

## Chapter 7

# The Money and Capital Markets

*Developments in the money and capital markets were determined to a great extent by the Bank of Israel's policy, which sought to attain the inflation target mainly by means of high domestic interest while maintaining the exchange-rate regime. This policy resulted in large-scale capital inflow (encouraged by Israel's improved financial standing), a steep rise in foreign-currency credit, and rapid growth of unindexed local-currency assets. Long-term real interest rose, in reaction to monetary policy and heavy investment demand.*

*M1 and certain aggregates with low interest-rate sensitivity rose in line with GDP, after fluctuating widely in 1993–94. Total credit expanded faster than did total financial assets, and wealth rose slightly slower than GDP, with an increase in the share of physical assets. In the capital market, capital raised via the stock exchange plummeted, as did accumulation in institutional channels, particularly provident funds, as long-term savings fell.*

### 1. MAIN DEVELOPMENTS

The Bank of Israel's interest-rate policy—intended to return the economy to a path consistent with the government's inflation target—set the tone for developments in the money and capital markets in 1995, following the unwelcome deviation from the inflation target in 1994. During 1994, and especially at the end of the year, the Bank of Israel raised the interest rate on its monetary (discount-window) loan to the banks by some 8 percentage points, reaching about 18 percent at the beginning of 1995. As the year progressed, interest was reduced somewhat, averaging approximately 15.6 percent, about 2 percentage points higher than in 1994, and 4 percentage points higher than in 1993.

Monetary policy, together with increased supply in agriculture and housing, helped to bring inflation back to its path, an important achievement in light of the higher demand and lower unemployment rate. The rise in interest, however, encouraged the extensive inflow of short-term capital, over and beyond what can be attributed to project financing and other long-term factors, and prevented exchange-rate depreciation. As it was committed to the crawling exchange-rate band, the Bank of Israel did not permit the capital inflow to be fully expressed by a fall in the exchange rate, thereby moderating the effect on the profitability of tradable goods—and of exports in particular. It did this by purchasing large amounts of foreign currency from the public. Thus the large gaps between domestic interest and the expected cost of importing capital were maintained, encouraging continued capital inflow on an unprecedented scale.

<b>Table 7.1</b>					
<b>Main Indicators of the Money and Capital Markets: 1993-95<sup>a</sup></b>					
	Balance at end-1995		Nominal change during period, percent		
	NIS bill.	Percent of GDP	1993	1994	1995
Short-term aggregates and financial assets <sup>b</sup>					
Monetary base <sup>c</sup>	10	4	33.0	16.7	2.3
M1—money supply	15	6	27.8	5.0	16.5
Other unindexed financial assets	70	26	32.7	50.3	39.1
M2—total unindexed financial assets	86	32	31.3	38.1	34.5
Foreign-currency denominated or indexed deposits	21	8	-9.8	13.6	-2.3
M3—total short-term financial assets	107	40	20.0	31.0	25.2
Tradable bonds held by public	29	11	14.7	-6.1	19.3
Shares held by public	84	31	88.8	-40.6	19.2
A. Total short-term financial assets and tradable securities held by public	225	84	55.3	-14.4	24.8
Long-term financial assets					
Restitutions deposits	16	6	7.3	11.6	13.2
Savings schemes and indexed deposits	58	22	10.9	17.6	8.8
Provident funds	106	40	15.7	5.5	3.0
Pension funds and life-insurance schemes	97	36	22.5	20.6	16.9
B. Total long-term assets held by public	277	104	16.1	12.9	9.3
C. Total financial assets (A+B)	502	188	32.3	-0.3	15.8
Balance of bank credit to public	166	62	34.7	32.0	20.7
of which Unindexed	68	25	37.9	21.3	6.5
Foreign-currency denominated or indexed	48	18	15.2	29.7	68.0
CPI-indexed	49	18	43.2	50.2	10.3
Mortgage banks	70	26	30.7	37.4	27.3
D. Total bank credit	235	88	33.6	33.5	22.5
E. Net financial assets (C-D)	249	93	31.6	-18.0	9.6
F. Net wealth <sup>d</sup>	751	281	19.5	17.7	14.5
<sup>a</sup> In this table 'the public' does not include the government, the Bank of Israel, and the banks. Financial assets held by nonresidents are included, but foreign financial assets held by Israelis are not. The definition of the public in different items in the table depends on the source of the data.					
<sup>b</sup> December average. Including short-term assets of the provident funds, pension funds, and life-insurance schemes.					
<sup>c</sup> For definitions, see Table 7.3.					
<sup>d</sup> The difference between total assets and liabilities of the nonfinancial private sector.					
SOURCE: Bank of Israel.					

Net capital imports by the nonfinancial private sector, and net foreign-currency credit extended by domestic banks to this sector, are assessed at \$10.5 billion in 1995, about 12 percent of GDP (Tables 6.11 and 7.2). Some of this was long-term, arising largely from the peace process and improved economic performance rather than from interest-rate differentials. Most of the capital inflow, however, appears to have been due to changes in expected returns on assets and liabilities in local and foreign currency, some of them representing a correction of the low local-currency interest rates of 1993, and others reflecting sharp increases in these rates as part of the anti-inflationary effort.

These interest-rate developments also had important implications for the composition of activities on the money and capital markets: unindexed deposits and foreign-currency credit grew rapidly, foreign-currency-denominated assets and unindexed local-currency credit fell in real terms, the rate of return required on the securities market and long-term savings instruments rose, and the financing mix of the public-sector deficit changed.

During the year, the rate of increase of some of the aggregates that are less sensitive to differentials between local- and foreign-currency interest rates tended to stabilize, after fluctuating widely in 1993–94 (Table 7.1). M1, which is considered to be a relatively good indicator of the strength of inflationary pressures due to monetary expansion, rose by 16.5 percent in 1995, similar to the growth rate of nominal GDP, after increasing slowly in 1994. Total financial assets of the public rose at a similar rate to M1, after a rapid increase in 1993 and real decline in 1994. By contrast, M2 and M3, in which unindexed local-currency assets have a significant share, continued to soar as demand for these assets swelled. The increase in the share of Treasury bills and time deposits in these aggregates, together with the extension of periods to maturity, was notable.

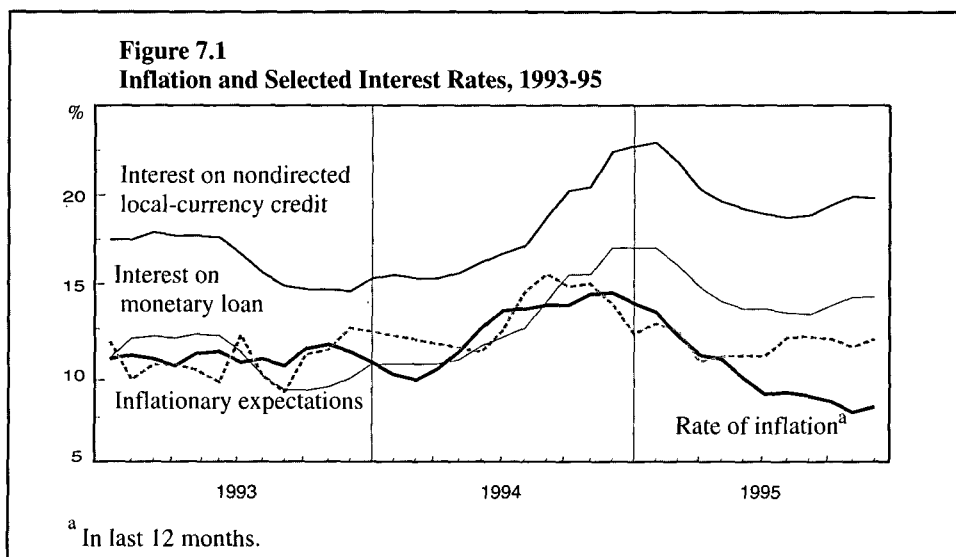
The value of tradable bonds and shares held either directly by the public or via mutual (trust) funds rose by 20 percent, after falling in 1994, while the long-term financial assets of the public rose by 9 percent, and their share in the portfolio declined. There was real erosion of provident fund balances, while those of pension funds rose in line with GDP. These changes reflect both the public's disappointment with the performance of provident funds and the attractiveness of pension funds, which have a high, stable, and guaranteed yield. In real terms, the extent of indexed savings schemes and deposits remained unchanged, with an increase in the CPI-indexed component at the expense of the foreign-exchange-indexed one.

In 1995 the government increased its issues of tradable bonds in order to finance the deficit and replace those earmarked bonds not renewed. There was a marked rise in variable-interest unindexed bonds. The price of indexed bonds dipped slightly in real terms, after plummeting in 1994, and their real yield to maturity rose from 3 to 4 percent.

Although the stock market rallied during 1995, private share issues continued their steep decline, reaching their lowest point since 1988—0.6 percent of GDP, compared with 4.5 percent in 1993. Net corporate bond offerings were negative, so that the capital market made no contribution to business-sector financing in 1995.

The growth rate of credit extended to the public by commercial and mortgage banks slowed in 1995, but remained higher than that of GDP. There was a marked rise (68

percent) in credit indexed to and denominated in foreign currency extended by the commercial banks, as well as a slight real reduction in unindexed credit.



The net wealth of the nonfinancial private sector rose in line with GDP in 1995, with a continued rapid increase in its physical wealth and slight drop in real net financial wealth. Since 1990 the growth rate of financial wealth has lagged behind that of physical wealth and GDP, and this was also reflected by the fall in the share in GDP of net financial saving, from 7–8 percent in 1989 to about 1 percent in 1994–95. The background to this long-term trend appears to be the combination of rising housing needs due to the influx of immigrants and the increasing attractiveness of nonresidential investment.

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The wide fluctuations in the money and capital markets since 1993 followed several years of rapid expansion. Between 1986 and 1993 the average growth rates of the various money and credit aggregates exceeded that of GDP, alongside the steady reduction of interest rates and narrowing of the interest-rate spread. To a great extent, the rapid expansion of financial assets and credit reflected the growth of financial demand against the backdrop of increasing economic stability and the reforms in the money and capital markets, and did not cause the inflation rate to accelerate. Inflation even fell from an annual average of 18 percent in 1986–91 to 10–12 percent in 1992–93.

In the second half of 1993 the money and credit aggregates expanded at a particularly rapid rate, as did capital market activity. Although this trend was partly connected with

**Table 7.2****The Money and Capital Markets: Price Changes, Yields, and Flows, 1993-95**

	1993	1994	1995
<b>A. Rate of yield and price changes (percent)<sup>a</sup></b>			
CPI	11.2	14.5	8.1
CDs and SROs	9.7	11.6	13.3
Monetary loan	11.3	13.4	15.6
Unindexed local-currency credit	16.4	17.4	20.1
Eurodollar interest	3.1	4.7	5.9
NIS/\$ exchange rate	10.1	1.8	3.1
Real yield to maturity on 5-year bonds	2.8	2.9	4.1
Actual yield on shares	40.9	-38.5	14.8
<b>B. Sources of change in financial assets (percent of GDP)</b>			
1. Public-sector financing requirement <sup>b</sup>	4.9	2.4	4.0
2. Bank of Israel activity <sup>c</sup>	1.9	-2.2	-6.6
3. Total	6.8	0.3	-2.6
4. Private sector sales of foreign currency to Bank of Israel	-2.5	0.5	7.1
of which Implied private capital imports <sup>d</sup>	0.2	4.3	12.1
5. Total change (3+4) = (6+7+8)	4.4	0.8	4.4
6. Change in monetary base	1.0	0.9	-0.3
7. Change in base of Treasury bills	-0.1	-0.3	1.8
8. Capital raised through bonds, deposits, and sales of assets	3.5	0.2	2.9
Capital raised via private bonds	-0.5	-0.9	-0.6
Capital raised via shares	4.5	2.2	0.6
Gross private saving	22.6	20.4	20.7
Implied gross private saving	3.6	0.8	0.9
<sup>a</sup> Local-currency nominal rates of change, except for Eurodollar interest which is in dollar terms, and yield to maturity on bonds.			
<sup>b</sup> Domestic deficit of the government and Jewish Agency, and net credit extended by the government.			
<sup>c</sup> Sales of foreign currency to the Bank of Israel less the private-sector current account.			
<sup>d</sup> Gross private saving less gross private domestic investment.			
SOURCE: Bank of Israel.			

the peace process, it also reflected the greater expansion of supply than of demand, and was expressed by low interest rates and the accumulation of excess liquidity. This exerted pressure on prices and, together with unfavorable developments in agriculture and housing and the government's expansionary wage policy, contributed to raising inflation in 1994 above the target rate.

