

Chapter 7

The Money and Capital Markets

In the first half of 1996, the rate of price increases and inflation expectations accelerated, significantly exceeding the inflation target set by the government. In order to achieve the target the Bank of Israel reacted by adopting a tight monetary policy in the second half of the year, while fiscal policy continued to be expansionary. The result of monetary constraint was that the rise of prices in 1996—10.6 percent—only slightly exceeded the upper limit of the target range of 8–10 percent, and inflation expectations came down quickly. The high rate of interest mid-year, in the context of the increase in long-term-capital inflow, helped slow the rise in the exchange rate in 1996 which, alongside the reduction of inflation expectations, represented a major channel through which monetary policy moderated price rises in the second half of the year. The money supply grew at a rate consistent with the inflation target and the rate of growth.

Bond prices fell in the summer, alongside heavy withdrawals from the provident funds, and may have been affected by the mix of expansionary fiscal policy with contractionary monetary policy. In conjunction with the Ministry of Finance, the Bank of Israel announced the creation of a safety net in the form of a commitment to buy bonds in order to moderate the fall in their prices. In September–December bond prices rallied, and their total real return was higher than in the last few years.

Borrowing by quoted companies continued to fall, in line with the decline in share prices; privatization ground to an almost complete halt. The share of unindexed assets in total financial assets expanded, and physical wealth also made an impressive advance.

1. MAIN DEVELOPMENTS

In 1996, especially in the second half-year, the Bank of Israel adopted a tight monetary policy in order to help attain the government's inflation target. Inflation was just over 10 percent, slightly above the upper limit of the 8–10 percent range. This was achieved against the background of expansionary fiscal policy, with the domestic budget deficit significantly exceeding its 1996 target.

In 1996 a tight monetary policy, aimed at achieving the inflation target, was pursued.

In the second half of the year monetary policy helped to reverse the trends of prices and inflation expectations.

In April and May the Consumer Price Index (CPI) rose exceptionally fast, after exceeding the upper limit of the target inflation range since September 1995. Inflation expectations¹ also rose considerably during the first half of the year. Until April the Bank of Israel increased interest on the monetary loan² by moderate amounts, so that real interest was eroded to a low level. In May, June, and July interest was raised more steeply, and price rises and inflation expectations eased. Thus, real interest on the monetary loan rose markedly, reaching 6 percent in July. As the year progressed the Bank gradually lowered the nominal rate of interest, but the continued reduction of inflation expectations meant that real interest on the monetary loan remained high, above 5 percent (Tables 7.A.3 and 7.2). By raising interest in the second half of the year, monetary policy helped to reverse the trends in prices and expectations in the middle of the year, and to avoid the danger of inflation deviating from the 9–12 percent environment prevailing in the last few years. Such a deviation could have undermined the stability of the money and capital markets, impaired the credibility of monetary policy, and harmed Israel's international credit rating.

Table 7.1
Main Indicators of the Money and Capital Markets, 1993–96

					1996			
	1993	1994	1995	1996	I	II	III	IV
<i>Period averages, annual rates of change</i>								
M1	24	21	8	15	14	15	17	2
M2	38	33	35	27	25	17	38	25
M3	25	26	25	27	25	26	31	24
Total nondirected credit	45	28	26	22	22	25	22	20
<i>Percent, annual terms</i>								
Average interest rate on monetary loan	11.3	13.4	15.5	16.1	14.8	16.0	17.6	16.2
Interest rate on unindexed local-currency credit	16.5	17.4	20.2	20.7	19.6	20.5	21.9	20.7
Real yield to maturity on 10-year bonds	2.9	3.2	4.3	4.5	4.3	4.3	4.9	4.4
<i>Cumulative, during period</i>								
Total yield on indexed government bonds	9.3	10.2	9.4	13.5	14.0	14.5	10.6	15.0
Total yield on shares	41.0	-38.5	14.8	-3.2	-	2.5	-	68.8
					35.2		21.8	

¹ As derived from the capital market, according to the gap between gross returns on indexed and nonindexed assets.

² The average effective rate of interest on the monetary (discount window) loan in auctions and quotas.

The high interest rate set in the middle of the year, against the background of the rise in the inflow of long-term capital, added to the pressure on the exchange rate, which in September fell to the bottom of the crawling band. In order to support the exchange rate and prevent it from deviating from the band, the Bank of Israel renewed its intervention in foreign-currency trading, purchasing considerable amounts of foreign exchange in September and October and at the beginning of 1997, having refrained from intervening in the market since February 1996 as long as the exchange rate was within the band. The policy of nonintervention reflected a strengthening of the trend towards enabling the exchange rate to respond to market forces within the band. The slower rate at which the exchange rate rose in 1996, to an average of just 3.3 percent, as well as the quick reaction of inflation expectations, were apparently the main channels through which monetary policy held back the rate of price increases in the second half of the year. Nonetheless, the slowdown in the rate of change of the nominal exchange rate contributed to real local-currency appreciation in 1996, which eroded the profitability of the traded sector, particularly of exports. Note that the contribution of monetary policy to real appreciation cannot be quantified precisely. The latter, which was affected mainly by excess domestic demand, led by the public-sector deficit, also reflected the slowdown in the rise in the dollar prices of imports and exports, as well as the increased inflow of long-term capital.

As stated, the sharp deceleration in the rate of price increases started in June 1996, about the same time as the steep increases in the average interest on the monetary loan (May–July). Based on experience, it is generally assumed that monetary policy affects prices with a lag of several months, its full effect being felt only after more than a year. The rapid reaction of prices to monetary policy in 1996 may be due to two factors: first, the fact that this policy acted via the exchange rate, changes in which were reflected by the CPI very quickly; second, the rapid response of inflation expectations.

From February to August 1996 the Bank of Israel did not intervene in foreign-exchange trading within the exchange-rate band.

The rise in interest was accompanied by moderation of price increases.

Table 7.2
Real Interest in the Unindexed Local-Currency Segment, 1996

	(percent)					
	Nominal interest		Deflated by CPI		Deflated by gross inflation expectations ^a	
	Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec
Monetary loan	15.4	16.9	0.7	9.5	2.7	5.1
Yield to maturity on monthly T-bills	14.7	16.4	0.1	9.0	2.1	4.7
Resident time deposits	13.7	15.2	-0.7	8.0	1.2	3.7
Unindexed credit	20.0	21.3	4.8	13.7	6.8	9.1

^a As derived from the capital market.

