Chapter 7
Money and Capital Markets

The chief monetary feature of 1993 was the rapid expansion of local-currency assets and credit, especially in the last four months of the year. This was associated, at least in part, with the stock-market boom, and was supported by monetary policy which kept interest rates low compared with their level at the beginning of the year. As the cost of the monetary loan (discount-window) declined, interest on local-currency credit and deposits followed suit, and the interest-rate spread narrowed. The large-scale capital exports which had begun at the end of 1992 abated at the beginning of the year, after monetary policy had acted to raise the exchange rate rapidly, followed by interest-rate increases. Later in the year the private sector imported capital, and its overall foreign-currency purchases matched its current account deficit financing needs. The exchange rate against the currency basket rose by some 8 percent during the year, a rate which was in accordance with the slope of the exchange-rate band.

The government's domestic deficit continued to shrink, as did its net borrowing, while the yield to maturity on bonds rose slightly. The public's financial portfolio rose by a real 20 percent (as it had in 1992), most of it due to the sharp increase in the proportion of shares. The increase in stock-market activity persisted and share prices rose, together with a reduction in the supply of government bonds and the breakthrough in the peace process.

1. MAIN DEVELOPMENTS

The principal monetary development of 1993 was the rapid expansion of local-currency assets and credit. The increased demand for domestic assets was reflected by the expansion of the local-currency aggregates (up to M2) and the rise in the overall value of shares held by the public, especially in the last four months of the year. Foreign-currency assets and credit expanded at a far more moderate pace, alongside relative calm in the foreign-currency market. These developments expressed themselves in the changed composition of the public's portfolio, with a rise in the share of unindexed local-currency assets and a reduction in that of foreign-currency and long-term assets.

Monetary developments in 1993 should be viewed in the context of the low and declining government deficit, falling inflation, and extensive liberalization of the money and capital markets of the last few years. As a result of the latter, the interest-rate spread narrowed and the connection between domestic and foreign interest rates became tighter while, given the exchange-rate regime, it gradually narrowed the scope of action of

nonetary policy. Within this framework, the object of monetary policy was to preserve he achievements regarding inflation while encouraging economic activity; this was done)y adhering to an exchange-rate regime and level of interest which were consonant with)ne another and with the trend of inflation.

At the end of 1992 there was widespread capital export arising from the process of iberalization, supported by yield gaps between domestic and foreign assets. As a result, ıt the beginning of 1993 monetary policy permitted the exchange rate to rise rapidly, and herafter maintained a high level of interest. This policy, which was introduced after the nflation rate had accelerated slightly, was accompanied by a slowing of economic ıctivity in the first half of the year. In the second half, in view of the reduction of the nflation rate and the desire to stimulate economic activity, several measures were ntroduced. The slope of the exchange-rate band was lowered from 8 to 6 percent, in ıccordance with the inflation target for 1994 (8 percent), and the interest on the monetary discount-window) loan was reduced by 2 percentage points The average (effective) cost)f the discount-window loan in 1993 was 11.3 percent. Interest on local-currency assets ınd credit also fell to their lowest nominal level in recent years, reaching an average of).7 (SROs) and 16.4 percent respectively, with an appreciable contraction of the spread Figure 7.1 and Table 7.3). Since the inflation rate during the year was 11.2 percent, hese interest rates also fell, *ex post*, in real terms. Annual average long-term interest, as :stimated by the yield to maturity of bonds, was half a percentage point higher than in .992. The slope of the yield curve continued to flatten in 1993 (Figure 7.4); the yield on ;overnment bonds (CPI-indexed) close to their redemption date continued to rise, while hat on long-term bonds remained virtually unchanged.

Monetary policy during the year was reflected by the development of the aggregates ınd credit. The money supply (M1) was 27 percent higher in 1993 than its 1992 average Table 7.1). The wider aggregate (M2**), which also includes interest-bearing short-erm local-currency deposits (SROs and resident time deposits), rose by an average of 31)ercent. This rate of growth exceeds the increase derived from that of nominal GDP some 15 percent), thus deviating from the path of the aggregates in 1990–92, when the wo measures rose at the same rate. Developments were very different in the first and econd halves of 1993. In the first six months M2** expanded at the same rate as in .992 while M1 grew more slowly, but in the second half of the year—and especially in he last quarter—these aggregates grew appreciably (especially the SRO and resident ime deposit components). From July to December 1993 these assets grew by a nominal)0 percent, and M1 by 21 percent. Some of the increase in the money supply is :xplained by the resurgence of economic activity in this period, expectations of future :xpansion as a result of the peace process, and the continued adjustment of the demand or money to the lower level of inflation. The greater need for liquidity for the purpose of ncreased stock-market activity also helps to account for the expansion of local-currency ıggregates during this period.

Unindexed local-currency credit (overdraft and term credit) was up by more than 43)ercent from its 1992 average and, as with the aggregates, most of the expansion was in

the last four months of the year (Table 7.7). Beyond the economic recovery of thi period, the increased demand for local-currency credit seems to be connected in part wit the stock-market boom, reflected by the considerable expansion of its daily turnove Foreign-exchange credit shrank by more than 7 percent, in dollar terms, from its 199 average. Medium- and long-term credit rose at a similar rate to that of 1992—an annu average of 20 percent.

Local-currency aggregates and credit rose in line with the expansion of the monetar base, whose average level in 1993 was 33 percent higher than in 1992, after growing b 18 and 14 percent in 1991 and 1992 respectively. During 1993 the monetary base ros by NIS 1.8 billion, representing 1.1 percent of GDP (Table 7.4), almost twice th average rate of expansion (in terms of GNP) since 1990.[1]

The domestic budget deficit (the government and the Jewish Agency, cash basis continued to fall, reaching 3.8 percent of GDP, after a deficit of 4.9 percent of GDP i 1992 and 6.5 percent of GDP in 1991 (Table 7.6). The public's share in the domesti financing of the deficit was appreciably higher in 1993 than in 1990–92. This, togethe with the reduction of the deficit/GDP ratio, was translated into a reduction of the public sector injection/GDP ratio and of its contribution to the increase in the money supply. O the other hand, the contribution of the Bank of Israel injection—and especially th discount-window loan—rose, as did that of foreign-currency sales.

The share in deficit financing of net borrowing by the government from the publi through bonds declined in 1993, while income from the privatization of governmen corporations rose significantly, amounting to more than NIS 3 billion. This developmen reflects less government involvement in the capital market through the reduction o pressure by lower financing by means of bonds, and the contraction of its share o economic activity through the privatization of government corporations via the stoc exchange and outside it.

During 1993 the exchange rate against the currency basket rose by some 8 percent, rate which matches the path of the sloping band (8 percent until July and 6 percen thereafter). Following the rapid rise in the exchange rate at the end of 1992, in the wak of extensive foreign-currency purchases, the exchange rate remained virtually unchange in the first half of 1993. From the end of July, when the midpoint rate was adjusted, th exchange rate remained below it, changing on average in accordance with the slope o the band as relative calm prevailed on the foreign-exchange market.

The total real yield on shares in 1993 was 27 percent, after their prices rose by 74 pe cent in 1992 and 30 percent in 1991. As with the aggregates and credit, most of th increase in share prices (26 percent) occurred in the last four months of the year, afte fluctuating in the first half as a result of the economic slowdown, public statements mad by leading figures, and fears that a capital gains tax would be imposed. The increase demand for shares towards the end of the year is associated in part with the progress o

[1] The comparison of rates of increase of the monetary base in recent years should be treated wi caution, since in previous years the money supply and credit were also able to rise as a result of th reduction of the reserve requirement.

the peace process, which embodies prospects for opening new markets and future economic growth. At the same time, in order to prevent the interest rate rising, monetary policy allowed credit to expand, and this was partly responsible for the increase in the demand for securities, which in turn pushed their prices up. Capital market reform was also partly responsible for the increased demand for shares, since it enabled institutional investors (provident funds and insurance companies) to draw down their share of government assets. This reform, together with the smaller supply of government bonds resulting from the reduction of the deficit and the fact that these institutions were unable to invest abroad, increased the demand for shares and helped to raise their prices. Lively stock-market activity was also reflected by the unprecedented extent of offerings throughout the year and in all industries. Flotations (including the privatization of government corporations and banks) amounted to over NIS 8 billion in 1993, almost double the 1992 figure (at current prices). The upward trend of share prices persisted in January 1994. In February and March the trend reversed and share prices fell, with wider fluctuations and smaller turnover. The bond market was relatively stable, and the total real market value of bonds remained unchanged in 1993 (see Section 6 below).

The public's increased demand for assets was also evident in the housing market, where the relative price[2] of apartments rose by 12 percent. Here, too, the increased demand can be linked to political developments, which may have caused the expected return on real estate investment to rise, as well as to the reduction of interest on mortgages. The increase in the public's wealth due to the rise in share prices also contributed to the greater demand for real estate.

The physical and financial wealth[3] of the nonfinancial private sector grew by a real 5 percent in 1993, and the share in it (deflated by the CPI) of physical wealth continued to rise. Net financial wealth declined because liabilities expanded faster than assets. The share in total assets of short-term assets,[4] and in total liabilities of short-term liabilities, rose steeply, largely because of the increase in unindexed local-currency deposits and credit in the last quarter.

There were two factors behind the expansion of aggregates and credit and the stock-market boom. The first was the political developments associated with the peace process, and the signing of the Declaration of Principles with the PLO in September 1993. The second was in the area of monetary policy, where the cost of sources provided by the Bank of Israel was reduced in the second half of the year, in view of the slowing of economic activity in the first half and in accordance with the change in the slope of the exchange-rate band. The question arises as to what factor was predominant in causing the exceptional expansion of the local-currency aggregates. One possibility is that politic-

[2] Index of owner-occupied housing prices in the CPI relative to the CPI excluding that item.

[3] Wealth here is that of the entire nonfinancial private sector—households and firms. The market value of shares held by the public is not included in wealth because these assets are regarded as the stock of firms' real assets, at replacement prices. In explaining private consumption, the relevant item is households' wealth, which also includes securities.

[4] Not including short-term assets denominated in and indexed to foreign currency.

Table 7.1
The Principal Monetary Aggregates, and Changes in the CPI, 1990–93[a]

(percent change, annual rate)

						Credit			
	M1	M2**	M2*	M2	M3	Unindexed local-currency	Short-term foreign-currency	Total short-term	CPI
End-period balance[b]									
1990	30	37	37	38	30	29	3	21	18
1991	15	20	20	27	29	25	20	23	18
1992	36	26	26	22	22	32	19	28	9
1993	31	47	47	40	32	46	3	34	11
1992									
I	37	29	30	22	8	19	56	28	10
II	46	9	8	5	16	27	–3	19	6
III	40	41	41	47	40	18	–3	12	12
IV	21	26	26	18	25	69	37	61	9
1993									
I	5	20	23	15	28	38	–6	25	16
II	18	33	27	26	7	30	1	22	8
III	79	59	60	47	38	17	3	14	9
IV	32	85	85	78	61	114	15	87	12
Average balance[c]									
1990	27	25	25	25	24	34	–3	21	17
1991	28	32	32	35	29	26	17	24	19
1992	19	19	21	24	24	26	14	23	12
1993	27	31	47	40	36	43	6	33	11
1992									
I	19	41	43	49	31	11	37	18	6
II	50	13	19	10	14	25	15	23	12
III	33	18	11	16	26	26	–9	16	7
IV	15	34	63	54	41	48	30	43	10
1993									
I	34	23	12	4	26	55	2	39	15
II	8	27	25	23	10	24	–2	17	12
III	41	50	47	40	28	24	7	20	6
IV	49	75	592	503	287	154	6	109	13

[a] M1= currency in circulation and demand deposits; M2** = M1 + interest-bearing local-currency deposits; M2* = M2** + other deposits; M2 = M2* + Treasury bills; M3 = M2 + foreign-currency-denominated or indexed deposits.