The government did not take a leading role in restraining inflation in 1994-95, even adopting a more expansionary macroeconomic policy than in previous years.<sup>1</sup> Under

<sup>1</sup> Note, however, that the government's macroeconomic policy on construction slowed the rise in housing prices in 1995 by making more land available.

these conditions, the Bank of Israel acted to attain the inflation target, placing most of the burden of restraint on monetary policy. The central bank took a firm anti-inflationary stance in view of the decline in the unemployment rate since 1993, and the formal adoption of inflation targets by the Bank of Israel and the government since 1992. The existence of the targets has created a situation in which deviation from them undermines the credibility of the policy and increases apprehensions that the inflationary deviation will persist.

In 1994–95 the Bank of Israel resorted extensively to the interest rate, and its effect on both the growth rate of M1 and the exchange rate, as a major means of affecting prices directly. This policy differed from the one employed in the late 1980s and early 1990s, when the Bank tended to raise interest primarily when this was required in order to defend the exchange rate against speculative capital flows.

The transition to pre-announced inflation targets and the greater importance of interest reduced the role played by the exchange rate in monetary policy. While it continued to constitute a vital link in the mechanism whereby policy affects prices, it was less important as an indicator of the goal of overall price developments. At the same time, monetary policy decisions were based to a greater extent on estimates of inflationary expectations derived from the capital market. Another way in which this change in emphasis was expressed was in the decision to widen the exchange-rate band—from 10 to 14 percent—and to increase exchange-rate fluctuation around the midpoint rate in the second half of 1995.

Despite this shift in emphasis, the exchange rate was still perceived as an important means of affecting prices and moderating fluctuations in the real exchange rate. In this context, the Bank of Israel intervened in the foreign-exchange market and prevented a fall in the exchange rate, which could have helped to combat rising inflation and increase future depreciation, thereby reducing the incentive to import short-term capital. By doing this, the central bank acted to avoid a situation in which a combination of limiting exchange-rate flexibility and domestic price- and wage-inelasticities would significantly impair the profitability of tradable goods. By preventing the exchange rate from dropping to the lower limit of the band, the Bank of Israel signalled its commitment to the band and prevented the interest rate from having its full potential effect on the exchange rate; thus, the incentive for extensive private capital imports persisted throughout the year.

Monetary policy in 1995 reflected the importance attached to developing monetary policy instruments. The Bank of Israel implemented most of the absorption required to offset the expansionary effect of the capital inflow by reducing the monetary loan, which had risen in 1991–93, and selling Treasury bills to the public. When the monetary loan was very small, and the approved quota of Treasury bills had been sold, the Bank began to absorb liquidity by means of foreign-currency swaps. The greater openness—both internally and externally—of the money and capital markets requires a greater range of instruments than is available to the Bank of Israel, as well as their unrestricted use; this applies especially to the purchase and sale of securities on the open market.

The anti-inflationary policy adopted by the Bank of Israel in mid-1994 has not yet run its course, so that it is difficult to assess it in full at this stage. It is possible, however, to make an interim assessment of its effect on inflation and other spheres. This assessment indicates that Israel did not pay a high real price for attaining the objectives of monetary policy in 1995, but also that problems are piling up which require changes in the economic policy mix, especially the implementation of a more contractionary fiscal policy than has been evident in the past two years.

- There is no doubt that monetary policy succeeded in reducing inflation in 1995; it thus acquired credibility, which will enable it to continue performing this function in the future. Since much of the decline in the rate at which prices rose between 1994 and 1995 was due to sectoral factors, such as a rise in agricultural supply and the sale of land for construction, when adjusted for these factors inflation did not fall significantly. Nonetheless, monetary policy also had an important task to play in restoring inflation to a low path. This was achieved primarily by convincing the public that the reduction of inflation took top priority and that a deviation from the inflation target would be unacceptable. In this way, monetary policy prevented the steep price increases of 1994 from spilling over to the rest of the economy and causing a higher inflation rate. Monetary policy also acted directly on prices through its effect on demand (especially for housing) and the nominal exchange rate.

- Real interest on unindexed local-currency credit averaged 11 percent (deflated by the CPI), and on total bank credit (including credit indexed to the CPI and to foreign currency) it was about 7 percent—some 4 percent higher than abroad.<sup>2</sup> Note, however, that the implementation of contractionary monetary policy in 1994–95 did not involve loss of GDP and higher unemployment (the sacrifice ratio). On the contrary, during that period there was rapid economic growth and an impressive decline in the unemployment rate. In addition, the increase in the long-term interest rate did not prevent the continued rapid rise in investment, and in effect the interest-rate hike appears to have been due in part to the buoyant demand for investment. The current-account balance of payments deteriorated in 1995, but it is not clear whether monetary policy had any substantial effect on either this or the real exchange rate. On the one hand, it acted to depress domestic demand, thus reducing the import surplus and exerting pressure for real depreciation. On the other, it slowed the rate of nominal depreciation and, because of economic rigidities, could have exerted pressure for real appreciation and impaired the profitability of the tradables sector. In the context of buoyant economic activity, the slight real appreciation evident in 1995 indicates that this effect was not significant; nonetheless, towards the end of the year real appreciation intensified.

<sup>2</sup> Interest on credit is more relevant for the decisions of the business sector. Real interest on deposits and Treasury bills, which is more relevant for the decisions of consumers, was lower, averaging about 7.5 percent, and at the end of the year was similar to the level abroad. An assessment of real expected interest as derived from the capital market (including a risk premium) indicated that annual average real interest was lower, though at the end of the year the two were identical (see Table 7.6).

- Tight monetary policy tends to hamper public borrowing, making it more expensive and, under certain circumstances, serving to reduce the inflation tax. Monetary contraction appears initially to have expanded the income of the Bank of Israel by increasing income from the monetary loan, but at a later stage the loan was reduced and the volume of assets on which the Treasury and the Bank of Israel pay a high interest rate rose.

- In 1995 Israel was exposed to extensive capital flows and large changes in the composition of the public's portfolio. The latter were due in part to long-term factors, such as the peace process, Israel's continued integration in the world economy, and the correction of the effect of low interest rates in 1993. However, a large part of the capital flows was because the differential between expected yields on assets and liabilities in local and foreign currency rose beyond their equilibrium level.

This situation, together with the effect of monetary policy in other spheres, presents economic policy-makers with the challenge of shaping a balanced overall policy which can cope with the balance-of-payments problem while encouraging rapid economic growth and reducing the inflation rate, and also prevent financial shocks and other unfavorable effects. This should be based on tight fiscal policy, which will bear the brunt of attaining macroeconomic balance and enhancing the credibility of economic policy.

This kind of policy will help to bring inflation down and make it possible to gradually reduce interest and reduce the yield gap between assets and liabilities in local and foreign currency. Without remedial fiscal measures, recourse to credit abroad may be greater, thereby reducing the effectiveness of monetary policy, and a basis may be created for a potential rapid and uncontrolled capital outflow, causing serious economic damage.

### **BOX 7.1 THE MONEY AND CAPITAL MARKETS**

In the past, Israel's money and capital markets were characterized by the following: a high degree of involvement on the part of the government and the Bank of Israel in raising capital, serving as intermediaries and regulators, the pivotal role of banking corporations, on the one hand, and of interested parties, on the other; considerable segmentation, differential interest rates, the relative weakness of the stock exchange, a high proportion of indexed government securities (principally to the CPI), relatively low liquidity, and long terms to maturity of portfolios. Following the reduction of the public-sector deficit, the slowing of the inflation rate, and a series of internal and external reforms, many of these characteristics changed. In particular, the role of the government and the Bank of Israel in financial intermediation shrank markedly, and the degree of integration between the various sectors of the domestic market—as well as the link with international money markets—increased.



The process of regulating the institutional framework of the money and capital markets continued in 1995. Among other things, the Securities Consultancy Law was passed, and the Provident Funds Law was drafted, following the amendment to the Mutual Funds Law in 1994. The declared aims of this legislation are to regulate the functioning of these funds, encourage competition, and prevent conflicts of interest.

The government's decisions regarding the pension funds are of particular significance. It decided, among other things, to continue issuing earmarked bonds at high interest rates, as coverage for the established pension funds and partial coverage (at less beneficial terms) for new ones. The subsidization of pensions savings could increase the private saving rate to some extent, but could constitute a considerable burden on the budget in the future. It is also doubtful whether continued reliance on earmarked bonds is advisable, since this stands in contradiction to the reform and restructuring of the capital market.

Towards the end of 1995 the Brodet Committee submitted its recommendations, proposing various restrictions on the nonfinancial holdings of banking corporations; this will affect some banking corporations.

The extent of privatization was quite limited in 1995 as a result of several factors. It was felt that the terms under which certain companies operated should be regulated prior to privatization, there were fears that receipts would be low given existing market conditions, and it was considered advisable to guarantee companies appropriate controlling interests. Note, however, that delays in the privatization process create uncertainty, have an adverse effect on companies' day-to-day management, and deter potential investors in Israel and abroad.

During the year the government announced its intention of distributing options (vouchers) to enable the public to buy shares in government companies. These options could accelerate the privatization process at the cost of partly forgoing the opportunity to use it to reduce the public debt.

## 2. THE MONEY MARKET

### **Monetary policy in 1995**

The main object of monetary policy in the last two years has been to attain the inflation target—in view of the fact that it was exceeded in 1993, and by an even wider margin in 1994—as well as the rapid expansion of economic activity, and the reduction of unemployment. The emphasis of current policy differs from that of the years following the influx of immigrants when, in view of the high unemployment rate, monetary policy concentrated mainly on supporting economic activity. Since 1994 the Bank of Israel has ascribed great importance to assessing the inflationary environment by means of several indicators—actual price increases, estimated inflationary expectations, money, and the level of economic activity—stressing the extent of demand in relation to supply. Greater

**Table 7.3**  
**The Principal Monetary Aggregates, and Credit, 1993-95<sup>a</sup>**

						(percent change, annual rate)		
Monet- ary base <sup>b</sup>	M1	M2*	M2	M3	Nondirected credit			
					Local- currency	Foreign- currency	Total	
End-of-period								
1993	33	28	37	31	20	40	6	35
1994	17	5	37	38	31	33	24	32
1995	2	16	31	34	25	11	118	22
1994								
I	27	36	75	71	44	42	10	38
II	5	-20	19	21	20	32	39	33
III	32	44	48	48	41	28	14	27
IV	5	-22	12	18	20	30	33	31
1995								
I	14	2	36	43	17	9	290	27
II	16	27	33	38	27	11	100	22
III	39	58	34	37	32	13	60	20
IV	16	-10	21	21	25	10	82	20
Period average								
1993	31	24	44	38	25	52	9	45
1994	25	21	34	33	26	30	13	28
1995	-1	8	31	35	25	19	87	26
1994								
I	-6	28	-33	-30	-20	-3	4	-2
II	19	-10	38	37	27	32	29	32
III	29	36	42	42	38	30	18	28
IV	8	-18	13	17	18	30	34	30
1995								
I	-48	1	39	46	23	16	162	28
II	25	21	32	36	24	11	166	
III	34	47	36	41	33	12	58	18
IV	20	0	21	22	24	10	80	20