The money supply grew at a rate consistent with growth and the inflation target.

The M1 money supply, which research findings suggest is the monetary aggregate most significantly correlated with fluctuations in inflation (taking appropriate lags into account), expanded at a stable and moderate average 15 percent, consistent with the rate of growth and the inflation target. M2 grew by 27 percent, considerably less than in 1995 but still a large increase. M3 also went up by 27 percent, similar to its rise in 1995. The increase in nondirected credit—22 percent—was less than in 1995, particularly in the second half of the year (Tables 7.A.1 and 7.A.2).

The supply of government bonds and Treasury bills increased.

In the capital market, the supply of bonds issued by the government to finance its deficit grew, as did the supply of Treasury bills sold by the Bank of Israel to sterilize conversions and the government injection. In contrast, the total value of shares fell, their prices falling by 12 percent. Bond prices moved unevenly during the year: in the summer they declined, alongside large-scale withdrawals from the provident funds, and apparently also in response to the increases—some unexpected—in interest on the monetary loan in that period. In the atmosphere of crisis which accompanied the withdrawals from the provident funds, the Ministry of Finance and the Bank of Israel announced the creation of a ‘safety net’ in the form of an undertaking that the Bank would buy bonds in order to moderate the extent of price falls. Thereafter bond prices rallied, and their total real net return reached 3 percent, the highest annual figure since 1992. The fall in demand for credit may also have contributed to the reduction in real interest. Fluctuations in interest rates abroad—the tendency to rise in the first half of the year and to fall in the second—also affected the domestic bond market.

Investment in short-term unindexed assets, pension funds, and life insurance rose, alongside heavy withdrawals from the provident funds.

Borrowing by quoted companies continued to decline. Privatization came to a virtual halt, further increasing the government’s need for financing from other sources. The effect of monetary policy was reflected in the public’s asset portfolio, as direct investment in both short-term unindexed assets and in pension funds and life insurance—most of whose investment is in subsidized non-negotiable assets—continued to rise, while there were large-scale withdrawals from the provident funds.

In 1996 no measures which could have reduced distortions in the capital market were introduced. Developments in the capital market led to the appointment of the Brodet Committee whose brief was to propose reforms to eliminate the defects, but the government did not adopt the committee’s recommendations. The developments in the money and capital markets, in particular the withdrawals from the provident funds and the rise in the interest rate which accompanied the increase in the budget deficit, did not have an adverse effect on physical wealth, which continued to expand rapidly.

2. THE MONEY MARKET

Monetary policy

Despite decisions taken regarding inflation targets in the last few years, economic policy was not consistent in attempting to achieve the targets. In the last few years fiscal policy has been increasingly expansionary, with the budget deficit significantly exceeding its target, largely due to substantial wage increases in the public sector since 1993, which led to the adoption of a supplementary budget at the end of 1994. Monetary policy, on the other hand, acted to reduce pressure on prices by raising real interest until it reached exceptionally high levels at the end of 1994 and beginning of 1995, and in the second half of 1996. In its determination to achieve the inflation target, the central bank gave an indication of the policy mix which the economy could expect if fiscal policy did not change. The high level of interest relative to foreign-currency returns, however, resulted in an inflow of short-term capital (just at a time when the inflow of long-term capital was rising too), so that the foreign reserves did not signal the balance-of-payment problem more strongly, and sooner. The fact that the inflation environment did not change despite the relatively tight monetary policy, in the context of expansionary fiscal policy, highlights the importance of a consistent, balanced policy mix to ensure that the inflation target is met at a more reasonable cost to the economy. Continuing with the current policy mix creates macroeconomic pressures and an economic cost; these could be reduced by a less expansionary fiscal policy, which would enable monetary restraint to be eased.

The main instrument used to implement monetary policy since 1994 has been the interest rates on the various local-currency sources made available to the private sector by the Bank of Israel. The bank determines the rate of interest at the beginning of each liquidity month according to actual developments and changes in expectations in the nominal and real spheres and their implications for the inflation environment.

The interest environment was not constant in 1993–94: in the first half of 1993 real interest was relatively low; towards the end of 1994, in light of the acceleration of the CPI and inflation expectations, increased economic activity, and lower unemployment, the Bank of Israel raised nominal interest steeply, and real interest soared.

In 1995 monetary restraint was eased slightly, following a significant reduction in the rate of actual price increases and inflation expectations. In September–December 1995 the CPI rose by about one percentage point a month, and inflation expectations (derived from the capital market) stabilized at a similar level. The Bank of Israel reacted by raising the interest rate slightly to an average of just under 15 percent, so that at the beginning of 1996 real interest was relatively low compared to the 1995 average. In January–April 1996 price increases accelerated to a level considerably above the inflation target, especially in April–May, and inflation expectations rose to a level significantly higher than the inflation target. The central bank reacted by raising the rate of interest on the monetary loan sharply until July, when it reached the peak

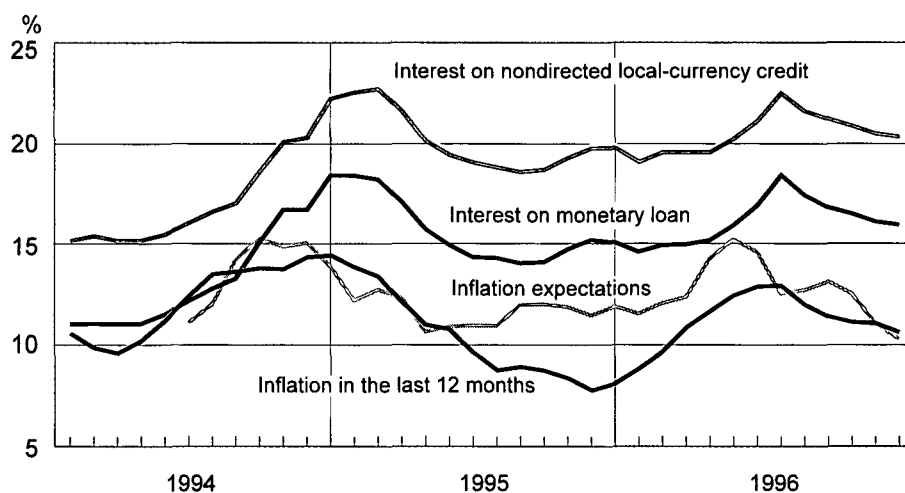
Monetary policy succeeded in minimizing the deviation from the inflation target in 1996.

