# Chapter 1 Main Developments

## 1. THE ECONOMY, INFLATION AND MONETARY POLICY

The consumer price index rose by a moderate 1.2 percent in 2004, after falling by 1.9 percent in 2003 and rising by 6.5 percent in 2002. The housing price component of the index dropped by 2.5 percent in 2004 while the CPI excluding housing rose by 2.3 percent. The rate of increase in the CPI during 2004 was close to the lower limit of the targeted rise in the index of between 1 and 3 percent defined as price stability that was set with respect to 2003 onwards. This followed an exceptional downward deviation in 2003 and an upward deviation in 2002. The moderate development of prices during the last two years and other indicators (which will be detailed later) support the assessment that the price stability which characterized the Israeli economy since 1999, although temporarily disturbed in 2002 and 2003, is not a transitory phenomenon. During the years 1999 to 2004, consumer prices rose by an annual average rate of 1.4 percent, compared with an annual average rate of 10 percent during the years 1992 to 1998.

The main factors responsible for the slow pace of price increase in 2004 were the moderate development of the exchange rate in the course of the year, following the decline in the exchange rate during 2003, and the continued slump in activity and in the labor market during the years 2001 to 2003. Despite the rapid expansion of business sector activity in 2004 (see below), the sector still remained with production capacity surpluses. This was apparent from the modest development of wages and unit labor cost in the business sector. Nominal wages per employee post (FTE) rose by a moderate 1.5 percent in 2004 following a decrease of 1.8 percent in 2003, and the nominal unit labor cost (the proportion of the wage bill in business sector GDP) fell by 2.8 percent following a decrease of 3.9 percent in 2003. It should be noted that the continued decrease in unit labor cost in 2003 and 2004 followed on from a moderate increase during the years 2000 to 2002. The trend in this indicator was undoubtedly a major factor behind the moderate pace of price developments during recent years as a whole and during the past two years in particular.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> The rates of increase in wages and labor cost are in average annual (and not year-end) terms. See Table 2.7 for details.

<sup>&</sup>lt;sup>2</sup> During 2000 to 2004 nominal unit labor cost rose by an annual average of 0.5 percent, and prices increased by an annual average of 1.5 percent. (The rates of increase are in year-average terms compared with the previous year.) See Table 2.7 for details.

Price developments in 2004 were affected by the moderate development of the exchange rate, which fell by 1.2 percent against the dollar and rose by 1.8 percent against the currency basket, after declining by 6.4 percent against the dollar and 0.5 percent against the currency basket in 2003.<sup>3</sup> The development of the exchange rate and consumer prices was not uniform in the course of the year. The shekel rose against the dollar by 2.9 percent and consumer prices increased by 1.4 percent in the first half of the year, but fell by 3.9 percent and 0.2 percent respectively in the second half.<sup>4</sup>

During the first four months of the year, the Bank of Israel maintained the process of interest rate reduction that began in 2003. This was due *inter alia* to the low level of inflation expectations for a year ahead (as reflected by capital market data and professional forecasters' assessments) in the first quarter of the year, a level that was below the center of the targeted range of inflation. During January-April, the Bank of Israel cut the interest rate by a cumulative 1.1 percentage points. From May to November, the interest rate was left unchanged. In December, the rate was cut by 0.2 percentage points and in each of the months January and February 2005, was cut by another 0.2 percentage points to a level of 3.5 percent. The Bank of Israel's interest rate in real terms (the nominal interest rate, less inflation expectations for a year ahead derived from the capital market) also fell during the initial months of the year, and in the second half of 2004 reached an average of 2.3 percent compared with 4.6 percent in December 2003.

The Bank of Israel maintained the process of interest rate reduction during the four months of 2004 despite the rise in medium and long-term interest rates, which are determined by the markets,<sup>5</sup> and the upturn in the exchange rate (against both the dollar and the currency basket) in that period. Concurrent with the interest rate reduction, inflation expectations for a year rose, and in May 2004 market expectations reached 2.0 percent while private forecasters' assessments reached 2.6 percent. The moderate upturn in bond yields (which matched the development of bond yields in the USA during the same period) ceased in mid-year. In the second half of the year, long-term yields-to-maturity stabilized and short and medium-term yields fell slightly, developments that were behind the Bank of Israel's decision to cut the interest rate in December 2004. During the year as a whole, the differential between long and short-term interest rates expanded (the slope of the real and nominal yield curves became steeper), a development that was indicative of monetary expansion.

The downtrend in CPI-indexed and unindexed bond yields for all terms continued during December 2004 and January 2005,<sup>6</sup> developments that affected the decision to further reduce the interest rate in January and February 2005.

<sup>&</sup>lt;sup>3</sup> December 2004 average compared with December 2003 average.

<sup>&</sup>lt;sup>4</sup> The rapid increase in prices during the first as compared to the second half of the year partly reflected seasonal factors.

<sup>&</sup>lt;sup>5</sup> The yield-to-maturity on CPI-indexed and unindexed bonds for the medium and long terms.

<sup>&</sup>lt;sup>6</sup> This clearly almost certainly resulted from the improvement in the security situation that became apparent during the same period.

Despite the contraction in the differential between the monetary interest rates in Israel and the USA (as a result of the Bank of Israel's reduction in the interest rate during the initial months of the year and the continued rise in the interest rate in the USA during the second half), the shekel strengthened against the dollar in the second half of 2004 due to the concurrent weakening of the dollar against the euro. The fall in the exchange rate against the dollar during the second half of the year had the effect of reducing consumer prices in that half.