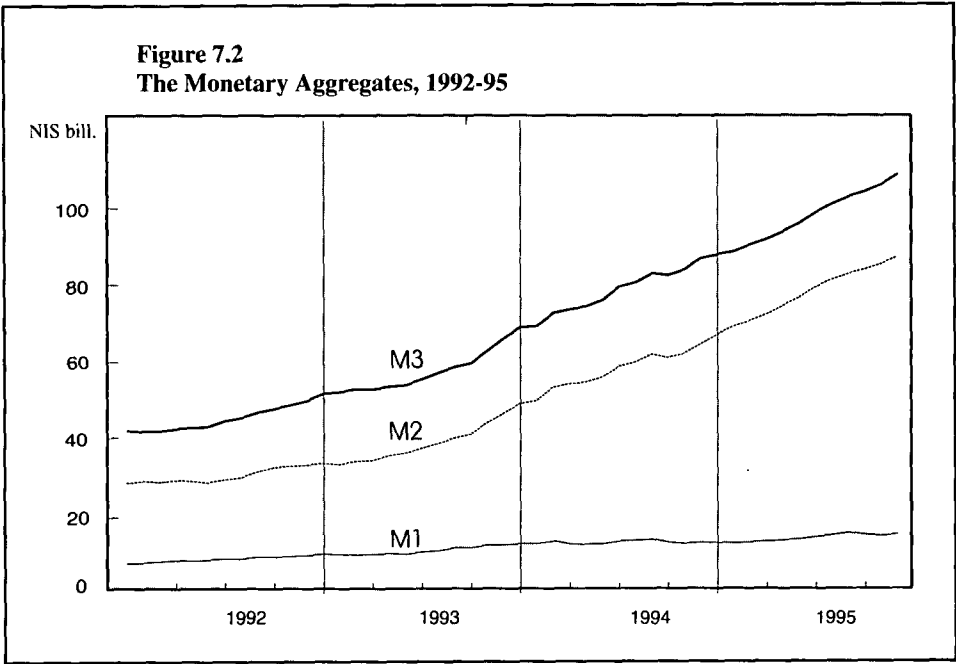
<sup>a</sup> M1 = cash in the hands of the public and demand deposits; M2\* = M1 + interest-bearing local-currency deposits + other deposits; M2 = M2\* + Treasury bills; M3 = M2 + foreign-currency-denominated or indexed short- and medium-term deposits.

<sup>b</sup> The reserve requirements were reduced at the end of December 1994. This is estimated to have reduced the monetary base by NIS 1.8 billion on the day of its implementation. The rate of change of the monetary base during 1995:I has been adjusted for this effect, whereas the period-average change and the annual figures have not.

importance is now attached to inflationary expectations—mainly the estimate derived from the capital market—as both an indicator of price pressures and an interim variable which policy seeks to influence.

The main policy instrument for attaining the inflation target is the interest rate on the Bank of Israel's monetary loan, which affects domestic interest rates and the development of the monetary aggregates, especially M1. Raising the interest rate affects prices in several ways, tending to depress the expansion of demand, slow the rate at which the exchange rate rises, and influence the prices of a variety of assets, including housing. Another important mechanism by which policy affects prices is the contractionary effect on inflationary expectations of the policy-makers' determination to attain the inflation target.

At the end of 1993, in view of the rapid expansion of most of the monetary and credit aggregates in the latter half of the year, the continued reduction of the unemployment rate and rapid economic growth, the Bank of Israel began to raise the interest on its monetary loan. In 1994 the CPI overshoot its target by more than it had in 1993, inflationary expectations, as derived from the capital market, increased, and credit continued to expand. Economic activity and demand also expanded rapidly. The public-sector wage agreements, which incorporated generous increases, also had an expansionary effect on demand. Consequently, the Bank of Israel again raised the interest on the monetary loan, bringing it to 18.5 percent (effective rate) in December 1994, with a total annual increase of 8 percentage points.



**Table 7.4**  
**Selected Real Interest Rates, 1992-95**

(percent p.a.)

	Short-term local-currency credit to the public					Financial assets of the public				Interest-rate spread <sup>e</sup>
						Real yield to maturity of government bonds <sup>d</sup>				
	Overdraft facilities	Term credit	Average <sup>a</sup>	3-month Eurodollar <sup>b</sup>	Average cost of monetary loan	SROs (CDs) <sup>c</sup>	1-month Treasury bills	5 years	10 years	
Nominal interest rate										
1992	22.0	17.6	19.9	3.7	11.9	10.3	12.2			11.7
1993	18.1	15.0	16.4	3.1	11.3	9.7	11.4			8.4
1994	19.8	15.6	17.4	4.7	13.4	11.6	13.0			8.2
1995	22.4	18.4	20.1	5.9	15.6	13.3	15.4			9.2
1994										
I	17.5	13.8	15.4	3.5	11.0	9.5	10.2			8.0
II	17.9	14.1	15.7	4.4	11.5	10.0	11.2			7.9
III	20.0	15.8	17.5	4.9	13.7	11.8	13.4			8.2
IV	23.8	19.0	21.0	5.9	17.3	15.0	17.1			8.9
1995										
I	24.8	20.6	22.4	6.1	18.0	15.6	17.4			9.2
II	21.8	18.0	19.7	6.0	15.1	12.8	15.2			9.0
III	21.1	17.0	18.8	5.8	14.1	12.0	14.0			9.1
IV	22.1	17.9	19.7	5.7	15.0	12.7	15.1			9.3
Real <i>ex post</i> interest rate <sup>f</sup>										
1992	11.5	7.5	9.6	10.9	2.3	0.9	2.6	2.3	2.6	10.7
1993	6.2	3.3	4.6	2.1	0.1	-1.4	0.1	2.8	2.9	7.5
1994	4.7	1.0	2.5	-6.9	-1.0	-2.5	-1.3	2.9	3.2	7.2
1995	13.3	9.5	11.1	1.0	6.9	4.8	6.8	4.1	4.3	8.5

1994										
I	7.2	3.8	5.3	-5.6	1.4	-0.0	0.6	2.7	2.9	7.3
II	-1.4	-4.6	-3.3	-3.5	-6.8	-8.0	-7.0	3.0	3.3	6.6
III	5.4	1.6	3.2	-10.8	-0.2	-1.8	-0.4	2.6	3.2	7.2
IV	7.7	3.5	5.2	-7.4	2.1	-0.0	1.8	3.2	3.5	7.7
1995										
I	23.6	19.4	21.2	-1.8	16.8	14.5	16.2	4.0	4.0	9.1
II	11.5	7.9	9.5	-2.4	5.3	3.2	5.4	4.1	4.4	8.3
III	9.9	6.3	7.9	3.3	3.6	1.6	3.5	4.1	4.4	8.3
IV	8.7	5.0	6.6	5.0	2.4	0.4	2.5	4.4	4.4	8.3
<sup>a</sup> Weighted by the volume of credit of the two components. <sup>b</sup> In dollar terms. The real rate is based on changes in the dollar exchange-rate and the CPI. <sup>c</sup> Assuming renewal every three days; excluding 'Jumbo' deposits. <sup>d</sup> Gross yield to maturity in secondary market. <sup>e</sup> The difference between interest rates on overdraft credit and SROs. <sup>f</sup> Nominal rate deflated by change in the CPI over the same period.										

Inflationary expectations declined in the last quarter of 1994 and at the beginning of 1995. In the first quarter of 1995 the upward trend of the CPI moderated significantly, and M1 expanded only slightly, continuing the marked slowing of its rate of increase in 1994. In March 1995, in view of these positive developments in the inflationary environment, the Bank of Israel began to bring the interest rate down, cutting it by a total of 4 percentage points by August. Later in the year the rate at which prices rose stabilized at 10 percent, and estimated inflationary expectations declined slightly. Nonetheless, in the third quarter the rise in M1 accelerated and inflationary expectations crept up. In response to these developments, and in view of the continued rapid expansion of economic activity, decline in unemployment, and expansion of credit, the Bank of Israel raised the interest on the monetary loan by 1 percentage point by the end of October. At the end of December it reduced interest by half a percentage point, largely as a result of the stability of inflationary expectations and the steep drop in M1.

Another important instrument of monetary policy is the exchange-rate band. While the interest rate on the monetary loan is decided once a month, in the last few years the slope of the exchange-rate band, which is derived from the inflation target and world inflation, has been set about once a year by the government in conjunction with the Bank of Israel. The exchange-rate band plays an important role in attaining the inflation target, especially in the long run. To a great extent, the exchange rate, together with the trend of world prices, determines the level of prices in the tradables sector, and hence affects all prices. Furthermore, if the exchange-rate band is perceived as credible and its slope fits the inflation target it reinforces the credibility of the inflation target. In 1995 the slope of the band was set at 6 percent, similar to the 1994 rate, with a slight change of the midpoint rate. In the first half of 1995 the Bank of Israel acted to maintain the exchange rate within a range that was narrower than the band. By supporting the exchange rate, the Bank sought to reinforce the credibility of the band and establish a more stable business environment, as well as to limit damage to export profitability. Raising the interest rate on local currency created a yield gap in its favor, so that there was considerable excess supply of foreign currency, and downward pressure on the exchange rate. Appreciation might have narrowed the yield gap, thereby reducing capital inflow. In order to moderate the pressure for appreciation, in the first half of 1995 the Bank of Israel bought foreign currency from the nonfinancial private sector totalling \$3.7 billion.

In June the Bank of Israel widened the official exchange-rate band from  $\pm 5$  to  $\pm 7$  percent around the midpoint rate, allowing the exchange rate to fluctuate more widely. This underscored the central bank's commitment to attaining the inflation target through the use of the interest rate while reducing the role of the exchange rate in determining inflationary expectations, though not in its direct effect on prices. The object of widening the band was to grant the central bank greater flexibility in conducting monetary policy and setting the interest rate, in view of the liberalization of capital flows and the marked international mobility of capital. When the exchange rate is managed in a narrow band and the economy is open to capital flows, departure from a range of interest rates gives rise to capital flows which increase together with the deviation. Widening the exchange-

rate band means that the exchange rate can fluctuate more widely, as will the expected return on foreign currency. It also increases the exposure to risk embodied in foreign-currency purchases and conversions. Despite the widening of the exchange-rate band, and the subsequent appreciation against the basket of currencies, the large supply of foreign currency from the private sector persisted, and in the second half of 1995 the Bank of Israel purchased \$2.4 billion.

Throughout the year the Bank of Israel acted to fully sterilize foreign-currency conversions in order to prevent money from rising and local-currency interest falling beyond the policy targets. For this purpose, the Bank reduced the supply of the monetary loan offered to the banks and increased sales of Treasury bills. In August, since the monetary loan was at an extremely low level and Treasury bills were approaching their permitted limit, the Bank of Israel introduced a new monetary instrument—swaps. In this framework, commercial banks deposit local currency with the Bank of Israel through an auction, and the Bank extends them foreign-currency credit without interest, to the equivalent local-currency amount (at an exchange rate set on the day the transaction was implemented). The Bank of Israel also pays interest, determined at the auction, on the unindexed local-currency deposits; this should reflect the spread between the interest on the monetary loan and on dollar deposits abroad.

In 1995 the Bank of Israel began to buy government bonds from the public on a limited scale by means of auctions. The Bank's activities in such transactions is restricted under an agreement with the Ministry of Finance, and this makes it harder to sterilize foreign-currency conversions. At the end of 1994 the Bank of Israel also reduced the reserve requirement—equivalent at that point in time to a NIS1.8 billion expansion of the monetary base. The Bank of Israel compensated for this by reducing the supply of the monetary loan, so that it had to mop up liquidity by means of other instruments later in the year.

The management of interest-rate and exchange-rate policy in 1994–95 differs slightly from that of the first few years of mass immigration, when the exchange-rate band was perceived as the main instrument for attaining the price target and served as a nominal anchor for prices. Interest was set at a level intended to support economic activity, in coordination with developments on the foreign-exchange market, in order to maintain the credibility of the exchange-rate band. In certain cases, when there were expectations of devaluation and capital outflow, the interest rate was raised in order to bolster the exchange rate.

### **Monetary developments in 1995**

After raising the interest rate on the monetary loan by 8 percentage points in 1994, the Bank of Israel reduced it by 3 percentage points in 1995. However, the development of the various monetary aggregates and the extensive capital inflow indicate that local-currency interest remained higher than the return on foreign currency. During the year foreign-currency conversions by the private sector amounted to \$6 billion (Table 7.5).

