Chapter 7
Money and Capital Markets

1. MAIN DEVELOPMENTS[1]

Interest rates were again reduced in 1989 within the context of persistent economic slack, stability of the basic level of inflation, and a relatively high level of foreign reserves during most of the year (Figures 7.1 and 7.2).

Average nominal interest rates on unindexed credit in local currency stood at 27 percent during the last quarter of the year and 31 percent on average during the year, compared with 51 percent during 1987 and 41 percent during 1988. Interest rates on local-currency deposits, which were negative in real terms in 1988, continued to decline, while the interest rate spread narrowed. For example, the average annual interest rate on SROs (self-renewing overnight accounts) declined from 14 percent in 1988 to 11.6 percent in 1989. Yields to redemption on long-term indexed bonds, both government and corporate, as well as interest rates on long-term credit also fell significantly (Tables 7.3 and 7.8).

The drop in interest rates was accompanied by a rise in M1 that exceeded the growth rate of nominal GDP by more than 5 percentage points[2] (Figure 7.2, Table 7.1); together they indicate monetary expansion. The broader monetary aggregates, such as M2* and M3*, fell in real terms, but they include elements whose returns declined relative to alternative assets, such as bonds and shares; thus, this does not contradict the general picture of monetary expansion.

At the beginning of the year and again in June, the sheqel was devalued by 13 percent and 6 percent respectively. Expectations of a devaluation at the beginning of the year

[1] All interest rates and percentage changes are in annual terms, unless otherwise stated.

M1 = currency in circulation and demand deposits; M2 = M1 *plus* interest bearing local currency deposits and Treasury bills held by the public; M3 = M2 *plus* resident deposits (foreign-currency denominated); M2*, M3* = M2 and M3, respectively, *less* Treasury bills held by the public; net domestic credit (domestic credit) represents the contribution made by the commercial banks and the Bank of Israel to the growth in M3* by granting domestic credit to the government and the public. The other source of growth in M3* is the rise in the foreign reserves (see also note 4).

[2] The rates of change in the various balances referred to in this chapter are measured by the change between the average level in a given year and the average level in the previous year, unless otherwise stated. The rationale behind this is that annual averages are less affected by the fluctuations of devaluation expectations than figures measured at a given point of time. Annual averages are also exposed to this problem, though to a lesser extent, and it would seem that annual averages do in fact reflect the principal monetary developments.

were accompanied by massive capital movements; in the final quarter of 1988 there was an export of capital amounting to $1.8 billion, and during the first quarter of 1989, after the devaluation, an import of capital amounting to $1.5 billion .

Table 7.1
The Principal Monetary Aggregates, 1987–89[a]

(annual rate of change, percent)

				Sources of increase of M3*		
	M1	M2*	M3*	NDC	Foreign reserves[b]	CPI
Monthly average						
1987	60	65	33	14	55	20
1988	32	27	20	42	0	16
1989	27	17	17	15	19	20
I	1	40	26	–47	358	31
II	68	41	31	1	72	19
III	63	16	18	49	–7	13
IV	21	27	23	108	–38	19
During period						
1987	51	48	29	21	39	16
1988	11	2	10	55	–35	16
1989	43	41	27	17	51	21

[a] M1—currency in circulation and demand deposits; M2*—M1 + interest-bearing local-currency deposits; M3*—M2 + resident deposits (foreign-currency denominated).

[b] Each year's U.S. aid is received in October–November and has been spread over the year in order to smooth out the resulting fluctuations in the data.

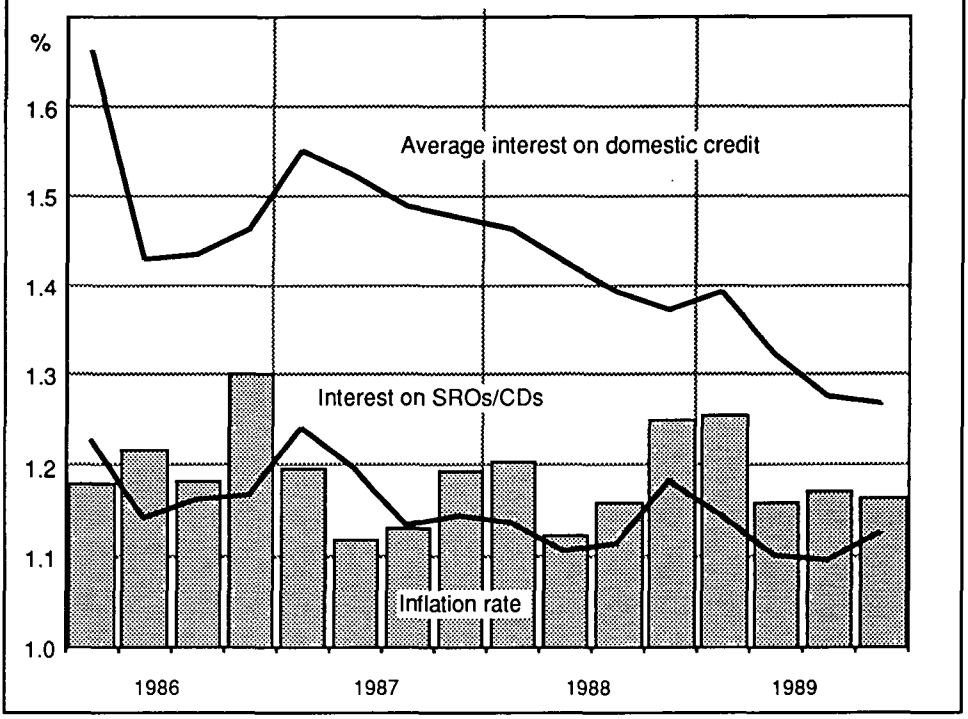
Speculative capital movements continued during the rest of the year, but these were mild compared with those at the beginning of the year. The principal swings in foreign currency were related to concurrent movements of interest rates—a rise when economic agents bought foreign currency and a fall when they sold it. In spite of the policy of reducing interest rates over time, the Bank of Israel allows these changes in interest rates in order to protect the foreign reserves, thereby supporting the exchange rate, which serves as the principal anchor for the price level.

The decline in interest rates and the differential development of monetary aggregates are a result of developments in both the financial markets and in the markets for goods and services.

The forces for growth in money demand were weak in 1989; output grew only slowly, contributing little to the increased money demand arising from the transactions motive. In addition, there were no special factors (such as important changes in transaction practices) contributing to the growth in money demand.

Monetary expansion characterized the supply side of the money market this year, fostered by the Bank of Israel, which placed the need to lower interest rates high on its

Figure 7.1
Nominal Interest Rate and Inflation, 1986–89[a]



[a] Monthly rates.

scale of priorities. This against a backdrop of continuing recession, and forecasts at the beginning of the year that the recession itself would serve to restrain inflation.

The extensive capital inflow at the beginning of the year improved the foreign reserves level, while at the same time providing resources for monetary expansion. Accordingly, during this period, expansionary monetary policy consisted of not offsetting the increase in resources for monetary growth. In the spring, when it became clear that the reduction in interest rates on local-currency bank credit through these means was too slow, and that the increase in the quantity of money and credit was lower than planned, the Bank of Israel required that the banks accelerate the process of reducing interest rates. In May, the Governor of the Bank of Israel warned the banks that he would be forced to take drastic action, namely a reduction in interest rates by administrative fiat, whereupon the interest rates dropped as demanded. Subsequently, the Bank of Israel continued to support a gradual reduction in interest rates on local-currency credit, at least until the last quarter, when expectations of devaluation revived.

In the capital market, the demand for medium and long term assets rose faster than supply, resulting in a drop in real interest rates. This was connected primarily with developments in the goods and services markets: the rise in the rate of household saving

Table 7.2
Monetary Assets, 1987–89

(annual rate of change, percent)

	Currency in circulation	Deposits			Treasury bills	Tradable bonds
		Demand	Time[a]	Resident		
Monthly average						
1987	60	60	67	–13	438	40
1988	36	29	25	0	9	13
1989	23	31	13	15	84	40
I	–3	4	62	–8	2,532	22
II	71	66	31	–0	124	48
III	43	80	–1	25	–75	54
IV	20	21	30	2	82	38
During period						
1987	40	59	46	–8	250	40
1988	20	5	–2	39	–23	25
1989	35	50	41	–11	144	38

[a] Including SROs.

and the decline in the investment demand of firms released more real resources than were needed to cover the government's growing deficit.

The reforms in the money and capital markets since the stabilization program of 1985 have substantially increased the substitutability between financial assets. In spite of the still considerable segmentation of the market (e.g. assets and liabilities linked to different indexes or with different maturities), it is reasonable to assume that the different interest rates do affect one another. Thus, the forces at work in the different market segments combined to reduce interest rates.

The expansionary monetary policy of 1988 and 1989 (apart from periods of devaluation expectations) did not suffice to revive economic activity, and the downturn in investment became more pronounced during this period. This was because other factors, whose influence outweighed the reduction in interest rates, continued to restrain economic activity and investment. These included low profitability in the business sector (caused principally by high labor costs), financial difficulties experienced by firms, problems of supply and demand caused by the *intifada*, and growing uncertainty as to the government's determination to initiate the structural change required to generate sustainable growth (for a detailed discussion, see Chapters 1 and 2).

Although interest rates have declined considerably during the past two years, they still remain high in real terms. In view of the continuing recession, there is room for a further reduction, particularly on short-term credit. However, in order to revive growth, efforts must be directed principally towards resolving the structural difficulties which plague the economy.

Table 7.3
Selected Interest Rates, 1987–89[a]

(percent p.a.)

	Short-term credit to the public								
	Local currency					Financial assets of the public			
	Overdraft facilities	Term credit	Total[b]	Total[c]	Private issues (indexed)	CDs and SROs[d]	1-month deposits	Resident deposits	Government indexed bonds[e]
Nominal interest									
1987	61.9	39.1	50.8	39.0		12.9	19.1	12.8	
1988	46.2	33.4	41.2	33.2		14.1	13.7	12.8	
1989	34.3	26.6	31.2	33.4		11.6	12.6	13.0	
I	41.8	34.2	39.2	50.8		14.2	15.9	13.3	
II	34.6	27.6	32.0	38.5		10.1	11.3	13.1	
III	30.6	23.0	27.4	27.3		9.5	10.3	12.9	
IV	30.5	21.8	26.8	19.1		12.4	12.9	12.6	
Real interest (*ex post*)									
1987	39.4	19.7	29.9	19.7	6.7	–2.8	2.5	-2.9	4.4
1988	25.6	14.5	21.3	14.4	6.2	-2.0	-2.4	-3.1	4.1
1989	11.3	4.9	8.7	10.5	3.1	-7.6	-6.7	-6.4	1.5
I	8.5	2.7	6.5	15.4	4.9	-12.6	-11.3	-13.3	2.5
II	11.9	6.0	9.7	15.1	2 .1	-8.5	-7.5	-6.0	1.7
III	14.3	7.7	11.5	11.5	2.7	-4.1	-3.4	-1.2	1.5
IV	10.6	3.2	7.3	0.9	2.8	-4.8	-4.4	-4.6	0.8

[a] For details see Table 7.8 and 7.A9.

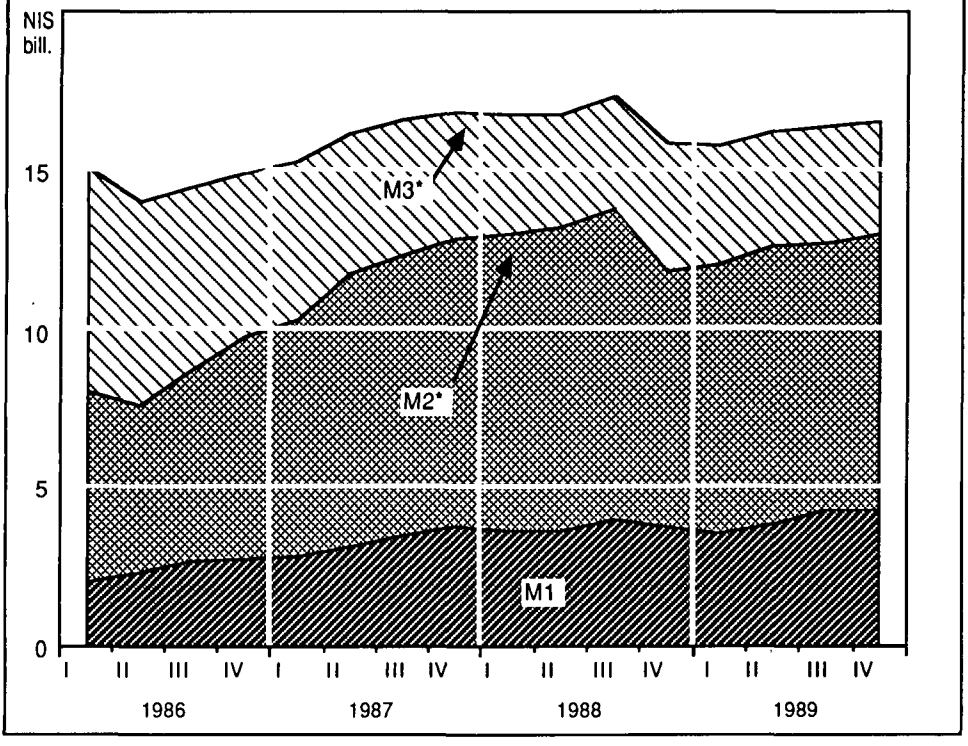
[b] Weighted by the volume of credit of the two components.

[c] Includes directed credit and exchange-rate indexed credit n.e.s.; weighted average; the rates on nondirected foreign-currency credit are posted rates and are generally above the rates actually charged.

[d] Median of banking system; over NIS 10,000; assumed to be renewed every three days; does not include large negotiable SROs. From September 1988, the figures are the average of all brackets.

[e] Five-year bonds.