In July–December inflation expectations went down with the lowering of interest, so that real interest did not change.

level which had prevailed at the beginning of 1995—18.4 percent (effective rate) (Table 7.A.3). In July–December price increases slowed to just over half a percent per month, and inflation expectations fell sharply. As a result of this moderation, and the gradual reduction of nominal interest by the Bank of Israel, real interest on the monetary loan remained high, at more than 5 percent. Expected real interest (gross expectations derived from the capital market) in the unindexed local-currency segment rose from the first half-year to the second by an average of about two percentage points. Real interest derived ex post from rises in the CPI rose by more—from about one to 9 percent on the credit side and from 5 to 14 percent on the debit side (Table 7.2).

From the second quarter of 1996 economic growth slowed down markedly, to less than 3 percent, annual rate. Among the reasons for this were the approach to full employment, mainly in high-tech industries, the effect—mainly on tourism—of terrorist attacks, and the cumulative real appreciation of the last two years. This was the background against which real interest on the monetary loan reached a high level of 6 percent. The question arises whether the level of interest set in the second half of 1996 to attain the inflation target, in the context of the significant fiscal deviation, will succeed in slowing inflation while moderating the rapid growth rate of the last few years, without leading to a more severe slowdown. This question is particularly relevant in light of the decisions reached regarding the 1997 budget, intended to reduce the deficit. Excessive easing of monetary restraint alongside the failure to implement the decision to reduce the deficit—which seemed to be the situation at the beginning of 1997—will result in the strengthening of inflationary pressures and continued balance-of-payment difficulties.

Figure 7.1
Inflation and Selected Interest Rates, 1994-96



Box 7.1: Sterilizing international capital flows

In the last few years, a feature common in monetary policy—sterilization of capital inflow—has developed in Israel. In several exchange-rate regimes, especially those in which the rate is managed (kept either constant or within a band), when pressure to import capital exerts downward pressure on the exchange rate, the central bank has to buy foreign currency from the public to prevent the rate from slipping below the lower limit of the range set by the regime. Sometimes, for various reasons, the central bank may intervene in trade even if there is no immediate danger of the rate deviating from the band. Private-sector foreign-currency conversions swell the money supply, thereby acting to reduce interest and increase inflationary pressures. In order to maintain interest at the level needed to achieve the inflation target, the central bank must sterilize foreign-currency conversions by absorbing the injection arising from them, which increases the public-sector internal local-currency debt.

Since 1994 several factors have caused capital inflows (see Chapter 6). Due to increased inflationary pressure, the Bank of Israel has raised nominal interest on the monetary loan since 1994, until in 1996 it averaged 5 percentage points higher than in 1993, with most of the increase occurring in 1994–95. The peace process also contributed to the greater inflow of long-term capital. Both these developments occurred in the context of continued liberalization of foreign-currency control, which made capital movements more sensitive to interest-rate differentials. On the other hand, the relatively high dollar interest rate, following its rise in 1994 and the growing balance-of-payments deficit, could be expected to lead to private-sector purchases of foreign exchange.

Until mid-1995 the Bank of Israel—by means of significant foreign-currency purchases from the private sector—helped maintain the currency-basket exchange rate close to the midpoint of the band, while sterilizing the resulting injection. Thereafter the Bank allowed the exchange rate to react more freely to market forces, and from February to August 1996 totally refrained from intervening in trade, so that no sterilization was necessary in that period. At the end of 1996 and the beginning of 1997 the Bank had to intervene to prevent the exchange rate from sliding below the lower limit of the band. From the end of 1994 until the end of 1996 the Bank of Israel purchased \$ 8 billion from the private sector, mainly in 1995, and took measures to sterilize these conversions. This was done to prevent the expansion of the money supply and a reduction of interest, to make it possible to meet the inflation target and avoid the danger of inflation accelerating, in the context of significant excess demand, large public-sector deficits, and a decline in unemployment. Alongside these developments, there was a considerable increase in the government injection in 1996, which the Bank of Israel took steps to offset.

Exchange-rate movements within the band were greatly affected by interest-rate policy.

From the introduction of the crawling exchange-rate band at the end of 1991 until mid-1995 the Bank of Israel maintained the rate close to the midpoint of the band. In June 1995 the band was widened from 5 percent to 7 percent on either side of the midpoint. Since then there have been significant changes in the management of the rate within the band, and the Bank of Israel allowed the currency-basket exchange rate to fluctuate more and more widely within the band. This policy change reflects the change in the role of the exchange rate as an instrument of monetary policy: until 1994 the exchange rate was considered to be the main nominal economic anchor, and the interest rate was set at a level which would help secure this anchor. Since 1994 interest has become the dominant instrument, and since the band was widened, the movement of the exchange rate within the band has to a great extent resulted from interest policy, and not vice versa.

With a given fiscal policy, situations may arise in which there is conflict between the pursuit of an active interest-rate policy to achieve the inflation target, on the one hand, and the movement of the exchange rate within the band, on the other. Keeping the exchange rate within the band creates limits on the local-currency interest rate; deviating from it leads to significant capital inflow and increases the money supply. These conditions reflect a situation in which two aims are being pursued—the inflation target, and a rate of depreciation consistent with the crawling band—using only one policy instrument, i.e., the rate of interest. Since the hikes in interest at the end of 1994, the rate of return on local currency considerably exceeded that on foreign

Table 7.3
Local- and Foreign-Currency Interest on Credit and Deposits, 1996

	(in NIS terms)	
	1996	
	Jan-Jun	Jul-Dec
Yield to maturity on 1-month Treasury bills	14.7	16.4
Interest on time deposits	13.7	15.3
Interest on dollar deposits <i>plus</i>		
Depreciation of dollar during period	14.1	6.2
Slope of exchange-rate band	11.1	11.2
Distance from midpoint <i>plus</i> slope of band	15.9	18.3
Interest on unindexed local-currency credit	20.0	21.3
Interest on dollar credit <i>plus</i>		
Depreciation of dollar during period	16.2	8.0
Slope of exchange-rate band	13.1	13.1
Distance from midpoint <i>plus</i> slope of band	18.0	20.3

currency. Throughout 1996 the unindexed local-currency yield was higher than the sum of the slope of the band and foreign-currency interest, which provides an estimate of the expected yield on foreign currency. This occurs when the exchange-rate band is credible, and the exchange rate is kept close to the midpoint (Table 7.3). The widening of the band in 1995 and the nonintervention of the Bank of Israel in foreign-currency trading within the limits of the band in 1996 increased exchange-rate risk, reducing the incentive to import capital (for a given yield differential).

