exchange rates for floating, the Turkish lira has depreciated by a cumulative 55.5 percent against the US dollar in February and March. CPI increased by 6.1 percent in March, 10.3 percent in

April, and the increase in the January-October period reached 56.6 percent (Table I.1.1).

With the floating exchange rates and the abandoning of the exchange rate based stabilization program that has been implemented since the beginning of 2000, publicly controlled prices in CPI increased in March and April by 12.1 percent and 16 percent respectively. Consequently, CPI after reaching a 14-year low level of 33.4 percent in February jumped to 48.3 percent level in April 2001.

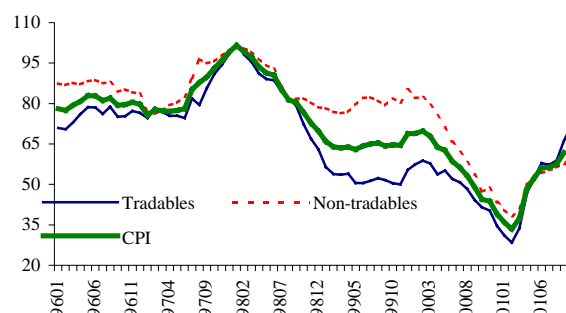
**The consumer price increase that occurred in 2001 was the common result of the two opposite effects. The first effect is the increasing wholesale prices due to a surge in costs and the second effect is related to insufficient domestic and foreign demand.**

In addition to this, prices of the tradables increased, partially figuring out the effects of high jump in exchange rates, and the difference between the prices of tradables and nontradables, which amount to 10 percentage points, disappeared in May. At the end of October, price increase changed in favor of tradables and the increase was realized as 71.8 percent and 61.3,percent, respectively (Figure I.1.2).

In October, it was observed that many sectors of the economy were not able to reflect the change in exchange rate to their prices although the average depreciation of the Turkish lira was 136.2 percent against the US dollar. It is considered that there are two reasons behind this fact; the first one is the contracting domestic demand after the crisis. The second reason is related with the firms supplying goods from their inventories for both domestic and foreign demand. Along with the contracting domestic demand, as the foreign demand is low due to a general slowdown in the world economy, the reflection of the depreciation of the Turkish lira to CPI remained limited.

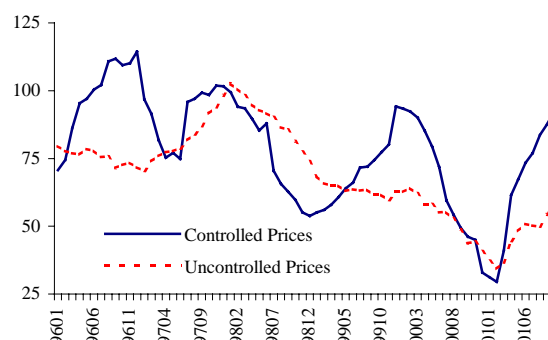
The difference between the controlled and uncontrolled prices within the first 10 months of the year is of great importance. Within this period, the prices in the public sector increased by 34 percentage points above the

Figure I.1.2. CPI, Tradables and Non-tradables; 1994=100 (Annual Percentage Change)



Source: SIS, CBRT

Figure I.1.3. CPI, Controlled and Uncontrolled Prices 1994=100 (Annual Percentage Change)