Figure 7.2
Monetary Aggregates, 1986–89 [a]



[a] At December 1988 prices. For definition of aggregates, see Table 7.1.

The changes during the course of the year in the composition of the public's portfolio and in the relative yields on different assets are the result of monetary policy, increased private saving and declining investments, cyclical devaluation expectations, and changes in inflationary expectations. Interest rates on unindexed deposits continued to drop (except in periods of intense devaluation expectations) and it may be assumed that the expected yield on resident deposits was very low, following the devaluation at the beginning of 1989. Accordingly, the public preferred to invest in securities, particularly in conjunction with capital inflows. This was generally done via financial intermediaries specializing in securities investments, such as mutual funds and provident funds. The combination of rising demand and relatively inelastic supply led to high yields in these outlets. Although there are no clear indications of a change in the expected rate of inflation, it seems that there was growing uncertainty as to its level in 1989, leading to the increased attractiveness of indexed assets.

Since mid-1986, the M3* aggregate has served as the principal monetary aggregate by which the growth of the money supply is assessed. The composition of M3* was

Table 7.4
Monetary Policy: The Money Base, 1988–89

(NIS million)

	1988					1989				
	Total	I	II	III	IV	Total	I	II	III	IV
Government and Jewish Agency injection	–219	395	–178	–621	186	–953	303	–656	–268	–331
of which Net borrowing[a]	*2,432*	*5*	*574*	*1,303*	*550*	*6,097*	*314*	*2,057*	*2.430*	*1,296*
Balance-of-payments injection	–4,374	338	–144	–809	–3,758	1,011	4,244	–686	–961	–1,586
of which Foreign-currency purchases (–)[b]	*–3,901*	*41*	*277*	*–1,001*	*–3,218*	*466*	*3,195*	*–599*	*–592*	*–1,537*
Bank of Israel injection (nondiscretionary)[c]	517	218	157	73	69	616	101	200	146	169
Bank of Israel injection (monetary policy)	3,082	–850	–256	1,071	3,117	–93	–3,701	720	1,852	1,036
Open-market operations[d]	124	30	59	30	5	19	5	5	4	5
Sale of treasury bills	317	–289	–350	672	283	–799	–1,031	17	231	–16
of which To the public	*126*	*14*	*–256*	*189*	*178*	*–618*	*–848*	*27*	*337*	*–134*
Discount-window loan	2,641	–591	35	368	2,829	686	–2,675	697	1,617	1,047
of which By auction	*650*	*442*	*42*	*300*	*750*	*100*	*–528*	*128*	*200*	*300*
Total change in money base	**–994**	**100**	**–421**	**–287**	**–385**	**581**	**947**	**–422**	**768**	**–712**
Effect of monetary policy on unindexed asset base	880	400	0	480	0	948	424	0	524	0

[a] Including compulsory loan.
[b] By private sector.
[c] Central bank injection originating in directed credit and other sources (consisting mainly of interest payments to and from banks; derived from the Bank of Israel's profit and loss statement).
[d] In tradable bonds.

Table 7.5
Monetary Policy: Supply and Demand of Banks for Liquid Assets, 1988–89[a]

(NIS million)

	1988					1989				
	Total	I	II	III	IV	Total	I	II	III	IV
Demand										
Reserve requirement	2,717	2,899	2,780	2,915	2,276	2,179	2,308	2,222	2,185	2,000
Liquidity surpluses (balance)	–90	–72	–63	–113	–111	146	133	242	167	42
Total demand	**2,627**	**2,826**	**2,716**	**2,802**	**2,165**	**2,325**	**2,442**	**2,464**	**2,352**	**2,042**
Supply										
Nonborrowed reserves[b]	1,692	2,142	2,398	2,187	40	467	447	1,954	843	1,374
of which Treasury bills held by banks	*308*	*300*	*345*	*346*	*241*	*414*	*394*	*424*	*437*	*400*
Discount-window loans utilization[c]	936	684	319	615	2,125	1,858	1,995	510	1,509	3,417
Ordinary loan	324	115	28	59	1,096	805	682	80	242	2,217
Auction	611	569	290	556	1,029	1,052	1,313	430	1,267	1,200
Total supply	**2,627**	**2,826**	**2,716**	**2,802**	**2,165**	**2,325**	**2,442**	**2,464**	**2,352**	**2,042**
Free reserve (nonborrowed reserve *less* reserve requirement)	–1,026	–756	–382	–728	–2,236	–1,712	–1,861	–268	–1,342	–3,374
Discount window, addendum										
Marginal bracket utilization	67	115	28	58	65	590	651	80	430	1,200
Total offered at auction	632	583	354	561	1,029	1,121	1,370	647	1,267	1,200

[a] Daily average accounting for months included in the stated period.
[b] I.e., other than discount-window loans.
[c] See Section 3 of the text.

influenced by the transfer of funds out of resident accounts and into unindexed assets resulting from the reduction in the liquidity of resident accounts which was part of the 1985 stabilization program. As a result, the broad M3* aggregate was the most reliable indicator of overall monetary developments. In spite of continuing institutional innovations in the components of M3* (such as the replacement of resident deposits—which are foreign-currency denominated—with a new type of exchange-rate indexed deposits, which eliminated the government's component of the linked liability), it would appear that in 1989 the shift out of resident accounts into unindexed assets was markedly reduced. By way of contrast, there was a far greater shift from interest-bearing local-currency deposits[3] into less liquid assets—such as bonds—which are excluded from the M3* aggregate.

Consequently, the role of the narrow money supply (M1) as an indicator of monetary developments is of growing importance. The reduction in real terms in M2* and M3* as well as in net domestic credit during 1989[4] does not indicate monetary contraction, but rather stems from a change in the composition of the public's portfolio, as yields on interest-bearing assets within these aggregates declined, which is in fact consonant with monetary expansion.

Changes in the money base (Tables 7.4 and 7.5) are influenced by two main factors, neither of which is directly under the control of the monetary policy makers, namely, government injections and private sector foreign-currency conversions.

In 1989 the government absorbed more than NIS 2 billion, after absorbing NIS 1.3 billion during the previous year. This was not the result of a budget surplus but on the contrary, it occurred during a period in which the budget deficit (on a cash basis) grew significantly, from NIS 1.1 billion in 1988 to NIS 4.1 billion in 1989, and stems from a still steeper growth in net borrowing—from NIS 2.4 billion in 1988 to NIS 6.1 billion in 1989. It is difficult to explain the extent of borrowing and absorption, particularly towards the end of the year, in view of the continuing recession and the desire to encourage economic growth, amongst other things by a reform of the capital market which includes reducing government intervention (for a detailed discussion of the above—see Section 2).

Private-sector foreign-currency conversions fluctuated strongly during the year, principally because of the devaluation-expectations cycle. The heavy inflow of capital at the beginning of the year was followed by a period of relative calm. In the middle of May, however, devaluation expectations resumed, bringing an increase in purchases of foreign currency. In June, when the sheqel was devalued, expectations and purchases

[3] Demand deposits also carry some rate of interest, but in order to simplify matters it has been ignored here.

[4] Domestic credit increased during the year at a slower rate than M3*, mainly because of the impact of the heavy capital inflow at the beginning of the year. As stated previously, this year greater emphasis was placed on interest rates in determining monetary policy and, in consequence, the monetary aggregates in general, and domestic credit in particular, lost some of their importance. (See Chapter 8, *Bank of Israel Annual Report*, 1987 and 1988)

died down, only to be renewed in September when the public again made massive purchases of foreign currency. During the last four months of the year, more than $1 billion were purchased, and a further $300 million were purchased during the first two months of 1990. These massive speculative purchases came to a halt at the end of February 1990, when the Bank of Israel announced that the midpoint exchange rate had been raised by 6 percent. During March and April the public sold foreign currency, thereby moderating the actual devaluation.

The Bank of Israel responded in a number of ways to the sharp movements in both the government injection and the speculative capital flows. The Bank offset the major part of the government's absorption by increasing the discount-window loan, thereby preventing a rise in interest rates as a result of the government's policies. In order to permit some rise in domestic interest rates so as to damp down the demand for foreign currency, the Bank did not offset the entire effect of the foreign-currency purchase.

In addition, the Bank of Israel introduced two changes in foreign-currency trading whose principal aim was to modify the extreme swings in foreign-currency purchases caused by devaluation expectations. At the time of the January 1989 devaluation the exchange-rate regime was changed, and from then on the daily rate of the currency basket was allowed to move in a range of up to 3 percent from the midpoint rate. After the 6 percent devaluation in the midpoint rate at the end of February 1990, the band was widened to 5 percent in each direction instead of 3 percent, enabling it to be more responsive to the forces of supply and demand for foreign currency. Exchange rate management within a given band allows the Bank to moderate both the capital movements and their effects on the money base, since a change in the rate in response to capital movements in a given direction serves as a disincentive to further movements in that direction. The additional instrument introduced was the foreign-currency options instituted in November 1989 (a detailed description is given in the following section). These afforded some hedge against devaluation without the need to buy foreign currency, and it would appear that they served to calm devaluation expectations at the end of the year.

Several steps were taken during the year to extend the reform in the money and capital markets. These included a significant relaxation of the restrictions on foreign-currency credit, further reductions in the liquidity requirements on local-currency deposits and in the deposit requirement on provident funds, and the creation of a new bank deposit indexed to the exchange rate, allowing the banks to expand exchange-rate indexed credit against the new deposits.

On the other hand, further expansion of the tradable portions of the internal debt and other reforms in the structure of financial intermediation, in particular the sale of banks involved in the Bank Share Arrangement and the breaking up of some of the banking groups, were all suspended.

During 1989 substantial resources were released for investment in the capital market as a result of the increase in private saving, the decline in capital formation, the partial reform in the capital market and the increase in redemption of the internal debt. All this

provided the government with an excellent opportunity to privatize government corporations on good terms, a goal which it had advocated on many occasions. However, the government failed to complete the required preparations, and the opportunity was missed.

2. MONETARY POLICY

During 1989 the recession (which started in the second half of 1987) deepened. The inflation rate remained in the 15–20 percent range, more than 10 percentage points above the inflation rate of Israel's major trading partners. This situation served only to exacerbate the dilemma facing monetary policy-makers. On the one hand, in a fixed exchange-rate regime, the aim of which is to gradually reduce the gap in inflation rates, devaluation expectations are formed from time to time, with concomitant sharp swings in foreign reserves. As a result, a restrictive monetary policy is called for, raising local interest rates in order to maintain the reserves. On the other hand, the economic and social cost of the recession dictates an expansionary monetary policy, which would reduce the high interest rates on credit and help to strengthen real economic activity.

The attempt to grapple simultaneously with both of these problems has been the focus of monetary policy during the past two years. It is important therefore, to analyse several basic characteristics of the dilemma.

The long-run aim of monetary policy is to reduce inflation. Since a high rate of inflation over an extended period has an adverse effect on both productivity and the efficiency of the production process, there is no conflict in the long run between holding down inflation and encouraging real economic activity.

In 1985, as part of the economic stabilization program, it was decided that the exchange rate should be kept stable, to serve as the central anchor for price levels. The rationale for this was that the exchange rate has a direct bearing on a variety of prices, as well as on the value of many transactions; furthermore, information concerning the exact rate is updated daily and is readily available. A stable exchange rate over an extended period, even during a period of price rises, helps to keep prices steady, since an increase in the prices of local relative to foreign products reduces the demand for the former.

A stable exchange rate also demonstrates readiness on the part of the monetary authorities to maintain their efforts to contain inflation. After the first dramatic success of the stabilization program in 1985, it was decided to retain a stable exchange rate in view of the considerable importance attached to reducing the inflation-rate gap between Israel and its principal trading partners. In spite of the significant contribution made by the stable exchange rate as a nominal anchor, experience has shown that it is not an absolute anchor for prices. The rate of inflation ceased to fall after 1985 in spite of the fact that adjustments to the exchange rate lagged significantly behind inflation.

The efficacy of the exchange rate as a nominal anchor is limited by two main factors. First, a significant proportion of local production consists of nontradables, and their

price levels are determined primarily by local supply and demand. Second, a stable exchange rate does not mean one which is permanently fixed. In order to avoid undue damage to real economic activity the rate is adjusted, but only occasionally and in as small amounts as possible. The drastic change in the exchange rate regime introduced in the 1985 stabilization program was designed, together with other steps, to achieve a massive drop in inflation, and indeed succeeded in doing so. By contrast, the object of current policy is to bring about a gradual reduction in inflation, while making allowances for the other costs of the remaining inflation and the adverse effects on real economic activity. In a currency regime of this kind, devaluation expectations are generated from time to time, accompanied by cyclical money flows. In order to weaken the latter and protect the stable exchange rate, the Bank of Israel allows nominal interest rates to respond to the capital flows, somewhat reducing their profitability. The duration and intensity of these cycles varies, but in general they increase uncertainty and divert resources to unnecessary financial activity. As described in the preceding section, in 1989 the Bank of Israel took various steps to alleviate the situation, such as the management of the exchange rate within a permitted band and the introduction of foreign-currency options (see further discussion in Chapter 6).

As regards the goal of encouraging economic activity, it should be borne in mind that the major problems currently bedevilling economic activity in Israel, other than interest rates, cannot be solved by monetary policy. The main forces generating the decline in demand during the last two years, other than the decline which is an outcome of the recession, are reduced defense consumption, the reaction of private consumption to excessive growth in 1986 and 1987, and the *intifada*—none of which are affected by current monetary policy.

The principal supply-side problems are likewise unconnected with monetary policy. Instead, they are a result of certain institutional arrangements and government intervention in the economy, both of which act as a restraint on competition and limit the development of incentives to produce efficiently. They include the introduction of a minimum wage, excessive protection from import competition, a highly concentrated structure in many branches of production, and rigidity of wages and employment.