(NIS million)

[illegible]



**Table 7.5B****Sources of Change in Unindexed Local-Currency Assets,<sup>a</sup> 1993–95**

	(percent of GDP)*										
	1993	1994	1995	1994				1995			
				I	II	III	IV	I	II	III	IV
Public-sector injection	1.4	2.2	1.1	1.4	-1.1	-0.1	7.9	-2.8	2.7	3.3	0.9
Bank of Israel, total	2.0	-1.9	-6.5	-1.6	1.2	1.8	-8.3	-9.6	-9.3	-5.1	-2.3
Monetary loan	3.2	-0.7	-4.2	-1.9	2.2	4.2	-6.7	-8.8	-5.6	-1.5	-1.5
Open-market operations	0.5	0.6	-1.2	1.8	0.8	-0.6	0.5	0.4	-2.9	-2.4	0.3
Other <sup>b</sup>	-1.7	-1.8	-1.1	-1.5	-1.8	-1.9	-2.1	-1.2	-0.9	-1.2	-1.0
Swaps	0.0	0.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.1	-3.5
Private foreign-currency conversions	-2.5	0.5	5.1	1.5	-0.3	-0.7	1.5	10.3	7.7	1.6	1.3
<b>Total change in monetary base</b>	1.0	0.9	-0.3	1.4	-0.2	1.1	1.1	-2.1	1.1	-0.1	-0.1
<b>Domestic banking operations<sup>c</sup></b>	7.2	6.2	8.9	7.4	4.1	5.2	8.0	5.9	9.9	7.5	12.0
<b>Change in unindexed local-currency assets</b>	8.2	7.1	8.6	8.8	3.9	6.3	9.1	3.8	11.0	7.4	11.9
Money supply	1.6	0.5	0.9	0.6	-0.8	0.0	1.9	-1.8	1.8	2.2	1.3
Time deposits, SROs (CDs), and other deposits	6.6	6.6	7.7	8.2	4.7	6.2	7.2	5.6	9.2	5.2	10.6

<sup>a</sup> See notes to Table 7.5A.<sup>c</sup> Flow *divided by* GDP in the same period (quarterly or annual).

In view of the rise in the private-sector current-account deficit, these conversions indicate a large-scale capital inflow. Although some of this is not sensitive to differentials in short-term rates of return, since it reflects direct investment or long-term loans, most of it was due to yield differentials (including a risk premium) between foreign and local currency in 1994-95.

M1 rose by a moderate 16 percent in 1995 (Table 7.3), slightly more than nominal GDP (Table 7.9), after slowing significantly in 1994. Local-currency deposits expanded rapidly because their rate of return was higher than that of assets indexed to the CPI or in foreign currency. M2 (unindexed, short-term, local-currency assets) also rose steeply—by 34 percent (Table 7.3)—because the growth in local-currency deposits outstripped that in M1. Deposits denominated in or indexed to foreign currency dipped slightly during 1995, as their rate of return was lower than that on local-currency deposits, and M3 rose by 25 percent. The expansion of total nondirected bank credit slowed to 22 percent from 32 percent in 1994 (Table 7.3)—though this was still faster than that of nominal GDP. Credit was diverted to the foreign-currency-indexed and denominated segment, which rose by 64 percent in 1995 at the expense of local-currency credit—and particularly unindexed credit, which rose by only 7 percent, remaining stable in real terms (Table 7.9). Loans from mortgage banks expanded by a rapid 27 percent, slightly lower in real terms than in 1994 (Table 7.9).

Interest on the monetary loan averaged 15.6 percent in 1995, up by 2 percentage points from the 1994 level, and by 4 percentage points from that of 1993. During 1995 interest fell from 18 percent (effective rate) in the first quarter to 14–15 percent during the rest of the year. Unindexed borrowing and lending rates moved in line with interest on the monetary loan. Interest on SROs was 2 percentage points lower than on the monetary loan, while that on overdraft facilities and overdrawn current accounts was 7 percentage points higher than that on the monetary loan. The spread between the interest on SROs and on overdraft facilities and overdrawn current accounts rose by an average of 1 percentage point in 1995, reaching 9.2 percentage points (Table 7.4).

**Table 7.6**

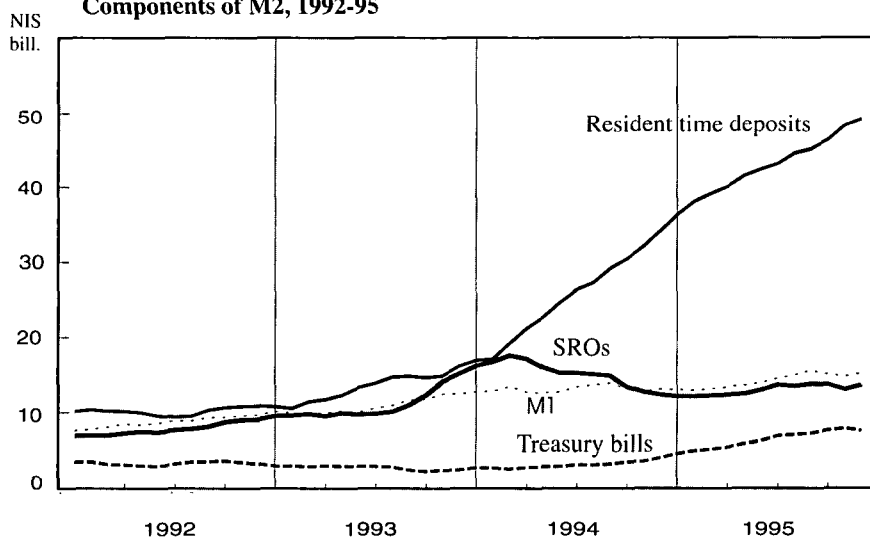
**Real Interest in the Unindexed Local-Currency Segment, 1995**

(percent)

	Nominal interest		Deflated by CPI		Deflated by expected inflation*		Deflated by wholesale prices	
	I, II	III, IV	I, II	III, IV	I, II	III, IV	I, II	III, IV
Monetary loan	16.5	14.6	10.9	3.1	4.4	2.6	3.8	7.0
Yield to maturity on monthly T-bills	16.3	14.6	10.7	3.0	4.2	2.6	3.6	6.9
Resident time deposits	15.0	13.2	9.5	1.7	3.0	1.3	2.4	5.6
Unindexed credit	21.1	19.2	15.2	7.2	8.4	6.8	7.8	11.3

\* As derived from the capital market.

**Figure 7.3**  
**Components of M2,<sup>a</sup> 1992-95**



<sup>a</sup> Excluding other deposits.

The expected real interest implicit in unindexed local-currency interest rose from 1994 to 1995 as a result of the higher average level of interest and the moderation of inflationary expectations as estimated from the capital market. Real *ex post* interest rose more sharply, due to the marked slowing of the rise in the CPI<sup>3</sup> (Table 7.4). For business-sector borrowers, the calculation of real interest *ex post* deflated by nominal interest on the wholesale price index is also relevant. Table 7.6 shows real interest as calculated in these three ways.

Expected real interest was about 4 percent on deposits and 8 percent on credit in the first half of 1995, moderating by some 2 percentage points in the second half of the year due to the decline in nominal interest. Real *ex post* interest (based on the CPI) was particularly high in the first half of the year, due to the marked slowing of the rise in the CPI, and plunged in the second half. Real *ex post* interest on local-currency credit was over 15 percent in the first half of 1995, falling to 7 percent in the second half. In terms of the wholesale price index, real interest actually rose in the second half of the year, as wholesale prices moderated. The real interest implicit in the monetary loan, which fell to 3 percent in the second half of 1995 (deflated by the actual rise in the CPI), remained 3–4

<sup>3</sup> Expected real interest affects economic decisions, while *ex post* interest affects actual profitability.

percentage points higher than in 1993–94, though similar to its 1992 level. An international comparison shows that the expected real interest on the monetary loan and on unindexed deposits was similar to that in other developed countries. Since the interest-rate spread in Israel is wider than in other developed countries, however, and interest on the monetary loan is closer to that on deposits, interest on credit in Israel appears to be relatively high.<sup>4</sup>

Real long-term interest, as reflected by the yield to maturity of indexed government bonds, also rose in 1995, by an average of more than 1 percentage point, continuing the more moderate increases of previous years (Table 7.4). The rise in interest was principally the result of greater demand for capital in Israel because of the high level of investment in relation to national saving. It was also due to the effect of the tight monetary policy, which has pushed up the average level of unindexed short-term interest since 1994. Furthermore, the rise in long-term interest constitutes some compensation for its relatively low level in the last few years, closing the gap between the price of capital in Israel and abroad. The liberalization of the money and capital markets in general, and of capital movements in particular, helped to narrow these gaps.

During 1994 a gap emerged between short-term local-currency and foreign-currency returns. Local-currency yields rose in 1994 because of the 8 percentage point rise in interest on the monetary loan, and fell in 1995 because of the 3 percentage point reduction in it (Table 7.4). The return on foreign currency was affected by dollar interest, which rose by 3 percentage points to 6 percent in 1994, and declined by half a percentage point in 1995.<sup>5</sup> A major factor affecting foreign-currency returns is the significant slowing of the rate of depreciation since 1994, part of which was expected. The dollar exchange rate rose by 1.8 percent in 1994 and by 3.1 percent in 1995, while in 1992–93 average depreciation was some 13 percent. Although part of the depreciation against the dollar was due to its weakness in international markets, the exchange rate against the currency basket also moderated considerably, rising by an annual average of 5.6 percent in 1994–95, compared with 11 percent in 1992–93. Table 7.7 presents the local- and foreign-currency borrowing and lending rates of domestic banks, in local-currency terms, under various assumptions regarding expected depreciation. In the first half of 1995, as local-currency interest was high and the exchange rate was managed within a narrow band around the midpoint rate, the yield gaps favored local-currency deposits and foreign-currency credit, for every estimate of expected depreciation.

The picture is less clear for the second half of 1995, following the reduction of interest and the widening of the band, which was followed by appreciation. On the credit side,

<sup>4</sup> There are two main reasons why the interest-rate spread in the local-currency segment is wider than that in the foreign-currency segment in Israel and abroad. First, there is little interbank competition in the local-currency segment, and secondly, there are differences between the kinds of credit on which average interest is calculated. A case in point is local-currency credit, which includes overdraft facilities and current accounts, and can be used more efficiently by the customer than short-term credit.

<sup>5</sup> Most foreign-currency credit is denominated in dollars. Deposits include a large restitutions component, which is less affected by yield gaps.

all the indicators show interest-rate differentials, although these were far smaller than in the first half of the year. On the deposit side, some indicators show that the yield gap favored the dollar. The rapid rise of the exchange rate in November–December 1995 contributed to the higher yield on the dollar in the second half of the year. When these two months are excluded, the *ex post* return on the dollar was significantly lower than that on local currency, for deposits and credit alike. Note that until October the return on local-currency assets was higher than the cost of dollar credit, so that *ex post* it would have been possible to benefit from arbitrage between the two currencies. Although some of the indicators show that there were no yield gaps in the second half of 1995, the extensive capital inflow persisted (though far more slowly than in the first half), so that estimated expectations of depreciation based on the slope of the band and the distance of the actual exchange rate from the midpoint rate may have an upward bias.

**Table 7.7**  
**Local- and Foreign-Currency Interest on Credit and Deposits , 1995**

	(in NIS terms)		
	1–6/95	7–12/95	7–10/95
Yield to maturity on 1-month Treasury bills	16.3	14.6	14.3
Interest on unindexed time deposits	15.0	13.2	12.9
Interest on dollar deposits in domestic banks <i>plus</i>			
depreciation of dollar during period	2.3	15.3	7.3
Slope of exchange-rate band	11.8	11.6	11.6
Distance from midpoint <i>plus</i> slope of band <sup>a</sup>	13.1	15.7	15.9
Interest on unindexed local-currency credit	21.1	19.2	18.9
Interest on dollar credit from domestic banks <i>plus</i>			
depreciation of dollar during period	4.3	17.3	9.3
Slope of exchange-rate band	13.9	13.6	13.6
Distance from midpoint <i>plus</i> slope of band <sup>a</sup>	15.4	17.8	18.0

<sup>a</sup> Assuming that the gap between the actual currency-basket exchange rate and the midpoint rate will be closed within a year.