A major factor that contributed to exchange rate and price stability in 2004, and which facilitated a further reduction in the monetary interest rate, was the government's budgetary policy. This policy was reflected by a decrease in domestic public consumption, and by a reduction in the budget deficit and government borrowing for the purpose of financing the deficit. The budget deficit amounted to 3.9 percent of GDP in 2004, close to the target of 4.0 percent of GDP and compared with a deficit of 5.6 percent of GDP in 2003. The government's domestic borrowing totaled NIS 13.0 billion in 2004, compared with NIS 23 billion and NIS 24 billion respectively in 2003 and 2002.

The moderate development of the exchange rate and prices, concurrent with the combination of an expansionary monetary policy and contractionary fiscal policy, supported a rapid growth in activity and employment in the business sector during 2004. Leading the growth in activity in 2004 were the decline in the entire range of interest rates in 2003 and the increase in global activity in 2004. The 6.2 percent growth in business sector GDP was based on a rapid 14.6 percent expansion in exports and a 5.2 percent increase in private consumption. Domestic public consumption fell by 1.5 percent, and investment in fixed assets dropped by 2.1 percent. The fall in investment was comprised of a further decrease in investment in housing, structures and other construction works – 6 and 10 percent respectively - and an 8 percent increase in investment in machinery, equipment and transportation equipment, a turnaround that followed a continued decline during the years 2001 to 2003.

In contrast to the moderate development of consumer prices, the wholesale price index rose by 2.9 percent and 5.2 percent respectively in 2003 and 2004. The relatively rapid increase in wholesale prices appears to have resulted from the increase in the prices of raw materials, most of which are imported from the eurozone, due to the strengthening of the euro against the dollar in recent years. During the years 2002 to 2004 the shekel depreciated against the euro by an annual average of 11 percent as compared to 1 percent against the dollar. Concurrent with the strengthening of the euro, the dollar prices of imported inputs for domestic production rose by 5.6, 8.5 and 15.7 percent respectively in the years 2002 to 2004.

The large increase in world prices for oil contributed to the steep rise in the prices of imported inputs in 2004. The fact that the increase in the prices of imported inputs

<sup>&</sup>lt;sup>7</sup> The index excluding fuel. The index including fuel rose by 7.6 percent in 2004.

<sup>8</sup> See Table 2.5.

<sup>&</sup>lt;sup>9</sup> The dollar price of a barrel of oil in the USA, for example, rose by 45 percent during the year (fourth quarter of 2004 compared with fourth quarter of 2003).

and wholesale prices was not reflected by a rise in consumer prices can be attributed to the relatively low level of domestic demand resulting from the recession in previous years. In addition, the increase in prices of imported consumer goods was less than that of imported production inputs, and amounted to 1.4 percent, 6.8 percent and 2.8 percent in dollar terms respectively during the years 2002 to 2004.

In an inflation targeting regime, in which the central bank's interest rate is the principal tool for the management of monetary policy, the money supply in the economy is determined by demand on the part of the public. In 2004 the means of payment (M1) expanded by 19 percent. This expansion, which is much higher than that derived from the increase in activity and prices, mainly reflects a delayed response to the large decline in the nominal interest rate during 2003 and at the beginning of 2004. The broader monetary aggregate (M2), which includes time deposits, expanded by a more moderate rate of 8 percent in 2004, following an increase of 2.5 percent in 2003. This development, reflecting a slow pace of expansion in time deposits, partly resulted from the relatively rapid growth in the supply of Treasury bills, which serve as a substitute for deposits of the public at the banks.

Bank credit to the public, which expanded considerably during the years 2000 to 2002, at an average annual rate of 10 percent, remained stable in 2004 after contracting by 2.8 percent in 2003. The moderate development of bank credit during the last two years reflects the stricter terms that the banking system imposed for the extension of credit. Demand for credit appears to have increased in view of the rapid growth in business activity. The private sector supplied businesses' growing demand for credit by means of an increased volume of private issues. This increase was due to the decrease in government borrowing and the decline in interest rates during the last two years.<sup>10</sup>

# **Box 1.1**

# The Inflation Target, Inflation Expectations and Actual Inflation in the Years 1992 to 2004

The public's inflation expectations serve as a highly important variable in the management of monetary policy. There are three main reasons for the importance of this variable. The first reason derives from its effect on current inflation. Since a change in prices by the vendors of products and services, including those selling labor services, has a cost, the price adjustment by the relevant economic units is not continuous, and is implemented in discrete movements at irregular intervals. At each stage, the price increase expected in the future, during the period in which the economic unit will

<sup>&</sup>lt;sup>10</sup> Private sector stock issues (for the purpose of financing the sector's activity) totaled NIS 18 billion and NIS 28 billion respectively in 2003 and 2004. This compared with an average of NIS 11 billion a year in the years 2000 to 2002. See Chapter 4 for more details.

have to refrain from adjusting prices, is taken into account. When prices are adjusted therefore, a key consideration in deciding the extent of the adjustment is the expected increase in prices.