[b] End-period balance is the change from last month of period over last month of preceding period.

[c] Average balance shows the change over preceding period average.

l developments, increased economic activity, and the lower inflation rate raised the lemand for liquid assets by generating expectations of growth. If that was the case, nonetary policy adapted itself to these changes by expanding sources in order to acilitate current and future economic activity. The other possibility is that the reduction f interest rates in July–November enlarged banks' sources, reducing their cost below he level appropriate to the increased demand resulting from changing market conditions, nd this caused credit and the aggregates to soar. If that was indeed the case, the excess upply of sources could in future spill over to increase the demand for foreign exchange nd create excess demand for goods, causing inflation to accelerate and exerting pressure n the reserves. Future developments will also depend, however, on the response of nonetary policy to the prevailing economic conditions and expectations.

It is reasonable to assume that the expansion of the aggregates and the stock-market oom would have been more moderate had the Bank of Israel allowed interest to rise. Expectations of growth and the monetary policy adopted in the second half of 1993 acted o raise share prices and increase the money supply and credit, but it is impossible to inpoint the principal cause of the developments.

Beyond determining the prime cause of events, it is also important to understand the rocess which pushed share prices up alongside the expansion of local-currency credit nd the aggregates from September to November 1993. Whether the explanation lies vith the increased demand for assets traded on the stock exchange or the lower cost of ources, the full amount of demand for the discount-window loan was met by supply, vith no change in its cost. This enabled local-currency credit to increase substantially vhile its price remained unchanged. The structure of the banking system also contributed o the vigor and persistence of the process, since as well as being financial intermediaries he banks market mutual funds (with which they are associated) by extending credit for heir purchase.

. MONETARY POLICY

The main aim of monetary policy in 1993 was to keep inflation down while naintaining interest rates as low as possible, in order to stimulate economic activity vithout adversely affecting the reserves. This was done within the framework of the ong-term process of bringing interest down from its high level following the economic tabilization program (ESP), and the continued liberalization of the financial markets, vhich strengthens the link between domestic interest and the real price of capital facing he economy. Short-term local-currency interest, especially on credit, has declined since 988. Until 1992 this trend reflected mainly the liberalization of the domestic capital narket—through the abolition of barriers and restrictions and the reduction of the reserve equirement—and capital movements abroad. The backdrop to these measures was rovided by a better economic environment, *inter alia* as a result of the stabilization of nflation at a lower level (although still higher than that of Israel's trading partners) and

Table 7.2
Financial Assets of the Public[a] in the Commercial Banks and the Bank of Israel, 1989–93

	Unindexed local currency	Foreign-currency deposits[b]	Residents' restitutions deposits	Savings[c]	Total assets[d]	Tradable government bonds	Earmarked bonds[e]	Tradable private bonds	Nonbank shares	Total A[f]	Total B[g]
Balance at end of period (NIS million)											
1989	16,337	9,060	7,153	39,941	72,490	28,551	43,634	5,521	13,530	163,726	144,675
1990	23,368	10,186	8,572	43,814	85,940	33,253	52,180	7,099	16,974	195,446	171,373
1991	29,409	12,463	10,052	49,483	101,407	44,402	61,374	8,497	29,778	245,458	207,184
1992[i]	35,523	17,115	12,103	50,802	115,543	58,176	66,939	9,604	72,130	322,393	240,659
1992	35,661	17,537	12,269	51,316	116,782	58,176	66,545	9,604	72,130	323,238	241,504
1993	50,370	19,581	12,986	56,760	139,696	65,310	75,817	10,277	133,078	424,179	280,824
Nominal change during period[h]											
1990	43.0	12.4	19.8	9.7	18.6	16.5	19.6	28.6	25.5	19.4	18.5
1991	25.8	22.4	17.3	12.9	18.0	33.5	17.6	19.7	75.4	25.6	20.9
1992	20.8	37.3	20.4	2.7	13.9	31.0	9.1	13.0	142.2	31.3	16.2
1993	41.2	11.7	5.9	10.6	19.6	12.3	13.9	7.0	84.5	31.2	16.3
Real change during period[h]											
1990	21.6	–4.4	1.9	–6.7	0.8	–1.0	1.7	9.3	6.7	1.5	0.7
1991	6.6	3.7	–0.7	–4.3	–0.0	13.1	–0.4	1.4	48.6	6.4	2.4
1992	10.4	25.6	10.1	–6.1	4.2	19.8	–0.3	3.3	121.5	20.1	6.2
1993	27.0	0.4	–4.9	–0.6	7.5	0.9	2.4	–3.8	65.8	18.0	4.5
Real change in average balance[h]											
1990	7.3	5.7	2.7	–4.6	0.0	2.0	2.8	6.8	12.2	1.1	0.2
1991	12.6	–1.7	–0.7	–5.8	–0.4	7.2	0.4	4.0	41.7	5.1	1.4
1992	10.2	11.4	5.3	–4.5	2.4	12.2	0.5	2.7	67.1	11.4	3.9
1993	16.9	15.4	3.5	–3.8	5.6	7.0	1.7	–4.0	69.6	16.1	4.8

[a] Excluding the government, the Bank of Israel, and commercial banks.

[b] Short-term foreign-currency-indexed deposits.

[c] Savings, CPI-indexed deposits, and private earmarked deposits *less* credit to government from earmarked deposits (reflecting the assumption that most of

this credit is covered by earmarked bonds).

[d] In banks and the Bank of Israel.

[e] Estimate of earmarked bonds held by sick funds, study funds, pension and life insurance funds (mostly governmental).

[f] Total of previous 5 columns (i.e., total assets and bonds and nonbank shares).

[g] Total excluding nonbank shares and private tradable bonds.

[h] See notes b and c, Table 7.1. Rates based on monthly averages calculated from end-of-month figures.

[i] As of 31.12.1992 interest is included in the deposit balance.

the gradual reduction of the budget deficit. The process of reducing the deficit/GDP ratio is anchored in law, and is due to continue over the next few years. The reduction of the budget deficit beyond its level before the ESP helps to reduce government pressure on the capital market and frees sources for the private sector. Alongside the reduction of the inflation rate, its variance (fluctuation) has also diminished, providing greater certainty regarding future prices, thus aiding economic activity. The announcement of a pre-set inflationary target (providing it is regarded as credible) also affects the creation of expectations and reduces uncertainty. The sloping-band exchange-rate regime, which allows for daily fluctuations but provides a pre-set medium-term path, contributes to reducing uncertainty regarding inflationary expectations, and aids business planning. However, the reduction of uncertainty lowers the risk involved in holding foreign assets, and may thus increase capital movement.

The ability to maintain a given level of interest is closely connected with both exchange-rate policy and the extent to which capital movement is liberalized. The fact that the domestic capital market has been opened up means that interest rates cannot differ widely from those abroad, so that under the current exchange-rate regime it is difficult to use interest rates to affect the monetary aggregates. In the short term, changing monetary policy by altering the slope and position of the supply curve of the various kinds of discount-window loan will depend on foreign-exchange developments and the behavior of domestic prices, in the context of economic developments. Thus, at the end of 1992, after the midpoint had been shifted in November, and given the slope of the exchange-rate band and the position of the actual exchange rate, a gap was created between expected yields in favor of foreign assets, and this, together with other factors, led to capital outflow. It was necessary to respond by raising interest or rapidly adjusting the actual exchange rate in order to reduce the expected yield on foreign assets. In order to deal with the change in the yield gap, concomitantly with the change of the slope of the exchange-rate band from 8 to 6 percent in July (and a nonrecurring 2 percent increase in the midpoint rate) to match the 8 percent inflation target announced for 1994, interest was reduced.

The foreign-exchange reserves rose by $ 1.3 billion during 1993, and their level at the end of the year was $ 6.4 billion. The public sector (including the Bank of Israel) contributed $ 1.9 billion, while the private sector reduced them by $ 700 million (see Chapter 6). The private sector can affect the reserves either through foreign-currency purchases on the trading floor or through a change in banks' foreign-exchange deposits with the Bank of Israel. Foreign-exchange purchases by the private sector depend on its current account, i.e., on its need for foreign currency to finance the import surplus (adjusted for unilateral transfers), and are also influenced by its desire to alter its portfolio composition. One nonrecurring contributory factor was the improved ability to diversify the portfolio through the wider possibilities of residents' investment abroad resulting from capital-market liberalization; this explains some foreign-exchange purchases at the end of 1992 and the beginning of 1993. Another factor was the change in the relative yields of domestic and foreign assets. Given the interest rate on foreign

assets, this depends on expected devaluation, local-currency interest, and the yield on other domestic assets (e.g., shares). A decline in expected domestic yield or a rise in expected devaluation may increase the capital export of the private sector. The capital inflow that began in March occurred initially within the context of relatively high local-currency interest, but persisted after July, when interest fell. The relevant alternative yield at that time appears to have been the high expected yield on the stock market, and this accounted for most of the capital inflow after July, too.

The second channel through which the private sector affects the foreign-exchange reserves is, as stated, the banks' foreign-exchange deposits with the Bank of Israel. Changes in these do not affect the money supply, since they do not involve currency conversions.[5] During 1993 deposits of the banks in excess of the reserve requirement grew by $2.2 billion, offsetting the reduction in the banks' compulsory deposits with the Bank of Israel in 1991–92 and reflecting the transition from administrative measures to market forces in raising capital abroad.

Thus, policy-makers have two ways of maintaining the level of the foreign reserves. The first is through the deposits of the banks, which are affected by the interest paid by the Bank of Israel. The second is through foreign-exchange purchases by the private sector, which are affected, *inter alia*, by the level of local-currency interest. The preferred combination of instruments should be determined with reference to progress in the liberalization process, which reduces the banks' reserve requirement and also alters the effectiveness of monetary policy and the connection between different domestic interest rates. In order to assess the level of local-currency interest, which is derived from monetary policy, relative to the expected yield on foreign assets, it is necessary to examine the difference between the private sector's foreign-exchange purchases and its deficit on current account.[6] If purchases exceed the deficit this may indicate expectations that the yield on foreign-exchange assets will be higher than that on local-currency assets, while credit on foreign currency will be cheaper than that on local currency. During 1993 the private sector bought $1.6 billion from the Bank of Israel, slightly less than its current account financing needs (about $1.9 billion). Thus, it cannot be said that on average the expected yield on foreign currency during the year was higher than that on local currency. If we include in the current account direct investment overseas by Israeli firms, which is connected at least in part with considerations of real economic activity rather than yield gaps, the capital inflow was greater.

[5] A reduction in banks' deposits involving conversion into local currency is implemented on the trading floor and does not affect the foreign reserves.

[6] To make the calculation more precise, the share of the financial sector should be deducted from the current account, to give the current account of the nonfinancial private sector. In effect, there is virtually no difference between the deficit on the current account including or excluding the financial sector (see Chapter 6).