In the last few years the exchange-rate regime has gradually become more flexible. The resulting regime has the clear advantage of giving monetary policy room to maneuver and allowing it full expression in acting to attain the inflation target. Nonetheless, Israel's is a small economy whose foreign trade accounts for a large share of economic activity, so that exposure to higher exchange-rate volatility may increase uncertainty and risk in the business sector, and inflict damage (even if there are financial instruments which enable the business sector to protect itself to some extent against these risks). The crawling-band regime was essentially intended to handle these difficulties, too. The experience of 1994, when inflation significantly exceeded the target despite a rate of depreciation which matched the slope of the band, indicated that the exchange-rate band cannot always ensure a particular rate of price increases, especially when there are strong forces exerting pressure for real appreciation.

The effects of monetary policy

Active use of the interest rate helps achieve the inflation target in a number of ways. Through it, the Bank of Israel controls changes in the money supply. Uncontrolled expansion of the money supply is likely to cause a rise in inflation, so that ensuring its appropriate rate of increase must be one of the central bank's main intermediate goals, taking the inflation target and economic growth into account. In Israel, M1 is usually taken to represent the money supply; in 1996 it increased by a moderate 12 percent, and thus the policy helped achieve the inflation target (Table 7.A.1b). It seems, however, that the trend change which occurred in price rises at mid-year was not related to the changes in the money supply which preceded it.

Interest also influences prices through the moderating effect which interest hikes have on demand, and particularly on investment. Excess demand may cause upward pressure on prices, and reducing excess demand eases these pressures. In 1996 there was a slowdown in the rate of increase of domestic use of resources, mainly private consumption and investment, continuing the pattern evident in 1995. The growth of GDP eased in 1996, on average, slightly more than did domestic resource use, so that excess demand did not contract, but actually increased somewhat.

Since the interest hikes at the end of 1994, a gap has opened up ex post between the yield on local currency and that on foreign currency.

The Bank of Israel affects the money supply by means of the interest rate.

Despite the increases in interest in 1996, excess demand did not contract, and actually rose slightly.

Mid-year interest hikes played a part in lowering inflation expectations in July–December.

Monetary policy also affects inflation through inflation expectations: when it is pursued with determination to attain its declared objectives, it increases their credibility in the eyes of the public. When the public affords greater credibility to the declared inflation target and takes it into account in its economic decisions, the chances of its being met improve. The importance of this effect on expectations is all the more important in an economy which has experienced periods of hyperinflation. In the first half of 1996, mainly in April–May, inflation expectations (derived from the capital market) rose sharply, by up to 3.5 percentage points (Table 7.A.3). This rise in expectations accompanied steep increases in consumer prices in those months, relatively rapid devaluation against the currency-basket, persistent expansion of the budget deficit, and an atmosphere of uncertainty in the pre-election period. In July–December, in the wake of sharp hikes in interest and the announcement of the severe budget cuts planned for 1997, expectations declined quickly, returning to their level at end-1995 and the beginning of 1996, and even a little lower. The mid-year rises in interest thus apparently restrained expectations, and helped reduce them in July–December.

The decline of the exchange rate to the lower limit of the band was a major cause of the slowdown in price increases in the second half of the year.

An important channel through which monetary policy operates is the exchange rate. If the exchange rate is not fixed, a rise in local-currency interest will *ceteris paribus* slow the rate of change of the nominal exchange rate. This tends to slow the rise in prices of tradables, thereby having a relatively quick effect on the general rate of price increases (especially if foreign trade accounts for a large share of economic activity). The exchange rate also affects housing prices, which in many cases are quoted in dollars, although this is mainly a short-term phenomenon. The rapid fall of the exchange rate to the lower limit of the band in July–December, which reduced the rate of depreciation against the currency basket to only 3.3 percent in 1996, may have made the greatest contribution to moderating price increases in that period. Exchange-rate policy thus helped to reduce the deviation from the 1996 inflation target to a minimum. This policy bears a cost, however: due to rigidities and inertia in wages and prices, a slower rise in the nominal exchange rate leads to real appreciation in the short term, impairing the profitability of exports and making imports more profitable. Most indicators showed that there was considerable real appreciation in 1996. Real appreciation reflects many factors, however—including excess demand, deviation from the target budget deficit, and the inflow of long-term capital—and the slower rise of the nominal exchange rate is just one among them (see Chapter 2).

Monetary policy and lower inflation expectations led to a rise in the share of liquid assets in the portfolio.

One of the results of the relatively high level of unindexed local-currency interest in the last two years (in addition to preventing deviation from the inflation environment) was to make the public's portfolio more liquid. This was expressed, for instance, in the rapid increase in local-currency deposits in 1995–96 relative to the rise in total financial assets. The higher demand for unindexed local-currency assets also derived

from the stabilization of actual and expected inflation since 1992 at levels below those prevailing previously. The move to greater liquidity continued in 1996, albeit more slowly. The persistent withdrawals from the provident funds, too, partially reflect this phenomenon, which may make the public's portfolio more sensitive to changes in relative prices or in expectations regarding financial and real developments. Such sensitivity may intensify the effects of shocks on the economy. The stability of the portfolio also depends on the level and stability of inflation, however, so that in attempting to attain the inflation target, contractionary monetary policy contributed to the stability of the portfolio.

The monetary aggregates

The monetary base grew by NIS 3.8 billion in 1996 (Table 7.A.4a), with a considerable part of the increase occurring towards the end of the year. The expansion of the monetary base resulted mainly from the large government injection compared with previous years, which intensified in December. Foreign-currency conversions also played their part in expanding the monetary base. On the other hand, the Bank of Israel absorbed a significant share of the conversions by reducing the monetary loan, using the auction for banks' deposits, and selling Treasury bills. The average monetary base in December 1996 was 20 percent higher than in December 1995 (Table 7.A.1b).