The second reason for the importance of the inflation expectations variable is that changes in the interest rate affect inflation partly with a lag, estimated at between a year and a year and a half. As a result, the central bank sets its interest rate with an eye to the future. In order to determine the extent of the change necessary in the interest rate, anticipated developments in prices at each point in time are assessed, and the public's expectations are an important variable that can help to forecast these developments. The third reason for the importance of inflation expectations is their indication of the extent of monetary policy's credibility: A situation in which expectations are relatively stable and close to the inflation target is indicative of a high degree of monetary policy credibility. For these reasons, central banks devote resources to obtaining indications regarding the public's inflation expectations. The usual sources of obtaining such indications are professional forecasts and surveys.

Another source for these indications exists in Israel – the expectations derived from bond trading data. These data are available due to the depth of the market and the consecutive trading in CPI-indexed and unindexed bonds. The yield differential between unindexed bonds and CPI-indexed bonds for the same period to maturity serves as an indicator of the inflation that is expected for that period. These data form part of the indicators that the Bank of Israel uses in assessing the inflation environment. We will now focus on expectations for a year.

Table 1 presents inflation data for the years 1992 to 2004, inflation expectations and the inflation target, as well as the gaps between inflation and inflation expectations, inflation and the inflation target, and between expectations and the target. The table also presents the averages and standard deviations for these variables for each period and sub-period.

We will first examine inflation, inflation expectations and the difference between them, in two sub-periods. In the first sub-period, 1992 to 1998, the inflation rate averaged 9.9 percent and inflation expectations averaged 11.2 percent. In the second sub-period, 1999 to 2004, inflation fell to 1.4 percent and expectations to 2.6 percent. The drop in the level of inflation was therefore fully reflected by the decline in expectations.

It is interesting to note however that the drop in the level of inflation in 1999 was unexpected. The center of the targeted range of inflation for 1999 was 4 percent. Although expectations fell slightly, they remained at 7.0 percent while inflation declined to 1.3 percent. It should be noted that the drop in the level of inflation actually occurred back in mid-1997. As a result of the large depreciation in September and October 1998, which

was certainly not expected at the end of 1997, the actual rate of inflation in 1998 was by chance similar to the target and expectations.

With respect to the differential between actual inflation and inflation expectations (which reflects unexpected inflation), it is difficult to point to a systematic error in expectations. Firstly, this differential is not significantly different from zero, within the entire period or in the sub-periods. Secondly, except for 1999 and 2000, there was no period when a large positive or negative differential prevailed. It should be noted that this differential is characterized by a large standard deviation that is typical of both of the variables.

An examination of the differential between inflation and the target (the deviations of inflation from the target) shows that this differential did not differ significantly from zero, either in the entire period or in the subperiods. This differential is also notable for a large standard deviation and here too, apart from 1999 and 2000, no persistent large positive or negative differential is apparent.

The differential between expectations and the target could serve as an indicator of the extent of the credibility of monetary policy relative to the inflation target. It transpires that the differential and its standard deviation were small both in the entire period and in the sub-periods. A low standard deviation is usually indicative of the high credibility of monetary policy. In the first sub-period however, a persistent, small but significant positive differential is apparent between expectations and the target. The credibility of monetary policy in that period therefore appears to have been lower than in the second period. Here too, 1999 was notable for a relatively large differential of 3 percent between expectations and the target, implying that when it was announced, the ambitious target for 1999 did not enjoy full credibility. Subsequently, the fluctuations in the differential decreased, and in each of the last three years the absolute value of the differential was close to one percentage point. In other words, the credibility of monetary policy appears to have increased during recent years.

The considerable fluctuations in inflation rates are one reason for the large standard deviation of the differential between inflation and expectations, and between inflation and the target. These fluctuations remained high even after the decline in the pace of inflation during recent years, and complicated the current assessment of the inflation environment. Table 1.2 presents annual data on the pace of inflation, the standard deviation of inflation, and the standard deviation of the pace of depreciation. As regards the development of inflation, the period 1986 to 2004 can be divided into three main sub-periods. The annual inflation rate averaged 18.1 percent

<sup>&</sup>lt;sup>1</sup> Such a differential between inflation expectations could also reflect an inflationary risk premium.

Table A
Inflation, Inflation Expectations, and the Inflation Target, 1992–2004

		Inflation expectations	Midpoint of	Difference between	Difference between	Difference between
	Actual	derived from	inflation	inflation		expectations
	inflation	capital	target	and		and midpoin
	rate	market <sup>a</sup>	range	expectations	target	of target
Year	(1)	(2)	(3)	(1)–(2)	(1)–(3)	(2)–(3)
1992	9.4	16.8	15.0	-7.4	-5.6	1.8
1993	11.2	10.2	10.0	1.1	1.2	0.2
1994	14.5	9.0	8.0	5.4	6.5	1.0
1995	8.1	13.8	9.5	-5.7	-1.4	4.3
1996	10.6	10.6	9.0	0.0	1.6	1.6
1997	7.0	9.5	8.5	-2.6	-1.5	1.0
1998	8.6	8.2	8.5	0.4	0.1	-0.3
1999	1.3	7.0	4.0	-5.7	-2.7	3.0
2000	0.0	2.9	3.5	-2.9	-3.5	-0.6
2001	1.4	0.8	3.0	0.7	-1.6	-2.2
2002	6.5	1.6	2.5	4.9	4.0	-0.9
2003	-1.9	2.8	2.0	-4.6	-3.9	0.8
2004	1.2	0.7	2.0	0.5	-0.8	-1.3
1992–2004						
Average	6.0	7.2	6.6	-1.2	-0.6	0.6
Standard deviation	5.1	5.2	4.0	4.0	3.3	1.8
Standard deviation						
of the average	1.4	1.4	1.1	1.1	0.9	0.5
1992–1998						
Average	9.9	11.2	9.8	-1.2	0.1	1.4
Standard deviation	2.5	3.1	2.4	4.4	3.7	1.5
Standard deviation						
of the average	0.9	1.2	0.9	1.7	1.4	0.6
1999–2004						
Average	1.4	2.6	2.8	-1.2	-1.4	-0.2
Standard deviation	2.8	2.4	0.8	4.0	2.9	1.9
Standard deviation						
of the average	1.1	1.0	0.3	1.6	1.2	0.8

<sup>&</sup>lt;sup>a</sup> At beginning of period.