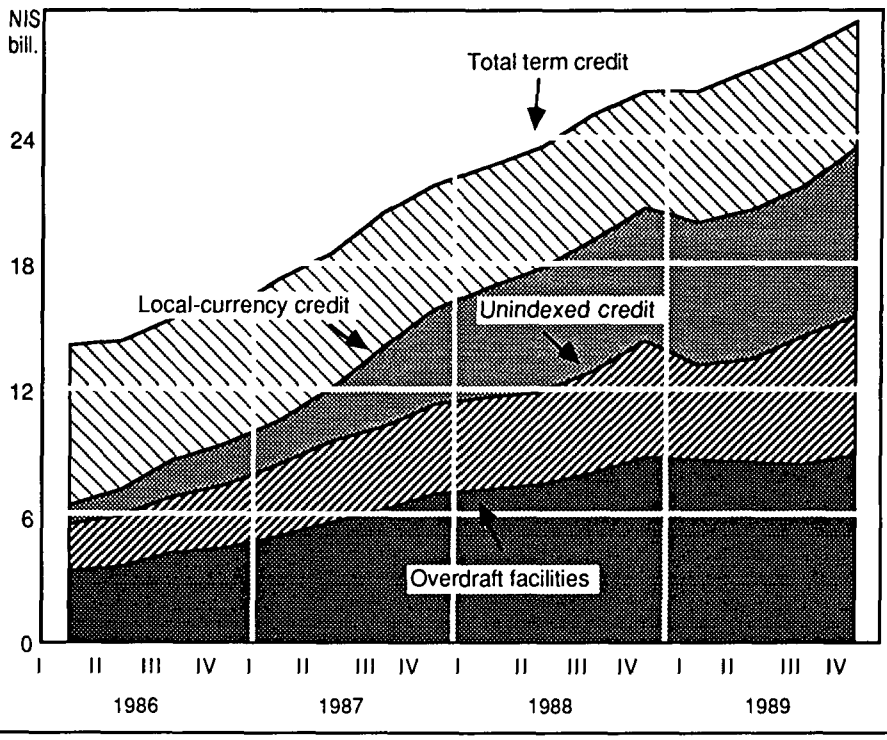
The area in which there is a connection between monetary policy and the supply of goods is that of real interest rates on local-currency credit, whose high level during the last few years has reduced business-sector profitability. As mentioned, the slow pace of interest rate reductions is part of the monetary policy intended to preserve the stability of the exchange rate. It was also dictated by structural considerations, however, such as the high concentration of the banking sector, as well as by the slow reduction in local-currency liquidity requirements, dictated in part by the limited ability of the Bank of Israel to offset the effects of a reduction in liquidity ratios on the money supply. Since the contraction of the structural element of high local-currency lending rates should increase supply and demand to about the same extent, it does not generate pressure on either the balance of payments or the rate of inflation.

The conventional trade-off between inflation and economic activity is connected with

the effect of monetary policy on the aggregate demand for commodities. When aggregate demand rises, the level of real economic activity increases in the short term, as does the rate of inflation. In a small, open economy such as Israel, however, a large part of any change in local demand affects the balance of payments, and the effect on the rate of inflation and short-term economic activity is weaker than in a closed economy. In addition, where supply difficulties, such as those mentioned above, impose constraints on output, an increase in demand will lead to a balance of payments deterioration combined with accelerated inflation. Consequently, the trade-off is less pronounced in Israel than in larger and more developed countries.

The monetary policy of the past two years reflects a compromise between the two aims mentioned—reducing inflation by stabilizing the exchange rate and protecting the foreign reserves as against stimulating economic activity by reducing interest rates. In the first nine months of 1988 the main emphasis was on lowering interest rates via an expansionary monetary policy. This changed during the last quarter of 1988, when the Bank of Israel permitted a jump in interest rates particularly on the banks' resources, as a counterweight to the sharp speculative pressure of foreign-currency buying.

Figure 7.3
Short-Term Bank Credit, 1986–89 [a]



[a] At December 1988 prices.

The basis for monetary policy in 1989 was defined just before discussions on the government budget for that year. In 1989 economic activity remained slack and unemployment grew appreciably, which would have led one to expect some reduction in inflation. The devaluations at the start of the year were perceived as a non-recurring adjustment of relative price levels, which would not generate increased inflation. Accordingly, the level of interest rates on local-currency credit at the end of 1988 was perceived as high, both internationally and in the light of the local economy's predicament. Thus, it was decided to maintain the broad outlines of monetary policy that had been applied in 1988, encouraging a more rapid reduction in interest rates on local-currency credit and a narrowing of the gap between them and interest rates on local currency deposits. This would hold provided there was no run on foreign currency as a result of renewed devaluation expectations.

Early in 1989 the policy of interest-rate reduction was applied in the traditional manner of expanding the resources made available to the banks for extending credit. In the first quarter the public deposited large quantities of local currency with the banks as a result of foreign-currency sales. The expansionary policy of the Bank of Israel during this period enabled the banks to repay relatively expensive loans (as detailed in the next section). The Bank of Israel also reduced the interest rates on these loans, making the sources available to the banks substantially cheaper. The rate of interest on the monetary tenders fell to 21 percent in January, 15 percent in February and 13 percent in March—the lowest levels ever set by the Bank. SRO interest rates declined accordingly, reaching 12 percent in March. On their part, the banks lowered interest rates on credit, but not fast or far enough for the needs of the economy.

In view of these developments, the Bank of Israel exerted pressure in March and April to accelerate the pace of interest-rate reduction, and went so far as to announce that if necessary it would act by means of administrative fiat in order to achieve the desired aim. Interest rates on credit went down to 29 percent in June and they continued falling slowly almost to the end of the year.

In the middle of May the public began buying foreign currency again, despite the fact that the basic account on the balance of payments was almost balanced. In the middle of June, when the pressure of these purchases grew, a decision was taken on an early devaluation of 6 percent against the basket of currencies. This was done in order to improve the employment situation and strengthen exports, in the hope that it would have only a limited effect on the level of inflation, given the recession. The devaluation was timed so as to limit sharp movements in foreign currency, and in fact foreign-currency purchases in the third quarter were relatively modest. In the final quarter, however, they rose again, totalling some $800 million.

In order to control the wave of foreign-currency buying, the Bank of Israel operated on two planes. In a traditional move, the Bank did not increase the amount of money made available through the monetary auction to the full extent of that absorbed from the money supply through foreign-currency buying. In addition, the Bank raised interest rates at the ordinary discount window. These moves forced the banks to borrow at more

Table 7.6
Domestic Budget Deficit (Consolidated Balance Sheet of Central Government and Central Bank), 1985–89[a]

(percent of GNP)

					1989				
	1985	1986	1987	1988	Total	I	II	III	IV
Deficit									
Estimated expenditure[b]	40.4	39.3	41.2	43.5	42.1	44.7	39.5	45.3	38.7
less Tax revenue	44.9	48.4	47.7	46.3	41.8	46.7	39.4	40.3	40.9
subtotal: Deficit excl. interest	–4.6	–9.1	–6.5	–2.8	0.2	–2.0	0.1	5.0	–2.2
Interest receipts[c]	5.6	5.7	5.8	5.2	5.4	4.6	6.0	4.5	6.6
Total domestic deficit	1.0	–3.4	–0.7	2.4	5.7	2.6	6.2	9.5	4.4
Financing									
Money creation (change in M2 base)	6.2	1.8	2.5	–1.5	0.8	5.2	–2.2	3.7	–3.3
Net increase in internal public debt[d]	–10.9	–7.2	–3.0	1.4	5.5	–0.8	7.7	9.7	5.2
Purchases of foreign currency	6.7	3.3	1.7	6.5	–0.5	–16.8	4.0	3.9	7.1
Net effect of monetary policy on the local-currency segment[e]	–1.0	–1.3	–1.9	–4.1	–0.2	15.1	–3.4	–7.8	–4.6

[a] The general government deficit shown here differs from that of Chapter 5 in two respects: (a) Cash basis (this table) versus accrual basis ; (b) the deficit figures in this table do not include that part of the deficit of the local authorities, the National Institutions, and publicly supported private nonprofit institutions which is not financed by the central government. (c) The data here do not include that part of the deficit of local authorities, the National Insurance Institute, and the publicly supported nonprofit institutions which is not financed by the government. The deficit of the Jewish Agency is included both here and in Chapter 5.

[b] Expenditures are calculated as the sum of tax receipts and the deficit figure obtained from the financing side.

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

[d] Increase in the government asset base *less* net credit from the government. This is the balancing item.

[e] Interest on the money base *plus* the implicit budgetary outlay of discount-window lending *less* liquidity fines. See also Table 7.7.

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

expensive ordinary discount window brackets, with interest rates at the monetary auctions rising concomitantly from an average of 10 percent during the third quarter to 15 percent during the final quarter. During the same period, interest on SROs rose from 10 percent to 12 percent. The banks raised interest rates on local-currency credit during the last two months of the year, but these remained below 30 percent, the upper limit set by the Bank of Israel in May 1989.

A new financial instrument, foreign-currency options, was introduced by the Bank of Israel in November 1989 with the purpose of limiting movements in foreign currency. The option gives the buyer the right to buy foreign currency from the Bank of Israel at a predetermined exchange rate 90 days after buying the option.[5] The Bank of Israel offers options to the value of $3 million at daily auction, and by the end of the first three months the balance of options totalled some $150 million.

Another significant development in 1989 was the raising of capital by the government in marked excess of its requirements for financing the budget deficit and debt servicing. This led to a significant absorption from the narrow money base and necessitated a suitable reaction in terms of monetary policy. The budget deficit (on a cash basis and excluding the Jewish Agency) rose to 5.1 percent of GDP as compared to 1.7 percent in 1988 and surpluses in 1986 and 1987. Such a large rise in the budget deficit, requiring commensurate financing, would not have been expected to lead to net monetary absorption by the government. Nonetheless, significant amounts were absorbed from the money base—2 percent of GDP in 1988 and 2.5 percent in 1989. Net capital raised by the government, which generated this monetary absorption, reached 3.7 percent in 1988 and 7.6 percent in 1989. The surplus financing raised in 1989 was not uniform throughout the year. During the first 8 months it reached NIS 600 million, an amount which can be explained by the upcoming redemption of Arrangement Bank Shares at the end of October 1989, in the amount of NIS 850 million. In September alone a further NIS 970 million were added to the financing surplus, as a result of private sector deposits in the dollar/index bank saving schemes.[6] The amounts accumulated in these saving schemes were not anticipated or desired by the Ministry of Finance and they stemmed from a loophole in the agreements governing these schemes between the

[5] Strictly speaking, the options are not a right to buy foreign currency. The buyer receives local currency which includes devaluation profits if the option is realized.

[6] The increased share of saving schemes at the end of 1988 reflects extensive temporary deposits in accounts which were prematurely withdrawn after the devaluations around the turn of the year. The large amounts saved in dollar/index schemes derived from the fact that the Ministry of Finance did not adjust the interest rate of this scheme to the drop in yields on the bonds serving as cover for alternative schemes, such as the Tesua scheme, which was linked solely to the index. Saving began building up as the date for redeeming bank shares approached. When one of the five major banks embarked on a campaign to attract new customers to this scheme, the other banks had to follow suit. These campaigns enabled savers to open dollar/index saving accounts which were financed in part by the bank's credit sources and in part by the saver. The basic interest terms on this saving and credit were similar, but the banks received a 2.5 percent distribution fee for deposits made with the Ministry of Finance arising from these schemes. Thus, a net financial margin, which was shared by the banks and their customers, was created at the expense of the Ministry of Finance.

Table 7.7
Potential and Actual Revenue from Money Creation, 1984–89[a]

(percent of GNP)

	1984	1985	1986	1987	1988	1989 Total	1989 First half	1989 Second half
Inflation tax[b]	3.3	3.2	1.3	1.1	1.0	0.8	1.0	0.7
Money creation	2.9	6.2	1.8	2.5	–1.5	0.8	1.5	0.2
less Interest on money base[c]	0.7	1.7	0.8	0.8	0.4	0.2	0.1	0.2
Interest on discount-window loan[d]	1.1	0.7	0.0	0.0	–0.0	0.4	0.4	0.3
Subtotal	**3.2**	**5.2**	**1.0**	**1.7**	**–1.9**	**1.0**	**1.8**	**0.3**
less Change in discount-window loan	0.6	–0.0	0.5	1.2	3.7	0.4	–5.6	6.3
Net revenue from money creation	**2.6**	**5.2**	**0.5**	**0.6**	**–5.5**	**0.7**	**7.4**	**–6.0**

[a] See note a to Table 7.A2.

[b] The decline in the real value of the M2* base due to inflation; the figures are the product of the M2* base and the rate of inflation, calculated monthly.

[c] Interest paid on deposits with central bank.

[d] Includes liquidity-deficit fines.

SOURCE: Bank of Israel.