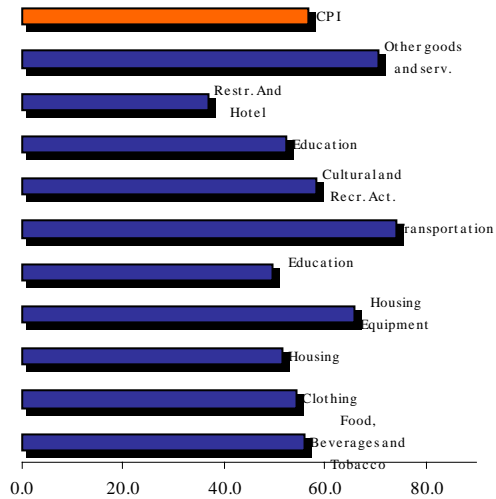
Source: SIS, CBRT

Table I.1.1. CPI and Sub Items; 1994=100

	OCTOBER		JAN-OCT		OCT-OCT	
	2000	2001	2000	2001	2000	2001
CPI	3.1	6.1	30.8	56.6	44.4	66.5
Food	3.9	11.8	24.2	55.9	42.4	67.0
Clothing	8.0	11.1	27.4	54.5	38.6	64.6
Housing	2.7	3.5	35.5	51.7	48.9	63.9
Housing Equipment	1.5	4.2	36.2	65.7	45.7	74.6
Health	0.6	0.6	47.2	49.7	50.8	53.5
Transportation	1.0	3.4	24.5	74.2	40.9	78.7
Culture and Recr.	4.9	2.4	28.2	58.4	32.5	68.8
Education	1.3	0.3	27.5	52.3	27.7	52.3
Restaurant and Hotel	2.3	2.7	40.4	37.0	48.6	42.4
Other goods and Serv.	2.4	5.3	40.5	70.5	53.2	79.9

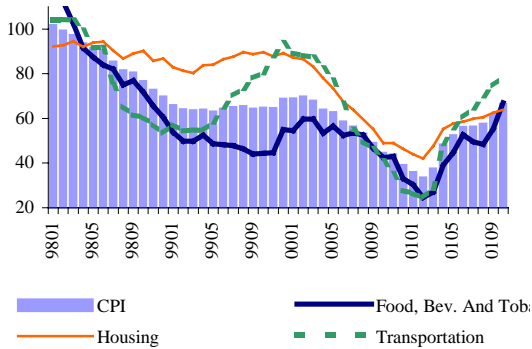
Source: SIS

Figure I.1.4. CPI and Sub-Items :1994=100 (2001 Cumulative Percentage Change)



Source: SIS

Figure I.1.5. CPI, Food Housing and Transportation Prices; 1994=100 (Annual Percentage Change)



Source: SIS

private sector. The high price increase for the public prices came afterwards the stabilization program that was implemented in 2000 during which the public prices were under control. The reason why the public prices are well above the private prices are related with the delayed price adjustments in public prices during 2000 and cost increases (these are sometimes realized indirectly and sometimes as indexation) related to high devaluation of the Turkish lira.

**In the first 10 months of the year the prices in the public sector were 34 percentage points above the prices of the private sector.**

When the sub-items of CPI are examined in detail, it has been observed that transportation prices, prices of housing equipment and prices of other goods and services are the three sub-items that experienced high increase in the January-October 2001 period. The prices of the transportation sector has been affected from the increasing exchange rates, rising prices of the imported motor vehicles and increasing prices of transportation services due to a surge in fuel prices. Housing equipment sector is the one that is the most affected sector from the increasing costs as the goods in the sector are imported goods or import substitutes.

**Lower than expected increases in rents and the difference between wholesale and retail prices especially for the food and clothing sector constitute a risk for the CPI inflation for the coming period.**

In food, beverages and the tobacco sector that is one of the two important sub-items of CPI, the prices increased by 39.4 percent for the January-September period, which is 8.3 percentage points below the general index. Seasonal factors also contributed positively to this increase. However, a price increase of 11.3 percent at the end of October, the prices surged to 55.9 percent. The other important sub-item of CPI is housing prices that increased by 51.7 percent, which is near to the increase in general index. The reason of it is related with the fact that the rents increased by 31.9 percent due to the legal restriction, decline in real

wages and contraction in economic activities, while one of the most important sub-items of housing, electricity, and oil and gas prices increased by 115.4 percent. Lower than expected increases in rents and the difference between wholesale and retail prices especially for the food and clothing sectors constitute a risk for the CPI inflation for the coming period.

### I.2. Developments in Wholesale Prices

The volatility in the financial markets in November 2000 and a crisis in 2001 February, which resulted in a floating exchange rate regime, determined the price movements of 2001. Wholesale prices increased fast in the first 10 months of the year due to the depreciation of the Turkish lira, increasing credit costs and high public sector price adjustments.