SOURCE: Based of Central Bureau of Statistics data.

in the first sub-period, 1986 to 1991, fell to 9.9 percent in the second sub-period, 1992 to 1998, and in the third sub-period, 1999 to 2004, fell again to 1.4 percent. As can be seen, during the second sub-period the standard deviation of monthly inflation dropped appreciably concurrent with the decline in inflation. In this sub-period, inflation dropped by 8.2 percentage points and the standard deviation decreased by 5.0 percentage points. But during the third sub-period, inflation declined by 8.5 percentage points while the standard deviation of monthly inflation dropped by only 1.6 percentage points. The phenomenon of continued large fluctuations in the pace of monthly inflation, despite the significant decline in the inflation rate,

appears to derive *inter alia* from fluctuations in the pace of depreciation of the exchange rate, which remained high in recent years as well. (As can be seen, the standard deviation of the monthly pace of depreciation fell from 35.5 percent to 21.2 percent in the second period, and in the third period was still high at 19.0 percent.)

However, data for 2004 indicate that the standard deviation of monthly inflation may have declined during recent years. This downtrend became more apparent in 2004. This decline, which began in 2001, ceased in 2002 and 2003 and appears to have resumed in 2004. The standard deviation for 2004 for example was 4.4 percent compared with an average of 5.2 percent during the years 1999 to 2001. The standard deviation of monthly inflation that is based on the seasonally-adjusted index also fell in 2004, to 1.6 percent compared with an average of 3.3 percent during the years 1999 to 2001.

Table B
Inflation and Standard Deviation of Inflation and of the Rate of Depreciation, 1986–2004

Depreciai	Depreciation, 1980–2004							
		T	Inter-month	Standard	Inter-month			
		Inter-month	standard deviation	deviation	standard			
	Inflation	standard	based on seasonally	of the CPI	deviation			
Year	ratea	deviation <sup>b</sup>	adjusted index <sup>c</sup>	components <sup>d</sup>	of depreciatione			
1986	19.6	15.9	13.8	2.7	5.4			
1987	16.1	7.6	3.8	2.2	29.8			
1988	16.4	10.9	6.1	2.8	13.7			
1989	20.7	17.2	15.5	2.4	95.2			
1990	17.6	8.4	5.0	1.7	18.8			
1991	18.0	11.9	11.2	2.1	50.2			
1992	9.4	7.8	6.7	2.7	27.7			
1993	11.2	5.8	5.5	1.6	16.1			
1994	14.5	4.8	3.0	1.9	6.1			
1995	8.1	5.6	4.3	2.0	16.7			
1996	10.6	5.7	5.1	1.9	17.2			
1997	7.0	6.7	7.4	1.9	12.4			
1998	8.6	12.3	9.3	2.2	51.9			
1999	1.3	5.0	3.4	1.7	15.4			
2000	0.0	5.6	3.7	1.8	16.1			
2001	1.4	4.9	2.7	1.5	11.7			
2002	6.5	8.5	7.3	2.0	35.9			
2003	-1.9	4.0	5.7	1.9	22.7			
2004	1.2	4.4	1.6	1.9	12.3			
1986–1991	18.1	12.0	9.2	2.3	35.5			
1992-1998	9.9	7.0	5.9	2.0	21.2			
1999-2004	1.4	5.4	4.1	1.8	19.0			

<sup>&</sup>lt;sup>a</sup> Monthly average in annual terms.

<sup>&</sup>lt;sup>b</sup> Standard deviation of monthly change in prices.

<sup>&</sup>lt;sup>c</sup> Standard deviation of monthly change in seasonally adjusted CPI (using the X12 method).

<sup>&</sup>lt;sup>d</sup> Monthly average of the standard deviation of monthly change in 10 primary of the CPI components

 $<sup>^{\</sup>rm c}$  Standard deviation of the monthly change in the NIS/\$ exchange rate.

SOURCE: Based of Central Bureau of Statistics data.

To conclude, the data for 2004 support the assessment that price stability is becoming increasingly consolidated in the Israeli economy. This notwithstanding, the experience of the years 2002 and 2003 is leading to greater awareness that adherence to the objectives of fiscal and monetary policy is an essential condition for ensuring that this stability persists.