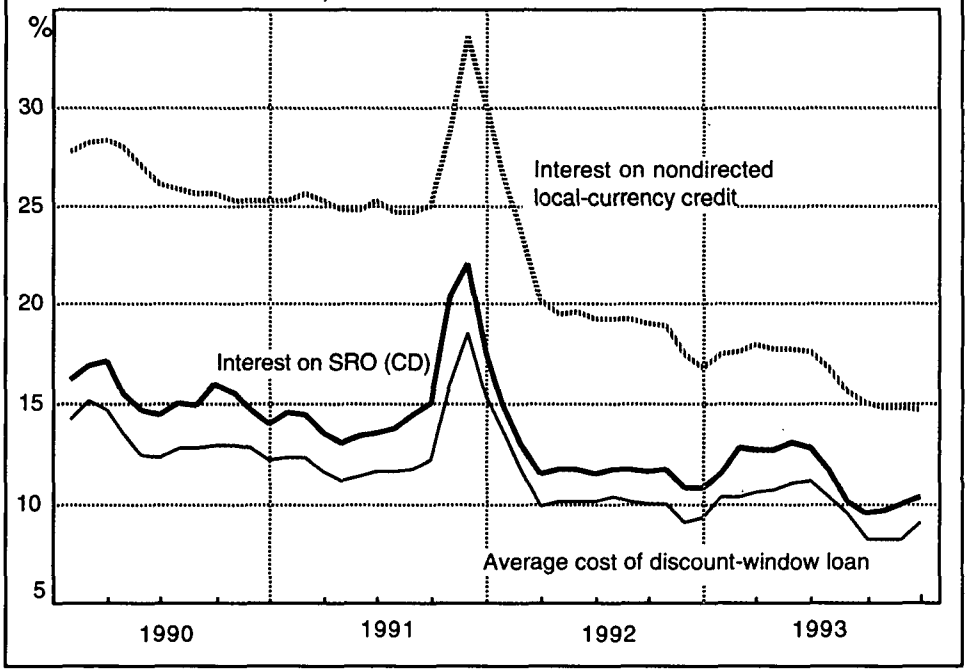
Table 7.3
Selected Interest Rates, 1990–93

(percent p.a.)

	Short-term local-currency credit to the public					Financial assets of the public				
								Real yield to maturity of government bonds[d]		
	Overdraft facilities	Term credit	Average[a]	3-month Eurodollar[b]	Marginal cost of discount-window loan	SROs[c] (CDs)	1-month TBs	5 years	10 years	Interest-rate spread[e]
Nominal rate										
1990	29.6	22.5	26.4	8.1	15.4	13.2	15.7	1.2	1.9	16.4
1991	29.9	22.3	26.4	5.7	15.3	12.9	14.9	2.1	2.9	17.0
1992	22.0	17.6	19.9	3.7	11.9	10.3	12.2	2.3	2.6	11.7
1993	18.1	15.0	16.4	3.1	11.3	9.7	11.4	2.8	2.9	8.4
1992										
I	26.1	20.4	23.5	4.1	13.2	11.7	13.9	2.8	3.2	14.4
II	21.2	17.4	19.4	3.9	11.6	10.0	12.5	2.5	2.8	11.1
III	21.2	16.9	19.1	3.2	11.6	10.1	11.3	2.0	2.2	11.1
IV	19.4	15.8	17.7	3.5	11.1	9.4	11.0	1.9	2.1	10.0
1993										
I	19.2	16.1	17.6	3.1	12.2	10.4	12.4	2.1	2.2	8.9
II	19.5	16.0	17.7	3.1	12.8	10.9	12.5	3.2	3.3	8.6
III	17.3	14.3	15.7	3.1	10.5	9.2	10.4	3.3	3.4	8.1
IV	16.5	13.4	14.7	3.2	9.8	8.4	10.3	2.5	2.8	8.0

[a] Weighted by the volume of credit of the two components.
[b] In dollar terms.
[c] Excluding large negotiable SROs.
[d] Gross yield to maturity in secondary market.
[e] The difference between interest rates on overdraft credit and SROs.

Figure 7.1
Nominal Interest Rates, 1990–93[a]



[a] For definition of interest rates, see Table 7.3.

Monetary developments during 1993 can be divided into three sub-periods: the end of 1992 to February 1993; March to July; and August to December (Table 7.4).

November 1992–February 1993: In order to stimulate economic activity and employment, in view of the high unemployment rate and slowdown in inflation in 1992, the Bank of Israel reduced the cost of the discount-window loan by one percentage point in November 1992, with the intention of reducing interest and narrowing the spread. At the same time, the midpoint rate of the exchange-rate against the currency basket was raised by 3 percent and the slope of the band reduced from 9 to 8 percent. As a result, the gap between the expected yield on local-currency and foreign-currency assets widened, and both domestic credit and foreign assets became more worthwhile. This development, together with the process of adapting to the liberalization of the capital market, which increased the public's possibilities of investing in foreign assets and thereby of diversifying and improving its portfolio, pushed up the demand for foreign exchange. From November 1992 to February 1993 the public bought $ 1.75 billion on the trading floor.

In order to contend with the wider yield gap, which represents the difference between the interest on local-currency assets and liabilities, on the one hand, and that on foreign

assets and liabilities plus the expected rate of devaluation, on the other, it is possible to take steps to increase the yield on domestic assets or reduce the expected devaluation rate. Within the framework of the sloping band exchange-rate regime, a faster rise in the exchange rate than is indicated by the slope of the band may dampen expectations of its rise in the future. In selecting policy instruments it should be noted that raising local-currency interest higher than is necessary could impair economic activity, while a rapid adjustment of the exchange rate could undermine the credibility of the exchange-rate policy and hence price stability. At the beginning of this sub-period the Bank of Israel chose to meet the increased demand for foreign currency while raising the exchange rate and expanding the discount-window loan accordingly—in response to the increased demand for credit for foreign-exchange purchases—without raising its cost. During November and December the exchange rate rose by 6.2 percent against the currency basket, and the marginal interest on the discount-window loan remained at 10.5 percent. Pressure on the reserves continued in January and February, but the Bank of Israel increased the cost of banks' sources by meeting only part of the greater demand for liquid assets intended to extend credit for the purchase of foreign currency. Marginal interest on the discount-window loan went up to 12.3 percent in February 1993, while the exchange rate against the currency basket, which reached the middle of the band in January, remained virtually unchanged. At the end of the sub-period, foreign-exchange purchases were checked, and during the subsequent three months there were conversions by the private sector.

Table 7.4
Changes in the Monetary Base

(NIS million)

	Govt. and Jewish Agency injection	Bank of Israel injection	Foreign-currency conversions	Change in monetary base
Oct. 1992–Feb. 1993	280	5,336	–5,442	174
Mar. 1993–Jul. 1993	2,105	–1,641	–97	366
Aug. 1993–Nov. 1993	1,297	2,787	–1,493	2,592
Dec. 1993	1,407	–2,234	–459	–1,285

There was little change in the money supply during this sub-period. The public-sector injection was also negligible—a relatively large injection in November–December 1992, the end of the budget year, followed by an equivalent absorption in January–February 1993. The latter was due to net borrowing of NIS 1.6 billion, even though at this time there was a public-sector surplus of NIS 500 million. The substantial reduction of the monetary base as a result of private-sector foreign-exchange purchases of NIS 5.4 billion was fully offset by the Bank of Israel injection, most of it via the discount-window loan.

March–July 1993: The Bank of Israel maintained the relatively high interest rates which had prevailed at the end of February, in order to prevent a renewal of the capital outflow of end-1992 and beginning-1993. Marginal interest on the discount-window loan was 12.5–13 percent.

Table 7.5A
Sources of Change in Unindexed Local-Currency Assets[a], 1990–93

(NIS million)

					1992				1993			
	1990	1991	1992	1993	I	II	III	IV	I	II	III	IV
General government	3,578	4,562	5,156	2,628	–809	1,982	2,721	1,262	–2,186	2,069	967	1,779
Bank of Israel	–2,754	304	2,884	3,800	650	743	–569	2,060	6,127	–1,824	1,877	–2,381
Discount-window loan	–1,671	2,575	5,370	5,994	1,539	1,001	–201	3,032	6,728	–1,347	2,714	–2,102
Open-market operations	277	–918	–108	996	–384	224	275	–223	177	272	41	507
Other[b]	–1,360	–1,352	–2,378	–3,190	–505	–482	–642	–749	–777	–750	–878	–785
Private foreign-currency conversions	–282	–4,122	–7,180	–4,591	131	–1,825	–2,169	–3,317	–2,499	–373	–574	–1,146
Total change in monetary base	541	744	860	1,837	–29	900	–17	6	1,442	–128	2,270	–1,748
Domestic banking operations[c]	5,781	3,469	5,749	13,358	137	371	2,563	2,678	–2,321	3,500	1,580	10,599
Change in unindexed local-currency assets	6,322	4,214	6,609	15,194	108	1,271	2,546	2,684	–879	3,371	3,850	8,852
Money supply	1,646	957	2,482	2,927	257	815	706	705	–323	544	1,464	1,241
Time deposits, SROs (CDs), and other deposits	4,676	3,256	4,127	12,267	–149	457	1,840	1,979	–556	2,828	2,386	7,610

[a] Excluding Treasury bills.
[b] This includes budgetary expenditure of the Bank of Israel, directed local-currency credit, transactions in government securities, interest on banks' local-currency deposits with the Bank of Israel, and the interest paid by the banks on the discount-window loan.
[c] This is the residual item (i.e., change in the unindexed local-currency assets *less* change in money base), and represents the effect of the deposit multiplier.

Table 7.5B
Sources of Change in Unindexed Local-Currency Assets[a], 1990–93

(percent of GDP)

					1992				1993			
	1990	1991	1992	1993	I	II	III	IV	I	II	III	IV
General government	3.3	3.0	3.1	1.3	–2.2	4.9	6.7	3.0	–5.1	4.7	2.1	3.6
Bank of Israel	–2.5	0.2	1.8	2.4	1.8	1.8	–1.4	5.0	14.3	–4.2	4.1	–4.8
Discount-window loan	–1.5	1.8	3.4	3.6	4.1	2.5	–0.5	7.3	15.7	–3.1	5.9	–4.2
Open-market operations	0.3	–0.7	–0.1	0.5	–1.0	0.6	0.7	–0.5	0.4	0.6	0.1	1.0
Other[b]	–1.3	–1.0	–1.5	–1.8	–1.4	–1.2	–1.6	–1.8	–1.8	–1.7	–1.9	–1.6
Private foreign-currency conversions	–0.3	–2.6	–4.4	–2.6	0.4	–4.5	–5.3	–8.0	–5.8	-0.9	–1.3	–2.3
Total change in monetary base	0.6	0.6	0.5	1.1	–0.1	2.2	–0.0	0.0	3.4	–0.3	5.0	–3.5
Domestic banking operations[c]	5.3	2.4	3.5	6.8	0.4	0.9	6.3	6.4	–5.4	8.1	3.5	21.3
Change in unindexed local-currency assets	5.9	3.0	4.0	8.0	0.3	3.2	6.2	6.4	–2.1	7.7	8.4	17.8
Money supply	1.5	0.7	1.5	1.5	0.7	2.0	1.7	1.7	–0.8	1.2	3.2	2.5
Time deposits SROs (CDs), and other deposits	4.3	2.3	2.5	6.4	–0.4	1.1	4.5	4.8	–1.3	6.5	5.2	15.3

[a] Excluding Treasury bills.
[b] This includes budgetary expenditure of the Bank of Israel, directed local-currency credit, transactions in government securities, interest on banks' local-currency deposits with the Bank of Israel, and the interest paid by the banks on the discount-window loan.
[c] This is the residual item (i.e., change in the unindexed local-currency assets *less* change in money base), and represents the effect of the deposit multiplier.

During this period foreign-exchange purchases by the private sector were minimal—less than the current account deficit financing requirement. This is consistent with the relatively high level of interest and expectations of a moderate change in the exchange rate, and perhaps also with the adjustment arising from the early foreign-exchange purchases of the previous months. The exchange rate against the currency basket remained stable, at around NIS 3, meaning that the actual exchange rate was moving further away from the midpoint of the exchange-rate band, i.e., a slowing of the change in the exchange rate relative to its expected change on the basis of the slope of the band. Before the midpoint rate was adjusted at the end of July, the actual exchange rate was some 2 percent below the midpoint rate.