Ministry of Finance and the banks which was not rectified in time. It could have been assumed that the Ministry of Finance would offset the financing surplus over the following few months. However, the over-financing of the deficit continued, amounting to NIS 450 million in the final quarter of 1989 and a further NIS 350 million in January and February 1990.[7]

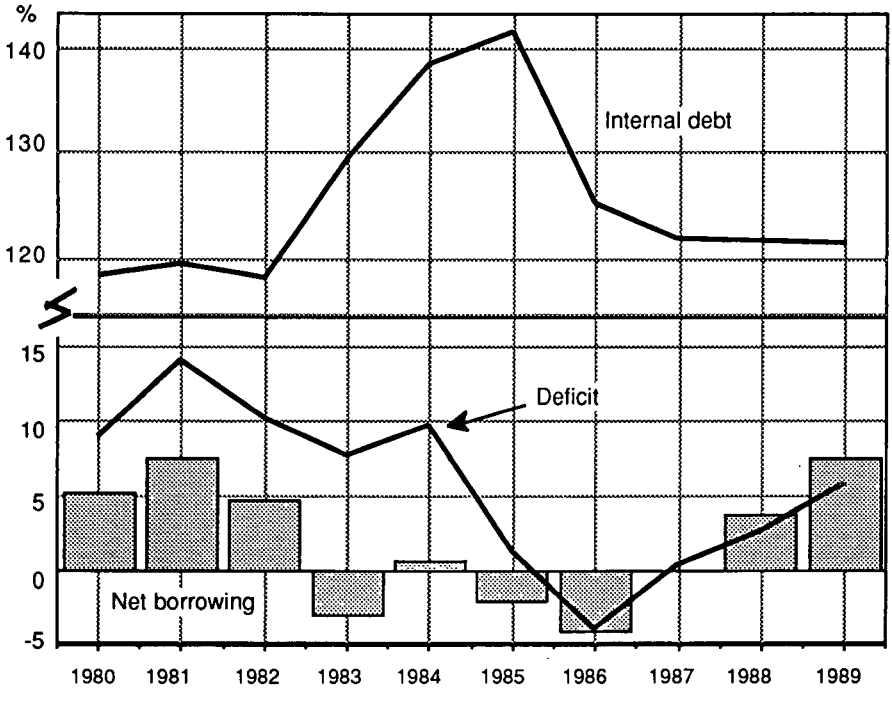
The Ministry of Finance justified the surplus financing by the need to provide a continuous presence in the market and prevent a further decline in bond redemption yields which might harm private saving, as well as by its desire to provide cover for the deposits in provident funds. It would appear that the first two claims are unjustified. The claim concerning government presence in the market is at best correct as far as gross financing is concerned. Had it not been for the surplus financing the latter would have totalled NIS 4 billion, a scale of financing which constitutes a strong market presence. The claim concerning the encouragement of saving needs to be weighed against the

[7] These figures of monetary absorption by the government are an underestimate, since they include monetary injection and amounts transferred by the Ministry of Finance to the Bank of Israel in repayment of resident and nonresident deposits (for details, see the Bank of Israel, *Financial Statements for 1989*, pp.16–19). The details in this section differ from those in Table 7.6, because they exclude the Jewish Agency deficit, on the grounds that the local Jewish Agency deficit is financed directly from foreign-currency transfers of the Agency. Foreign-currency purchases in the private sector are commonly viewed as an additional, indirect source of finance for the domestic government deficit, and in most years this item would increase the extent of over-financing even more. Net foreign-currency purchases in 1988 and 1989 were heavily influenced by speculative capital movements around the end of the year, and these purchases cannot therefore be viewed as a stable source of budget finance. For this reason, the surplus financing has been estimated as the net domestic financing relative to the budget deficit.

possible harm to the level of business investment. In 1989 forces were created which led to an increase in private saving, but the level of business investment dropped drastically. It seems, therefore, that the damage caused to business investment as a result of the maintenance of high interest rates was greater than the harm that might have befallen private saving had interest rates not been allowed to fall further. In this context, it should be borne in mind that Treasury bonds are indexed and are backed by the government's guarantee, so that the danger of any reduction in their real value is considerably less than the risk associated with corporate securities. Finally, the claim concerning provident funds is based on the desire to reduce discrimination of the provident funds vis-à-vis the pension funds and the insurance companies, saving instruments which benefit from non-marketable cover on preferential terms (for further details see Section 5). This last claim might be justified to some extent, but the reduced pressure to lower interest rates, which can be related to the continuing preferential treatment of the pension funds and insurance companies, is harmful to the economy.

In order to prevent a sharp reduction in the money base and pressure for a rise in interest rates as a result of the surplus government financing, the Bank of Israel was obliged to expand the discount-window loan facilities to the banks. As a result, the

Figure 7.4
Internal Debt, Government Deficit, and Net Borrowing, 1980–89 [a]



[a] Percent of GNP.

private sector was left holding medium and long-term indexed bonds as against short-term liabilities to the Bank of Israel, the nominal yields on bonds being higher than the nominal interest rates on the monetary loans. Thus, these activities created a certain budgetary burden,[8] as well as distorting the net position of the public sector at various repayment dates. It is difficult to grasp what advantage can be derived from these developments as against the price paid.

3. THE TOOLS OF MONETARY POLICY

During 1989 the Bank of Israel continued to deploy the tools of monetary policy as first introduced at the end of 1987. These allow the Bank to influence either the quantity or the cost of liquid assets available to the banks, depending on current policy needs. The principal tools available to the Bank for the management of current monetary policy are the two types of discount-window loans—the ordinary loan and the auction loan. The other tools available to the Bank, such as liquidity requirements, Treasury-bill market operations and interest rates paid by the Bank on liquid assets, are used primarily for long-term ends and are of secondary importance in short-term policy operations.

The two types of discount-window loans differ from each other in their economic characteristics, although they are similar in accounting and legal terms, both being loans which the banks obtain from the Bank of Israel.

The ordinary loans are extended in a number of brackets, at increasing rates of interest which are set by the Bank of Israel. Each bank's access to every bracket is determined by its share of the liquid assets held by the banking system as a whole. Each bank is allowed to take up and repay the ordinary loan on a daily basis (provided its monthly average utilization stays within its allotted share). Thus the Bank of Israel determines the size of the loans available in each bracket, the interest rates, and the guidelines for allocation among the banks, while each bank determines the size of the loan it takes up.

By contrast, in allocating the auction loan to the banking system, the Bank of Israel sets a maximum sum for the loan available, while both the rate of interest and the allocation among the banks are determined by bidding. The Bank of Israel normally determines the minimum interest rates prior to the auction. Very occasionally, when there is a surfeit of liquid assets and the banks are able to dispense with most discount-window loans, it is they who determine the size of the loan taken up at auction. Usually, however, the full amount of the available loan is taken up by the banks at auction, so that the quantity is set by the Bank of Israel and the rate of interest by the banking system. Since each bank is interested in minimizing the costs of its resources, its offer at auction will be determined by its assessment of both its own needs for the ordinary loans and those of the other banks. The interest rates will accordingly be set in the region of the marginal cost of the ordinary loan taken up.

[8] For example, a financing surplus of 1.5 percent of GDP taken together with a 7 percentage points gap in interest rates, creates a burden of 0.1 percent of GDP.

Table 7.8
Real Cost of Short-Term Credit, 1986–89[a]

(percent p.a.)

	Before tax						After tax[b]					
				1989						1989		
	1986	1987	1988	Total	First half	Second half	1986	1987	1988	Total	First half	Second half
Nondirected short-term credit	17.5	26.2	18.9	10.0	11.8	8.2	8.0	14.4	10.4	5.5	6.5	4.5
Local currency	24.8	29.9	21.3	8.7	8.1	9.4	11.4	16.4	11.7	4.8	4.4	5.2
Overdraft facilities	35.0	39.4	25.6	11.3	10.2	12.4	16.1	21.7	14.1	6.2	5.6	6.8
Fixed-term credit	15.3	19.7	14.5	4.9	4.3	5.4	7.1	10.9	8.0	2.7	2.4	3.0
Foreign currency[c]	–1.2	6.9	3.5	18.1	38.6	0.6	–0.6	3.8	1.9	9.9	21.2	0.3
Subject to ceiling	12.3	17.9	12.5	24.2	46.4	5.4	5.6	9.9	6.9	13.3	25.5	3.0
Exempt from ceiling	–9.2	–2.3	–3.0	12.4	31.6	–4.0	–4.2	–1.2	–1.7	6.8	17.4	–2.2
Directed credit	–6.5	0.1	–2.8	11.1	30.9	–5.7	–3.0	0.0	–1.5	6.1	17.0	–3.1
Local currency	–1.4	2.4	–1.0	–4.5	–8.1	–0.8	–0.6	1.3	–0.6	–2.5	–4.5	–0.4
Foreign currency[c]	–6.5	0.1	–2.8	11.1	30.9	–5.7	–3.0	0.0	–1.5	6.1	17.0	–3.1
Total short-term credit[d]												
Average cost	10.2	19.7	14.4	10.5	15.2	6.0	4.7	10.8	7.9	5.8	8.4	3.3
Standard deviation	14.5	16.2	10.1	14.5	22.5	6.5	6.7	8.9	5.6	8.0	12.4	3.6

[a] Deflated by an index approximating the end-of-month price level, constructed as the geometric mean of adjacent monthly CPI.

[b] Assuming that real interest is tax deductible and that the tax rate was 54 percent in 1986 and 45 percent in 1988–89 (for development loans, 30 percent in 1986 and 25 percent in 1988–89).

[c] Nominal interest on dollar-linked loans is calculated as $[(1 + r)(1 + e) - 1]100$, where r is the nominal interest rate in terms of dollars and $1 + e$ is the NIS/$ exchange rate.

[d] Weighted by the composition of credit (average balances).

SOURCE: Bank of Israel.

In this respect, the auction loan is somewhat similar to open market operations, in that the central bank determines the quantity and the market sets the interest rate. Since these monetary tools were introduced, an interbank market in liquid assets has developed considerably, and the banking system now utilizes the reserves at its disposal with much greater efficiency.

To understand the management of current monetary policy it is convenient to classify the Bank of Israel's activities into two categories: (a) defensive operations, which are designed to offset technical changes in the money base not under the Bank's direct control; (b) active operations, which are intended to attain the basic aims of monetary policy.

As an example of defensive operations, at the turn of each month the government injects large amounts for debt servicing and salary payments. Taxes are collected only in the middle of the month, however. This gives rise to a large swing in both the money base and the banks' liquid assets during the course of the month. The main tool for dealing with this imbalance in the money market is by conducting reserve accounting on a monthly basis. The money flows are sometimes so large, however, that regulating action is required through discount-window loans, thereby preventing undesirable shifts in either interest rates or the quantity of money and credit.

Active monetary operations are illustrated by an increase in discount-window loans in reaction to private sector foreign-currency purchases, in order to prevent excessive rises in interest rates.

4. REFORM OF THE MONEY AND CAPITAL MARKETS

The economic stabilization program of 1985 increased awareness of the need to develop a program of comprehensive reform in the financial markets, and plans have in fact been developed in certain areas. These include reducing government involvement in the capital market as a result of reductions in budget deficits, rolling over the internal debt, privatizing government enterprises—including banks—and perfecting market forces by encouraging competition and reorganizing market structure and regulation. The plans also included changes in the money market, such as a gradual reduction in liquidity requirements on local currency, the removal of barriers between various types of short-term credit, and the encouragement of innovation in the market. So far, these plans have been realized only in part. During 1986 and 1987 the reforms were concentrated in the capital market, namely, rolling over the internal debt, reducing the mandatory deposits of institutional investors with the Ministry of Finance, relaxing controls on the issuing of securities by the private sector, and laying the foundations of privatization. The first results of these steps were visible in 1987. Securities issues by the private sector increased markedly and long-term interest rates dropped somewhat. The pace of capital market reform slowed down considerably in 1988, however. No new administrative steps were taken and privatization virtually ground to a halt. Some processes did

Table 7.9
Principal Stock Market Indicators, 1987–89

	1987	1988	1989		
			Total	1st half	2nd half
Millions of December 1989 NIS[a]					
New issues	515	191	673	116	557
Commercial-bank shares	*4*	*0*	*0*	*0*	*0*
Other shares	*96*	*100*	*100*	*100*	*100*
Market value (end of year)	26,181	11,023	16,153	14,239	16,153
Commercial-bank shares	*60*	*32*	*19*	*28*	*19*
Other shares	*40*	*68*	*81*	*72*	*81*
Volume of stock-exchange trade (on and off the floor)	11,071	4,927	7,723	3,192	4,531
Commercial-bank shares	*29*	*41*	*20*	*25*	*16*
Other shares	*71*	*59*	*80*	*75*	*84*
Annual turnover[b]					
Commercial-bank shares	0.20	0.16	0.43	0.46	0.40
Other shares	0.65	0.36	0.59	0.52	0.66
All shares	0.40	0.23	0.55	0.50	0.59
Real overall rate of return[c] (percent)					
Commercial-bank shares	5.1	–2.6	16.8	24.7	–6.4
Other shares	6.4	–31.3	64.7	36.7	20.5
All shares	5.3	–14.2	48.5	30.5	13.7

[a] Monthly deflation. Figures in italics are percentages.

[b] Ratio of monthly volume of trade (on and off the floor) to average monthly market value of the stock of shares.

[c] Deflated by end-of month CPI.

SOURCE: Bank of Israel and Central Bureau of Statistics.

continue, among them the reduction in mandatory deposits with the Ministry of Finance imposed on long-term saving instruments (principally those of the provident funds, taxable indexed deposits, and some saving schemes).

Although the importance of the steps taken should not be underestimated, the salient feature of 1989 would seem to lie less in what was done than in what was not. The continued rise in saving and the drop in investment provided a golden opportunity for privatizing government enterprises by selling them off in the local market to the general public, but the opportunity was missed.

Towards the end of the year agreements were reached for the sale of the banks and the equalization of their share rights. These agreements were reached only after the threat of legislation for share right equalization which even reached the stage of a draft law on the subject in the Knesset. However, with the signing of the agreements it appears that the prospect of increasing competition in the banking system and alleviating conflicts of

interest has diminished. Breaking up the banking concerns would have altered the ownership structure in the commercial banking sector as well as in allied areas of financial intermediation.

The establishment of a rating company, which would grade securities issues in the private sector, has been delayed. In addition, the Ministry of Finance has failed in its attempts to change the terms of the special deposit requirements of the life assurance companies and the Histadrut (the General Federation of Labour) pension funds by adjusting them to normal market conditions.

In short, over the last few years there has been real progress in reducing direct government involvement in the money and capital markets (despite the growth in the budget deficit), but the government and its allied agencies have not yet made the decisions required to ensure the successful and speedy development of a private capital market for the encouragement of lasting economic growth.

5. ACTIVITY IN THE CAPITAL MARKET

The principal factors influencing the components of the capital market during the year operated on all of them together. These included the devaluations of December 1988 and January 1989 and expansionary monetary policy, as well as the increase in both private saving and the government deficit. All this led to an increased demand for securities, raising stock market prices and depressing yields to redemption .