The money supply rose by 12 percent during 1996, and on average by 15 percent (Tables 7.A.1a & b). The increase was consistent with the rate of inflation (about 11 percent) and the rate of growth (4–5 percent), which act as quasi-indicators of nominal activity, and in itself does not suggest severe monetary restraint. The money supply rose in the first quarter, as the real interest on unindexed local-currency assets was eroded; in the second quarter the rate of increase declined, partly reflecting the rise in nominal interest and partly, it seems, increased uncertainty and expectations of a devaluation close to the election. In the third quarter the money supply accelerated again, both for seasonal reasons and possibly as expectations of a comprehensive economic policy proved unfounded, leading to reduced expectations of devaluation. In the fourth quarter the money supply declined, largely correcting the seasonal increase in the third quarter and also due to real interest, which remained high despite reductions in the nominal rate during the quarter.

M2, total unindexed local-currency assets of up to one year, rose by about 26 percent in 1996, significantly slower than the rise in 1995 (Table 7.A.1b). Developments by quarter were similar to those of time deposits described above. The slowdown was caused by two factors: as a result of the two surges in expectations of a devaluation, i.e., close to the elections and before the 1997 budget was passed, the

The monetary base increased by NIS 3.8 billion.

The increase of 15 percent on average in the money supply does not indicate severe monetary restraint.

M2 rose by 26 percent during the year.

average expected yield on foreign currency was high relative to that in 1995. The change in policy—expressed by the Bank of Israel's almost complete withdrawal from the foreign-exchange market for most of the year and the resulting significant reduction in foreign-currency conversions—acted in the same direction. The public's supply of local-currency deposits declined, as did the need to sell Treasury bills (included in M2).

At the beginning of 1995, unindexed deposits for periods of more than one year were offered to the public, for the first time, by the commercial banks. The balance of these deposits has risen very rapidly since they were introduced, and by the end of 1996 had reached more than NIS 8 billion. Their fast growth reflects both relatively high local-currency interest and the adjustment of the stock of a new financial asset until it reaches equilibrium. The rapid rise of relatively long-term unindexed deposits also reflects the public's adaptation to the new inflation environment prevalent since 1992, or in other words, the reduction in the risk premium on unindexed assets. On the supply side, the rise in budget financing by means of unindexed bonds of more than one year enables the banks to offer such deposits and to use bonds as coverage for them.

Deposits in and indexed
to foreign exchange
rose faster than in
previous years.

Deposits denominated in or indexed to foreign currency rose much faster than in 1993–95, especially in the second quarter, due to the surges in expectations of devaluation. M3 (M2 *plus* these deposits) increased at the same rate as in 1995 (Table 7.A.1). This aggregate has risen at about the same rate every year since 1993—by 25, 26, 25, and 27 percent respectively, its stability contrasting with the high volatility of the money supply, and to a lesser extent, of M2.

Credit

Total nondirected bank credit increased by 21 percent in 1996, similar to the rise in 1995 (Table 7.A.2b), significantly slower than in the last few years; it is still expanding faster than nominal GDP, so that monetary policy does not appear to be imposing severe restrictions on credit growth. Credit expanded more slowly in the second half-year than in the first, consistent with the rise in real interest in the second half.

Opening the economy
to capital movements
made available
foreign-currency-
credit sources abroad.

Opening the economy to capital movements made foreign-currency-credit sources abroad available, thereby reducing the effect of local-currency interest on the total amount of credit. Unlike in 1995, the Bank of Israel's policy of nonintervention in the foreign-currency market in 1996 made it more difficult for the private sector to increase foreign-currency credit for conversion into local currency. The private sector was thus more exposed to the price of local-currency credit, and the effectiveness of the credit channel of monetary policy increased. The restriction imposed by the Bank of Israel's directive to the banks not to increase the construction industry's share of total credit—to prevent over-exposure of the banking system to this industry—also served to slow the rise in credit.

The components of credit growth in 1996 were far more balanced than in 1995. About 33 percent of the increase was in or indexed to foreign currency, compared with 55 percent in 1995. In contrast, the share of unindexed local-currency credit increased from 15 to 24 percent. CPI-indexed credit also increased its share of the rise in total credit. The rate of increase of unindexed credit was still significantly below that of CPI-indexed credit, however, and even further below that of credit in or indexed to foreign exchange.

Credit in or indexed to foreign exchange rose mainly in the first and third quarters, increasing more slowly in the second and fourth. This is the mirror-image of changes in the monetary aggregates, arising from expectations of devaluation in the second and fourth quarters, which raised the expected cost of credit in and indexed to foreign exchange. In local-currency terms, this credit developed relatively uniformly, as changes in the exchange rate offset the effects of changes in the amount of credit. Unindexed credit rose more slowly in the second half of the year due to the rise in interest, although the slowdown in the third quarter may have been seasonal, the mirror-image of the seasonal rise in the money supply (mainly in current accounts). The rise in CPI-indexed credit also moderated in the third quarter due to the rise in interest for all periods.

3. THE CAPITAL MARKET

The value of the capital market at the end of 1996 was NIS 366 billion, consisting of (mainly government) bonds (69 percent of the total market value), equity (17 percent), and other investments of financial institutions (14 percent) (Table 7.4). Capital market assets, deflated by the CPI, rose by one percent in 1996. This was the net result of opposing factors: on the one hand, the stock of government bonds and bills issued to finance the growing budget deficit rose, and on the other, equity values declined by 10 percent as their prices fell to a real level about half of that at the beginning of 1994.

Although the year-on-year change in real bond prices was zero, there was some movement during the year. Prices fell in the summer months, and then rallied, resulting in a yearly total real return of 3 percent (including reinvested interest), the highest level since 1992.

Foreign investors expanded their holdings of listed Israeli companies both in Israel and abroad.

The public rearranged its portfolio investments by withdrawing savings from provident funds, while increasing investments in short-term unindexed assets, pension funds, and life insurance. In the wake of the withdrawals from the provident funds and the fall in bond prices in July, the Bank of Israel and the government announced

The value of the capital market at the end of 1996 was NIS 366 billion.

The yearly total return on bonds was the highest since 1992.

In 1996 the public increased withdrawals from the provident funds.