The slower rate of depreciation evident since the end of 1994 appears to have been generally expected. Given the Bank of Israel's determination to attain the inflation target, it could have been assumed that interest would remain relatively high for a long time. This assessment was translated into the expectation that in the short term there would be no significant devaluation of the NIS, thereby making capital imports more profitable. In addition, the widening of the exchange-rate band in June 1995 and the Bank of Israel's announcement that it would henceforth intervene less in foreign-exchange trading may have caused the public to assume that in the short term the Bank of Israel would not act to restore the currency-basket exchange rate to the midpoint rate, even if the difference between them was relatively large. The link between the public's expectations regarding the exchange rate and monetary policy was expressed at the end of the year. Expectations

<b>Table 7.8</b> <b>Domestic Budget Deficit (Consolidated Balance Sheet of the Government and the Bank of Israel), 1993-95<sup>a</sup></b>							
(percent of GDP) <sup>b</sup>							
	1993	1994	1995	1995			
				I	II	III	IV
<b>Deficit</b>							
Government expenditure	39.6	40.2	40.6	40.6	39.9	42.3	39.4
<i>of which</i> Interest on internal debt <sup>c</sup>	4.3	3.9	4.2	3.3	4.6	4.2	4.5
Government income <sup>d</sup>	36.6	38.1	37.1	41.7	35.0	35.9	35.9
Budget deficit	3.0	2.1	3.5	-1.1	4.9	6.4	3.5
Non-budgetary injection	0.2	0.3	0.6	0.5	0.7	0.6	0.4
Jewish Agency conversions	0.5	0.4	0.3	0.5	0.3	0.3	0.2
<b>Total domestic deficit</b>	<b>3.8</b>	<b>2.7</b>	<b>4.4</b>	<b>-0.1</b>	<b>5.9</b>	<b>7.3</b>	<b>4.1</b>
<b>Financing</b>							
Change in monetary base	1.0	0.9	-0.3	-2.1	1.1	-0.1	-0.1
Net borrowing via Bank of Israel	-2.0	1.9	8.4	9.6	9.3	9.2	5.8
<i>of which</i> Treasury bills	-0.1	-0.3	1.8	0.5	3.4	3.0	0.3
Monetary loan	-3.2	0.7	4.2	8.8	5.6	1.5	1.5
Net domestic borrowing	2.4	0.5	3.3	2.7	3.2	4.0	3.2
Bonds and deposits <sup>e</sup>	1.8	-0.1	2.5	0.5	2.8	3.8	2.9
Sales of assets and capital income	1.7	0.3	0.4	1.7	0.1	0.0	0.0
<i>less</i> Net credit to private sector	1.1	-0.3	-0.4	-0.5	-0.4	-0.3	-0.2
Foreign-currency conversions	2.5	-0.5	-7.1	-10.3	-7.7	-5.7	-4.8

<sup>a</sup> The deficit shown here differs from that of Chapter 5 in two respects: (i) cash basis (this table) versus accrual basis; (ii) coverage: this table is confined to central government (the whole public sector in Chapter 5); however, the deficit of the Jewish Agency is included both here and in Chapter 5.

<sup>b</sup> Flow *divided by* GDP in the same period (quarterly or annual).

<sup>c</sup> Mostly real interest (since most of the internal debt is indexed); it also includes a nominal element (since some of the debt is not fully indexed or is indexed to the exchange rate).

<sup>d</sup> Including net compulsory loans.

<sup>e</sup> Tradable bonds and nontradable deposits and bonds (excluding Treasury bills and resident deposits).

SOURCE: Bank of Israel and Ministry of Finance (Accountant-General).

that the government and the Bank of Israel would combine budget cuts with a reduction of the interest rate caused the private sector's supply of foreign currency to plummet and the exchange rate to rise. These expectations moderated in the wake of the relatively mild cuts in the budget, the slight reduction of interest at the end of December 1995, and the rise in interest in January 1996, so that the currency-basket exchange rate was adjusted downwards and the private sector's supply of foreign currency rose again.

Over and beyond changes in the yield gap, other factors affected the profitability of resort to foreign-currency credit. The liberalization of the foreign-exchange market made foreign-currency credit more accessible to Israeli borrowers. The transition to intensive use of foreign-currency credit may also have involved adjustments, some of which were non-recurring, and as experience of resort to foreign-currency credit grew, the substitutability between it and local-currency credit increased. The yield gap also includes a risk factor arising from fluctuations in the exchange rate. While the widening of the exchange-rate band increased this risk, it was offset by the firm commitment of monetary policy-makers to attaining the inflation target. This exerted downward pressure on the exchange rate, thereby reducing uncertainty regarding short-term devaluation. Hence it is not yet clear in what direction the risk associated with foreign-currency transactions changed in the second half of 1995.

### **The effect of policy**

In 1995 the CPI rose by 8.1 percent, close to the lower level of the 8–11 percent inflation target. The object of monetary policy, i.e., to attain the inflation target set by the government and the Bank of Israel, was thus achieved in full. This is especially important in view of the overshooting of the target in 1994, when it was 8 percent and the CPI rose by 14.5 percent. The Bank of Israel's firm resolve to attain the target acted to reduce inflationary expectations and reinforce the target's credibility. The combination of steep increases in both prices and inflationary expectations, as in 1994, could have led to the acceleration of inflation. As stated, monetary policy served to prevent this.

The moderation of the rate at which prices rose from 1994 to 1995 also reflected the slower increase in the relative price of housing and the decline of fruit and vegetable prices. The slower increase in housing prices was due to both the marked rise in sales of land for construction by the Ministry of Housing and the Israel Lands Administration and the effect of monetary policy on the demand for housing. Higher interest on the monetary loan in 1994, and its relatively high level in 1995, served to raise the interest on all long-term indexed financial instruments in those years, bringing it close to world levels. This was also expressed in the higher cost of mortgages, thereby serving to reduce the demand for housing. In addition, it increased contractors' financing costs, giving them an incentive to sell units under construction in order to ease their debt burden, and also reduced the discounted value of the flow of housing services provided by a housing unit, hence leading to a decline in its value.



**Table 7.9****Commercial Nondirected and Mortgage Bank Credit to the Public, 1993–95<sup>a</sup>**

	End-year, NIS million			Nominal change, percent					
				During period			Between periods		
	1993	1994	1995	1993	1994	1995	1993	1994	1995
Total local-currency credit	97,415	129,689	143,752	39.6	33.1	10.8	51.7	30.1	19.0
<i>of which</i> Unindexed	54,902	66,620	71,452	37.9	21.3	7.3	50.5	24.9	11.0
CPI-indexed	34,947	52,498	63,204	43.2	50.2	20.4	52.6	38.1	33.4
Foreign-currency-indexed	7,565	10,571	9,097	35.5	39.7	-13.9	56.6	31.7	5.1
Foreign-currency credit (NIS)	12,420	15,348	33,527	5.5	23.6	118.4	9.3	13.1	86.7
Total credit	109,835	145,037	177,279	34.7	32.0	22.2	44.9	28.1	26.2
Mortgage loans	39,899	54,823	69,777	30.7	37.4	27.3	25.1	32.7	31.2
GDP				13.3	20.9	15.7	15.0	19.8	17.1

<sup>a</sup> Based on monthly averages of daily data, except for credit from mortgage banks which is based on end-of-month data.

The decline in fruit and vegetable prices in 1995 was the result of supply problems in agriculture in 1994, which had led to exceptional price increases. These were adjusted in 1995, and prices fell. Even adjusting for the effect of fruit and vegetables and housing prices, the rise in the CPI moderated—albeit slightly—from an annual increase of 9.8 percent in 1994 to 8.8 percent in 1995. It seems, therefore, that in 1995 monetary policy contributed to some slowing of the rate of increase of certain components of the CPI and to preventing the steep increases in the relative prices of fruit and vegetables and housing in 1994 from spilling over to other components in 1995.

Another channel through which monetary policy acted to slow price increases in 1995 was, as stated, the contribution of the relatively high interest rate to the slowing of the rate of depreciation. This moderated price increases, acting directly on prices of tradables and indirectly on those of nontradables. The currency-basket-exchange rate rose by 5.8 percent during 1995.<sup>6</sup> Although this rate of depreciation is slightly lower than the slope of the exchange rate band, much of the rise was concentrated at the end of the year, while for most of the year the exchange rate was 2–5 percent below the midpoint rate.

Contractionary monetary policy acts to depress domestic demand, and hence to weaken price pressures. Although according to various indicators real local-currency interest rose sharply in 1995, at the same time the share of local-currency credit shrank, and that of foreign-currency credit rose, so that the effective interest rate facing the country was lower than that implicit in local-currency interest.<sup>7</sup> The expansion of domestic resource uses moderated slightly in 1995, rising by 7.2 percent (at constant prices) compared with 8.1 percent in 1994, though their growth rate in general, and of investment in particular, remained high. Alongside the rise in domestic resource uses, economic growth accelerated and unemployment fell steadily throughout 1995. Had it not been for the tight monetary policy, domestic demand might have risen more steeply, exceeding supply and exerting stronger upward pressure on prices.

In 1995 there was real appreciation vis-à-vis exports and slight real depreciation vis-à-vis imports. Export growth was disappointing this year because according to several indicators—including the rapid expansion of world trade and the opening up of new markets to Israeli goods, *inter alia* because of the peace process—demand for Israel's exports rose considerably. The moderate export growth appears to reflect mainly sectoral difficulties and problems of profitability. The latter depends among other things on the real exchange rate, which is determined in the long term by real rather than nominal factors. Tight monetary policy serves to slow the pace of nominal depreciation, and hence—because of price rigidities—should also lead to real appreciation. Despite the slowing of the rate of depreciation in 1995, monetary policy does not appear to have had a significant effect on the trend of the real exchange rate and the import surplus.

<sup>6</sup> End-of-year monthly averages.

<sup>7</sup> Average real interest on total bank credit (unindexed, indexed, foreign-currency-indexed, and foreign-currency-denominated) in 1995 is estimated (at replacement prices) at 7 percent, compared with 1.5 percent in 1994 (*ex post* interest, based on the CPI).

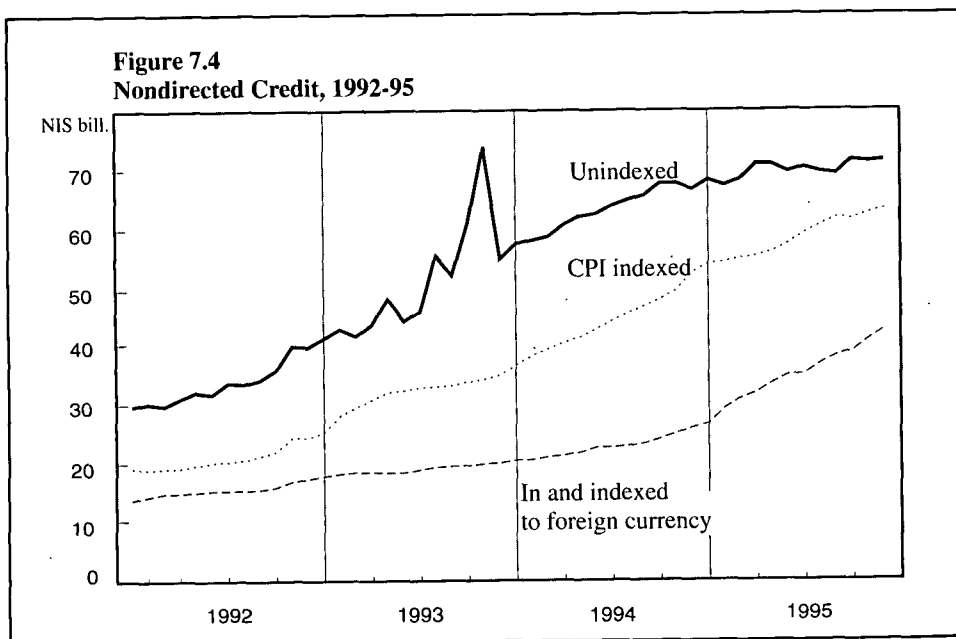
The balance-of-payments deficit has expanded rapidly since 1993, and in 1995 reached a worrying level. To date no financing problems have arisen, because Israel's economic standing in world markets has improved due to changes in the political situation in the region as well as to higher local-currency interest, which caused capital inflow. Since there were no current-account financing problems in 1995, the government did not take the fiscal steps necessary to reduce the deficit.