As noted, the cost of sources (the discount-window loan) was stable in this period, with a slight dip in the quantity provided by the Bank of Israel, so that neither supply nor demand changed significantly. In this period, too, there was moderate change in the monetary base, matching the requirement of increased economic activity, but the components of this change differed from those of the preceding period. The absorption of NIS 1.6 billion by the Bank of Israel (with a NIS 800 million reduction in the balance of the discount-window loan) partly offset the public-sector injection, most of which took place in June (the *kibbutz* debt settlement). Activity on the foreign-exchange market served to lower the monetary base, so that its total expansion in this period was minimal.

In July an inflationary target of 8 percent was announced for 1994, and the slope of the exchange-rate band was accordingly reduced from 8 to 6 percent. At the same time, the midpoint rate was raised by 2 percent, and the exchange-rate premium for exporters and the import tariff—both standing at 2 percent—were cancelled. Alongside the change in the slope of the band—in line with the slowing of the rate of inflation, calm on the foreign-exchange market, and slowdown in economic activity—the Bank of Israel took steps to reduce interest. Low-interest brackets, down to an initial rate of 8.5 percent, were added to the discount-window loan, and some of the brackets were reduced from half a percent to one tenth of a percent.

August–December 1993: The main development during this period was the substantial expansion of the discount-window loan, enabling an appropriate increase in the monetary base and the local-currency aggregates (up to M2), especially interest-bearing assets—SROs and resident time deposits—as well as in local-currency credit (Figures 7.2 and 7.3). From August to November the monetary base rose by NIS 2.6 billion, after growing by only NIS 530 million from January to July. Alongside the increase in the discount-window loan, interest on sources remained at the low level set at the conclusion of the process of interest reduction—about 9.5 percent. Although interest was low, foreign-exchange purchases (though larger than in previous months) were generally in step with the requirements of the private sector's current account. From August to the end of the year the private sector bought some $ 650 million from the Bank of Israel. The moderation of the slope of the exchange-rate band (an action which was apparently perceived as credible) and the lower interest rate prevented the yield on foreign assets from rising, thus reducing foreign-exchange purchases by the

Table 7.6
Domestic Budget Deficit (Consolidated Balance Sheet of Central Government and Central Bank), 1990–93[a]

(percent of GDP)[b]

	1990	1991	1992	1993	1993 I	1993 II	1993 III	1993 IV
Deficit								
Government expenditure	39.3	41.4	41.7	40.6	41.0	40.2	41.9	39.3
of which Interest on internal debt[c]	5.0	4.8	4.4	4.4	3.5	5.1	3.8	5.2
Government income[d]	35.6	35.8	37.7	37.5	41.7	35.7	35.6	35.6
Budget deficit[e]	3.7	5.6	4.0	3.1	–0.7	4.4	4.8	3.7
Non-budgetary injection	0.2	0.1	0.3	0.3	0.1	0.2	0.9	–0.2
Jewish Agency injection	0.9	0.9	0.7	0.5	0.5	0.6	0.3	0.6
Total domestic deficit	4.9	6.5	4.9	3.8	–0.0	5.2	6.0	4.1
Financing								
Change in monetary base	0.6	0.6	0.5	1.1	3.4	–0.3	5.0	–3.5
Net borrowing via Bank of Israel	2.5	–0.2	–1.8	–2.4	–14.3	4.2	–4.1	4.8
of which Treasury bills	–0.2	0.7	0.4	–0.1	0.1	–0.1	0.4	–0.6
Discount-window loan	1.5	–1.8	–3.4	–3.6	–15.7	3.1	–5.9	4.2
Net domestic borrowing	1.5	3.5	1.8	2.5	5.1	0.5	3.9	0.6
Bonds and deposits[f]	1.5	5.1	3.2	1.9	5.5	1.0	2.2	–1.1
Sales of assets and capital income	0.3	0.4	0.8	1.7	1.8	1.7	1.7	1.8
less Net credit to private sector	0.3	2.0	2.2	1.2	2.2	2.3	0.0	0.2
Foreign-currency conversions	0.3	2.6	4.4	2.6	5.8	0.9	1.3	2.3

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

[b] Average of quarterly flow as percent of estimated GDP for that quarter; the annual figure is the average of the quarterly data.

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

[d] Including net compulsory loans.

[e] Government expenditure *less* government income.

[f] Tradable bonds and nontradable deposits and bonds (excluding Treasury bills and resident deposits).

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

private sector. However, the main reason for the reduction in this period seems to be the existence of another domestic asset—traded securities—whose expected yield made it an attractive alternative at the prevailing interest rates.

Given the appreciable expansion of the monetary base and local-currency aggregates, as well as the relatively high level of the price indices in December 1993 and January 1994, the Bank of Israel took steps to raise interest on the discount-window loan to 10.5 percent in order to attain the 8 percent inflation target announced for 1994. The rate of expansion of local-currency credit and the money supply at the beginning of 1994 appears to have slowed, though short-term deposits continue to increase rapidly. Some of this expansion can be explained by the higher interest on these assets. This process was accompanied by foreign-exchange conversions by the private sector rather than capital outflow.

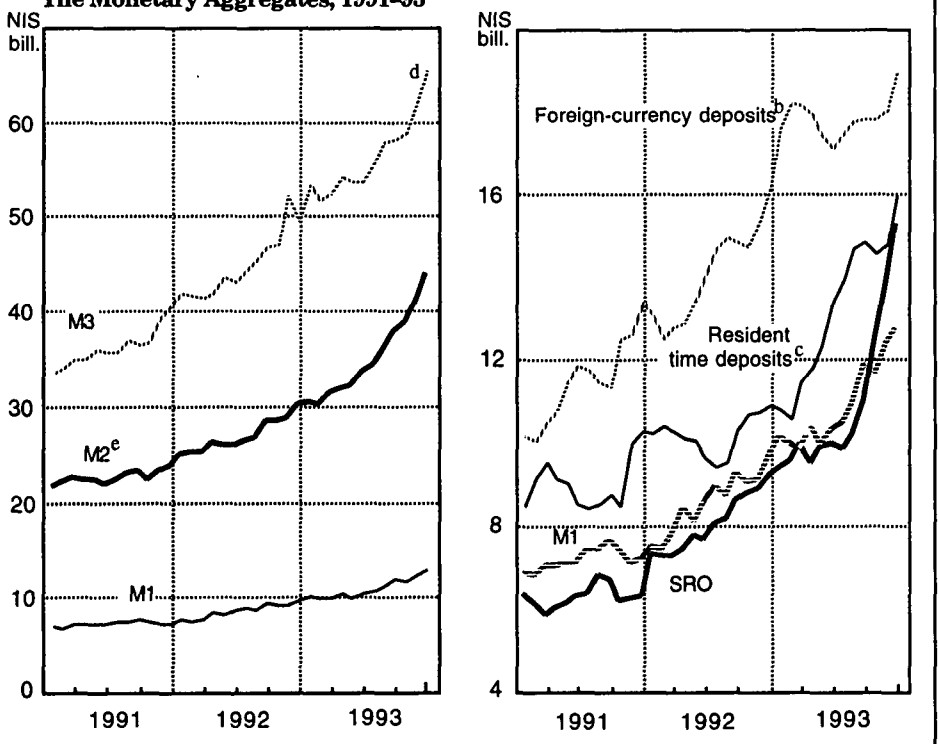
3. THE MONETARY AGGREGATES, CREDIT, AND INTEREST

The aggregates

During the year the composition of M3 changed, with an increase in its local-currency component and a fall in its foreign-exchange-denominated or indexed (short-term) deposits, from 33 percent in December 1992 to some 28 percent in December 1993. Most of this change occurred in the second half of the year and was due to the considerable expansion of local-currency deposits (M2), especially interest-bearing ones (SROs and resident time deposits), and a more moderate change in foreign-exchange deposits. The expansion of the components of M2 is also evident from a comparison of the average levels of the aggregates in 1993 and 1992, and particularly when the rates of growth in the first and second halves of 1993 are compared. In the first half of the year the aggregates expanded at the same rate as—or even slightly lower than—1992, matching the slowdown in economic activity. The moderate expansion of the money supply was also in step with the relatively high level of local-currency interest at that time. In the second half of the year, however, the average money supply rose faster, at an annual rate of over 30 percent, while SROs and resident time deposits increased at an annual rate of 58 percent. The rise in economic activity and expectations of growth as a result of progress in the peace process can explain only part of the accelerated expansion, while some can be attributed to developments on the capital market—the increase in stock-market activity, on both the primary and secondary markets, and the substantial increase in share prices.

The acceleration of the real growth rate in the average balance of M1, to 16 percent in 1993, is prominent in view of the almost uniform real annual increase of about 10 percent in 1990–92. This is even more pronounced against the backdrop of the slowdown in the growth of business-sector product, from 7 to 3.5 percent in 1993. The expansion of the broadest aggregate, M2**, also displayed the same trend.

Figure 7.2
The Monetary Aggregates, 1991-93[a]



[a] For definition of aggregates, see Table 7.1; based on monthly averages.
[b] Short-term foreign-currency-indexed and denominated deposits.
[c] Unindexed.
[d] An exceptional overnight deposit of NIS116.2 billion in November 1993, due to 'other deposits' for securities orders, has been ignored, to maintain the proportions of the figure.
[e] Excluding Treasury bills and 'other deposits.'

A separate examination of the components over and beyond M1 in M2* (M2 excluding Treasury bills) is particularly significant in 1993. In addition to interest-bearing deposits, M2* includes 'other deposits,' the deposit matching the amount of their order which persons ordering securities on issue are required to deposit for the issue day. The method of issue at maximum price, which guarantees a maximum price for those ordering new issues, irrespective of whether the issue was over-subscribed or not, generated a vicious circle in which the extent of orders—and deposits—was sometimes several multiples of the actual issue. In order to gain a better understanding of the development of the monetary aggregates during 1993, this amount should be deducted from M2* (indicated by M2** in Table 7.1). The demand for a deposit equal to the amount of the order was complemented by the equivalent rise in credit extended for this purpose. At the

end of 1993 the maximum price was abolished, as was the deposit requirement, so that over-subscriptions fell drastically, as did credit taken for this purpose.

The view that changes in the aggregates are linked with stock-market activity is supported by the different paths of development during 1993 of SROs and resident time deposits—both of them short-term, interest-bearing, local-currency deposits (Figure 7.2). Resident time deposits, which are short-term from a week to a year, grew substantially in the first eight months of the year, remaining stable thereafter. SROs, which are interest-bearing overnight deposits, remained virtually unchanged until August, growing by about 40 percent in the subsequent five months even though the nominal interest on them fell at that time. Since interest rates on SROs and resident time deposits are coordinated over time, the different behavior of these deposits cannot be explained by a change in relative yield. It may be assumed that resident time deposits, which are less liquid and hence serve more for accumulating wealth than for implementing transactions, are more sensitive than the money supply to changes in their own and alternative yields. Consequently, this deposit grew at the beginning of the year, when interest was relatively high, and continued to do so as nominal interest remained high but inflation slowed, so that *ex post* real interest rose. Another explanation for the increase in resident time deposits is connected with the large extent of new issues during the year. Capital raised on the stock exchange is not used immediately, so that it can be assumed that in the meantime firms deposit it in resident time deposits; SROs, on the other hand, which are almost as liquid as the money supply, are more sensitive to changes in economic activity. The considerable expansion of the balance of SROs occurred at the same time as the stock market boomed, with a rise in daily turnover due to the increase in the number of securities changing hands and in their market value. The rise in the quantity and value of transactions increases the average level of liquid assets required to implement these transactions, so that the more liquid asset, which is used to bridge the gap between purchases and sales, will expand in accordance with capital-market activity.[7]

Over and beyond this, the increase in the money supply, SROs, and resident time deposits during the year reflects, at least in part, a response to the lower level of inflation. During 1992 and 1993, nominal interest on SROs and resident time deposits declined by less than the inflation rate, which fell from 16–18 percent to 10 percent. As a result, their *ex post* real cost fell in those years, and for some of the time they even bore a positive real yield. The cost of holding liquid assets is lower, so that they became more desirable (Table 7.3). When the interest on these assets is deflated by the CPI excluding housing, which is a better indicator of basic inflation, it clearly shows the shift from real cost to *ex post* positive real yield on these assets.