Table 7.4
The Capital Market as at December 31, 1996, and Change from
Previous Year

	(NIS billion)					
	Total	Shares ^a	Negot- iable bonds ^{b,c}	Indexed earmarked bonds	Treasury bills ^b	Other
Institutions						
Provident funds	109.1	11.0	49.4	10.6	0.6	37.4
Change (%)	-10	-21.5	-14.6	-17.9	-59.6	5.7
Pensions funds	77.1			72.6		4.5
Change (%)	4.2			4.8		-5.2
New pension funds	1.0		0.3	0.7		0.1
Life insurance plans	39.2	0.7	4.6	26.3		7.6
Change (%)	13.6	26.6	37.5	9.7		16.6
Mutual funds ^d	12.7	5.0	6.6		0.6	0.4
Change (%)	-24.7	-36.6	-10.8		-32.2	-40.0
Households and firms	64.3	28.3	28.6		7.4	
Change (%)	12.7	-7.5	37.6		30.7	
Nonresidents	17.4	16.5	0.8		0.1	
Change (%)	8.5	8.9	20.6		-9.6	
Commercial banks	45.2		37.3		7.8	
Change (%)	9.5		9.6		9.0	
Total	365.5	61.6	127.6	110.2	16.5	49.6
Change (%)	1.3	-9.9	2.8	3.8	7.6	4.7
Real change in price^e (%)	-2.5	-12.0	-1.0			
Change in quantity (%)	3.8	2.4	3.8	3.8	7.6	4.7

^a Excluding market value of quoted companies derived from their holdings in other quoted companies ('double counting'), and government-owned companies.

^b Excluding securities held by the Bank of Israel.

^c Government and corporate bonds.

^d Adjusted for provident funds' and nonresidents' holdings in mutual funds.

^e Total real return *minus* interest and dividend.

SOURCE: Bank of Israel Research Department.

the creation of a 'safety net' according to which the Bank would intervene in the bond market in order to moderate the decline in prices. Within this framework the Bank of Israel bought about NIS 1.5 billion of indexed bonds, mainly via auctions, and sold bills to prevent expansion of the money supply. The government also appointed a committee of experts (the Brodet Committee) to propose capital-market reforms. The committee's recommendations were not adopted, however.

Bonds

Bonds can be divided into negotiable (issued by the government and corporations), and earmarked, which include nonnegotiable bonds issued by the government in the past for provident funds, and those it issued in the past and continues to issue for pension funds and some life insurance plans. All earmarked bonds, whose value rose by 4 percent in 1996, are CPI-indexed and subsidized, bearing above-market interest rates. 74 percent of the negotiable bonds are CPI-indexed, 10 percent foreign-currency-indexed, and the balance unindexed. Half of the new issues of negotiable government bonds in 1996 were unindexed, and their share in the stock of outstanding domestic government debt has risen from 3 percent to 17 percent in the last two years. The length of unindexed government securities is far shorter than that of indexed bonds, so that the shift to unindexed securities has shortened the average length of the government's marketable securities to just over 4 years.

The average length of the government's marketable securities shortened.

The market value of marketable government bonds (excluding Treasury bills) increased by a real 5.5 percent, after rising by 9 percent in 1995 (Table 7.A.8). The stock of negotiable bonds rose more slowly despite the increase in the budget deficit, because a large share of the deficit was financed by government borrowing abroad (see below for a discussion of the financing composition of the domestic budget deficit). The greater share of financing through earmarked bonds also played a part in slowing the rise in the stock of negotiable bonds.

In 1993–95 strong demand for credit along with a tight monetary policy pushed interest rates upwards, especially on short-term bonds. This led to a decline in bond prices and a flattening of the yield curve. Bond prices continued falling for much of 1996, especially from June to August, but rose towards the end of the year.

Bond prices fell, mainly in June–August, but rallied towards the end of the year.

While some of the fluctuations in 1996 can be attributed to changes in world interest rates, many others were the result of domestic factors. The reduction in bond prices in the summer months was apparently affected by provident fund withdrawals. Fiscal developments, too, particularly the inability to meet the deficit target, contributed to dampened bond prices. The failure to meet the privatization revenue target acted in the same direction. Tight monetary policy mid-year also contributed to the rise in real interest rates, as did the government's undertaking to issue preferential bonds for the new pension funds.

Fluctuations in bond prices reflected changes in interest rates abroad, and monetary and fiscal policy.

Following the decline of bond prices in the first half of July and heavy withdrawals from the provident funds, the government and the Bank of Israel announced on July 15 that the latter would buy bonds from the funds (the 'safety net') in order to smooth downward price movements and reduce volatility. The policy announcement did not have the desired effects immediately. On the contrary, bond prices continued falling for five weeks after the announcement, even after the Bank had purchased bonds

In order to moderate the fall in bond prices, in July the authorities announced the creation of a 'safety net.'

In the last quarter, the decline in withdrawals from provident funds contributed to the recovery of the bond market.

totaling NIS 0.5 billion at the end of July. The safety net may have had some effect, however, after the Bank purchased an additional NIS 1 billion of bonds in late August.

Other factors also played a part in the recovery of the bond market towards the end of the year. As indexed bonds matured, the government tended to issue unindexed bonds, leading to a fall in the supply of indexed bonds and a rise in their price. The reduction in provident fund withdrawals in October–December also contributed. Similarly, the rise in the private-sector saving rate boosted demand for financial assets, which in turn may have contributed to an increase in bond prices towards the end of the year. In addition, the demand for credit slowed down as the economy grew more slowly, adding its weight to the upward pressure on bond prices. Government borrowing abroad also resulted in a relative reduction of government bonds and lower domestic interest rates.

For the third successive year, there were hardly any new issues of corporate bonds, and with the redemption of NIS 1.5 billion of old bonds, this market contracted to its lowest level since 1988.

The stock market

The share index fell by a real 12 percent in 1996; some fluctuation was due to developments in stock markets around the world.

The share index fell by about 12 percent in real terms in 1996, after rising by 6 percent in 1995, and plunging by 46 percent in 1994 following the boom of 1991–93 (Table 7.A.9). Equity offerings declined to their lowest level since 1988.

Share prices declined along with low profitability (Table 7.A.10), and apparently also as a result of decelerating growth expectations. Political developments may also have had some effect. While Israeli equity prices tended to perform poorly relative to the rest of the world, daily and monthly returns in Israel were correlated with price movements in other markets, particularly in the US.