As stated, in 1995 there were gaps between yields on local and foreign currency, and domestic interest rates deviated from the range beyond which capital flows occur. The clearest evidence of this is the large capital inflow originating with the nonfinancial private sector,<sup>8</sup> and its withdrawal of foreign-currency credit—totalling 12 percent of GDP—from domestic banks, as well as the large share of short-term capital imports in this inflow. The addition to the monetary base stemming from foreign-currency conversions exerts downward pressure on local-currency interest because it expands the money supply. The diversion of credit to the foreign-currency segment also acts to reduce local-currency interest as it damps demand for it. In order to keep the interest rate high, the Bank of Israel acted to sterilize these conversions. As a result, the public's holdings of unindexed local-currency assets rose, as did its foreign-currency liabilities. The mirror-image of this is that the composition of the public-sector debt changed—the unindexed, short-term, local-currency component rose and the short-term foreign-currency component fell. On the face of it, it could be claimed that the large capital flows of 1995 reflect inventory adjustment, in the wake of relatively low levels in the past. The rise in the share of foreign-currency credit in total bank credit in 1995 could, for example, represent correction of the bias in favor of local-currency credit until 1993, following the relatively low levels of local-currency interest prevailing then. However, experience indicates that the intensity of the flows in 1995 is more than inventory adjustment. Consequently, the effect of persisting with the current policy mix—tight monetary policy and expansionary fiscal policy—must be examined.

The yield gap between local and foreign currency should not persist in the long term, as the processes set in motion could have negative repercussions. The persistence of the yield gap could cause the local-currency component of the public's portfolio to continue growing, at the expense of the foreign-currency component. In this case, if the expected yield gap is reversed, the ensuing portfolio adjustment will also be larger. The narrowing of the yield gap could be caused by a decline in domestic interest or by a change in expectations of depreciation. Such expectations could arise if in the near future there is no significant improvement in the balance of payments—which would depend *inter alia* on public spending cuts and the reduction of the budget deficit—and if the capital inflow and the divergence of the nominal exchange rate from the midpoint rate continue. The portfolio adjustment could be greater than the original change in it, because if it occurs within a short period of time the yield on foreign currency could be extremely high.

<sup>8</sup> These imports are calculated on the basis of the current-account deficit of the entire private sector, which includes the capital services of the financial sector. Some foreign-currency imports by the nonfinancial private sector originate in banks' deposits in the Bank of Israel.

In 1995 foreign-currency credit accounted for a large part of the rise in total credit. Although real *ex post* interest on total bank credit rose to about 7 percent, this did not express the full extent of the change which would have occurred had it not been for the rise in the share of foreign-currency credit. Moreover, if the yield gap persists, it will lead to the continued increase in the share of foreign-currency (especially short-term) credit in total credit. In that case, short-term local-currency interest could eventually lose some of its effectiveness, as it acts on a contracting segment of the credit market. In this way, the effect of local-currency interest on economic activity will diminish.



The effect of monetary policy on the prices associated with the management of the public debt serves to change the composition and cost of the debt. In 1994 the rise in local-currency interest contributed to an increase in the income of the Bank of Israel, as interest payments by the commercial banks on the monetary loan rose. However, its contribution to higher long-term interest on indexed bonds increased the cost of financing the domestic public debt to some extent. In 1995 the monetary loan plummeted, and the balances of swap transactions and of Treasury bills held by the public rose. The reduction of the monetary loan caused a steep fall in the Bank of Israel's income from local-currency interest. Sales of foreign currency to the Bank of Israel by the private sector worked in the opposite direction, reducing both the net foreign debt of the government and the Bank of Israel and interest payments on it

### 3. THE CAPITAL MARKET

The value of the capital market including (mainly government) bonds, shares, and other investments of financial institutions was NIS326 billion at the end of 1995 (Table 7.10), a rise of 7 percent over 1994. This was due mainly to the increased supply of both government bonds to finance the higher deficit, and Treasury bills sold by the Bank of Israel. In contrast to 1992–94, when stock-market prices fluctuated widely, in 1995 they increased by only 1 percent. Bond prices declined by 1.5 percent.

**Table 7.10**

**The Capital Market, 1995**

	Total	Shares <sup>a</sup>	Tradable bonds <sup>b</sup>	Indexed earmarked bonds	Treasury bills <sup>b</sup>	Other assets held by institutions
End-of-period balances (NIS billion)						
Institutions						
Provident funds	105.9	11.4	50.0	12.1	1.3	31.0
Pension funds	65.9	0.0	0.0	62.1	0.0	3.8
Life insurance	31.0	0.4	2.7	21.3		6.6
Mutual funds <sup>c</sup>	14.7	6.5	6.8		0.8	0.6
Households and firms	56.7	29.8	21.7		5.2	
Nonresidents	15.1	14.4	0.6		0.1	0.0
Banks	37.1		30.7		6.4	
<b>Total</b>	<b>326.5</b>	<b>62.6</b>	<b>112.6</b>	<b>95.5</b>	<b>13.8</b>	<b>41.9</b>
Real change (percent)						
Institutions						
Provident funds	-4.7	-7.6	-8.8	-31.6	17.0	23.7
Pension funds	6.7	41.9	69.7	7.9		-9.9
Life insurance	11.4	27.9	22.9	4.2		35.3
Mutual funds <sup>c</sup>	-23.3	-24.6	-26.5		58.4	-22.0
Households and firms	17.9	4.0	31.8		76.6	
Nonresidents	59.5	56.6	252.5		98.2	-64.9
Banks	40.3		32.1		98.7	
<b>Total</b>	<b>7.4</b>	<b>5.7</b>	<b>6.0</b>	<b>-0.2</b>	<b>76.3</b>	<b>20.1</b>
Real change in price (percent)	-0.3	1.0	-1.5			
Real change in quantity (percent)	<b>7.7</b>	<b>4.6</b>	<b>7.6</b>	<b>-0.2</b>	<b>76.3</b>	<b>20.1</b>

<sup>a</sup> Excluding market value of quoted companies derived from their holdings in other quoted companies ('double counting'). Also excludes government-owned quoted companies.

<sup>b</sup> Excluding securities held by the Bank of Israel.

<sup>c</sup> Adjusted for provident funds' and nonresidents' holdings in mutual funds.

SOURCE: Bank of Israel Research Department

**Table 7.11**  
**Main Indicators of the Bond Market, 1994-95**

	1994	1995		
		Year	Jan-Jun	Jul-Dec
Market value of bonds tradable on TASE <sup>a</sup> (NIS million) <sup>b</sup>	108,352	115,691	107,861	115,691
Government	96,655	105,237	96,844	105,237
Private <sup>d</sup>	11,697	10,454	11,016	10,454
Composition by type (percent)				
CPI-indexed	86	82	86	82
Dollar-indexed	11	10	10	10
Unindexed	3	8	5	8
By holder				
The public	15	19	16	19
Banks	21	27	25	27
Provident funds	51	43	47	43
Bank of Israel	2	3	3	3
Insurance plans	2	2	2	2
Mutual funds	9	6	7	6
TASE <sup>a</sup> bond turnover (NIS million) <sup>b</sup>	17,175	17,561	8,862	8,699
Government <sup>c</sup>	15,855	16,612	8,310	8,302
Private <sup>d</sup>	1,320	949	552	397
Bank of Israel share of turnover (percent) <sup>e</sup>	1.84	2.92	3.28	2.57
Capital raised via tradable bonds (NIS million) <sup>b</sup>	-5,668	3,980	-839	4,819
Government <sup>c</sup>	-3,462	5,517	-114	5,631
Private <sup>d</sup>	-2,206	-1,537	-725	-812
Annual velocity of circulation of bonds <sup>f</sup>	0.15	0.16	0.17	0.16
Government <sup>c</sup>	0.16	0.17	0.17	0.16
Private <sup>d</sup>	0.10	0.09	0.10	0.07
Total real net yield (percent)				
CPI-indexed bonds	-3.5	0.7	-0.9	1.6
Government	-3.4	0.8	-0.9	1.7
Private	-4.0	-0.1	-0.9	0.8
Foreign-currency-indexed bonds	-11.5	0.9	-0.4	1.2
Government	-10.9	0.4	-0.7	1.1
Private	-17.2	5.4	4.0	1.3
Market value of earmarked bonds (NIS million) <sup>b</sup> held by provident and pension funds	69,625	74,200	71,861	74,200
Life insurance plans	18,937	21,327	20,097	21,327

<sup>a</sup> Tel-Aviv Stock Exchange.

<sup>b</sup> At December 1995 prices.

<sup>c</sup> Including unindexed bonds. Capital raised—adjusted for principal and interest of bonds reaching maturity.

<sup>d</sup> Including government corporations.

<sup>e</sup> The share of Bank of Israel purchases and sales in total turnover.

<sup>f</sup> The ratio of TASE transactions to market value; calculated on monthly basis.

SOURCE: Based on Central Bureau of Statistics, and Bank of Israel Monetary Department data.

The contraction of capital raised on the stock exchange by corporations contributed to an increase in corporate financing via bank credit. The share of foreign investors in the capital market rose in 1995.

## Bonds

Bonds can be divided into two categories: tradable (issued by the government and corporations) and nontradable (earmarked bonds, issued by the government especially for provident and pension funds and for life insurance companies). Bonds in the second category—whose value did not change in 1995—are all CPI-indexed, and are subsidized, bearing interest higher than the market rate. Of the tradable bonds, 82 percent are CPI-indexed, 10 percent are foreign-currency indexed, and the rest are relatively short term and unindexed, paying variable rates of interest derived from those paid on Treasury bills. The share of this last type of bond grew from 3 percent of all tradable bonds in 1994 to 8 percent in 1995, as it accounted for 40 percent of new issues, and the average period to maturity of the government's tradable domestic liabilities contracted from 5.1 to 4.5 years.

The market value of tradable bonds (excluding Treasury bills) increased by a real 7 percent, after falling by 8 percent in 1994 and rising by 1 percent in 1993 (Table 7.11). The rise in 1995 stemmed mainly from the large share of the government deficit financed by bonds—some NIS6.5 billion (2.5 percent of GDP)—following the reduction of the deficit in 1994. The government also issued NIS5 billion of bonds to finance the redemption of nontradable government liabilities, mainly approved savings schemes.

Average yields to maturity on both short- and long-term bonds rose. Following the decline in unemployment, contractionary monetary policy in 1993 and 1994—aimed at combating inflation—led to increases in real interest rates. The continued demand for finance for investment in equipment, working capital, liquid financial assets, and inventory, as the business sector expanded, has also had a major influence on interest rates since 1990.

Other factors, too, appeared to affect bond prices in 1995: fiscal developments, particularly the inability to achieve the deficit target, caused interest rates to rise. The failure to meet the privatization target also acted in the same direction, by making the government increase its borrowing in the capital market. The surge in withdrawals from provident

funds, which invest about 60 percent of their assets in government bonds, also reduced demand for the latter, and the government's commitment to issue new preferential bonds for the pension funds apparently contributed to the continued reduction in demand for tradable bonds. On the other hand, interest rates abroad fell during 1995—although in most countries the real rate did not fall below that in Israel—and it may reasonably be assumed that their decline strengthened demand for bonds in Israel.

The private sector did not issue new corporate bonds in 1995, continuing a trend evident since 1992. The easing of restrictions on bond issues at the end of the 1980s apparently led to an active corporate bond market, helping many firms to raise capital. More recently the bond market has contracted from NIS14.8 billion in 1992 (at 1995 prices) to just NIS10.4 billion.