A prominent feature of 1993 was the continued contraction of cash held by the public as a proportion of the money supply (currency in circulation *plus* current accounts). This

[7] The rise in the balance of SROs in the second half of the year may also be partly connected with the greater number of transactions on the housing market and the rise in apartment prices, which led to an increase in the liquid assets needed to implement these transactions.

Table 7.7
Commercial Bank Credit to the Public, 1991–93

	End-year, NIS million			Nominal change over preceding year, percent[b]					
				Average balances			End-year balances		
	1992	1992[a]	1993	1991	1992	1993	1991	1992	1993
Unindexed local-currency credit	39,479	36,408	53,046	26	26	43	25	32	46
Credit lines and overdrafts	*19,782*	*18,266*	*22,837*	22	23	24	27	20	25
Other	*19,697*	*18,142*	*30,209*	31	29	65	22	47	67
Foreign credit[c]	11,948	13,104	13,545	60	13	6	22	19	3
Directed export credit	441	441	403	–86	23	0	–28	47	–8
Subtotal	**51,868**	**49,952**	**66,995**	24	23	33	23	28	34
Indexed local currency	26,748	27,178	39,620	36	36	43	38	39	46
Credit from earmarked deposits	21,884	15,029	12,838	10	10	–1	17	0	–15
Total bank credit	**100,500**	**92,159**	**119,453**	22	22	28	25	23	30
Consumer Price Index				19	12	11	18	9	11

[a] As of December 1992, reporting on credit includes the specific provision for loan losses, and interest is included in the credit balance. To enable a comparison to be made, the data for 1992 is presented in both the old form (left–hand column) and the new form (right-hand column).

[b] Growth rates based on end-month figures.

[c] Commercial banks and their overseas offices.

is a long-term trend which can be presumed to reflect such structural changes as technological advances (credit cards and ATMs), which reduce the amount of cash needed. Over and beyond this trend, however, in the second half of 1993 there was a steep drop in the cash component of M1, because the increase in current accounts was faster than that of cash. Cash is the most liquid asset and is used for current transactions. Current accounts, which are the next most liquid asset, are used for the same purpose, as well as for bridging the transition from one asset to another, as are SROs. The difference between the expansion of cash in comparison with that of current accounts lies in the assumption that part of the reason for the growth of M1 is in fact due to the expansion of capital market activity.

The stock of foreign-currency deposits rose by 6 percent, in dollar terms, in 1993. The change in the exchange rate was reflected by a 17 percent expansion of these assets in local-currency (nominal) terms. In the first quarter they rose by 12 percent in dollar terms, consistent with the private-sector capital export at that time. This increase can be explained by the yield gap created between local- and foreign-currency assets. Later in the year these aggregates fell, along with the expansion of local-currency assets (M2). In December 1993 and January–February 1994 foreign-currency-denominated and indexed assets expanded, despite the rise in local-currency interest.

Credit

The average level of unindexed local-currency credit was 43 percent higher in 1993 than in 1992,[8] overdraft credit rising by 24 percent and term credit by 65 percent. This difference is mainly the result of a 40 percent increase in term credit in the last quarter of 1993 over the average of the preceding quarter. This increase, alongside the rise in its relative price (the difference between interest on overdrafts and term credit), matches the relative rise in the demand for this credit. Credit from overdrafts and overdrawn current accounts presumably matches economic activity more closely than term credit (including on-call credit), which also reflects financial activity. The stock market rallied during this period, and expectations of a future high yield on shares increased the demand for this credit in order to finance purchases on the primary and secondary markets. The expansion of the discount-window loan met the increased demand for credit sources without raising the price of credit. The relatively low cost of short-term local-currency credit at this time, resulting from the fall in interest on the discount-window loan and the banks' efforts to sell units in mutual funds by extending credit, helped to increase activity on the stock market.[9] The average level of interest on all nondirected (short-

[8] Because of reporting changes in December 1992, there are two sets of figures for that month. Starting with that month, the credit balance at the end of the month includes provision for loan losses and the interest on credit. The rate of change of the average levels for 1992 and 1993 has been adjusted accordingly.

[9] There are no orderly data on credit extended by the banks for stock-market activity. Figures provided

Table 7.8
Mortgage Banks, Credit Flows and Balances, 1990–93

	1990	1991	1992	1993
NIS million[a]				
Credit flows				
Directed mortgages	1,688	3,517	5,109	6,449
Other mortgages	1,582	2,357	2,102	4,546
Total mortgages	3,270	5,875	7,210	10,996
Total *less* repayments	961	2,849	3,291	5,699
Other loans	314	414	641	1,189
Total mortgage-bank loans	3,584	6,289	7,851	12,185
Credit balance				
At end of period	18,037	25,369	30,523	39,917
Average	15,748	21,839	28,496	35,664
Real annual change, percent				
Credit flows				
Directed mortgages		76.9	28.8	14.7
Other mortgages		24.7	-20.3	95.3
Total mortgages		51.5	9.2	38.2
Total *less* repayments		152.0	2.0	57.9
Other loans		11.7	48.1	65.8
Total mortgage-bank loans		48.2	11.5	40.5
Credit balance				
At end of period		19.2	10.0	17.6
Average		16.3	16.8	12.8

[a] At current prices.

term) local-currency credit—16.4 percent—was 3.5 percentage points lower than in 1992. This development reflects high interest at the beginning of the year resulting from large-scale foreign-currency purchases, with a gradual reduction during the year, in tandem with the reduction of the cost of the sources made available to the banks by the Bank of Israel. The average level of nondirected foreign-currency credit (end-month figures, at foreign-currency rates) fell by more than 7 percent; in local-currency terms the credit balance rose by only 6.4 percent. There are no detailed figures for the interest on this credit. If we assume that its trend was similar to that of interest on the 3-month Eurodollar, which remained at around 3 percent, and that expected exchange-rate developments matched the slope of the band, we find that this credit became more expen-

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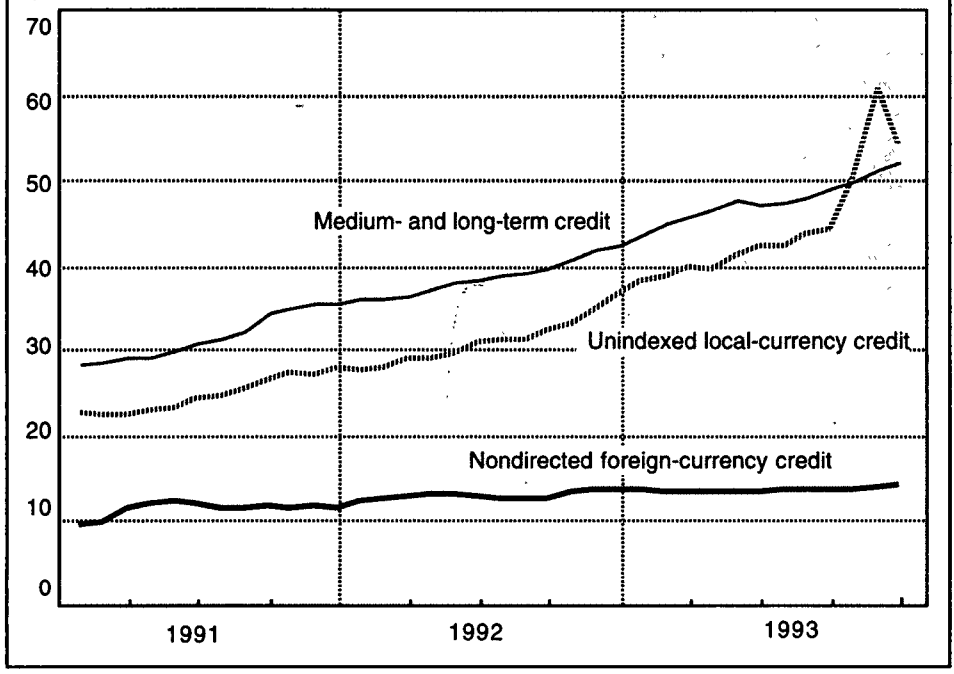
by the Banking Supervision Department of the Bank of Israel indicate that credit for the purpose of participation in mutual funds amounted to NIS 1.7 billion in October 1993, and rose to over NIS 3 billion in December 1993.

Figure 7.3
Bank Credit, 1991–93[a]



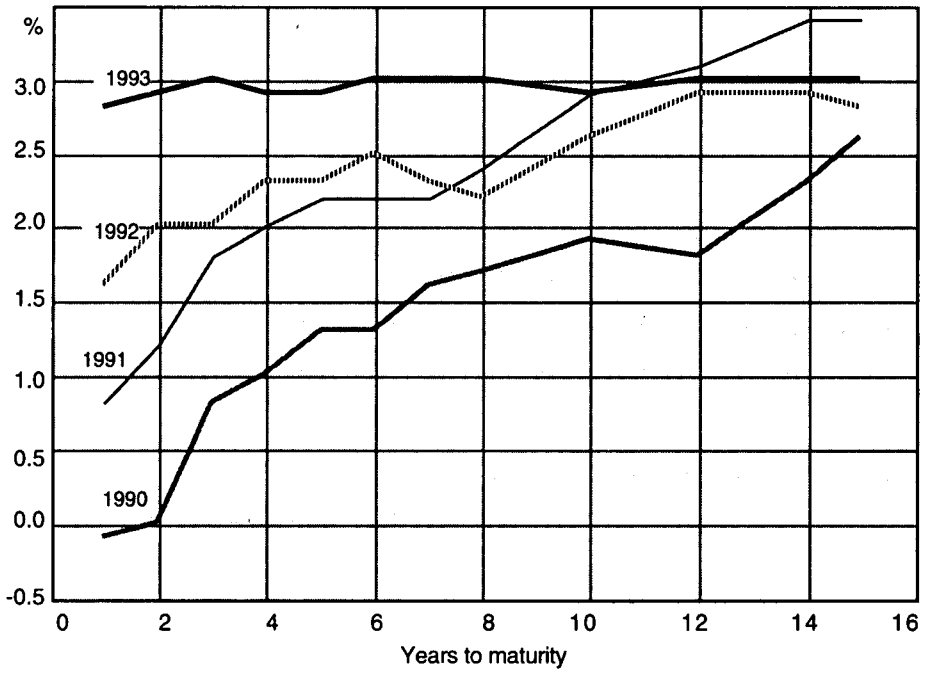
[a] End-month data. In December 1992 the reporting method was changed (see note to Table 7.7), and the data have been adjusted accordingly.

sive than local-currency credit, on which interest fell during the year. This may explain some of the shift from foreign- to local-currency credit.

In contrast to 1992, the trend of credit in 1993 is not a mirror-image of that of the aggregates. In 1992 the real rise of unindexed local-curency credit and the decline in the dollar balance of nondirected foreign-currency credit reflected the change in the composition of the public's portfolio—a switch from local- to foreign-currency assets. In 1993, as the local-currency aggregates grew and the foreign-currency aggregates remained stable, local-currency credit rose and foreign-currency credit fell (Table 7.7). Medium- and long-term bank credit[10] rose by some 18 percent from its average level in 1992, similar to its rate of growth in 1991–92. This expansion was entirely due to the increase in nondirected indexed credit, while the balance of credit from approved earmarked deposits remained stable. Real interest on this credit, as estimated from the

[10] This consists of nondirected credit and credit from approved earmarked deposits. On 31st December 1992 the arrangements regarding credit from earmarked government deposits at the responsibility of the banks were cancelled. The new arrangement makes credit from approved earmarked deposits and nondirected credit substitutable.