The prices increased above 10 percent following the two months after the crisis, March and April (Figure I.2.1). At the end of October, annual increase in WPI was realized as 81.4 percent (Table I.2.1).

The volatility in the financial markets in November 2000 and a crisis that happened afterwards in 2001 February, which ended with a floating exchange rate regime, determined the increasing prices of 2001.

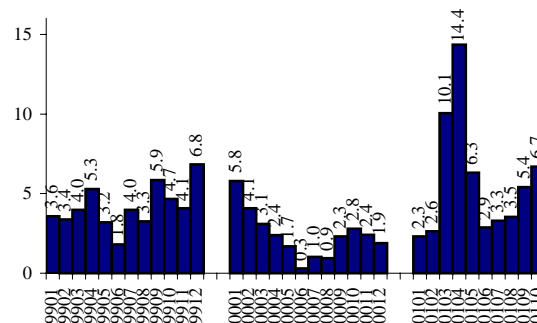
Increasing exchange rates after the crisis and the pressure created by rising credit interest rates affected wholesale prices negatively. Besides, jump in the public prices within the three months after the crisis caused additional costs for the firms. In short, high public price adjustments with a surge in costs due to the high depreciation of the Turkish lira, is responsible for high increases in WPI after February (Figure I.2.1). Contracting economy was not able to limit the increasing WPI. Expectations related to WPI deteriorated after January 2001, which is another

Table I.2.1. WPI and Sub-Items ; 1994=100

	OCTOBER		JAN-OCT		OCT-OCT	
	2000	2001	2000	2001	2000	2001
<b>WPI</b>	2.8	6.7	27.1	73.8	41.4	81.4
<b>Agriculture</b>	4.6	6.6	30.3	35.9	34.8	45.8
<b>Mining</b>	7.1	6.4	43.2	85.1	60.6	89.0
<b>Manufacturing</b>	2.0	7.0	25.4	85.7	43.2	91.7
<b>Public</b>	0.8	5.6	16.8	93.1	45.6	98.8
<b>Private</b>	2.5	7.6	29.4	82.7	42.2	88.7
<b>Energy</b>	1.9	3.6	28.4	101.1	41.2	115.3

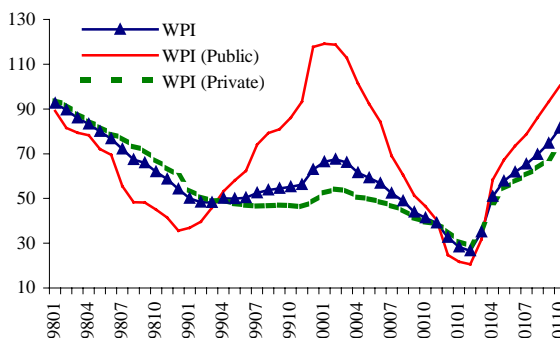
Source: SIS

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



Source: SIS

Figure I.2.2. WPI. Public and Private Sector Prices; 1994=100 (Annual Percentage Change)



Source: SIS

Figure I.2.3. WPI and Sub-Items; 1994=100 (Year 2001- Cumulative Change)

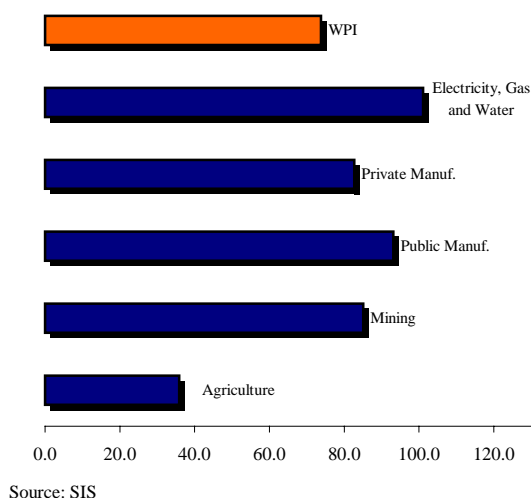
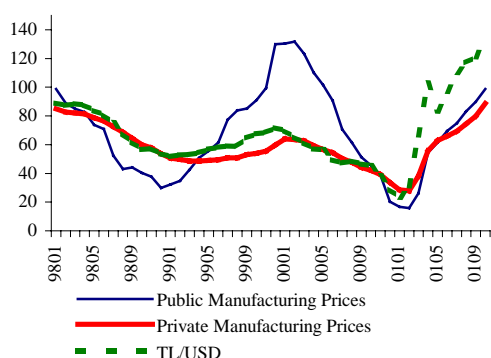