## Shares

The total return on shares rose by a real 6 percent in 1995, after plummeting by 46 percent in 1994 (Table 7.12). The announcement of the intention to tax capital gains contributed, albeit in small measure, to the collapse in 1994.

The positive total return in 1995 reflected exceptional returns on three shares—held mainly by nonresidents and the government—which account for 10 percent of the index, while other shares fell by 2 percent in real terms. Furthermore, making allowance for the rise which followed the announcement of the abolition of the proposed capital gains tax, the real return for the rest of the year was even lower. The rate of return was disappointing also in comparison with rising world-wide share indices. New issues plummeted to their lowest level since 1990, and turnover was low, too, apparently reflecting expectations that profits might not recover in the near future.

The value of foreign-owned shares rose in 1995, as the shares in which nonresidents have invested for years rose steeply, and because of new purchases. Despite growing foreign interest in the TASE, most nonresident investors, especially those who are not interested parties, invest via the US stock exchanges, and not via the TASE (Figure 7.8). The number of Israeli firms whose shares are traded on US stock exchanges is relatively high, as is their market value—about 35 percent of the value of companies traded on the TASE. Almost all Israeli firms traded abroad are industrial (mainly electronics, software, and communications), and their value on the US market is close to that of all industrial shares on the TASE.<sup>9</sup> Prices of Israeli shares in the US increased in 1995 in line with shares of US electronic and pharmaceutical companies. Flotations of Israeli firms in the US rose too; these, and the access of Israeli firms to international capital and money markets, have contributed to the growth in recent years of foreign direct investment in Israel (see Chapter 6).

<sup>9</sup> The Israeli shares abroad discussed here include those of companies listed abroad which are subsidiaries of Israeli firms, provided that most of the subsidiaries' activities are in Israel. This differs from the classification employed by the Bank of Israel's Foreign Exchange Control Department.



Privatization continued in low gear, with government receipts of NIS1.6 billion compared with a planned NIS4.6 billion. Actual receipts have fallen below the planned amount for most of the last six years. In 1995 new difficulties joined those which have accompanied privatization since its inception (see Bank of Israel *Annual Report*, 1994). The delay in privatization prevents streamlining, and also conveys a message of unwillingness to proceed with other economic reforms. The government did, however,

**Table 7.12**  
**Principal Stock-Market Indicators, 1992-95**

	1992	1993	1994	(NIS million)		
				1995	Jan-Jun	Jul-Dec
Flotations <sup>a</sup>	5,957	10,813	5,717	1,615	1,008	608
of which Government corporations	992	2,911	685	0	0	
Private sector	4,965	7,903	5,032	1,615	1,008	608
Market value <sup>b</sup>	112,740	187,579	106,771	114,495	110,496	114,495
Share of market value (percent)						
Bank shares	4	11	13	14	13	14
Insurance	3	3	2	2	2	2
Mortgage banks and finance institutions	4	2	2	2	3	2
Investment firms	21	19	17	15	16	15
Industry	45	37	40	42	41	42
Trade and services	13	15	14	16	16	16
Real estate, construction and development	10	13	10	9	10	9
Trade on and off the stock exchange floor <sup>c</sup>	50,701	110,912	88,869	28,608	14,853	13,754
Velocity of circulation <sup>d</sup>	0.65	0.79	0.61	0.27	0.29	0.25
Total real return <sup>e</sup>	74.4	27.0	-46.1	5.9	2.9	2.9
Standard deviation of monthly real yield	4.3	5.5	11.3	7.3	9.7	4.9

<sup>a</sup> At December 1995 prices; adjusted on a monthly basis; includes shares, convertible securities, and realization of warrants.

<sup>b</sup> At end of period.

<sup>c</sup> At December 1995 prices; adjusted on a monthly basis.

<sup>d</sup> The ratio of monthly trade on and off the stock exchange floor to the average value of the market in that month.

<sup>e</sup> According to the CPI at the end of the month.

SOURCE: Based on Central Bureau of Statistics, and Bank of Israel Monetary Department data.

make two decisions whose implementation should help achieve the aims of privatization: first, a program was adopted for distributing vouchers in government corporations to Israeli citizens. Secondly, to increase competition concurrently with privatization of the banks, it was decided that the two largest banks be obliged to divest their holdings in real corporations.

## **Institutional investors**

Approximately two-thirds of capital-market assets (a high rate by international standards) are held by financial institutions—provident, pension, life-insurance, and mutual funds (Table 7.10). Due to this high share, particularly that of provident funds—more than 90 percent of whose assets are managed by banks—the performance of institutions is likely to affect the profitability of all investors, the level of saving, and its allocation both within the capital market and between it and alternative saving channels. The success of capital-market reforms also depends on the quality of the financial institutions' intermediation.

The value of provident funds declined by a real 5 percent in 1995 to NIS106 billion as outflows exceeded inflows by NIS7 billion. In 1994 the two were approximately in balance, following a long period when inflows were greater than outflows. In the wake of redemptions in most of the mutual funds—those specializing in shares as well as those focusing on other assets—their assets fell, too, by almost a quarter in real terms, reaching their lowest level since 1990. On the other hand, assets of pension funds grew by 7 percent, to NIS66 billion, with approximately zero net inflow.

The reason for the differences between the net inflows of different financial institutions, despite the relative similarity in tax benefits for long-term investors in different channels (except for mutual funds), lies in the structural differences between provident funds on the one hand and pension funds and life insurance plans on the other, which also account for differentials in returns over time. One such difference is that the pension funds offer defined benefits—guaranteed by the state—which thus do not depend on returns received on their assets or on management expenses. The income of an investor in a provident fund, however, depends on the return on assets purchased by the fund, so that withdrawals from and deposits in the fund may be expected to be more sensitive to its performance.

Another difference is that the government did not cease issuing special subsidized bonds for pension funds and most life insurance plans, whereas it stopped doing so for provident funds. This explains why the greatest part of institutionally held shares and long-term tradable bonds are those held by provident funds and not by pension funds and life insurance plans. This also explains why the fall in prices of shares and bonds in 1994 resulted in provident funds' negative returns, while those of pension funds and most life insurance plans were positive, as well as the relatively high variance in provident funds' returns from year to year, arising mainly from the variance in the assets in which they invest.

Moreover, since 1987 the average total annual return of the provident funds (3.5 percent after deducting fees) has been lower than that of the financial assets in which they invested: more than 5 percent on earmarked bonds, about 9 percent on shares, and 4.1 percent on bonds. Two factors were responsible for this underperformance: market timing and market selectivity, i.e., the funds' choice of securities, which yielded lower returns than the average of the asset groups in which they invested, even after allowing

**Table 7.13A**  
**Financial Assets of the Public, 1993-95 <sup>a</sup>**

(end of period)

	Balances, NIS million					Percent of total		
	1994	1995				1993	1994	1995
		I	II	III	IV			
<b>Short-term assets<sup>b</sup></b>								
Unindexed	62,625	65,925	74,162	80,437	87,673	10.6	14.4	17.5
Money supply (M1)	13,908	13,094	14,339	15,555	16,383	3.0	3.2	3.3
Time deposits and SROs <sup>c</sup>	45,479	48,490	54,572	58,892	65,174	7.1	10.5	13.0
Treasury bills	3,238	4,340	5,251	5,990	6,115	0.5	0.7	1.2
Resident deposits and tradable bonds	46,753	44,211	44,215	47,048	52,803	10.4	10.8	10.5
Deposits <sup>d</sup>	22,751	21,052	20,554	21,254	23,660	4.5	5.2	4.7
Bonds	24,001	23,159	23,660	25,794	29,143	5.9	5.5	5.8
<b>Total short-term assets</b>	<b>109,378</b>	<b>110,135</b>	<b>118,377</b>	<b>127,485</b>	<b>140,476</b>	<b>21.0</b>	<b>25.2</b>	<b>28.0</b>
<b>Total shares</b>	<b>70,798</b>	<b>68,294</b>	<b>77,116</b>	<b>81,272</b>	<b>84,400</b>	<b>27.4</b>	<b>16.3</b>	<b>16.8</b>
<b>Total short-term assets and shares</b>	<b>180,176</b>	<b>178,429</b>	<b>195,493</b>	<b>208,757</b>	<b>224,876</b>	<b>48.4</b>	<b>41.6</b>	<b>44.8</b>
<b>Long-term assets</b>								
Restitutions deposits	14,495	15,483	15,638	15,681	16,403	3.0	3.3	3.3
Savings plans and indexed deposits	53,165	55,987	56,743	56,347	57,549	10.4	12.3	11.5
Provident and pension funds and life insurance	185,726	187,307	193,658	195,904	202,799	38.2	42.8	40.4
<b>Total long-term assets</b>	<b>253,385</b>	<b>258,776</b>	<b>266,040</b>	<b>267,933</b>	<b>276,751</b>	<b>51.6</b>	<b>58.4</b>	<b>55.2</b>
<b>Total financial assets</b>	<b>433,561</b>	<b>437,205</b>	<b>461,533</b>	<b>476,690</b>	<b>501,627</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<i>of which</i> Shares <sup>e</sup>	82,583	79,748	89,041	93,580	96,294	30.6	19.0	19.2
Foreign-currency-indexed assets <sup>f,g</sup>	54,575	53,023	51,694	48,805	52,172	11.6	12.6	10.4
CPI-indexed assets <sup>g</sup>	225,995	230,686	238,236	244,930	253,807	46.0	52.1	50.6
Unindexed assets <sup>g</sup>	70,408	73,749	82,563	89,374	99,354	11.9	16.2	19.8

<sup>a</sup> In this table 'the public' excludes the government, the central bank, and commercial banks. Owing to lack of data, no adjustment was made for the rest of the world, i.e., financial assets of nonresidents were not subtracted, and foreign financial assets of Israeli residents were not added. There is some double-counting in this table since financial assets include liabilities issued by private institutions and financial assets held by them.

<sup>b</sup> Excluding short-term assets held by provident funds, pension funds and life insurance.

<sup>c</sup> On-call deposits.

<sup>d</sup> Resident deposits, exchange-rate-indexed deposits and unrestricted (foreign-currency) deposits.

<sup>e</sup> Including shares held by provident funds.

<sup>f</sup> Savings plans with CPI/exchange-rate indexation options are regarded as foreign-currency-indexed assets.

<sup>g</sup> Including assets held by provident funds.

SOURCE: Bank of Israel.