Figure 7.4
Yield to Maturity on Treasury Bonds, 1990–93



ield to maturity on bonds, was half a percentage point higher in 1993 than in 1992. his increase reflects a process whereby interest rates rose until the middle of the year, fter which the trend reversed. Yield to maturity was still higher at the end of the year ıan at the beginning. The rise in the yield to maturity on bonds reflects the effect of two pposing forces: the reduction of net borrowing as a ratio of GDP by the government especially through bonds) reduces the supply of these assets and serves to push up their rice and lower the yield to maturity. On the other hand, the decline in the private saving ıte (see Chapter 2) and the shift of demand to other financial assets acts to trim demand ıd raise the yield to maturity. A noteworthy feature is the continued moderation of the ield curve (Figure 7.4). It can be clearly seen that the yield of bonds with at least 10 ears to maturity has remained almost the same since 1990, while the yield on bonds hose date of redemption is near rose significantly. In 1993 overall yield to maturity as about 3 percent. The moderation of the yield curve may indicate either expectations f a fall in long-term interest or excess supply of short-term assets.

The balance of mortgage bank credit rose by a real 18 percent in 1993 (Table 7.8), eflecting a real 38 percent increase in the flow of new housing loans. In contrast to 992, the flow of nondirected housing loans rose by a substantial 95 percent, while irected loans rose by only 15 percent. The share of directed loans in new credit fell

from some 70 percent in 1992 to about 60 percent in 1993. This is consistent with th decline in real interest on nondirected credit, and the stability of interest on directed credi throughout the year.

Interest rates

The interest-rate spread in the local-currency segment, reflecting the difference betwee the interest on overdrafts and SROs (Table 7.3), has contracted sharply in the last fev years—from 33 percentage points in 1988 to 8.4 percentage points in 1993. Most of thi decline resulted from a steep drop in interest on credit (from its high level following th ESP), as interest on deposits remained fairly stable. One reason for this was the reductio of the reserve requirement on local-currency deposits to the level consistent with pruden liquidity management; this reduced the effective cost of credit sources, bringing thei price down. The process of reform and liberalization of the financial and capital market in recent years—which involved the reduction of restrictions on both indexed an foreign-exchange transactions—and the reduction of the role played by the banks a financial intermediaries helped to increase competition between banks, and hence t reduce the spread. In addition, the central bank's senior personnel persuaded the bank to support these trends. Banks' total operating income rose as a result of the increase i commissions and the expansion of economic activity, and their share of total income (a opposed to net interest income) rose. The downward trend of the share of net interes income persisted into 1993, reflecting the decline in the interest-rate spread as well as th rise in net operating income (and stability in operating costs). In contrast to previou years, in 1993 the rise in operating income was almost entirely due to the expansion o banking operations, especially in securities, without a significant change i commissions. The decline in profit from net interest activities as a result of the reductio of the interest-rate spread was partly offset by the greater amount of credit extended b the banks.

4. THE PUBLIC'S PORTFOLIO

In 1993 the public's portfolio[11] continued to grow rapidly, by a real 21 percent, simila to the increase in 1992. This year, too, most of the rise reflects the sharp increase in th proportion of shares in the portfolio, and this reached 31 percent at the end of 199 compared with only 12 percent at the end of 1991.[12] At the same time, the share of CPI indexed assets fell for the second year in succession (Table 7.9).

Another notable development connected with the increased proportion of shares in th portfolio is the reduced proportion of long-term assets—indexed deposits, saving

[11] This comprises cash, bank deposits, bonds, shares, savings schemes, provident funds, and lif insurance (see also Table 7.9).

[12] This is in fact an overestimate, due to double counting arising from the ownership of firms liste for trading by other listed firms.

Table 7.9A
Financial Asset Holdings of the Public, 1991–93[a]

	End-of-period balances, NIS million					Percent of total		
		1993						
	1992	I	II	III	IV	1991	1992	1993
Unindexed short-term assets	**32,941**	**32,756**	**36,286**	**39,109**	**46,381**	**11.1**	**10.3**	**10.8**
Money supply (M1)	9,942	9,835	10,406	11,911	12,832	3.1	3.1	3.0
Time deposits and SROs[b]	19,960	20,074	23,100	24,974	31,011	6.6	6.2	7.2
Treasury bills	3,039	2,847	2,781	2,224	2,538	1.4	0.9	0.6
Resident deposits and tradable bonds	**40,104**	**42,337**	**41,351**	**43,631**	**45,018**	**12.0**	**12.5**	**10.5**
Deposits[c]	17,537	18,417	17,720	18,162	19,581	5.2	5.5	4.6
of which Nonresident deposits of Israelis	*10,467*	*11,255*	*11,395*	*11,768*	*12,964*	*3.0*	*3.3*	*3.0*
Bonds	22,567	23,436	23,631	25,469	25,437	7.2	7.0	5.9
subtotal: Short-term assets	**73,045**	**75,094**	**77,638**	**82,740**	**91,399**	**23.1**	**22.8**	**21.4**
Total shares[d]	63,940	71,344	78,787	95,109	119,461	11.1	20.0	27.9
Total short-term assets, tradable bonds, and nonbank shares	**136,985**	**146,437**	**156,425**	**177,848**	**210,860**	**34.2**	**42.7**	**49.3**
Restitutions deposits	12,269	12,366	12,259	13,000	12,986	4.2	3.8	3.0
Provident and indexed deposits	34,199	41,265	42,223	42,880	45,195	14.0	10.7	10.6
Provident funds and life assurance	136,992	140,615	143,710	150,703	158,745	47.7	42.8	37.1
Total financial assets	**320,445**	**340,683**	**354,617**	**384,432**	**427,786**	**100.0**	**100.0**	**100.0**
of which Shares[e]	72,130	80,850	88,486	106,755	133,078	12.4	22.5	31.1
Foreign-currency assets[f]	46,089	47,575	47,233	48,401	50,223	14.8	14.4	11.7
CPI-indexed assets[g]	169,285	179,503	182,611	190,166	198,104	61.8	52.8	46.3

[a] In this table 'public' excludes the government, the central bank, commercial banks, and provident funds. Owing to lack of data, no adjustment was made for the rest of the world, i.e., financial assets of nonresidents 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 private institutions and financial assets held by them.
[b] On-call deposits.
[c] Resident deposits, exchange-rate-indexed deposits and unrestricted (foreign-exchange) deposits.
[d] Including shares held by provident funds.
[e] Excluding shares held by provident funds.
[f] Arrangement bank shares and other savings schemes with CPI/exchange-rate indexation-options are regarded as foreign-currency-indexed assets.
[g] Includes total assets of provident funds *less* their holdings of shares, as most of their portfolio is CPI-indexed.
SOURCE: Bank of Israel.

Table 7.9B
Real Change in Financial Asset Holdings of the Public, 1991–93[a]

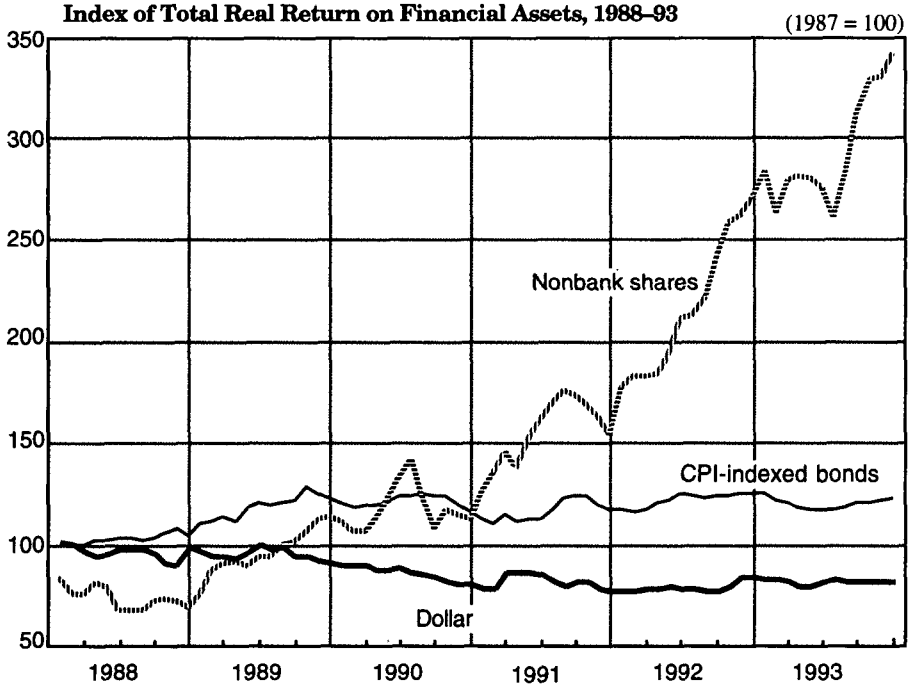
(percent)

	Average			During period						
						1993				
	1991	1992	1993	1991	1992	Total	I	II	III	IV
Unindexed short-term assets	13.2	11.7	17.9	9.6	12.4	26.6	–4.2	8.7	5.6	15.2
Money supply (M1)	8.2	8.3	13.6	–0.5	21.4	16.0	–4.7	3.8	12.1	4.6
Time deposits and SROs[b]	12.1	7.8	28.6	5.4	13.6	39.7	–3.1	12.9	5.9	20.6
Treasury bills	49.1	53.2	–26.3	89.4	–14.3	–24.9	–9.8	–4.2	–21.7	10.8
Resident deposits and tradable bonds	3.9	9.4	13.4	7.0	25.2	0.9	1.7	–4.2	3.4	0.2
Deposits[c]	–1.7	11.4	12.9	3.7	25.6	0.4	1.2	–5.6	0.4	4.7
of which Nonresident deposits of Israelis	10.3	17.0	20.9	13.6	29.6	11.3	3.6	–0.7	1.2	7.0
Bonds	8.5	8.2	12.6	10.6	19.6	1.3	0.0	–1.1	5.6	–3.0
subtotal: Short-term assets	8.0	10.5	15.5	8.2	19.0	12.5	–1.0	1.4	4.4	7.3
Total shares[d]	37.6	62.4	70.3	45.3	119.2	67.9	7.5	8.3	18.3	22.0
Total short-term assets, tradable bonds, and nonbank shares	16.2	27.5	38.3	18.0	51.5	38.4	3.0	4.8	11.4	15.1
Restitutions deposits	–0.7	5.3	2.3	–0.7	10.1	–4.9	–2.9	–2.8	3.9	–3.0
Savings schemes and indexed deposits	–8.2	–6.3	11.9	–6.7	–7.5	18.8	16.2	0.4	–0.5	2.4
Provident funds and life assurance	4.2	6.9	5.2	5.6	9.0	4.2	–1.1	0.2	2.7	2.3
Total financial assets	5.5	11.9	18.7	7.2	21.2	20.0	2.4	2.1	6.2	8.1
of which Shares[e]	38.4	71.1	69.6	48.8	121.2	65.8	8.0	7.4	18.2	21.1
Foreign-currency assets[f]	–8.5	0.3	8.1	–7.9	16.6	–2.0	–0.6	–2.6	0.4	0.8
CPI-indexed assets[g]	3.7	3.5	5.3	5.0	3.9	5.2	2.1	–0.2	2.0	1.2

[a] For notes see Table 7.9A.

schemes, provident funds, and life insurance—from 62 percent at the end of 1991 to 48 percent in 1993. The rapid rise in share prices in 1993 appears to have affected the change in the distribution of assets, as it did in 1992, although the changes in 1993 were more moderate.