Figure I.2.4. Exchange Rates, Prices of Public and Private Manufacturing; 1994=100 (Annual Percentage Change)



reason behind the high jump in wholesale prices (Figures I.3.1, I.3.2).

In May, with a deceleration in the rate of increase of public prices and exchange rates, and a new stand-by agreement with the IMF, the inflation expectations were affected positively; that is, the expectations followed a smooth path after May (Figures I.3.1, I.3.2). WPI started to slow down after May and with the seasonal factors that affected agricultural prices positively average increase in WPI remained as 3.2 percent for the period June-August.

In September, increase in WPI started to rise again with the effect of exchange rates, seasonal movements and public prices and was realized as 5.4 percent. In October also, accelerating agricultural prices and a surge in the private manufacturing prices are responsible for high increases in WPI.

In the first two months of 2001, it was observed that the increase in agricultural prices was limited when compared with the previous years. However, in March, April and May, the agricultural prices started to increase higher than before with the effects of the crisis that occurred in February 2001. In June, the agricultural prices decelerated significantly, but in July the prices increased by 0.3 percent, which was the first time after the crisis of 1994. However, this increase did not continue in August. In September, it was observed that a 5.1 percent increase in the agricultural prices remained well below the seven-year averages. In October, the agriculture prices rose at an average of 6.6 percent, which is equal to the seasonal average. It is expected that the agriculture prices will rise when compared with the previous years during the rest of the year due to decline in production and seasonal factors.

Private manufacturing prices are the most responsive to changes in the exchange rates following the public manufacturing prices.

Due to that reason, the prices are negatively affected from the depreciation following the February crisis. In the first two months of the year the public prices were under control and the WPI was mostly affected by the

adjustments in the private manufacturing prices. However, after the February crisis, high price adjustments in public prices and energy prices were highly effective on the WPI. Especially, price increases in fuel and fuel products and the depreciation of the Turkish lira resulted in a surge in the prices of some sub-items of private manufacturing sector prices and sectors that utilize imported goods. Conclusively, within the January-October period, the private manufacturing prices increased by 82.7 percent and the public manufacturing prices increased by 93.1 percent that is 10.4 percentage points above the private manufacturing prices. On the first 10 months of the year, the cumulative increase in the energy prices were realized as 101.1 percent.

**In the January-October period, the private manufacturing prices increased by 82.7 percent and the public manufacturing prices increased by 93.1 percent that is 10.4 percentage points above the private manufacturing prices.**

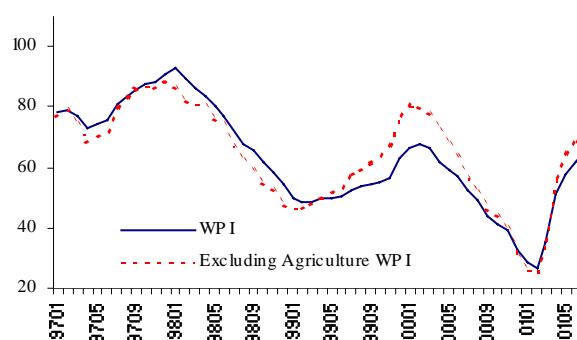
In the coming months, it is expected that the WPI will slow down due to a slowdown in exchange rates and the cost pressure related to public prices.