After some slackness in the shares market in 1988, it boomed in 1989. Real yields on nonbank shares reached 65 percent in 1989, compared with a drop of 30 percent in 1988. There was a marked increase in the volume of trading on the stock market and in new issues. The volume of turnover in share transactions reached 55 percent of the total share market valuation in 1989, compared with 23 percent in 1988. New share issues totalled NIS 700 million in 1989 compared with NIS 200 million in 1988.

The stock market prosperity extended to the market in both CPI-indexed and exchange rate-indexed government bonds, which showed a real yield of 13 percent.

In spite of the attractive conditions in 1989, the volume of new bond issues fell from approximately NIS 1 billion in 1988 to less than NIS 900 million in 1989, a fall in real terms of 26 percent. Furthermore, some 70 percent of the new bond issues in 1989 originated from government enterprises compared with 33 percent in 1988. All the issues benefited from the fall in the average costs of raising capital in 1989 as against 1988, and the change does not reflect the shift in the proportions of private and public sector issuers. The reduced volume of bond issues would seem to be a reflection of the ongoing recession in general, and the low level of investment in particular.

The Histadrut remains adamantly opposed to attempts by the Ministry of Finance to change the terms of the special government bonds issued to the pension funds by adjusting them to normal market conditions. The fall in redemption yields on other investments has created an ever-increasing gap between their yield and that guaranteed

on pension fund investments (6.2 percent in real terms). This anomaly has distorted the allocation of saving and investment and stands in blatant contradiction to the principles of capital market reform. In addition, since taxation is the marginal source for the redemption of government bonds, the preferential government bonds issued to the pension funds are creating a future tax burden, again contradicting the aim of reducing taxes in order to amend the distorted network of incentives in the Israeli economy.

Table 7.10
Principal Bond Market Indicators, 1987–89

			1989		
	1987	1988	Total	1st half	2nd half
Market value of listed bonds (NIS million[a])	22,450	31,450	41,185	38,364	41,185
of which Held by[b] the public	*36*	*28*	*21*	*22*	*21*
commercial banks	*23*	*22*	*21*	*24*	*21*
social insurance funds	*38*	*47*	*55*	*51*	*55*
Volume of stock-exchange trade (NIS million[a])	3,233	3,493	5,943	2,820	3,123
of which Bank of Israel intervention[c] (percent)	*5.77*	*1.93*	*0.00*	*0.00*	*0.00*
Issues of tradable bonds (NIS mill.[a])	3,877	5,826	2,714	1,186	1,528
Annual turnover[d]	0.17	0.13	0.16	0.16	0.16
Real overall rate of return (percent)					
CPI-indexed bonds	7.9	4.6	13.7	14.3	–0.5
Exchange-rate indexed bonds	1.1	3.5	12.7	18.1	–4.6

[a] At December 1989 prices.

[b] Percent. The remaining shares are held by the Bank of Israel.

[c] Ratio of the central bank's sales and purchases in the secondary market to total volume of stock-exchange trade in bonds.

[d] Ratio of monthly volume of trade (on and off the floor) to market value of the stock of bonds. Calculated from monthly ratios.

SOURCE: Bank of Israel and Central Bureau of Statistics.

Table 7.A1
Monetary Indicators, 1984–89[a]

(NIS million, average balances)

	1984	1985	1986	1987	1988	1989
Narrow money base	132	1,145	2,558	3,824	3,770	3,783
Money supply	137	620	1,671	2,676	3,528	4,497
Unindexed short-term assets[b]						
Excl. resident deposits	1,651	6,765	9,762	13,384	15,963	19,072
Excl. treasury bills	1,648	6,667	9,661	12,840	15,368	17,976
Total	388	2,535	5,793	9,943	12,518	15,088
Total short-term assets	2,510	10,042	15,323	20,626	24,230	30,614
Short-term assets + bank shares	3,240	13,498	20,191	26,601	30,032	33,952
Total financial assets	10,732	46,823	73,606	97,066	112,233	144,531
Bank credit to nonfinancial private sector	1,394	5,883	9,706	15,319	22,180	30,348
Medium and long term credit	2,642	11,703	18,494	23,572	27,348	31,494
Net financial wealth of nonfinancial private sector	6,675	29,553	46,132	55,469	62,680	78,132

[a] For details see Tables 7.A10, 7.A11, 7.A13, 7.A14, and 7.A15.
[b] Money supply, SROs (CDs), time deposits, treasury bills.

SOURCE: Bank of Israel.

Table 7.A2
Growth of M3, 1987–89

	NIS million				Percent of GNP[a]						
		1989					1989				
	1988	Total	First half	Second half	1987	1988	Total	I	II	III	IV
Contribution of balance of payments and NDC											
Foreign-currency transfers	–3,067	1,477	3,519	–2,042	2.5	–4.3	2.5	21.9	–2.4	–0.4	–9.0
Change in NDC[b]	3,906	2,345	–1,872	4,217	3.2	5.8	2.3	–14.1	3.5	5.5	14.1
To the government	–741	–501	232	–732	1.1	–1.1	–0.5	4.4	–3.0	–4.4	0.9
To the public	4,647	2,845	–2,104	4,949	2.2	6.9	2.8	–18.5	6.4	10.0	13.3
Total purchases	839	3,822	1,647	2,175	5.8	1.5	4.8	7.8	1.1	5.1	5.1
Contribution of revaluation											
Foreign reserves	566	877	621	256	1.5	0.8	1.1	–0.6	3.7	0.5	0.7
NDC	80	–452	–207	–244	–1.1	0.2	–0.5	0.8	–1.8	–0.7	–0.4
To the government	638	–1,604	–1,910	307	–2.9	0.9	–2.2	–8.6	–1.,7	2.3	–0.7
To the public	–558	1,152	1,703	–551	1.7	–0.7	1.6	9.4	–0.1	–3.0	0.3
Total revaluation	646	425	414	11	0.3	0.9	0.5	0.2	2.0	–0.2	0.2
Total change in M3 balances											
Foreign reserves	–2,502	2,354	4,140	–1,786	4.0	–3.5	3.6	21.2	1.4	0.1	–8.4
NDC	3,986	1,893	–2,079	3,972	2.1	5.9	1.7	–13.3	1.7	4.8	13.7
To the government	–103	–2,104	–1,679	–426	–1.8	–0.2	–2.7	–4.2	–4.7	–2.1	0.1
To the public	4,089	3,997	–401	4,398	3.9	6.1	4.4	–9.1	6.4	6.9	13.6
Total change	1,484	4,247	2,061	2,186	6.1	2.4	5.3	7.9	3.1	4.9	5.4

[a] Average of monthly ratios (monthly GNP estimated from quarterly data).
[b] Excluding revaluation.

Table 7.A3
The Money Base, 1986–89

(NIS million, end-of-period balance)

	Cash in circulation (1)	Liquid assets of banks (2)	Narrow money base (1)+(2) (3)	Broad money base: Recognized liquidity deficit (4)	Broad money base: Total (3+4) (5)	Change over preceding period, % (6)
1986	974	1,913	2,887	4	2,891	33.4
1987	1,365	2,798	4,163	2	4,165	44.1
1988	1.643	1,526	3,170	8	3,178	–23.7
1989						18.0
January	1,567	1,973	3,540	7	3,547	11.6
February	1,628	1,747	3,375	2	3,378	–4.8
March	1,762	2,355	4,117	4	4,121	22.0
April	1,868	1,868	3,736	5	3,741	–9.2
May	1,864	1,938	3,802	3	3,805	1.7
June	1,934	1,762	3,695	0	3,695	–2.9
July	1,989	1,760	3,749	0	3,749	1.5
August	2,034	1,202	3,237	0	3,237	–13.7
September	2,169	2,294	4,463	0	4,463	37.9
October	2,124	2,003	4,127	0	4,128	–7.5
November	2,135	1,672	3,808	0	3,808	–7.7
December	2,224	1,527	3,751	0	3,751	–1.5

SOURCE: Bank of Israel, Supervisor of Banks, *Current Banking Statistics.*

Table 7.A4
Unindexed Local Currency, 1986–89

(NIS million, end of period)

	Money supply (M1)				Other deposits				Total (3+5+6+7+8)	
	Currency in circulation (1)	Demand deposits (2)	Total (1+2) (3)	Total (3) seasonally adjusted (4)	CDs (5)	Time deposits (6)	Deposits against liabilities (7)	Treasury bills (8)	NIS million (9)	Change over preceding period (10)
1986	974	1,207	2,181	2,173	2,812	2,392	58	159	7,600	72.2
1987	1,365	1,922	3,287	3,193	4,096	3,517	77	555	11,532	51.7
1988	1,643	2,012	3,655	3,563	2,646	4,788	77	429	11,595	0.5
1989										45.2
January	1,567	2,034	3,602	3,873	3,386	5,006	39	810	12,842	10.8
February	1,628	2,071	3,699	3,897	3,249	5,395	56	1,129	13,529	5.4
March	1,762	2,244	4,007	3,726	3,792	5,656	56	1,277	14,788	9.3
April	1,868	2,353	4,221	4,281	3,990	5,586	49	1,331	15,176	2.6
May	1,864	2,323	4,187	4,371	3,858	5,695	51	1,355	15,147	–0.2
June	1,934	2,533	4,466	4,551	4,021	5,198	53	1,250	14,988	–0.1
July	1,989	2,521	4,509	4,517	3,991	5,323	49	1,016	14,888	–0.7
August	2,034	2,758	4,793	4,782	4,188	5,364	62	846	15,254	2.5
September	2,169	3.071	5,239	4,984	3,694	5,702	53	913	15,601	2.3
October	2,124	3,011	5,134	4,778	4,103	5,614	57	1,066	15,974	2.4
November	2,135	2,737	4,873	5,019	4,356	5,638	50	1,109	16,025	0.3
December	2,224	3,014	5,238	5,119	4,728	5,737	91	1,047	16,841	5.1

SOURCE: Bank of Israel.

Table 7.A5
Indexed Deposits of the Public and Its Securities Holdings, 1986–89

(NIS million, end of period)

	Approved saving deposits		Indexed long-term deposits[c]	Resident deposits[a]		Tradable securities[b]			Total (1)+(3) through (7)
	Total (1)	Principal (2)	(3)	Restitutions (4)	Other (5)	Bonds[d] (6)	All shares (7)	Bank shares (8)	(9)
1986	12,325	4,750	2,459	4,790	5,654	3,663	10,551	5,100	39,442
1987	15,113	7,902	4,165	5,664	5,730	5,146	13,776	6,737	49,595
1988	20,359	12,998	5,055	6,873	8,193	6,440	8,790	2,538	55,711
1989									
January	20,661	13,204	5,093	6,147	7,137	6,576	9,650	2,918	55,264
February	20,994	13,180	5,336	6,145	6,950	6,718	10,294	3,039	57,068
March	21,205	13,336	5,356	6,111	6,803	6,898	11,430	3,096	57,804
April	21,325	13,428	5,383	6,156	6,878	6,781	11,747	3,115	58,271
May	21,948	13,652	5,507	6,264	7,259	7,617	11,805	3,382	60,400
June	22,514	13,989	5,511	6,632	7,850	7.870	12,728	3,627	63,105
July	22,637	14,274	5,523	6,665	7,810	8,160	12,896	3,591	63,691
August	22,896	14,632	5,449	6,643	8,161	8,088	13,996	3,748	65,233
September	24,522	16,387	5,541	6,754	8,176	8,549	14,288	3,745	67,831
October	24,780	16,658	5,493	6,873	8,309	8.958	15,216	3,958	69,628
November	24,868	16,768	5,472	6,903	8,213	8,999	15,157	2,965	69,611
December	24,998	16,943	5,408	7,153	8,647	8,908	15,423	2,874	70,537

[a] Includes valuation adjustments for relative changes in foreign exchange rates. Includes nonresident deposits of Israeli residents entitled to hold nonresident deposits (e.g. new immigrants).

[b] At market prices. Includes shares held by banks; excludes shares held by the government.

[c] Includes indexation increments.

[d] At market prices. Excludes bonds held by commercial banks, the Bank of Israel, social insurance funds, and other institutional investors.

SOURCE: Bank of Israel, Supervisor of Banks, *Current Banking Statistics*.

Table 7.A6
Purchases[a] of M3, 1988–89

	NIS million				Percent of GNP[b]						
		1989					1989				
	1988	Total	1st half	2nd half	1987	1988	Total	I	II	III	IV
1. Total purchases of M3	839	3,822	1,647	2,175	5.8	1.5	4.8	7.8	1.1	5.1	5.1
Money supply	368	1,583	811	772	2.0	0.6	2.0	1.9	2.3	3.7	–0.0
Time deposits (incl. CDs and SROs)	–179	3,045	1,761	1,284	4.6	–0.0	3.9	10.9	–1.2	0.9	5.1
Resident deposits											
Demand	286	–521	–589	68	–0.4	0.4	–0.7	–3.6	0.4	0.2	0.1
Time	364	–285	–337	52	–0.5	0.5	–0.4	–1.4	–0.4	0.3	–0.1
2. Change in M3 base	–331	237	–95	332	1.6	–0.5	0.3	0.9	–1.3	5.2	–3.6
of which Change in narrow money base	–994	581	525	56	2.5	–1.5	0.8	5.2	–2.2	3.7	–3.3
3. Change in M3 originating in banking system (1 *less* 2)	1,170	3,585	1,742	1,843	4.2	2.0	4.5	6.9	2.4	–0.1	8.7

[a] I.e., the change in M3 excluding the automatic linkage component and revaluation.
[b] See note a to Table 7.A2.