**Table 7.13B****Real Change in Financial Assets of the Public, 1994-95<sup>a</sup>**

(percent)

	Real change during period									
	Real change in average balance			1995						
	1993	1994	1995	1993	1994	Total	I	II	III	IV
<b>Short-term assets<sup>b</sup></b>										
Unindexed short-term assets	17.8	26.3	26.8	27.6	18.6	29.5	5.0	10.0	5.9	5.9
Money supply (M1)	13.2	5.3	0.7	16.4	-6.8	9.0	-6.1	7.1	5.9	2.3
Time deposits and SROs <sup>c</sup>	28.5	37.4	31.9	39.6	28.1	32.6	6.4	10.1	5.3	7.5
Treasury bills	-32.1	7.1	83.6	-23.7	35.0	74.7	33.7	18.3	11.3	-0.8
Resident deposits and tradable bonds	13.1	-6.8	-4.7	1.9	-9.5	4.5	-5.7	-2.2	3.9	9.0
Deposits <sup>d</sup>	12.9	-0.6	-5.4	0.4	1.5	-3.8	-7.7	-4.5	0.9	8.1
Bonds	15.6	-11.8	-4.4	3.1	-17.9	12.3	-3.8	-0.1	6.4	9.8
<b>Total short-term assets</b>	<b>14.6</b>	<b>10.4</b>	<b>12.1</b>	<b>13.4</b>	<b>4.7</b>	<b>18.8</b>	<b>0.4</b>	<b>5.1</b>	<b>5.1</b>	<b>7.0</b>
<b>Total shares</b>	<b>81.1</b>	<b>-21.9</b>	<b>-11.0</b>	<b>69.6</b>	<b>-48.1</b>	<b>10.3</b>	<b>-3.8</b>	<b>10.4</b>	<b>2.9</b>	<b>0.9</b>
<b>Total short-term assets and shares</b>	<b>38.4</b>	<b>-6.7</b>	<b>1.9</b>	<b>39.6</b>	<b>-25.2</b>	<b>15.5</b>	<b>-1.2</b>	<b>7.2</b>	<b>4.2</b>	<b>4.6</b>
<b>Long-term assets</b>										
Restitutions deposits	2.3	-1.6	2.1	-4.9	-2.5	4.7	6.6	-1.2	-2.1	1.6
Savings plans and indexed deposits	11.9	0.9	6.3	18.7	2.8	0.1	5.0	-0.9	-3.1	-0.8
Provident and pension funds and life insurance	7.2	2.1	0.7	6.4	-2.4	1.0	0.6	1.1	-1.3	0.6
<b>Total long-term assets</b>	<b>7.8</b>	<b>1.6</b>	<b>1.9</b>	<b>7.9</b>	<b>-1.3</b>	<b>1.0</b>	<b>1.9</b>	<b>0.5</b>	<b>-1.7</b>	<b>0.3</b>
<b>Total financial assets</b>	<b>19.7</b>	<b>-2.3</b>	<b>2.0</b>	<b>21.3</b>	<b>-12.9</b>	<b>7.0</b>	<b>0.6</b>	<b>3.2</b>	<b>0.8</b>	<b>2.2</b>
<i>of which</i> Shares <sup>e</sup>	69.8	-6.1	-21.7	67.5	-45.8	7.9	-3.7	9.2	2.6	-0.0
Foreign-currency-indexed assets <sup>f,g</sup>	8.1	-4.2	-10.2	-2.0	-5.1	-11.6	-3.1	-4.7	-7.8	3.8
CPI-indexed assets <sup>g</sup>	7.0	0.2	3.2	6.4	-1.2	3.9	1.8	1.0	0.4	0.7
Unindexed assets <sup>g</sup>	18.1	28.8	27.2	29.0	18.9	30.5	4.5	9.5	5.7	8.0

<sup>a</sup> For notes see Table 7.13A.

for market timing. Despite low returns, the inherent risk in investing in the funds was relatively high, as reflected *inter alia* in the variance of the return. In spite of the funds' disappointing performance, very few competitors entered the market, apparently because of entry barriers.

The fear that the share in the capital market of pension funds which own nontradable subsidized bonds would expand in the future was even more acute in 1995, as the government decided to guarantee the cover for savers in established funds, and to permit the entry of new funds which would benefit from preferential terms (albeit slightly less favorable than those of the established ones), and due to the guarantee of a minimum return. It will be possible to estimate the damage caused by the government's decision only in a few years, when the funds' growth can be measured after the uncertainty surrounding the implementation of the decision will have dissipated.

### **The public's portfolio and wealth**

Developments in the money and capital markets affected both the portfolio of financial assets as well as nonfinancial private-sector wealth, which also includes physical assets less liabilities to the banks and abroad.<sup>10</sup> Monetary policy played a part in increasing the share of unindexed assets in both the portfolio and in wealth, at the expense of other, especially foreign-currency-indexed assets. The policy also served to expand the foreign-currency liabilities component, as these became cheaper, particularly in relation to unindexed local-currency credit. The method used to measure physical wealth shows that its rate of increase rose in 1995, because private savings grew as did financing from abroad.<sup>11</sup>

The financial portfolio at the end of 1995 is estimated at NIS502 billion, or 190 percent of GDP, consisting of NIS225 billion of relatively liquid short-term assets, and NIS277 billion of long-term assets (Table 7.13A). The former cover most money-market assets, i.e., cash, unindexed deposits, and short-term foreign-currency-indexed deposits, as well as capital-market assets held either directly by the public or via mutual funds. Long-term assets include restitutions deposits, savings plans, indexed deposits, and investments in provident funds, pension funds and life insurance. The portfolio,

<sup>10</sup> Financial assets held by the public include shares held by nonresidents and by other companies, although strictly speaking these should not be included. Table 7.10 gives the ownership composition of the capital market, adjusted for double counting. After deducting nonresidents' holdings and double counting, the public's total portfolio share holding was only NIS48 billion, and its true share of the total portfolio is 11 percent and not 19 percent. The portfolio does not include foreign assets, and the definitions relate to shares and bonds as short-term investments, although their redemption may be long term; provident funds, on the other hand, are considered long-term investments, although a significant share of members' accounts are liquid. Like the portfolio, wealth also includes foreign-owned assets, although these should be deducted. Unlike the portfolio, however, wealth does not include shares, which represent an asset to households and a liability to firms.

<sup>11</sup> Nonetheless, some of the change in the rate of increase reflects errors and omissions in the measurement of wealth and the sources of its growth.

deflated by the CPI, rose by 7 percent in 1995 because of an increase in the supply of assets, while average real prices did not change after years of fluctuations caused by the seesawing of the stock market.

In the last few years there has been a marked rise (31 percent in 1995) in unindexed assets (Table 7.3), as a result *inter alia* of differentials in returns. The high rate of return on these assets derived, as stated, from the contractionary monetary policy which raised nominal interest more than it affected interest on indexed instruments.

Foreign-currency-indexed assets, especially savings plans and deposits, fell, and the decline in their prices together with real appreciation led to a further contraction in their share. In contrast, CPI-indexed assets grew, due entirely to the increase in savings plans and indexed deposits of the provident funds, while the value of tradable bonds in the nonbank sector declined.

The wealth of the nonfinancial private sector, which consists of net financial wealth and physical wealth, is estimated at NIS751 billion, equivalent to 285 percent of GDP. Net financial wealth—which accounts for some 22 percent of the total—is the difference between financial assets and liabilities to financial intermediators, to the public sector, and abroad. The balance of 78 percent is physical wealth, consisting of housing and consumer durables, and productive assets and inventory of the business sector. Total wealth deflated by the CPI rose by 5.9 percent in 1995, compared with 2.9 percent in 1994 (Table 7.14).

<b>Table 7.14</b>								
<b>The Contributions of Price and Quantity to the Increase in Wealth, 1994-95</b>								
	Wealth (NIS bill.)		Relative to CPI		In relative prices <sup>a</sup>		Quantity	
	1994	1995	1994	1995	1994	1995	1994	1995
Total wealth of public	656.0	751.1	2.9	5.9	-1.2	0.0	4.1	5.9
Net financial wealth	151.9	162.1	-7.4	-1.3	-3.9	-0.6	-3.5	-0.7
of which Financial assets	362.7	418.1	2.2	6.6	-3.0	-0.9	5.2	7.5
less Liabilities	210.8	256.0	10.4	12.3	-2.3	-1.1	12.7	13.4
Physical wealth	504.0	589.0	6.4	8.1	-0.3	0.3	6.7	7.8
<sup>a</sup> Component prices relative to the CPI.								
SOURCE: Bank of Israel Research Department.								

In order to distinguish between the increase in the public's wealth arising from savings flows and investment on the one hand, and that due to changes in prices of financial assets and liabilities and physical wealth on the other, we calculated the real change in wealth according to price indices of its two components—financial and physical—and compared the results with the 1994 rates of change. The results showed that on average the prices of assets and liabilities changed *pari passu* with the CPI, so that wealth adjusted by the index of separate component prices rose by 5.9 percent, faster

than in 1994 and the same as in 1993. Growth of wealth stems from various sources, e.g., private savings, foreign investment in Israel, and the government's capital grants (Table 7.15). Savings, comprising those of households and firms' undistributed profits, grew, contributing to the acceleration of the increase of wealth. Investments from abroad also rose, while net government capital grants—the difference between its capital grants and the public's transfer of capital to the government—did not change significantly.

<b>Table 7.15</b>		
<b>Sources of the Increase in the Public's Wealth, 1994-95</b>		
	(percent of wealth at beginning of year)	
	1994	1995
Resources, as share of wealth	4.1	5.9
Private savings <sup>a</sup>	5.1	5.4
Investment from abroad	0.1	0.5
Capital grants <sup>b</sup>	-0.3	-0.2
Errors and omissions <sup>c</sup>	-0.8	0.2
Use of resources' share of wealth	4.1	5.9
of which Contribution of increase in financial wealth	-0.9	-0.1
Contribution of increase in physical wealth	5.0	6.0
<sup>a</sup> Includes net private savings, consumer durables, and an adjustment arising from the fact that physical wealth is calculated net of discards, whereas net savings are net of depreciation, which is greater.		
<sup>b</sup> The government's net grants are equal to its capital transfers <i>minus</i> capital transfers from the public to the government, which include land betterment tax, land purchase tax, leasehold payments to the Israel Lands Administration, payments to the Jewish National Fund, and local-authority betterment taxes.		
<sup>c</sup> Errors arise from investment from abroad and from differences in definitions of components of wealth and changes in them, on the one hand, and those of the CBS National Accounts data on the other.		
SOURCE: Bank of Israel Research Department.		

Physical wealth grew in 1995, as it has in most years recently, and its share in total wealth rose, too, as financial wealth did not increase. Physical wealth is estimated to have increased by 7.8 percent in 1995 (6.7 percent in 1994), reflecting higher investment, capital stock and inventories in the business sector, the 11 percent growth of durable goods, and the more modest (4.6 percent) expansion of the stock of apartments. In contrast, net financial wealth continued to fall, albeit more slowly than in 1994—due partly to the rise in government liabilities, i.e., the public's claims against it, and the increase in the deficit and its financing via bonds. The constantly rising share of physical wealth is due to the increased value of housing and other physical assets resulting from accelerated investment since the influx of immigrants began.

The persistent rise in the stock of equipment and buildings stemmed from higher gross investment in the last few years, encouraged by the cumulative effect of growth, rising profitability (compared with the end of the 1980s), and intensified infrastructure investment. Direct government financing—which reduced the level at which investment



was profitable—through the Encouragement of Capital Investments Law, also played a role. In 1991–93 cheap domestic credit and the lower price of capital (for firms), alongside higher share prices, boosted investment. By contrast, in 1994–95 real domestic interest rose, but cheaper dollar credit partially offset this. The decline of share prices in 1994 did not cause a slowdown, apparently because it was more than offset by the rise in real estate prices.

The modest reduction in financial wealth in 1995 was the result of an increase of 13.5 percent in liabilities and of 7.5 percent in financial assets. The exceptional rise of credit to the construction industry in 1994 was followed by a further increase in 1995, so that some banks came close to the credit ceiling above which they are required to make special loan-loss provisions, reflecting the risk inherent in an insufficiently diversified portfolio.

The various types of financial assets followed different trends: unindexed assets rose steeply, as the interest on them climbed, whereas other financial assets increased more slowly, and some actually fell. On the other hand, short-term unindexed assets declined slightly, while nondirected short-term foreign-currency credit doubled. Other foreign-currency credit also expanded, so that its share of GDP rose to its highest level since 1989. This was the result of an exchange-rate policy which made foreign-currency credit cheaper than unindexed credit. Foreign-currency credit was concentrated mainly in exporting segments, such as industry and tourism, although its share of credit to the nontradables segment also grew.

The rise in foreign-currency credit occurred after years in which its share of liabilities had been declining from its level in the period of very high lending rates to a low level in 1992–93, when real domestic interest was below the international rate. Part of the increase in credit in 1995 may be seen as an adjustment to a more reasonable norm, following the rise in domestic interest to more generally accepted levels. Nevertheless, bearing in mind the exceptional increase in the share of short-term foreign-currency credit, there is cause for concern that the business sector may be overexposed to exchange-rate shocks, because this credit amounted to half the value of annual exports, its highest level since the introduction of the economic stabilization program in 1985. The fact that foreign-currency-indexed financial assets still slightly exceed foreign-currency liabilities indicates that the nonfinancial private sector as a whole is not exposed to changes in exchange-rate policy. Note, however, that most foreign-currency liabilities are of the business sector, while most financial assets arise from government liabilities to households, so that steep rises in the exchange rate will adversely affect certain business-sector borrowers. At the same time, taxpayers will probably have to finance the rise in the government's liabilities to households which invested in foreign-currency-indexed assets.