Figure 7.5
Index of Total Real Return on Financial Assets, 1988–93



All the rise in share prices in 1993 occurred in the last four months of the year, and this, together with an unprecedented extent of share offerings, increased the proportion of shares to a third of the portfolio at the end of 1993. In December 1993 the market value of shares—some NIS 150 billion—exceeded the value of annual business-sector product. These indicators reflect the qualitative change in the structure of the capital market, due first and foremost to the economic policy implemented together with the ESP and the reform of the capital market. Within this framework, the budget deficit was reduced significantly, slowing the inflation rate, and long-term interest rates fell. Special factors were at work in 1993, mainly the breakthrough in the peace process with the signing of the Declaration of Principles with the PLO in September 1993.

The market value of shares reflects the extent of productive assets traded, and changes in it are indicative of a change in their market price. The portfolio excluding shares rose at a lower rate—a real 7 percent—the most prominent development in 1993 being the

higher proportion of unindexed local-currency assets at the expense of foreign-currenc assets, thus reversing the trend of 1992. Towards the end of 1992 the public increase the share of foreign-currency (and foreign-currency-indexed) assets in its portfolio. Thi was done against the backdrop of the decline in domestic interest and the determinatio of the slope of the exchange-rate band. The high level of share prices, creatin expectations of a lower yield on domestic than on foreign assets, also contributed to thi trend. The purchase of foreign assets was made possible by the liberalization of foreign exchange control, especially the new arrangement regarding taxes on these assets i 1992. The effect of some of this was expected to be permanent, enabling the portfolio t be diversified but, as stated, in the middle of 1993 the trend reversed, and at the end o the year the proportion of foreign-currency assets in the portfolio excluding shares fel from 18.6 percent to its level at the end of 1991—17 percent. The share of unindexe short-term assets, on the other hand, rose from 13 to 16 percent.

It is generally accepted that changes in the short-term monetary aggregates depen mainly on their yield and the extent of economic activity. While the decline in interes served to increase the demand for money, a major shift towards short-term assets seem to have been a result of the rapid expansion of stock-market activity. Unindexed short term assets complement this activity; the transactions motive increases the demand fo liquidity, while the large-scale capital raised by firms improves capital structure. Th capital raised is held, *inter alia*, in short-term local-currency deposits until its final use.

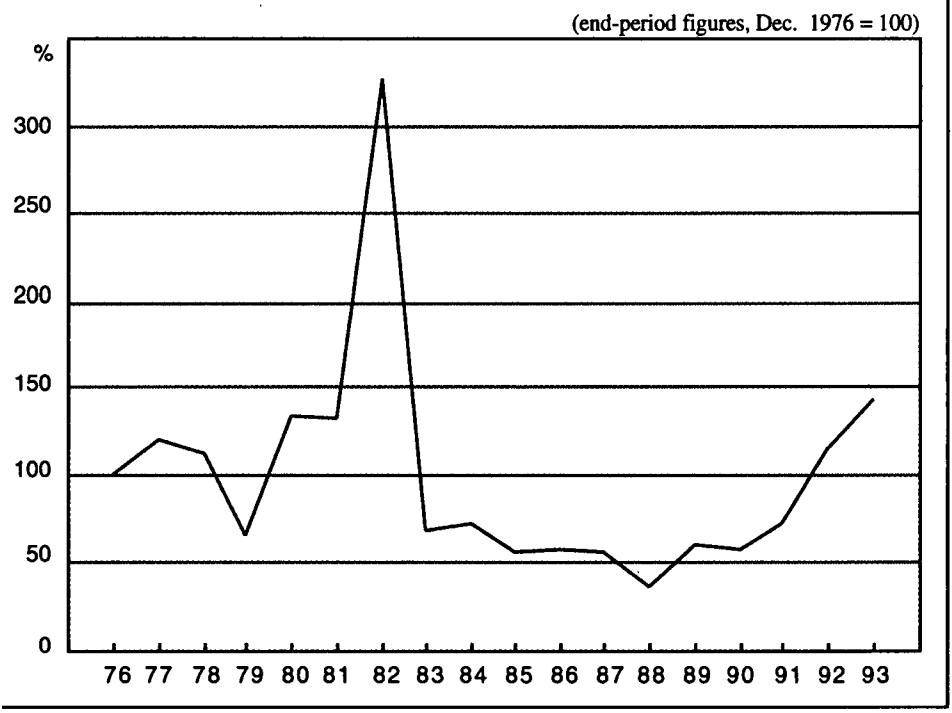
The increase in the proportion of shares in the portfolio, which began in 1990, reflect larger issues as well as rising share prices. Behind the steep increase in the share of thi component lies the continuing reduction of the public-sector deficit, which lowered th government's dependence on net borrowing in the capital market and, hence, the amoun of bonds held by the public. At the same time, the reform of the capital market enable institutional investors—provident funds and insurance companies—to increase th proportion of non-government financial assets in their portfolio, and hence their deman for shares rose. The greater demand by institutional investors for shares was no accompanied by a decline in direct demand by the public. This was because its direc investment in shares is short and medium term, while investment in provident funds i relatively long term, so that these two assets are not completely substitutable.

A comparison of offerings with share purchases by the provident funds shows that i 1989–93 the funds took up almost half all offerings—a net addition to demand whic explains part of the increase in share prices during the period reviewed. The liberalizatio of foreign-exchange control also enabled some demand to be diverted from domestic t foreign assets. Though this trend was indirect and incomplete—via the mutual funds—i served to moderate the increase in the price of domestic assets to some extent.

In view of the imbalance between the relative reduction in the supply of governmen financial assets and the incomplete nature of the reform of foreign investment, whic caused share prices to rise in 1993, the progress in the peace process caused furthe acceleration of the demand for shares in the last four months of 1993. The commercia banks contributed to this by extending additional credit for the purchase of participatio

ı mutual funds and direct investment in shares; at the same time, they resorted ıcreasingly to the relatively inexpensive sources provided by the Bank of Israel.

Figure 7.6
Ratio of Shares Index (Excluding Commercial Banks) to Business Sector Product, 1976–93



WEALTH

he public's financial wealth is inferred from the difference between its financial assets ıd liabilities.[13] The public's tangible assets include the assets of households—homes ıd consumer durables—as well as capital goods such as business-sector plant and ıuipment.

Total wealth rose by a real 4 percent in 1993, with tangible assets increasing by some percent while financial wealth shrank. The growth of tangible assets reflects the ıcrease in investment and capital stock by the business sector due to expectations of :celerated growth, and the continued rise in the stock of housing as a result of nmigrants' demand for accommodation (Table 7.10).

[13] See definition in Table 7.10.

Table 7.10
Estimated Wealth of Nonfinancial Private Sector, 1988–93[a]

(real annual change,[b] percent)

	NIS billion		Average				1993				
	1992	1993	1988–91	1992–93	1991	1992	Total	I	II	III	IV
Financial assets	**279.3**	**328.7**	**2.2**	**7.5**	**3.0**	**9.2**	**5.8**	**–6.0**	**4.5**	**10.9**	**15.1**
Short term[c]	*79.4*	*104.1*	–0.4	21.1	9.3	24.5	17.8	–3.1	16.0	26.7	35.3
Medium and long term	*199.8*	*224.6*	3.2	2.5	1.0	4.0	1.0	–7.1	0.1	4.7	7.0
Financial liabilities	**134.8**	**170.5**	**5.1**	**12.8**	**3.8**	**11.9**	**13.7**	**8.7**	**8.0**	**6.7**	**33.4**
Short term[c]	*49.9*	*66.2*	7.6	17.4	2.8	15.5	19.3	7.2	13.5	3.5	60.8
Long term	*84.9*	*104.2*	3.7	10.1	4.4	9.8	10.4	9.5	4.9	8.6	18.9
Net financial wealth	**144.4**	**158.2**	**–0.5**	**2.3**	**2.2**	**6.4**	**–1.5**	**–18.3**	**1.1**	**15.3**	**–1.2**
Tangible assets[d]											
Deflated by CPI	**342.5**	**412.3**	**3.2**	**11.2**	**3.8**	**14.3**	**8.2**	**3.9**	**4.4**	**12.0**	**12.9**
Real[e]			3.3	6.9	6.2	7.9	5.9	5.7	5.1	5.7	7.4
Total net wealth											
Deflated by CPI	**487.0**	**570.6**	**2.3**	**8.6**	**3.3**	**12.0**	**5.3**	**–3.1**	**3.5**	**12.9**	**8.7**
Real[e]			2.2	5.6	5.0	7.5	3.7	–2.1	3.9	8.4	4.8

[a] The nonfinancial private 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, financial institutions subject to the supervision of the Supervisor of the Banks, insurance companies, and pension and provident funds; these institutions represent most of the financial intermediation system. Owing to lack of data, financial institutions not under the supervision of the Supervisor of the Banks are not classified as financial intermediaries, and they are part of the nonfinancial private sector in this table. As a result, the asset and liability figures in this table differ from those of other tables in this chapter. As of 31.12.1994, interest is included in the deposit balance.

[b] Deflated by the CPI, unless otherwise specified.

[c] Includes financial shares and tradable bonds.

[d] Tangible assets comprise the stock of consumer durables and dwellings, as well as structures, goods, raw materials, and equipment held by firms.

[e] Deflated by respective component price indexes.

The flow of private saving contributed to the change in the stock of financial wealth /ith the decline in private saving and rise in direct investment in 1993 being reflected by real fall in financial wealth. Shares held by the public do not represent a claim on other ectors, since they are offset by the equity of private-sector firms, and are therefore not ıcluded in financial wealth. It can be assumed, however, that in an open economy such s Israel's, a rise in the market price of shares, which represent ownership of productive oods, embodies capital gains which will eventually constitute profits and permanent ıcome. Consequently, a rise in share prices will influence consumption.

In 1993 the public's wealth was supplemented by the shares of banks privatized by ıe government. The government also privatized certain corporations, and this epresented a net addition to the stock of shares held by the public.[14] Direct and financial ıvestment abroad also increased substantially, representing the diversification of the ublic's portfolio made possible by the liberalization of foreign-exchange control.

Thus, the contraction of financial wealth is generally consistent with the reduction of ıe budget deficit in 1993. It was accompanied by a rapid increase in the extent of inancial assets, and an even faster rise in the public's financial liabilities. Long-term abilities grew mainly due to the increased demand for housing and, hence, for ıortgages. Short-term liabilities, on the other hand, were influenced *inter alia* by the heaper credit extended by the banks, as stated earlier, towards the end of the year.

Private-sector investment in fixed assets seems to be increasing, following years in /hich the budget deficit was high and government financial assets crowded out ıvestment. Similarly, this process incorporates an increase in private investment verseas, thus drawing down the foreign exchange reserves.

. THE CAPITAL MARKET

'he increase in stock-market activity in 1993 was evinced by all the leading indicators. hare prices rose by a real 27 percent during the year, having soared by 74 percent in 992 after increasing rapidly, albeit more moderately, in previous years. Capital raised y firms almost doubled—from NIS 4.8 billion in 1992 to NIS 8.7 billion in 1993 December 1993 prices)—and the market value of shares amounted to NIS 150 billion, ome 120 percent of business-sector product (Table 7.11).

At the end of 1992 the level of share prices was already relatively high, due to the ıcreased demand for shares (see above). Standard estimation procedures show that this evel is justified only if exceptionally optimistic expectations of growth and profitability re assumed for the next few years—an assumption which cannot be confirmed.[15] In 'ebruary 1993 share prices fell, and remained stable until September, with the

[14] The stock of fixed assets of nonfinancial firms is included in private-sector wealth at replacement rices. Hence, when the public buys shares of these firms from the government, the extent of the ıcrease in wealth is underestimated because of the gap between purchase and renewal prices.

[15] See Asher Blass, *Are Israeli Stock Prices Too High?* Discussion Paper, Research Department, Bank f Israel.

fluctuations characteristic of this market. This took place in the context of short-terr factors: excess government absorption, the slower growth of business-sector produc pronouncements by leading figures, fears that a capital gains tax would be imposed, an a slight decline in profitability, as indicated by firms' quarterly reports.