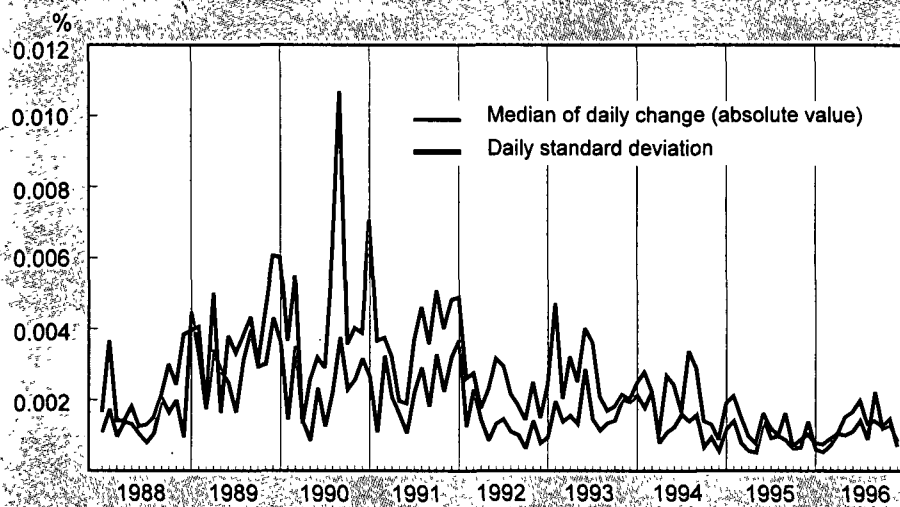
For several years initial public offerings in the US by Israeli firms have yielded relatively high returns.

The proportion of foreign-owned stock continued to rise. Nonresident investors continue to invest in Israeli companies, mainly via US stock exchanges, however, and not the Tel Aviv Stock Exchange (TASE). Israeli companies traded abroad are different from those traded on the TASE in that they are R&D-intensive and export most of their output. Moreover, their ownership structure is more dispersed. For years, initial public offerings (IPOs) abroad by Israeli firms yielded higher relative rates of return than those in Israel. Issuing stock on the US market may serve as an emblem of high quality.

The slowdown in privatization persisted in 1996.

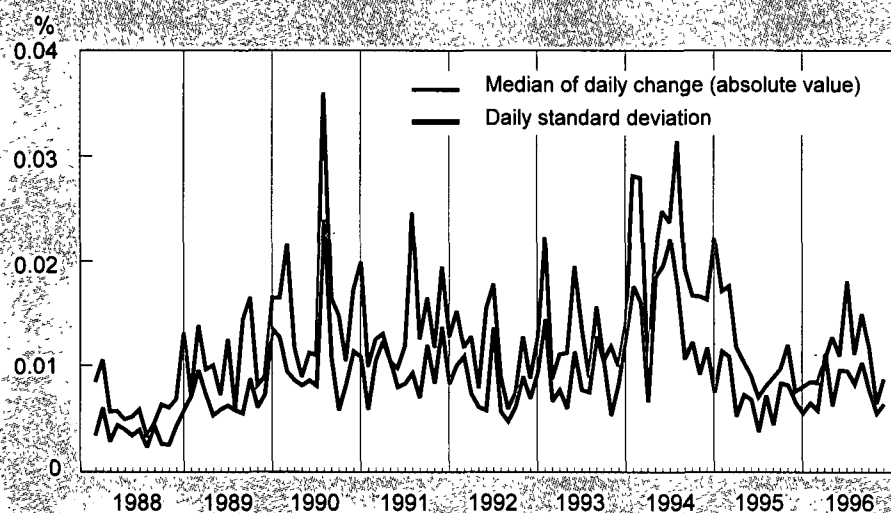
Privatization proceeds continued falling. At the end of the year the government announced ambitious privatization plans for the next few years. The implementation of these targets is crucial: persistent government ownership impedes streamlining, impairs profitability, and casts doubt on the government's commitment to other structural reforms.

Figure 7.2a
Volatility of the Government Bonds Index, 1988-1996



^aSOURCE: Based on TASE data.

Figure 7.2b
Volatility of the General Share-Price Index, 1988-1996



^aSOURCE: Based on TASE data.

Institutional investors

Financial institutions managing investment portfolios for investors hold about two thirds of all capital-market assets, a high share by international standards. By far the greatest part of the government's internal debt is held by these institutions, which, unlike their counterparts in many developed economies, invest most of their assets in government bonds.

The tax benefits and subsidies accruing to institutional investors—advanced study, provident, and pension funds, and life-insurance plans—exceed the norm in developed economies. In all of them, deposits by the employer on behalf of the employee, accumulation, and withdrawals are tax free. In provident funds, pension funds, and life-insurance plans deposits by the employee also qualify for tax benefits. Another benefit of saving with advanced study funds and provident funds is the possibility of *withdrawing savings after six years and fifteen years respectively, while continuing to make additional deposits which also qualify for tax benefits until withdrawn*. Pension funds and most life insurance plans have another advantage: the government sells them bonds bearing above-market-rate interest. Savers in pension funds have an additional advantage—the government has committed itself to covering accumulated actuarial deficits; the value of this undertaking seems to be of the same order of magnitude as their total assets. An analysis of the cumulative benefits to certain savers in pension funds indicates that under reasonable assumptions they amount to about 17 percent a year in real terms.

The value of provident and advanced study funds fell by a real 10 percent, to NIS 109 billion.

In 1996 the public withdrew some NIS 17 billion from provident and advanced study funds, and new deposits amounted to NIS 5 billion. As a result, their value fell by a real 10 percent, to NIS 109 billion (Table 7.A.11). Large-scale withdrawals from the former may have been due to the funds' disappointing performance over several years. (For an explanation of the structural factors which contributed to withdrawals from the provident funds despite their tax benefits, see last year's edition of this report.)

Box 7.2: Capital market reforms

The capital market can contribute to long-term economic growth in several ways: by allowing firms to raise capital; contributing to effective corporate governance; enabling households to save long-term; aiding efficient resource allocation; and serving as an alternative financial intermediary to the commercial banks. The capital market in Israel has certain characteristics which make it difficult for it to function efficiently, thereby impairing potential growth.

1. Asset management in the capital market is highly concentrated, with new competitors comprising a very small share. This is liable to harm competition, particularly in light of the control exercised by the banking corporations (most of which are government-owned) not only over asset management but also over underwriting, brokerage, real assets, and their holdings of conglomerates—all this over and above their role in providing corporate credit. The structure of Israel's capital market is unique among the developed economies.
2. The government is a dominant player in the capital market. Government bonds constitute the major part of assets in the market—reflecting the heavy government debt—while shares and corporation bonds continue to account for only a relatively small segment.
3. Government subsidies on certain investments, particularly investment grants and tax benefits, create a gap between the market price of capital and the low (relative to the market) rates of return on subsidized investments. The gap is even wider due to tax benefits afforded to certain investors, in particular in pension funds for which earmarked bonds are issued and whose actuarial deficits are covered by the government.