Table 7.A7
Sources of Change in Unindexed Local-Currency Assets, 1986–89

	1986	1987	1988	1989 Total	1989 1st half	1989 2nd half
Percent of GNP						
General government (injection *plus* net sale of treasury bills)	1.3	2.3	–0.8	0.0	1.9	–1.9
Bank of Israel	0.9	0.7	4.7	–0.2	–7.7	7.4
Discount-window loan	*0.5*	*1.2*	*3.7*	*0.4*	*–5.6*	*6.3*
Directed credit	*–0.1*	*0.0*	*–0.1*	*0.2*	*0.4*	*0.0*
Other	*0.5*	*–0.5*	*1.1*	*–0.7*	*–2.5*	*1.1*
Resident deposits	–1.9	–0.6	0.6	–0.8	–2.6	1.0
Private purchases (–) of foreign exchange	–2.3	0.0	–5.6	1.1	7.2	–5.0
Domestic banking operations	5.7	4.3	2.4	5.2	5.6	4.8
Purchase of unindexed financial assets	7.4	8.0	0.1	7.0	9.8	4.3
Money supply	*2.9*	*2.0*	*0.6*	*2.0*	*2.1*	*1.9*
Time deposits and SRO (CD)	*4.6*	*4.6*	*0.0*	*3.9*	*4.9*	*3.0*
Treasury bills	*–0.1*	*1.4*	*–0.4*	*1.1*	*2.8*	*–0.5*
Valuation differentials on Treasury bills	0.0	–0.5	0.3	–0.3	–0.5	0.0
Total change in unindexed local-currency assets	7.4	7.4	0.4	6.8	9.2	4.3
NIS million, monthly rate						
General government (injection *plus* net sale of Treasury bills)	52.3	107.8	–44.6	–12.8	110.2	–135.8
Bank of Israel	27.0	39.6	280.2	32.7	–456.7	522.1
Discount-window loan	*13.8*	*56.0*	*220.1*	*57.2*	*–329.6*	*443.9*
Directed credit	*–4.2*	*1.7*	*–3.6*	*11.3*	*23.3*	*–0.7*
Other	*17.4*	*–18.0*	*63.7*	*–35.8*	*–150.4*	*78.9*
Resident deposits	–64.5	–23.9	39.4	–45.4	–160.4	69.7
Private purchases (–) of foreign exchange	–82.0	–11.1	–325.1	38.9	432.6	–354.8
Domestic banking operations	203.6	194.5	118.3	348.1	351.2	345.0
Purchase of unindexed financial assets	265.5	354.7	–10.7	452.2	597.7	306.7
Money supply	*99.3*	*92.2*	*30.7*	*131.9*	*135.2*	*128.6*
Time deposits and SRO (CD)	*166.9*	*202.4*	*–14.90*	*253.7*	*293.5*	*214.0*
Treasury bills	*–0.7*	*60.1*	*–26.4*	*66.6*	*169.0*	*–35.9*
Valuation differentials on Treasury bills	0.0	–27.1	15.9	–15.1	–32.2	2.0
Total change in unindexed local-currency assets	**265.5**	**327.7**	**5.2**	**437.1**	**565.5**	**308.7**

Table 7.A8
Effective Monthly Interest Rates, 1987–March 1990

(percent, annualized rates)

	Lending rate								Borrowing rate				
	π	E/$	OV	OVE	FTC	DWt	C$c	TBC	LAm	CD	TB	RD$	YTM
1987	16.1	4.4	61.9	74.6	42.8	25.3	31.1	39.0	18.8	17.6	19.1	5.1	19.8
1988	16.4	3.1	46.2	56.2	33.4	19.0	27.0	33.2	11.2	13.4	14.6	6.1	16.3
1989	20.7	22.2	34.3	41.8	26.6	13.8	22.7	33.4	8.6	11.6	14.1	7.1	13.0
1988													
January	20.8	11.1	55.6	69.8	35.6	21.0	27.7	39.8	12.0	14.7	15.1	5.1	15.9
February	10.4	14.9	53.2	62.6	36.7	17.9	27.6	40.5	12.0	12.7	13.8	4.8	16.8
March	21.7	–10.0	49.7	61.5	35.3	18.2	27.7	28.6	11.5	12.6	14.2	5.1	16.2
April	37.7	–4.6	49.7	59.8	34.7	16.1	28.0	31.0	11.0	10.5	11.8	5.4	15.0
May	15.8	4.3	47.1	57.0	33.4	17.2	28.3	33.5	11.0	10.3	11.6	5.8	15.3
June	3.2	20.8	46.9	55.8	33.6	16.2	28.8	40.0	11.0	11.0	12.5	6.1	15.4
July	1.0	28.0	44.8	55.3	33.0	16.7	25.8	41.3	11.0	11.1	12.3	6.4	15.7
August	9.7	9.5	43.8	54.6	32.3	16.4	26.2	34.2	11.0	11.0	12.2	6.9	14.3
September	22.6	–0.7	42.0	50.9	32.1	15.0	26.1	30.1	11.0	12.2	15.2	6.5	14.3
October	32.3	–14.2	39.5	47.5	28.2	15.6	26.1	22.9	11.0	13.5	15.9	6.5	15.3
November	22.0	–19.4	40.4	48.8	31.2	27.8	25.1	22.7	11.0	18.5	19.2	7.0	18.8
December	6.0	9.2	43.1	52.6	34.5	30.9	26.8	35.7	11.0	22.9	22.4	7.1	22.9
1989													
January	73.5	345.7	45.6	57.5	36.7	21.8	26.7	107	11.0	17.6	21.2	8.8	19.1
February	21.9	–8.2	41.4	51.8	33.3	14.6	24.9	27.0	11.0	13.4	16.4	7.9	16.3
March	5.6	4.0	38.5	48.0	32.7	13.3	24.9	30.7	11.0	11.7	15.4	8.8	12.4
April	35.4	4.1	36.6	45.3	29.3	13.0	23.2	28.9	11.0	10.4	14.4	8.2	12.1
May	11.1	46.4	35.8	44.7	28.1	13.0	22.0	42.9	11.0	10.4	13.7	7.4	10.9
June	15.9	62.7	31.6	37.5	25.3	10.7	22.2	44.4	6.0	9.6	12.6	6.7	9.6

July	7.1	16.2	30.6	36.4	24.3	10.6	21.9	28.8	7.6	9.3	12.2	6.2	12.3
August	15.6	12.4	30.6	36.5	23.4	9.9	21.7	27.1	8.2	9.0	11.7	6.5	9.9
September	20.3	12.3	30.6	36.5	21.3	12.8	21.8	26.2	5.7	10.2	11.7	6.7	9.9
October	24.0	–8.1	30.4	36.3	20.7	15.9	21.0	19.4	6.9	12.3	13.1	6.0	16.9
November	16.7	–6.7	30.3	36.3	22.3	15.0	21.2	20.3	7.4	12.8	13.5	5.7	11.8
December	13.7	–16.6	30.9	36.8	22.4	15.0	21.1	17.6	6.7	12.2	13.3	5.8	15.7
1990													
January	13.6	–8.1	31.0	37.0	23.2	17.1	21.0	20.9	7.5	14.2	15.0	6.2	18.6
February	6.5	–0.5	31.5	37.7	24.0	17.8	21.0	23.7	8.0	15.1	15.5	6.3	16.1
March	16.0	51.6	31.4	37.7	24.2	17.0	18.4	37.1	8.7	14.7	15.5	5.5	21.7

NOTATION:

π – Inflation rate.

E/$ – Average change in the dollar exchange rate.

OV – Credit lines and overdrafts; includes regular interest, additional interest on borrowings in excess of approved credit lines, and credit-allocation and management fees and commissions.

OVE – Overdrafts in excess of approved overdraft facilities.

FTC – Other unindexed fixed-term credit.

DWt – Discount window auction. In October 1987, when the Bank of Israel changed the liquidity regime, it introduced discount-window loans by auction. The interest shown in the table is the average rate weighted by the volume of discount-window-loans.

C$c – Nondirected dollar credit subject to ceilings. The interest shown is nominal, i.e. $100(1 + rd)(1 + \delta(er)$ where rd is the dollar interest rate, in percent, and $\delta(er)$ is the average percentage change in the exchange rate against the dollar.

TBC – Total bank credit; average, weighted according to the composition of total credit ; Bank of Israel estimate.

LAm – 1987–June 1989, liquid assets held with the Bank of Israel, in the marginal bracket; from July 1989, actual interest (all brackets).

CD – CDs; median of the system—over NIS 10,000; on the assumption that CDs are renewed every 3 days, and there are no large deposits. From September 1988 the data are the average of all deposits brackets.

TB – Treasury bills; over NIS 10,000 for 14 days. From September 1988, the data are the average of all Treasury bills with maturities of up to a year.

RD$ – Resident deposits (in dollar equivalent) average for the total—over $50,000 for 12 months. The dollar interest rate was multiplied by the average change in the exchange rate against the dollar in order to obtain the nominal NIS yield.

YTM – Yield to maturity of 1-month Treasury bills.

SOURCE: Bank of Israel.

Table 7.A9
Velocity of Demand Deposits and the Monetary Aggregates, 1960–89[a]

	Demand deposits	M1	M2	M3	M4
1960	16.4	6.3			
1970	21.5	8.4	4.5	3.9	2.6
1976	35.8	13.2	7.5	5.5	2.6
1980	104.3	23.2	17.6	5.4	3.3
1981	161.0	28.6	19.3	5.9	3.6
1982	193.7	33.9	19.0	6.0	–3.8
1983	227.5	41.2	18.6	5.7	4.0
1984	345.9	59.6	21.1	5.0	3.9
1985	428.5	48.1	11.8	4.4	3.5
1986	306.3	28.8	8.3	4.9	3.6
1987	236.0	23.2	6.2	4.6	3.4
1988	206.0	21.0	5.9	4.6	3.4
1989	151.8	19.7	5.9	4.6	3.3

[a] Demand deposits—total debits to local-currency demand deposits divided by the average balance. Monetary aggregates—the denominator is domestic use of resources *less* direct defense imports.

SOURCE: Supervisor of Banks, *Annual Banking Statistics*.

Table 7.A10
Medium and Long Term Credit to the Public, 1986–89[a]

	Gross flows				Balance outstanding[c]	
	Total[b]	To households	To firms	Net flows	Average	End-of-period
NIS million						
1986	2,971	1,040	1,932	469	18,494	20,715
1987	3,509	1,455	2,054	–36	23,572	25,464
1988	3,674	2,222	1,452	52	27,348	29,638
1989	3,416	2,530	886	–1,007	31,494	32,748
Real annual change, percent[d]						
1987	0.0	18.5	–210.0		6.5	5.9
1988	–10.1	31.1	–39.3		0.0	–0.0
1989	–22.9	–5.6	–49.5		–3.8	–8.5

[a] The data cover only supervised banking institutions. The last two issues of the *Annual Report* included also an estimate of credit from unsupervised institutions, which proved to be unreliable.

[b] Includes credit to the public via National Institutions for which no classification is available.

[c] As recorded, i.e., the implicit subsidy has not been deducted.

[d] Deflated by six-month average (flows) or end-period (balances) CPI.

SOURCE: Bank of Israel.

Table 7.A11
Commercial Bank Credit to the Nonfinancial Private Sector, 1988–89

	End-year, NIS million		Average real balance, 1988 =100			Nominal change during period			
			1989				1989		
	1988	1989	Total	1st half	2nd half	1988	Total	1st half	2nd half
Nondirected credit[a]	23,236	31,587	116.9	110.7	123.1	48.5	35.9	12.4	21.0
Credit lines and overdrafts	9,233	10,845	109.6	109.1	110.0	50.4	17.5	3.1	14.0
Other unindexed local currency	5,566	7,888	114.7	97.9	131.4	44.3	41.7	4.9	35.1
Indexed local currency	6,642	10,012	122.2	116.6	127.8	65.4	50.7	16.3	29.6
Foreign currency	1,795	2,841	133.5	125.8	141.3	9.6	58.3	69.1	–6.4
of which For fuel imports	527	879	92.4	81.5	103.3	–16.8	66.6	38.3	20.4
Directed export credit	3,290	3,528	97.4	102.3	92.6	9.4	7.2	23.2	–13.0
Diamond fund[b]	2,719	2,873	96.4	102.5	90.2	6.9	5.7	22.5	–13.7
Other	571	654	102.9	101.5	104.2	23.4	14.5	26.8	–9.7
Total excl. indexed local currency	**19,885**	**25,102**	111.1	107.2	115.0	35.8	26.2	12.9	11.8
Total	**26,527**	**35,114**	114.0	109.4	118.5	42.2	32.4	13.7	16.4
Consumer Price Index						16.4	20.7	12.0	7.8

[a] Includes indexation differentials on the indexed portion of nondirected local-currency credit and credit from overseas offices of Israeli banks. Includes credit to local authorities.

[b] Includes problem debts of diamond firms.

SOURCE: Bank of Israel.

Table 7.A12
Local-Currency Credit to the Government, 1986–89

(NIS million)

	From the Bank of Israel			From banking institutions			Total net credit in local currency (3) + (6) (7)
	Credit[a] (1)	Central government and National Institutions deposits[b] (2)	Net credit (1) – (2) (3)	Credit (4)	Central government deposits (5)	Net credit (4) – (5) (6)	
1986	8,140	3,805	4,335	1,424	17	1,407	5,742
1987	8,801	5,077	3,724	2,007	18	1,989	5,712
1988	9,905	5,800	4,106	1,769	27	1,743	5,848
1989	10,087	8,294	1,792	2,363	21	2,342	4,135
January	9,779	6,601	3,178	2,205	16	2,189	5,367
February	9,461	6,919	2,542	2,333	15	2,319	4,861
March	9,407	6,359	3,048	2,148	16	2,131	5,179
April	9,435	6,367	3,068	2,221	14	2,207	5,275
May	9,533	6,498	3,034	2,212	15	2,197	5,231
June	9,891	6,877	3,015	2,178	22	2,156	5,171
July	9,838	6,237	3,601	2,207	19	2,187	5,788
August	9,745	5,861	3,884	2,498	21	2,477	6,361
September	9,753	6,547	3,206	2,302	33	2,269	5,475
October	9,701	6,772	2,930	2,352	21	2,331	5,261
November	9,658	7,929	1,728	2,226	21	2,205	3,933
December	10,087	8,294	1,792	2,363	21	2,342	4,135

[a] Includes monthly accrual of Bank of Israel profits.
[b] Includes the Bank of Israel's equity and net balances in the 'other accounts' item in its balance sheet.