Table 1.1
Principal Indicators of Inflation, Monetary Policy and the Money and Capital Markets, 1998–2004

						(pe	rcent)
	1998	1999	2000	2001	2002	2003	2004
Inflation							
Inflation target	7-10	4	3–4	2.5 - 3.5	3-2	3-1	1-3
Actual inflation <sup>a</sup>	8.6	1.3	0	1.4	6.5	-1.9	1.2
Inflation expectations for a year	6.2	5.2	2.5	1.9	3.3	2	1.5
Yields							
Nominal interest rate on Bank of Israel tenders <sup>b</sup>	12.6	13.0	9.8	7.1	7.3	7.8	4.4
Nominal yield for 5 years <sup>c</sup>	11.3	11.1	8.6	6.9	9.0	7.0	6.7
Nominal yield for 10 years <sup>c</sup>				7.1	10.5	9.0	7.8
Real yield to maturity on 5-year bonds <sup>c</sup>	5.1	5.5	5.9	4.8	4.7	4.9	3.8
Real yield to maturity on 10-year bonds <sup>c</sup>	4.9	5.1	5.4	4.9	5.1	4.8	4.2
Real yield to maturity on 20-year bonds <sup>c</sup>				4.6	4.1	5.8	4.6
Depreciation							
Against the currency basket <sup>d</sup>	20.6	-2.5	-6.3	3.7	14.2	-0.5	1.8
Against the dollard	18.2	0.4	-2.7	4.8	9.8	-6.4	-1.2
Against the D mark/euro <sup>e</sup>	25.9	-13.3	-13.7	4.2	25.5	12.7	7.9
Asset prices							
Overall rate of return on shares (nominal)	3.6	59.4	6.9	-15.4	-8.6	44.4	17.8
Apartment prices <sup>f</sup>	7.6	0.7	-8.2	-2.2	4.4	-5.1	-0.2
Monetary aggregates (nominal rates of change) <sup>d</sup>							
Narrow monetary base (M1)	11.7	14.3	7.5	15.4	4.9	7.7	18.2
Total credit (C3)	19.3	11.9	10.2	8.9	9.8	-2.5	1.3
The public's financial asset portfolio							
Nominal growth <sup>g</sup>	13.6	25.4	7.5	7.3	1.8	12.2	10.7
Weighting of unindexed assets <sup>h</sup>	24.9	24.6	28.3	31.3	31.2	31.6	31.3
Weighting of CPI-indexed assets <sup>h</sup>	46.1	38.4	35.9	34.3	36.7	33.4	30.5
Weighting of foreign-currency-indexed assets <sup>h</sup>	11	11	11.3	12.9	16.1	13.7	13.3
Weighting of shares <sup>h</sup>	18.1	26	24.5	21.4	15.5	21.2	24.9
Actual budget deficit (percentage of GDP)							
Domestic deficit, excluding credit	2.8	2.8	0.5	3.5	3.5	5.4	3.3
Total deficit, excluding credit	3.2	3.1	0.7	4.4	3.8	5.6	3.9
Additional data							
Bal. of payments, current account deficit (\$b)	-1.3	-1.7	-1.4	-1.8	-1.5	0.1	0.3
Unemployment rate	8.6	9	8.8	9.3	10.3	10.7	10.4
GDP growth rate <sup>i</sup>	3.3	2.6	7.4	-0.9	-0.7	1.3	4.3
26 : 1 1 : 1							

<sup>&</sup>lt;sup>a</sup> Consumer price index during the year.

<sup>&</sup>lt;sup>b</sup> Effective rate.

<sup>&</sup>lt;sup>c</sup> Gross (relative) annual average yield for the terms in question. Up to 2002 (inc.), relative gross yield. From 2003,gross yields.

<sup>&</sup>lt;sup>d</sup> December average compared with the same for previous year.

<sup>&</sup>lt;sup>e</sup> December average compared with the same for the previous year (from 2000, compared with euro).

f According to Apartment Prices Survey.

g Year-end compared with end of previous year.

h Year-end data.

<sup>&</sup>lt;sup>i</sup> Year-on-year annual average.

SOURCE: Monetary Department, Bank of Israel.

### 2. DEVELOPMENTS IN THE CAPITAL MARKET

# a. Main developments

The capital market continued to expand in 2004 as the result of economic recovery, the retention of price stability and continued structural changes that are supporting the development of non-banking financial intermediation. The year 2004 was a record year for trading turnover in the securities market. The average level of yields-to-maturity on government bonds and corporate bonds was lower than in 2003 and share prices continued to rise following the large upturn in 2003. These developments reduced companies' financing costs, and in the primary market were reflected by a growth in issues by companies and suppliers of structured products.

In 2004 the players in the capital market operated in accordance with new structural regulations that went into force as part of the tax reform recommended by the Rabinowitz Committee and as part of the pension reform. (The Committee proposed changes in income tax at the end of 2002. The government started to implement the Committee's recommendations at the beginning of 2003.) The main elements of these changes were the equalization of the tax rates on earnings from different financial transactions, including the early implementation of the equalization of tax rates on investments abroad with those on investments in Israel, at the beginning of 2005 instead of in 2007, and an end to the issue of earmarked bonds for the pension funds. 11 These changes and other changes that had already been implemented under the tax and pension reforms, together with the banks' stricter credit-extension policy, had the effect of diversifying the investments of the public and institutional investors, and contributed to the redirection of sources from the banks to the capital market and to the expansion of non-banking financial intermediation. It should be noted that the process of portfolio adjustment resulting from the changes in the investment regulations went smoothly, and the stability in the securities market, foreign currency market and prices was maintained.

The average yield on Galil 10-year CPI-indexed bonds fell from 4.8 percent in 2003 to 4.2 percent in 2004, while that on Shahar unindexed bonds for the same period dropped from 8.8 percent to 7.6 percent. Yields-to-maturity for long and medium terms rose during the first five months of 2004 and then fell with the result that at the end of the year, their level was similar to that at the beginning of the year. This was in contrast to the development of yields during 2003, when yields fell consistently from a high level, with a larger standard deviation.