These problems can be solved gradually. The problem of centralization may be partially solved by severing the provident funds from the commercial banks and making the tax regulations—which act as entry barriers against new competitors in the provident fund sphere—more flexible. Divesting the banks of other activities would also help, and liberalizing capital movements abroad would enable savers to place their savings overseas without banking intermediation.

The first step in dealing with the government's decisive share in the capital market is to cut the budget deficit and the public-sector debt. Furthermore, the regulations which discourage the funds from investing in non-government assets should be amended. Expediting the privatization process is important, too, as it would reduce the government's involvement and broaden the stock market.

The yield differentials may be reduced by cutting the subsidy to the pension funds, so that retirement conditions match those of investments. In addition, the subsidy in the form of grants in the framework of the Encouragement of Capital Investments Law should be reduced, and the benefits for firms opting for tax holidays should be cut, while easing the total long-term tax burden.

The Brodet Committee was appointed to recommend structural measures which would enable the capital market to fulfill its functions. Although the committee identified many of the problems described above, its recommendations dealt with only some of them, and the government did not adopt its conclusions.

Assets of mutual funds continued to fall in 1996, reaching their lowest level since 1988.

Assets of mutual funds, which are considered short-term investments and do not have the advantage of tax benefits, also declined due to heavy withdrawals, reaching their lowest level since 1988 (Table 7.A.12). In contrast, investments in pension funds and life insurance grew. Indeed, the stock of earmarked bonds increased in 1996, because the decline in the provident funds (for whom no earmarked bonds have been issued for 12 years) was less than the increase in pension funds and life insurance. The previous government's decision to formalize its funding of actuarial deficits in seasoned pension funds, and to allow the entry of new funds to whom earmarked bonds will also be issued, suggests that the role of subsidized saving is not likely to be diminished.

4. THE PUBLIC'S PORTFOLIO AND WEALTH

Developments in the money and capital markets affected the stock of financial assets (the public's portfolio) as well as private-sector wealth.

The financial portfolio, deflated by the CPI, increased by 4 percent in 1996.

The financial portfolio at the end of 1996 is estimated at NIS 578 billion, 180 percent of GDP, consisting of relatively liquid short-term assets (about 46 percent) and long-term assets (54 percent) (Table 7.A.13). The first category incorporates most money-market-type assets as well as bonds and stock held either directly by the public or via mutual funds. Long-term assets are defined to include restitutions deposits, savings plans, indexed deposits, investments in pension funds, life insurance, provident funds, and advanced study funds. The portfolio, deflated by the CPI, rose by 4 percent in 1996, due to a 7 percent increase in the stock of assets and a reduction of 3 percent on average in real prices, deriving mostly from a decline in prices of shares and foreign-currency-indexed assets.

The level of local-currency interest during the year apparently contributed to the rise in the share of unindexed short-term assets.

In the last few years the stock of unindexed short-term assets has risen markedly, a process abetted in part by monetary policy as it increased—at least in the short run—the relative return on these securities. The expansion of the share of unindexed assets may have been affected by the decline in investments in provident funds which have small holdings of unindexed assets.

The wealth of the nonfinancial private sector, 25 percent of which is financial and 75 percent of which is capital stock—equipment, buildings, inventory, and residential stock—is estimated at NIS 0.8 billion, equivalent to 250 percent of GDP (Table 7.A.14). Net financial wealth is the difference between the value of the financial assets held by the nonfinancial private sector and its liabilities to financial intermediaries, to the public sector, and abroad. Total wealth deflated by the CPI increased by 5.5 percent in 1996, compared with 7.3 percent in 1995.

In order to distinguish between the increase in the public's wealth arising from flows and that due to price changes, we calculated the real change in wealth according

to price indices of its components (Table 7.5). The results indicate that since the prices of physical assets and of a significant part of financial assets and liabilities rose by less than the CPI, the real rate of increase of wealth (which measures the rise deriving from flows) rose to 8 percent, the highest for several years. Indeed, wealth grew more rapidly than GDP, reversing the trend of previous years. Less than half of the acceleration (compared with 1995) was due to the increase in households' and firms' net savings. Smaller parts of the rise may be attributed to the increase in investment from abroad, and government capital grants.

Unlike in previous years, net financial wealth (which mainly reflects the public's claims against the government) grew rapidly, by 8 percent, similar to the rise in physical wealth.

The rapid growth of net financial wealth in 1996 reflects the increase in the government's liabilities, partly offset by a moderate expansion of credit. In 1995 foreign-currency credit increased by about 60 percent, but in 1996 declined to 10 percent (deflated by the CPI). The expansion of local-currency credit accelerated in 1996, however.

A concern that provident fund withdrawals would lead to a decline in savings was one of the key factors in establishing the safety net. However, as mentioned above, the rate of net savings did not fall, nor did the rate of accumulation of either capital or financial stock.

Despite the continued growth of capital stock, continued budget deficits over the next few years may crowd out investment. In the last few years, investments expanded above and beyond the increase in domestic saving as excess demand was financed from abroad. It is unclear whether such financing will be available indefinitely if the fiscal problems are not dealt with and if inflation does not eventually converge to Western levels.

The wealth of the private sector in 1996 is estimated at NIS 0.8 billion, 250 percent of GDP.

The rapid growth of net financial wealth reflects the increase in the government's liabilities and the slowdown in the expansion of credit.

Despite withdrawals from the provident funds, private savings did not decline.

Table 7.5
Changes in Wealth, 1995–96

	Wealth (NIS billion)		Change in terms of CPI (percent)		Change in quantity ^a (percent)	
	1995	1996	1995	1996	1995	1996
Total public wealth	680	794	7.3	5.5	6.2	8.1
Net financial wealth	165	199	-0.7	9.6	0.3	8.0
of which: Financial assets	419	502	7.0	8.3	7.9	9.3
Less liabilities	255	303	12.7	7.4	13.5	10.1
Physical wealth	516	594	10.1	4.2	8.3	8.2

^a In terms of component prices. This expresses flows of savings and investment in the categories of wealth.