### 1.3. Inflation Expectations

Besides the inflation forecasts, inflation expectations have a great importance for the monetary policy of the Central Bank, as the changes in the monetary policy affect macroeconomic fundamentals with a lag.

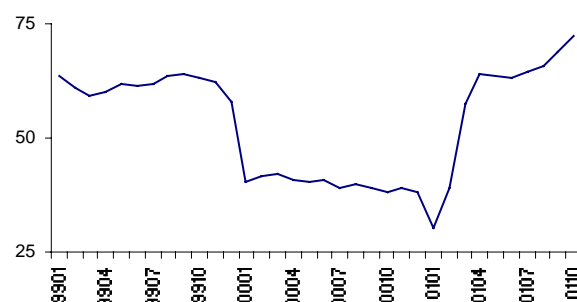
In an economy where a reliable yield curve and long-term inflation indexed assets do not exist, surveys have a special importance to gather inflation expectations. In this framework, the Central Bank of the Republic of Turkey carries out two different surveys for the determination of inflation expectations. The first survey, which is the Business Tendency Survey, has been carried out since 1987 by the CBRT, covering 500 private and manufacturing firms. Although this survey includes both private and public firms, the results are interpreted with respect to private firms only.

Figure 1.2.5. WPI and WPI excluding Agriculture: 1994=100 (Annual Percentage Change)



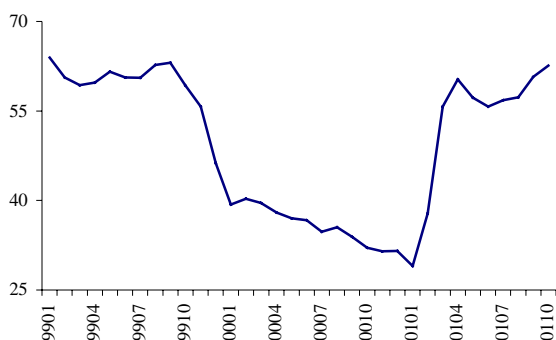
Source: SIS, CBRT

Figure 1.3.1. Year-End Inflation Expectations



Source: CBRT

Figure I.3.2. Inflation Expectations for the next 12 Months



Source: CBRT

Accordingly, the Business Tendency Survey has been utilized for the inflation expectations of private manufacturing industry firms. The CBRT Business Tendency Survey represents 49 percent of the private manufacturing industry according to the number of employees and total sales. The second survey is the Inflation Expectations Survey, which is still at the stage of targeting to obtain the inflation, interest rate and exchange rate expectations of the financial sector twice a month. Inflation Expectations Survey aims obtaining expectations are related to CPI and it has been implemented since August 2001. This survey has been implemented only for eight periods and the rate of response is 65 percent for this survey.

**In an economy where a reliable yield curve and long-term inflation indexed assets do not exist, surveys have a special importance to gather inflation expectations.**

According to the Business Tendency Survey of the CBRT, the WPI expectations for the next 12 months and the year-end inflation expectations declined gradually until January 2001, but after January, with increasing exchange rates the expectations jumped until May. With the implementation of a new monetary program for 2001 and contracting domestic demand, expectations followed a smooth path after May. Although a slowdown was observed for inflation in the summer, the rates were above the seasonal averages that caused a deterioration of the expectations again in August (Figures I.3.1, I.3.2).

**For the second period of November, according to the Inflation Expectations Survey, the CPI increased by 72 percent.**

The year-end and for the following 12 month inflation expectations in January 2001 were realized as 30.1 percent and 29 percent, respectively. These expectations were 72.2 percent and 62.6 percent for the year-end and the following 12-months respectively in October. The higher than expected inflation rates for September and October influenced the inflation expectations negatively. After the second half of

October, the stability that has been observed in exchange rates is thought to push down the inflation expectations in the coming month.

For the second period of November, the results of the Inflation Expectations Survey showed a slowdown for the first time. According to the first period and the second period results of the November survey, the inflation expectations for the end of 2001 declined from 73.1 percent to 72 percent, and the next 12 month expectations declined from 53 percent to 51.5 percent.