The Tel Aviv Stock Exchange's General Share Index rose by 18 percent in 2004 following an increase of 55 percent in 2003. Corporate bond prices went up by 5.4

<sup>&</sup>lt;sup>11</sup> In 2004 and at the beginning of 2005, taxation rules for financial investments went into force that abolished the discrimination to the benefit of savings at banks as compared to CPI-indexed government bonds, earnings from unindexed government bonds (Shahar, Gilon and Treasury bills) as compared to earnings from corporate bonds, and earnings from Israeli securities as compared to earnings from foreign securities.

percent in 2004 compared with 13.3 percent in 2003. The year 2004 was a record year for trading turnover in shares and bonds. <sup>12</sup> Daily turnover averaged NIS 660 million in shares, an increase of 80 percent compared with 2003, and in bonds, NIS 890 million, an increase of 27 percent compared with 2003. In the primary market, the volume of issues by companies and suppliers of structured products was two and a half times the amount recorded in 2003, due *inter alia* to reduced issues of government bonds (as will be detailed in section b. below) and the diversion of institutional investors' money to the tradable and non-tradable bond market. Issues floated for the purpose of financing business sector activity accounted for half of the amount raised in the primary market in 2004. The other half consisted of issues of structured instruments, whose purchase increased during the year. These were used for the purpose of reinvestment in the capital markets and not for financing business sector activity. (See Chapter 4 for details on the securities markets.)

Background factors that contributed to developments in the securities markets in 2004 were price stability, the economic recovery in Israel that began in the second half of 2003 and which was reflected by an increase in companies' profits, growth abroad, fiscal policy and monetary policy that were coordinated at achieving their respective objectives, structural reforms (which will be detailed in section c. below) that are increasing the demand and competition for sources, an improvement in Israel's country risk, low interest rates abroad, and the rise in share prices in the USA and Europe. (See Chapter 2 for details of the macroeconomic environment that affected developments in the capital market.)

In the economic environment of price stability, low yields and high monetary policy credibility, investors turned to shares and unindexed shekel assets. The public's share holdings continued to expand in 2004 and the proportion of equities in the public's asset portfolio reached 23 percent at the end of the year compared with 21 percent at the end of 2003. The proportion of unindexed assets also continued to grow, to 42 percent of the asset portfolio excluding shares compared with 40 percent at the end of 2003. The pension and tax reforms were mainly reflected by the replacement of bank deposits and earmarked government bonds by tradable bonds and Treasury bills, which increased the tradability of the public's asset portfolio. The proportion of tradable assets in the portfolio rose from 43 percent at the end of 2003 to 48 percent at the end of 2004. The ratio of foreign investors' holdings in the CPI-indexed government bond market, and the proportion of holdings in the equities market held by foreign investors that are not interested parties, which were slightly higher at the end of 2004 than at the end of 2003, remained very small. Foreign investors' holdings accounted for 0.3 percent of the CPI-indexed government bond market and 1.2 percent of the Shahar unindexed bond market at the end of 2004. Holdings by foreign investors that are not interested parties accounted for 4.2 percent of the equities market. In principle, the equalization of the tax conditions for investments abroad with those for investments in Israel from

<sup>&</sup>lt;sup>12</sup> Foreign investors purchased shares at the end of 2004, contributing to the upturn in prices characteristic of that period. (See the Annual Survey of the Foreign Currency Economic Activity Department in this report for details of foreign investors' activity.)

the beginning of 2005 will lead to the redirection of sources from the asset portfolio to investments abroad. But due to investors' tendency to show a preference for local assets ("the home bias"), the present soundness of the shekel and the expectations of future interest rate hikes in the USA, the process of redirection is likely to be gradual. (See Chapter 3 for details of the public's asset portfolio.)

The proportion of the public's savings held by means of institutional investors amounted to 37 percent of the public's asset portfolio at the end of 2004, similar to that at the end of 2003 and more than in the previous two years. The balance of assets held by institutional investors increased from NIS 509 billion at the end of 2003 to NIS 558 billion at the end of 2004. Most of the accrual was centered among the mutual funds specializing in corporate and government bond investments, unlike the situation in 2003 when the accrual was centered among the shekel funds. The provident funds recorded a positive accrual for the first time in a decade, due inter alia to the tax advantage on savings accrued in the funds prior to reform. A positive accrual was recorded in the new pension funds and the advanced study funds. In 2004 institutional investors operated in accordance with new structural regulations that were applied under the pension and tax reforms, and which affected these organizations' investment diversification. A notable increase was recorded in holdings of corporate bonds and shares, at the expense of government bonds and shares, whose proportion in the asset portfolio declined. This was with the intention of enhancing the yields on holdings against the background of the low interest rates that prevailed in 2004. The increase in institutional investors' holdings of corporate bonds during the last four years is evidence of the tax and pension reforms' contribution to the strengthening of non-banking intermediation: The proportion of corporate bonds in the provident funds' asset portfolio rose from 11 percent in 2000 to 18 percent in 2004, while the proportion of these bonds in the new pension funds' portfolio increased from only 3 percent in 2000 to 11 percent in 2004. The ratio of corporate bonds also rose in the insurance companies' portfolio of profit-sharing plans, from 4 percent in 2000 to 16 percent in 2004. Apart from that, savers' recognition of the fact that private provident funds' yields are superior to those of the funds managed by the banks (an awareness that has been apparent for several years) was reflected in 2004 by a more rapid move from the bank's provident funds and advanced study funds to private organizations. This process continued in the mutual fund market as well.