SOURCE: Financial statements of the Bank of Israel and monthly statements of the banking institutions.

Table 7.A13
Estimated Wealth of Private Nonfinancial Sector, 1982–89[a]

	NIS billion				Real annual change,[b] percent						
			1989						1989		
	1987	1988	First half	Second half	1982–86	1987–89	1987	1988	Total	First half	Second half
Assets	105.5	123.0	142.2	157.7	5.8	4.3	8.3	0.1	6.3	3.2	3.0
Short-term assets and tradable bonds	22.3	25.2	29.5	33.2	1.8	6.8	18.3	-2.7	9.1	4.5	4.4
Shares of financial intermediaries	*7.4*	*3.4*	*4.5*	*4.4*	*-1.8*	*-17.6*	*13.0*	*-60.3*	*6.3*	*17.5*	*-9.5*
Medium and long term assets	*75.9*	*94.4*	*108.2*	*120.2*	*8.1*	*5.2*	*5.3*	*6.8*	*5.5*	*2.3*	*3.1*
Liabilities	45.9	57.4	63.0	69.3	14.6	8.9	16.2	7.4	0.1	-1.9	2.0
Short term	*20.3*	*27.7*	*31.4*	*36.6*	*4.4*	*20.8*	*31.4*	*16.8*	*9.8*	*1.4*	*8.2*
Long term	*25.5*	*29.7*	*31.6*	*32.7*	*23.7*	*0.5*	*6.4*	*-0.1*	*-8.8*	*-4.9*	*-4.1*
subtotal: **Net financial wealth**	**59.6**	**65.6**	**79.1**	**88.4**	**2.2**	**1.3**	**2.9**	**-5.5**	**11.6**	**7.7**	**3.7**
Tangible assets[c]											
Nominal	126.4	142.0	157.3	172.3	3.6	0.4	2.5	-3.6	0.6	-1.1	1.7
Real					4.7	2.4	3.2	2.5	0.7	0.3	0.4
Total net wealth											
Nominal	**186.1**	**207.6**	**236.4**	**260.7**	3.1	0.7	2.6	-4.2	4.1	1.7	2.3
Real					3.8	2.0	3.1	-0.0	4.0	2.5	1.4

[a] The private nonfinancial sector comprises households and nonfinancial firms. The sector's wealth is estimated as the difference between its claims against and obligations to the public sector, the Bank of Israel, the rest of the world, and financial intermediaries. The latter include commercial banks, cooperative saving and loan associations, mortgage banks, investment finance banks, financial institutions required to publish financial statements, and pension and provident funds; these institutions represent most of the financial intermediation system. Financial institutions not required to publish financial statements are not, owing to lack of data, classified as financial intermediaries and they are therefore part of the private nonfinancial sector in this table. As a result, assets and liabilities figures in this table differ from those in other tables of this chapter. For further details see Table 7.A18.

[b] Deflated by the CPI.

[c] Tangible assets comprise the stock of consumer durables and dwellings; and structures, equipment, and goods and raw materials inventories held by firms. Also includes compulsory loan.

SOURCE: Bank of Israel.

Table 7.A14
Financial Asset Holdings of the Public, 1988–89[a]

	End-of-period balances, NIS million				Percent of total			
	1988		1989		1988		1989	
	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half
Unindexed short-term assets	13,234	11,595	14,988	16,841	11.7	9.5	10.4	10.4
Money supply (M1)	3,530	3,655	4,466	5,238	3.1	3.0	3.1	3.2
of which Currency in circulation	*1,562*	*1,643*	*1,934*	*2,224*	*1.4*	*1.4*	*1.3*	*1.4*
Time deposits, SROs, CDs, treasury bills	9,703	7,940	10,522	11,603	8.6	6.5	7.3	7.1
Resident deposits and tradable bonds	11,128	14,433	15,720	17,555	9.9	12.0	10.9	10.8
Deposits	5,782	8,193	7,850	8,647	5.1	6.7	5.5	5.3
of which Nonresident deposits of Israelis	*2,567*	*3,615*	*3,783*	*4,560*	2.3	3.0	2.6	2.8
Bonds[b]	5,346	6,440	7,870	8,908	4.7	5.3	5.5	5.5
subtotal: Short-term assets	**24,362**	**26,228**	**30,708**	**34,396**	**21.6**	**21.6**	**21.3**	**21.2**
Bank shares	6,759	2,538	3,627	2,874	*6.0*	*2.1*	*2.5*	*1.8*
subtotal: Short-term assets & bank shares	**31,120**	**28,766**	**34,334**	**37,270**	**27.6**	**23.7**	**23.8**	**22.9**
Nonbank shares	5,582	6,252	9,101	12,549	5.0	5.1	6.3	7.7
Restitutions deposits	5,543	6,873	6,632	7,153	4.9	5.7	4.6	4.4
Saving schemes and indexed deposits	22,014	25,754	28,455	30,825	19.5	21.2	19.8	19.0
Social insurance funds and life assurance	48,497	53,800	65,475	74,637	43.0	44.3	45.5	45.9
Total financial assets	**112,756**	**121,445**	**143,998**	**162,434**	**100.0**	**100.0**	**100.0**	**100.0**
of which Nonbank shares	5,582	6,252	9,101	12,549	5.0	5.1	6.3	7.7
Foreign-currency assets[c]	25,989	27,068	28,640	31,230	23.0	22.3	19.9	19.2
CPI-indexed assets	67,951	76,530	91,269	101,814	60.3	63.0	63.4	62.7

[a] In this table '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 sector, i.e., financial assets of foreigners were not deducted 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 financial institutions and tradable assets held by them.

[b] Total tradable bonds *less* bonds held by commercial banks, the central bank, and social insurance funds.

[c] Arrangement bank shares redeemed in October 1988 are regarded as a foreign-currency asset. This applies also to Arrangement shares redeemed in October 1989 or converted to saving schemes, and to other saving schemes with CPI/exchange-rate linkage options.

SOURCE: Bank of Israel.

Table 7.A15
Change in Financial Asset Holdings of the Public, 1986–89[a]

	Average real balances in 1989 (1988=100)			Percent change during period			
					1989		
	Total	1st half	2nd half	1988	Total	1st half	2nd half
Unindexed short-term assets	100	99	101	–13.6	20.3	15.4	4.3
Money supply (M1)	106	99	113	–4.5	18.7	9.1	8.8
of which Currency in circulation	102	97	108	3.4	12.2	5.1	6.7
Time deposits, SROs, CDs, treasury bills	98	99	96	–17.3	21.1	18.3	2.3
Foreign-currency deposits and tradable bonds	110	105	115	15.6	–0.6	–4.1	3.6
Deposits	105	101	108	22.8	–12.6	–14.5	2.2
of which Nonresident deposits of Israelis	116	107	125	26.8	4.5	–6.6	11.9
Bonds[b]	116	109	123	7.5	14.6	9.1	5.0
subtotal: Short-term assets	105	102	108	0.5	8.7	4.5	3.9
Bank shares	47	47	48	–67.6	–6.2	27.6	–26.5
subtotal: Short-term assets and bank shares	94	91	96	–15.2	7.3	6.6	0.7
Nonbank shares	133	118	147	–23.7	66.3	30.0	28.0
Restitutions deposits	96	95	96	4.2	–13.8	–13.8	0.1
Saving schemes and indexed deposits	107	106	109	12.8	–0.8	–1.3	0.5
Social insurance funds and life assurance	113	109	117	7.2	14.9	8.7	5.8
Total financial assets	107	103	110	–0.3	10.8	5.9	4.7
of which Nonbank shares	133	118	147	–23.7	66.3	30.0	28.0
Foreign-currency assets[c]	92	88	96	–10.5	–4.4	–5.5	1.2
CPI-indexed assets	112	109	114	9.5	10.2	6.5	3.5

[a] For notes, see Table 7.A14.

Source: Bank of Israel.

Table 7.A16
Estimated Wealth of the Private Nonfinancial Sector, 1986–89

(NIS million)

	1986	1987	1988	1989
Assets				
Short-term financial assets[a]	*21,815*	*29,624*	*28,614*	*37,566*
Money supply	2,181	3,287	3,655	5,238
Time deposits and SROs	5,362	8,167	7,860	11,541
Foreign-currency deposits	5,654	5,730	8,193	8,757
Tradable bonds	3,011	5,081	5,506	7,676
Financial shares	5,608	7,358	3,400	4,363
Medium-term financial assets[b]	*25,214*	*29,714*	*37,125*	*44,201*
Earmarked deposits of the public	1,079	1,230	1,451	1,670
Saving schemes & indexed long-term deposits	17,673	20,729	27,346	33,111
Restitutions deposits	4,790	5,664	6,340	7,153
Exporters' credit	1,672	2,092	1,987	2,267
Long-term financial assets	*36,864*	*46,182*	*57,240*	*75,977*
Deposits in social insurance funds	30,794	39,026	48,763	68,299
Life insurance deposits	3,157	4,092	5,037	6,338
Compulsory loans[c]	2,913	3,064	3,440	1,340
Tangible assets[d]	*106,248*	*126,426*	*141,956*	*172,315*
Consumer durables	12,453	16,564	19,582	23,801
Dwellings	42,385	48,587	52,233	64,671
Structures and equipment	45,819	54,517	62,315	74,490
Inventories	5,592	6,758	7,825	9,354
Total	**190,140**	**231,946**	**264,935**	**330,058**
Liabilities				
Short-term[e]	*13,328*	*20,344*	*27,656*	*36,638*
Nondirected credit				
Local currency	7,596	14,113	21,137	28,190
Foreign currency	1,207	1,186	1,432	2,691
Directed credit				
Local currency	5	5	0	0
Foreign currency	2,857	3,002	3,290	3,528
Credit from abroad	1,663	2,039	1,796	2,230
Medium-term and long-term[f]	*20,668*	*25,532*	*29,705*	*32,684*
Local currency	13,214	16,844	20,861	24,082
Foreign currency	7,454	8,688	8,843	8,602
Total liabilities	**33,996**	**45,876**	**57,360**	**69,322**
Net wealth[g]	**156,144**	**186,070**	**207,575**	**260,736**

[a] The data in this table differ from the corresponding items of Tables 7.A14 and 7.A15, which refer to the 'public', whereas this table refers to the 'private nonfinancial sector'. Time deposits and CDs are deposits in commercial banks and other financial institutions, Foreign-currency deposits are demand and

time deposits held with the banking system (resident deposits and nonresident deposits of Israeli residents) and importers' deposits. Tradable bonds are total bonds issued to the public (excluding dollar-linked bonds issued by the business sector) *less* bonds held by the Bank of Israel, commercial, investment, and mortgage banks, and other financial institutions subject to the supervision of the Supervisor of Banks, social insurance funds, and insurance companies. Shares of financial intermediaries are shares issued by commercial banks, specialized financial institutions, mortgage banks, and insurance companies.

[b] These items differ from the corresponding items of Tables 7.A14 and 7.A15 in that they include earmarked deposits of the public and saving schemes and indexed deposits with investment and mortgage banks (in addition to saving schemes and indexed deposits with commercial banks). The data on saving schemes include the imputed value of grants (where applicable) and not the amount recorded at the time the accounts were opened.

[c] Calculated by discounting the inflation-adjusted stream of repayments at 5 percent (the interest rate on social-insurance fund bonds). The present value of Peace for Galilee bonds is assumed to be 25 percent of the inflation-adjusted value.

[d] Revised data.

[e] Nondirected local-currency credit consists of credit from the commercial banking system, mortgage banks (to building contractors), and insurance companies *less* credit to local authorities. Nondirected foreign-currency credit includes credit from the banking system in Israel other than for fuel imports. Credit from abroad is granted by overseas offices of Israeli banks, suppliers, and others (excludes credit to local authorities).

[f] The subsidy element of long-term local-currency credit is estimated as the present value of the stream of repayments according to the actual inflation rate. In this calculation repayments are spread over six years (the estimated average term of the loans), with interest on outstanding loans weighted accordingly. The present value of the subsidy element of foreign-currency credit is calculated in a similar manner, with the stream of repayments discounted by the Eurodollar rate.

[g] Calculated as the difference between total assets and total liabilities of the private nonfinancial sector; includes the estimated subsidy element of long-term local and foreign currency credit.

SOURCE: Bank of Israel.

Table 7.A17
Net Financial Wealth of the Public (Foreign Currency), 1982–89

($ million)

	Assets[a] (1)	Liabilities[b] (2)	(1)–(2) (3)	(3) as percent of total net financial wealth (4)
31.12.82	8,991	6,584	2,407	8.0
30.9.83	10,022	6,928	3,094	10.3
31.12.83	12,584	6,916	5,668	24.2
31.12.84	14,832	7,176	7,656	32.2
30.6.85	16,570	7,239	9,331	40.5
31.12.85	16,405	7,941	8,464	29.5
31.12.86	17,528	8,868	8,660	25.8
31.12.87	18,083	9,693	8,390	21.6
31.12.88	15,580	8,503	7,077	19.5
31.3.89	15,146	9,479	5,667	14.3
30.6.89	15,436	8,901	6,535	16.6
30.9.89	16,909	8,978	7,930	18.7
31.12.89	16,648	8,686	7,962	17.7

[a] Resident deposits, nonresident deposits of Israeli residents, exchange-rate indexed bonds, restitutions deposits, dollar-linked saving schemes, and suppliers credit to foreigners. Bank shares covered by the Bank-Share Arrangement (including shares converted to saving schemes) are included from December 1983.