Table 7.11
Principal Stock Market Indicators, 1991–93

(NIS million)[a]

			1993		
	1991	1992	Total	1st half	2nd ha
New issues[a,b]	1,887	4,815	8,739	3,832	4,907
Public-sector corporations	452	802	2,352	767	1,586
Private firms	1,436	4,013	6,387	3,065	3,322
Market value	39,658	91,120	151,607	105,688	151,607
Percent					
Bank shares[c]	*3*	*4*	*11*	*9*	*11*
Other shares[c]	*97*	*96*	*89*	*91*	*89*
Volume of stock-exchange trade (NIS million)[b]	27,073	40,978	89,642	35,490	54,152
Velocity of circulation[c]	0.67	0.65	0.79	0.74	0.85
Real overall rate of return[d]					
All shares	31.8	74.4	27.0	2.3	24.2

[a] Shares, convertible securities, and exercised warrants.

[b] At December 1993 prices. Market value—end-of-year figures; volume of trade—on and off the floo

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

[d] Deflated by end-of-month CPI.

SOURCE: Central Bureau of Statistics and Bank of Israel data.

At the beginning of September there was a breakthough in the peace process, and th Declaration of Principles was signed with the PLO. This caused the demand for shares t rise. The peace process is expected to have a positive effect on the price of assets i Israel in general, and on the price of ownership of capital goods (shares), in particula Among other things, this is the result of the increased tendency to invest in the Israel economy due to the reduction of its risk rating, the improved export situation followin the opening-up of new markets previously closed to Israeli exports, increased tourism and expectations of higher profitability and accelerated business-sector growth.

The steep rise in the demand for shares was met only in part by new issues, and shar prices soared in the last four months of 1993. Share prices increased despite the slowe growth rate of business-sector product and lower profitability of firms—contrary to th expectations of the preceding year. Thus, the ratio between share prices and profits—which was high even before share prices rose—became higher still, and at the end o 1993 the price/earnings ratio rose to 26. This average reflects the fact that, on the on

hand, some share prices on the 'parallel list,' whose tradability is relatively low, rose sharply—the P/E ratio soaring by an unprecedented 82 percent in some cases—while, on the other, those of the blue-chip Mishtanim index rose by only 14 percent. Other indicators, such as cash flow and dividends, did not show any improvement in 1993, however.

Table 7.12
Principal Bond Market Indicators, 1991–93

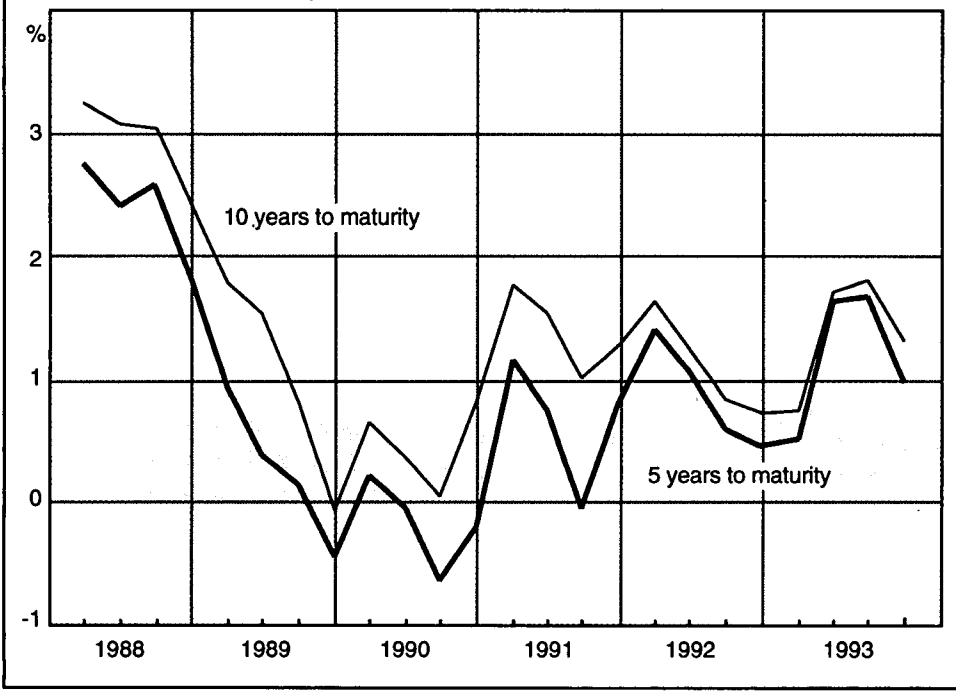
(NIS million)[a]

			1993		
	1991	1992	Total	1st half	2nd half
Market value of listed bonds	82,698	93,812	93,285	89,676	93,285
Government	71,153	81,807	81,783	78,558	81,783
Private[b]	11,545	12,005	11,502	11,118	11,502
of which: Percent held by					
The public	*25*	*27*	*27*	*28*	*27*
Commercial banks	*20*	*19*	*19*	*19*	*19*
Provident funds	*52*	*52*	*52*	*51*	*52*
Bank of Israel	*2*	*2*	*2*	*2*	*2*
Volume of stock-exchange trade	11,886	14,643	16,206	8,127	8,079
Government	9,842	13,260	15,318	7,835	7,484
Private[b]	2,044	1,383	888	293	595
Bank of Israel intervention[c]	*0.03*	*2.04*	*2.20*	*2.67*	*1.73*
Issues of tradable bonds	11,302	4,029	1,891	2,094	–203
Government	10,891	3,666	1,505	1,802	–297
Private[b]	410	363	386	292	94
Velocity of circulation of bonds[d]	0.15	0.17	0.18	0.18	0.18
Government	0.15	0.17	0.19	0.20	0.19
Private[b]	0.18	0.12	0.08	0.05	0.11
Real overall yield[e]					
CPI-indexed bonds	1.5	5.9	–1.6	–6.0	4.6
Government	–1.2	5.2	–1.5	–5.7	4.5
Private[b]	6.6	7.9	–0.4	–5.5	5.5
Exchange-rate-indexed bonds	–1.7	20.3	–4.5	–6.4	2.1
Government	–1.4	19.2	–5.4	–7.0	1.7
Private[b]	0.6	25.9	–1.2	–6.2	5.4

[a] At December 1992 prices.
[b] Including public-sector corporations.
[c] Ratio of the Bank of Israel's sales and purchases in the secondary market to total volume of stock-exchange trade in bonds.
[d] Ratio of volume of trade (on and off the floor) to market value of the stock of bonds. Calculated on monthly basis.
[e] Percent change, end of period compared with end of preceding period.
SOURCE: Bank of Israel (Monetary Department and Research Department) and Central Bureau of Statistics.

The overall picture, then, is one of exceptional excess demand which pushed prices up drastically and cannot be fully explained by firms' expected profitability or changes in interest rates. In fact, at the beginning of 1994 share prices were adjusted, with a smaller decline in those of more tradable shares.

Figure 7.7
Real Average Net Yields to Maturity of CPI-Indexed Bonds in the Secondary Market, 1988–93



There were two factors behind this rise. First, in the wake of liberalization, as long as the proportion of shares in the portfolio of the provident funds has not reached its optimum level, the public expects to be able to obtain short-term profits without fearing that share prices will fall below their long-term economic price. This is because the provident funds will prevent prices falling by using their stock of liquid assets to increase their stock of shares, as in fact happened in February 1994. The second factor concerns the commercial banks. These contributed to the greater demand for shares by extending credit for this purpose, substantially increasing their borrowing at the discount window. The banks' demand for this loan was fully met without raising interest on it, after the reduction in interest in August. Thus, in effect, the Bank of Israel indirectly financed some of the increased demand for shares.

The large offerings made the stock exchange an important instrument for raising apital, some of which was used for capital investment. In 1993 total offerings (except or those arising from privatization) amounted to one quarter of business-sector nvestment, which rose by a real 14 percent. As a result, business-sector capital stock ncreased by about 6 percent—matching a similar rate of future growth.

Privatization was quite extensive in 1993. Parts of the two major banks—Hapoalim nd Leumi—were offered to the public, as well as several government corporations, uch as the Shekem department store chain. The capital thus raised amounted to NIS 2.4 illion at December 1993 prices—three times the 1992 amount. This helped to increase he supply of shares when demand was high, and may also have contributed to nproving the efficiency of these firms and banks.

'able 7.13
ıssets of Mutual Funds, 1991–93

(percent, end of period)

			1993	
	1991	1992	Ist half	2nd half
lutual fund assets (NIS million)	13,331	28,661	28,816	36,787
eal annual overall rate of return	8.6	27.8	–2.8	13.4
tandard deviation of real monthly rate of return[a]	2.7	1.4	2.1	2.9
lutual funds' share of total tradable assets[b]	17.3	22.3	19.6	18.3
CPI-indexed bonds	9.6	10.6	9.3	8.2
Foreign-currency-indexed bonds	18.6	36.6	40.3	32.1
Nonbank shares	11.7	13.4	12.5	12.8
Unindexed assets	9.0	11.5	8.6	11.0
omposition of portfolio				
CPI-indexed bonds	43.7	27.5	24.1	18.2
Foreign-currency-denominated assets	11.6	22.2	22.3	16.0
Nonbank shares	28.6	38.3	43.6	52.8
Unindexed assets	16.0	12.0	10.0	13.1
Total	100.0	100.0	100.0	100.0

[a] Standard deviation for 12 months preceding end of stated period.

[b] Tradable assets comprise unindexed assets, tradable bonds held by the public, foreign-currency eposits, shares, and convertible securities.

SOURCE: Bank of Israel Research and Monetary Departments.

The market value of both private and government tradable bonds amounted to IIS 93.3 billion at the end of 1993, so that for the first time in many years there was no eal change. The stability of the market value of bonds reflects net issues of tradable overnment bonds of NIS 1.9 billion and a slight decline in the price of bonds during the ear (Table 7.12).

Table 7.14
Assets of Provident Funds, 1989-93

(percent, end of yea

	1989	1990	1991	1992	1993
Total provident fund assets (NIS billion)	44.6	53.6	67.5	81.9	94.4
Tradable assets of funds (percent of total tradable assets)					
Tradable government bonds	54.1	54.4	51.3	51.2	51.0
Private bonds	55.9	58.4	59.4	56.9	53.2
Nonbank shares	3.6	6.5	9.7	10.1	9.0
Unindexed assets	5.8	9.7	7.1	5.5	6.5
Composition of portfolio	100.0	100.0	100.0	100.0	100.0
Special bonds issued to provident funds	39.4	35.0	28.9	22.5	18.3
Tradable government bonds	42.6	41.8	44.0	46.0	44.2
Private bonds	7.8	8.6	8.4	7.5	6.5
Nonbank shares	1.3	2.6	4.7	10.1	14.4
Indexed deposits	4.4	5.4	7.4	8.3	9.5
Loans to members	0.1	0.1	0.1	0.1	0.1
Other loans	0.6	0.5	0.5	0.6	0.8
Other assets	3.8	6.0	6.1	5.0	6.1

SOURCE: Based on Ministry of Finance data.

The continued reduction of the budget deficit/GDP ratio to 2.5 percent in 199 together with extensive privatization, was reflected by the government's negativ contribution of NIS 5.6 billion to the supply of long-term financial assets following NIS 1.6 billion negative contribution in 1992. This caused the yield to maturity of CPI indexed bonds to fall steadily in 1992, so that the yield on 5-year bonds (net, end-yea fell to 1.6 percent. It rose again in 1993, however, reaching 2.4 percent, despite th reduced supply of bonds.

The increase in yields in 1993 indicates a drop in the demand for these bonds (togethe with the demand for other CPI-indexed assets), as a result of the reduction of the inflatio rate and its variance, as well as the shift in demand for financial assets to the stoc market and foreign assets.