The recommendations of the Bachar Committee were submitted to the government in 2004. The main recommendations called for the separation of the ownership and management of the provident funds, mutual funds and underwriting companies from the banks. (See Chapter 5 for details on the subject of institutional investors.)

# b. Principal trends in government borrowing

The budget deficit fell from 5.6 percent of GDP in 2003 to 3.9 percent of GDP in 2003, slightly less than the target of 4 percent. The fall in the deficit in 2004 led to a large decrease in the government's borrowing requirements. Net domestic borrowing

dropped from NIS 22 billion in 2003 to NIS 12 billion in 2004, and net overseas borrowing rose from NIS 6.7 billion in 2003 to NIS 7.8 billion in 2004. Privatization revenue totaled a billion shekels in 2004, less than the planned level of NIS 2.6 billion, as was the case in 2003 when this revenue amounted to only NIS 0.3 billion. The under-performance in the area of privatization resulted from the postponement of the sale of Bank Discount, which went ahead at the beginning of 2005, and of Bank Leumi, which will apparently go through in 2005. In the first quarter, the government exploited the low yields in Israel and abroad at the beginning of the year in order to increase the amount of borrowing in Israel and abroad, and thereby complete a substantial part of the planned annual quota at the expense of borrowing later in the year, which slowed.

The decrease in the budget deficit and the government's borrowing requirements, together with the relatively rapid growth in nominal GDP, prevented a further rise in the proportion of the government debt to GDP. At the end of the year, the ratio of the debt to GDP leveled off at a high 102 percent, slightly less than in 2003, following a consistent increase from 88 percent in 2000. The present level of the debt is similar to that which prevailed in 1996 and considerably higher than that in the developed countries and the eurozone. No major improvement was recorded in the interest payment burden, a rigid component of government spending, and its ratio of over 5 percent of GDP remained one of the highest among the developed countries. The size of this component in the budget impairs fiscal policy's flexibility in acting to stabilize fluctuations in economic activity.

The tradable domestic borrowing component in 2004 matched the government's long-term strategy, which is aimed at furthering the development of the capital market in Israel via the issue of benchmark series alone. The number of series issued continued to decline and reached 69 in 2004, compared with 81 in 2003 and 185 in 1999. The average term-to-maturity at the issues was extended from 8.3 years in 2003 to 9.2 years in 2004, and the average proportion of Shahar unindexed bonds rose from 41 percent of total domestic borrowing in 2003 to 42.5 percent in 2004. The proportion of Galil CPI-indexed bonds fell from 40 percent in 2003 to 31 percent in 2004. Two series of Gilboa dollar-indexed government bonds were redeemed in 2004 at an overall amount of NIS 5.4 billion. The government stopped issuing dollar-indexed bonds back in 2000. As a substitute for Gilboa bonds, the private sector issued dollar Certificates of Deposit during the last two years. These provide dollar indexation and are traded on the stock exchange. Also issued on the stock exchange were Galila Certificates of Deposit, which provide indexation to the CPI and serve as a substitute for Galil government bonds.

The government's policy with respect to the composition of domestic borrowing contributed to reducing the government debt's exposure to risks deriving from changes in inflation and exchange rates.<sup>13</sup> Despite this, in 2004 the government increased its

<sup>&</sup>lt;sup>13</sup> However, the foreign currency denominated external debt increased, an increase that was only partly offset by a decrease in the foreign currency indexed domestic debt.

borrowing by means of Gilon floating-rate bonds, which are regarded as an asset with an effective term of only three months. This form of borrowing exceeded a quarter of the government's annual borrowing compared with 19 percent in 2003. As a result, the government debt's exposure to changes in the short-term interest rate for three months increased, particularly in view of forecasts that this rate will rise again shortly. It is important that the government totally refrain from issuing short-term bonds such as the Gilon, which creates indexation of part of the debt to interest rate adjustments and is opposed to the general strategy of ceasing indexation and extending the term of the debt. Such a measure will conform to the government's policy in recent years of ceasing the issue of floating-rate CPI-indexed and dollar-indexed bonds, as accepted in the majority of developed countries.

In line with its activity directed at enhancing the development of the Shahar unindexed bonds, in cooperation with the stock exchange the government intends to launch a future contract on the Shahar that will be traded on the stock exchange. 14 However, the launching of the contract is being delayed due to a dispute over the manner in which it is to be settled: The Finance Ministry favors physical settlement, while the stock exchange supports cash settlement. Under the physical settlement model, on the contract's expiration date the seller is required to transfer to the buyer a Shahar bond from among a number of series of Shahar's that are predefined as transferable. Under the cash settlement model, the seller obtains from the buyer (or will pay to him) on the expiration date a sum of money equivalent to the difference between the price of the bond set in the contract and the market price of the bond on the expiration date. 15 Those in favor of physical settlement claim that by limiting the leverage that can be created in the future market for Shahar bonds, this form of settlement reduces the risk inherent in speculative activity and in large price fluctuations in the Shahar market itself. 16 Those supporting cash settlement, which is relatively new, claim its main advantages as: (1) a lack of potential for the corneringtype manipulations characteristic of physical settlement, which could be more serious

<sup>&</sup>lt;sup>14</sup> The contribution of futures contracts to trading in the underlying asset is well known: Derivative assets as a whole and futures contracts in particular enable investors to spread financial risks, and thereby increase their flexibility in diversifying the investment portfolio, enhance the liquidity of the underlying assets and reduce volatility in its price.