[b] Foreign-currency credit via the banking system (directed and nondirected); foreign-currency credit out of earmarked deposits with commercial, mortgage, and financial investment banks; and credit from abroad. Excludes fuel credit..

SOURCE: Bank of Israel.

Table 7.A18
Securities Held by the Public, 1987–89

	Market price			Percent of total			Percent annual change		
	1987	1988	1989	1987	1988	1989	1987	1988	1989
Tradable bonds									
Held by commercial banks	3,686	5,804	8,731	23.1	22.3	21.2	53.5	35.2	24.6
Held by Bank of Israel	462	755	1,136	2.9	2.9	2.8	–23.9	40.4	24.7
Held by social insurance funds	6,039	12,259	22,591	37.8	47.0	54.9	65.5	74.4	52.7
Held by the public (residual)	5,790	7,240	8,727	36.2	27.8	21.2	35.2	7.4	–0.1
Total	**15,977**	**26,058**	**41,185**	**100.0**	**100.0**	**100.0**	46.1	40.1	31.0
Shares and convertible securities									
Held by commercial banks[a]	960	1,196	1,463	5.2	13.1	9.1	25.4	7.0	1.4
Held by the government	4,105	0	0	22.0	0.0	0.0	64.0	–100.0	0.0
Bank shares converted into savings schemes	1,553	365	416	8.3	4.0	2.6	5.6	–79.8	–5.5
Held by social insurance funds	751	343	730	4.0	3.8	4.5	–10.0	–60.7	76.2
Held by the public (residual)	11,263	7,229	13,544	60.5	79.2	83.9	–0.4	–44.9	55.2
Total	**18,632**	**9,133**	**16,153**	**100.0**	**100.0**	**100.0**	10.3	–57.9	46.5

[a] This item may be overstated because of double counting due to classification problems.

SOURCE: Tel Aviv Stock Exchange and Bank of Israel.

Table 7.A19
Security Issues and Capital Formation Estimate, 1986–89

(NIS million)

	Public sector									Private sector		
	Tradable bonds[a]					Nontradable bonds						
	Volume of issues	Redemptions	Open market operations	Net borrowing CDs	Net borrowing	Savings schemes	Provident funds	Total	Total net borrowing	Bond issues	Shares and convertible securities	Total net borrowing
1986	2,502.1	1,519.3	0.2	2.1	985.1	-628.0	-728.8	-1,356.8	-371.7	628.8	98.2	727.0
1987	3,725.7	1,133.1	63.4	770.0	3,426.0	-2,652.5	-1,002.7	-3,655.2	-229.2	1,043.2	345.7	1,388.9
1988	7,141.8	2,551.6	-113.7	-316.7	4,159.8	-2,840.0	-731.3	-3,571.3	588.5	1,020.1	146.8	1,166.9
1989	5,949.5	3,377.6	1.7	798.9	3,372.5	632.3	-841.9	-209.6	3,162.9	874.3	648.8	1,523.1
January	329.1	259.9	0.1	711.9	781.2	11.8	17.8	29.6	810.8	266.7	0.0	266.7
February	319.5	284.4	0.0	384.0	419.1	-325.4	208.5	-116.9	302.2	71.1	16.6	87.7
March	455.3	441.6	0.0	-64.5	-50.8	-90.9	-197.6	-288.5	-339.3	150.8	0.0	150.8
April	385.8	475.4	0.0	119.1	29.5	1.9	-95.5	-93.6	-64.1	0.0	10.0	10.0
May	748.1	234.5	0.0	-62.5	451.1	-3.2	-112.4	-115.6	335.5	0.0	0.0	0.0
June	678.7	131.5	0.0	-73.9	473.3	501.3	-132.9	368.4	841.7	18.2	79.7	97.9
July	642.1	559.3	1.6	-29.1	55.3	134.1	-56.1	78.0	133.3	180.3	158.5	338.8
August	591.5	251.5	0.0	-79.0	261.0	-11.2	-64.2	-75.4	185.6	0.0	0.0	0.0
September	530.6	198.7	0.0	-123.0	208.9	981.8	111.8	1,093.6	1,302.5	0.0	14.9	14.9
October	301.0	215.2	0.1	123.3	209.2	-325.2	-192.5	-517.7	-308.5	33.0	74.6	107.6
November	392.4	116.5	-0.1	-139.5	136.3	-136.2	-70.4	-206.6	-70.3	84.2	76.2	160.4
December	575.4	209.1	0.0	32.1	398.4	-106.5	-258.4	-364.9	33.5	70.0	218.3	288.3

[a] Includes bonds issued to commercial banks and social insurance funds, does not include turnover in Bank of Israel trading portfolio.

SOURCE: Bank of Israel monetary department.

Table 7.A20
Real Overall Rate of Return on Listed Shares, 1986–89[a]

(index, December 1988 = 100)

	CPI	Commercial banks	Insurance companies	Mortgage banks	Financial institutions	Investment companies	Industry	Trade and services	Land, construction, development
1986	80.8	71.4	134.9	68.5	70.9	92.6	100.5	107.8	118.1
1987	98.6	86.9	127.8	97.3	92.3	126.5	119.6	140.4	138.5
1988	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1989									
I	129.9	117.3	152.6	142.1	111.1	139.1	132.8	141.0	155.7
II	143.3	136.9	156.1	149.5	116.8	155.3	145.7	149.3	164.2
III	156.8	141.9	198.6	185.2	144.0	157.7	155.6	168.7	193.6
IV	176.1	138.5	244.5	235.0	154.1	186.2	170.6	190.6	253.3
1989[b]	48.5	16.8	106.2	98.1	29.9	57.0	43.9	60.7	113.6

[a] End-of-period date, deflated by end-of-month CPI.
[b] Percent change during the year.
SOURCE: Tel Aviv Stock Exchange.

Table 7.A21
Real Overall Rate of Return on Listed Securities, 1986–89[a]

(Index, December 1988 = 100)

	Bonds		Shares and convertible securities		
	Foreign currency	CPI-indexed	Total	Commercial banks	Nonbank shares
1986	95.6	88.6	110.6	97.7	136.8
1987	96.6	95.6	116.5	102.7	145.5
1988	100.0	100.0	100.0	100.0	100.0
1989	112.7	113.7	148.5	116.8	164.7
January	99.2	104.9	106.4	100.8	108.9
February	98.8	106.9	119.2	104.1	126.3
March	103.4	108.9	122.7	110.9	131.3
April	103.2	107.0	123.3	109.6	132.6
May	111.3	112.5	123.1	117.7	128.7
June	118.1	114.3	130.5	124.7	136.7
July	116.1	113.6	128.9	122.1	135.4
August	119.4	114.7	136.8	125.5	145.4
September	118.4	116.5	137.3	124.3	146.9
October	122.3	122.1	143.8	128.4	154.5
November	114.5	116.5	149.2	120.7	164.2
December	112.7	113.7	148.5	116.8	164.7
Real overall rate of return, percent					
1989	12.7	13.7	48.5	16.8	64.7
1st half	18.1	14.3	30.5	24.7	36.7
2nd half	–4.6	–0.5	13.7	–6.4	20.5

[a] Deflated by CPI (adjusted to end of month).

SOURCE: Based on stock exchange data.

Table 7.A22
Real Net Yield to Maturity of CPI-Indexed Bonds, 1988–89[a]

(percent)

	New Issues[b]		Secondary Market	
Years to maturity	5	10	3–5	9–10
1988				
I	2.65	3.33	2.74	3.24
II	2.51	3.31	2.41	3.07
III	2.52	3.25	2.57	3.03
IV	2.10	3.01	1.83	2.42
1989				
January		2.13	1.09	1.63
February		1.79	1.03	1.80
March		1.66	0.67	1.97
April		1.69	0.88	1.95
May		1.51	0.24	1.55
June		1.20	0.01	1.10
July	1.02	1.88	0.20	0.79
August	1.25	1.56	0.34	1.15
September	0.63	0.89	–0.13	0.49
October	–0.02	0.21	–0.23	–0.09
November	0.11	0.25	–0.97	–0.35
December	0.93	0.69	–0.15	0.24

[a] Average of end-week yields of government bonds, calculated according to *ex post* CPI corrected for indexation loss at maturity.

[b] Five-year bond rates in 1988 are for fully indexed bonds; none of these were issued in the first half of 1989 and, starting in July, they were replaced by a bond that is not indexed during its first year. Ten-year bonds are fully indexed.

SOURCE: Bank of Israel.

Table 7.A23
Market Value of Listed Shares and Convertible Securities, 1989

	Market value, end of year[a]			New issues		Issues as percent of of market of total value[c]
	NIS million	Percent of total	Percent change[b]	NIS million	Percent	
Commercial banks[d]	2,995	18.5	–14.3	0.0	0.0	0.0
Mortgage banks	660	4.1	94.4	14.9	2.3	4.4
Investment finance banks	327	2.0	20.1	0.0	0.0	0.0
Insurance companies	762	4.7	108.2	58.9	9.1	16.7
subtotal: Financial sector	**4,744**	**29.4**	6.1	**73.8**	**11.4**	1.7
Trade and services	1,251	7.7	75.7	55.4	8.5	8.1
Real estate etc.[e]	2,540	15.7	130.0	184.1	28.4	16.9
Industry	4,909	30.4	53.0	258.2	39.8	8.4
Investment and holding companies[f]	2,392	14.8	73.5			
Total	**16,153**	**100.0**	46.5	**100.0**	**648.8**	6.1

[a] Excl. bonus shares, convertible bonds, noncash issues, newly listed shares issued in previous years.
[b] During 1989.
[c] At beginning-of-year prices (monthly deflation).
[d] Including bank holding companies.
[e] Real estate, construction, development, citrus.
[f] Including oil exploration companies.

SOURCE: Tel Aviv Stock Exchange and Bank of Israel.

Table 7.A24
Mean and Standard Deviation of Selected Rates of Return, 1987–89

(percent)

	Average yield during period (monthly rate)					Standard deviation[a]			
			1989					1989	
Total	1987	1988	Total	1st half	2nd half	1987	1988	1st half	2nd half
Demand deposits[b]	–1.23	–1.40	–1.43	–1.57	–1.30	0.37	0.74	0.77	0.62
SROs (CDs)[c]	0.13	–0.77	–1.41	–1.54	–1.28	0.44	1.02	0.95	0.59
Dollar-denominated resident deposits									
Demand	–0.90	0.02	–0.70	0.27	–1.67	2.62	4.01	4.28	2.57
Time	–0.57	0.30	–0.40	0.60	–1.41	2.61	4.03	4.29	2.58
Restitutions deposits[d]	1.11	–0.52	–0.07	–1.07	0.93	4.91	3.60	4.51	3.76
CPI–indexed bonds	0.68	0.39	1.12	2.27	–0.04	3.00	1.46	2.41	3.02
All shares	0.58	–1.24	3.41	4.62	2.21	5.69	2.36	4.23	3.89
Bank shares	0.44	–0.20	1.38	3.80	–1.04	2.19	1.98	3.50	4.18
Non–bank shares	1.24	–2.80	4.36	5.52	3.20	12.40	7.62	5.89	5.17

[a] Standard deviation for 12 months preceding end of stated period.
[b] Includes nominal interest from August 1984.
[c] High intercustomer variance.
[d] Time deposits denominated in DM.

SOURCE: Based on Central Bureau of Statistics data.

Table 7.A25
Mutual Fund Operations, 1987–89

(end of period)

	1987	1988	1989	
			First half	Second half
Mutual fund assets (NIS million)	3,529.4	3,895.8	5,874.1	7,093.1
Percent				
Real annual overall rate of return	8.5	–4.2	27.4	3.3
Standard deviation of real monthly rate of return[a]	3.0	2.0	1.9	1.8
Mutual fund assets/total tradable assets[b]	10.7	12.4	15.1	15.9
Local-currency denominated bonds	38.4	43.1	47.6	55.4
Foreign-currency denominated assets	5.6	7.3	8.9	10.3
of which Arrangement bank shares	8.6	24.6	24.7	31.9
Nonbank shares	12.0	9.0	10.0	11.1
Unindexed assets	6.8	5.8	10.6	7.0
Composition of portfolio				
CPI-indexed bonds	37.4	50.0	44.5	48.2
Foreign-currency denominated assets	22.6	23.7	21.0	20.8
of which Arrangement bank shares	*16.4*	*16.0*	*15.2*	*12.9*
Nonbank shares	24.0	14.4	15.5	19.6
Unindexed assets	15.9	11.8	18.9	11.4
Total	**100.0**	**100.0**	**100.0**	**100.0**

[a] Standard deviation for 18 months preceding end of stated period.

[b] Tradable assets comprise unindexed assets, tradable bonds held by the public, foreign-currency deposits, shares, convertible securities, as defined in Tables 7.A14 and 7.A15.

SOURCE: Bank of Israel Research and Monetary Departments.

Table 7.A26
Composition of Social Insurance Fund Portfolio, 1987–89

(percent, end of year)

	1987	1988	1989
Special bonds issued to social insurance funds	63	52	39
Tradable government bonds	20	32	42
Arrangement bank shares	2	0.3	0.3
Private bonds	4	6	8
Nonbank shares	0.6	0.7	1.1
Indexed deposits	5	5	4
Loans to members	0.3	0.3	0.1
Other loans	1	0.7	0.6
Total	100	100	100
Total (NIS billion)	23.1	30.5	44.8

SOURCE: Ministry of Finance.

Table 7.A27
Social Insurance Funds: Required and Actual Investment in Government Securities, 1983–89

(percent, end of year)

	Pension	Providence and severance pay	Study
Minimum requirement			
1983[a]	92	92	92
1987[a]	92	78	78
1988	93	78	78
1989	93	72	72
Actual investment			
1987	92	85	88
1988	94	84	86
1989	..	81	82

[a] Recognized investment requirement, consisting of shares (up to 10 percent) and approved private securities (in 1987 this applies only to pension funds).

SOURCE: Bank of Israel calculations.