<sup>&</sup>lt;sup>15</sup> With both models, a hypothetical Shahar bond is used. With the physical model, a number of transferable bonds exist and the seller of the contract is entitled to choose one of them. Since the bonds have different conditions and as a result, different prices, the hypothetical bond is used for calculating the conversion coefficient via which all the bonds can be brought to a common denominator. With the cash model, the hypothetical bond is the underlying asset and the financial accounting between the seller and the buyer of the contract on the expiration date will be based on the determinant rate of the underlying asset on expiration. This rate will be calculated in accordance with the yield on a predefined basket of Shahar bonds.

<sup>&</sup>lt;sup>16</sup> In a manner that will ensure that the future market will not predominate over the underlying asset market and will not compete with it.

than the risk of speculative activity in cash settlement;<sup>17</sup> (2) the efficiency of the model via which the buyer of the contract achieves his objective while saving costs. The success of the contract itself and its contribution to the development of the Shahar market are of major significance in determining the specific features of the contract, including the settlement model. An examination of the differences between the two types of settlement, an assessment of their implications for the Shahar market and worldwide experience have prompted the Bank of Israel to support the application of the cash settlement model for Shahar contracts.

# c. Main structural changes in the financial system

In 2004 the Bachar Committee submitted to the government its recommendations for the reform of the capital market. The Committee proposed that long-term savings be separated from the banks, with the aim of reducing concentration and the conflict of interests inherent in the management of savings by the banks, and of increasing the competition in the capital market. The Bachar Reform is part of a series of reforms relating to the activity of institutional investors that were initiated in recent years and part of which are still in the process of implementation. (See Chapter 5 for details of the main elements of the Bachar Committee's recommendation and their implications for the markets, and the other structural changes relating to institutional investors.)

At the end of the year the Knesset approved an amendment to the State Loan Law. Under the amendment, the government is entitled to appoint market-makers for its bonds and to conclude agreements with them that will determine their rights and obligations. An obligation to purchase a minimum amount at government bond tenders was defined, together with the obligation to quote purchase and selling prices in a special trading system for market-makers. As regards rights, market-makers are permitted to participate in government bond tenders, obtain an option for the purchase of an additional amount of government bonds, to borrow bonds from the government and to trade in their own special trading system. The integration of market-makers that are required to quote prices on a current basis in the government bond market is expected to increase the tradability of government bonds in the secondary market, and to reduce the risk inherent in their sale. In addition, if part of the market-makers to be appointed are foreign financial entities, the investor base is likely to expand. These

<sup>&</sup>lt;sup>17</sup> With the cornering strategy, a player will buy a large amount of the contract and will ask for the underlying asset to be delivered on the expiration date. This behavior in the future market artificially increases the demand for the underlying asset and its price. The implications of such action become more serious when the same player, apart from his large holding of the contract, holds a large amount of the underlying asset and thereby limits the supply of this asset in the market. In a situation such as this, the demand surplus from those wishing to purchase the underlying asset increases, and the player profits not only from the rise in the price of the future contract, but also from the rise in the price of the underlying asset.

developments will have the effect of reducing the cost of government borrowing. Large foreign organizations' entry into the ranks of the players in the secondary market could enhance the performance of the primary market, by increasing the competition in that market. However, the government's intention to limit the opportunity that financial organizations currently enjoy of accessing the tenders directly in order to provide market-makers that operate primarily in the secondary market with exclusive access to the tenders, could reduce the advantages inherent in the reform. Competition will not increase to the extent that would have been possible had all financial organizations retained the right to buy freely at government tenders, and may actually decrease, and the government will not be able to realize the full potential of the reduced cost of borrowing. Moreover, the government's intention to establish a special securities borrowing depository for the stock exchange management is against the trend whereby the private sector is developing a securities lending market. What is more, under the amendment that has been approved, the government and not the Bank of Israel will manage all matters relating to State loan activity. The government will therefore have to establish an entire network for the management of State loans, in addition to that existing at the Bank of Israel, which has been operated in coordination with the government for years.

The Ministry of Finance and the Securities Authority have recently focused on the development of the capital market by means of regulation within a legislative format. The objective is to increase the number of investors and the range of products available by strengthening the infrastructure for the establishment of real estate funds and by removing barriers. This will make it easier to issue bonds that are backed by assets and to issue commercial papers.

In 2004 the Bank of Israel maintained its policy of developing the money market and increasing the reliance on market tools in the management of monetary policy. The gradual move from monetary deposits to Treasury bills continued and in March, REPO transactions began to be used in a limited amount on a trial basis. These processes led to increased trading turnover in Treasury bills and enhanced the Bank of Israel's flexibility in the current management of interest rate policy. The development of the money market is expected to continue during the coming years with the approval of the draft REPO Law that the Bank of Israel initiated, the completion of the move to the management of monetary policy via loans and the establishment of an RTGS system.<sup>18</sup>

<sup>&</sup>lt;sup>18</sup> REPO transactions constitute an essential financial infrastructure for the continued development of the bond market and for the effective activity of market-makers. See Box 1 in the Inflation Report for the first half of 2004 and Chapter 4 in this report for details of the importance of the REPO market as a whole and Bank of Israel REPO transactions in particular.