

Chapter 7

Money and Capital Markets

1. MAIN DEVELOPMENTS

The characteristic features of 1992 were the rapid expansion of both the banks' credit to the public and the public's assets, and the fall in the central bank's foreign reserves. Demand for shares rose substantially, and that for assets denominated in or indexed to foreign currency also increased. These trends reflect interest and exchange-rate policies aimed at stimulating economic activity and employment in the business sector, while liberalization of the capital market continued.

Monetary policy acted to bring interest rates down in the unindexed local-currency segment to the lowest nominal level for some years. The marginal cost of the discount window loan fell from an average of 15 percent in 1990–91 to 11.5 percent in 1992. Consequently, both borrowing and lending rates fell, with the gap between them shrinking notably. Interest rates on unindexed local-currency credit and on SROs (on call deposits) fell from average levels of 26 and 13 percent in 1990–91 to 20 and 11 percent respectively in 1992.

The rate of increase of the Consumer Price Index (CPI) dropped from the 18 percent prevailing since the 1985 economic stabilization program (ESP) to 9 percent in 1992; this fall was greater than that of nominal interest rates, so that real ex post interest rates in the unindexed local-currency segment, which is mainly short term, were higher than in 1990–91. If the nominal interest rate is adjusted for the change in either the CPI excluding housing, or wholesale prices (which may better reflect the underlying inflation rate), a somewhat different picture emerges, with a slight decline in the real lending rate compared with 1990–91, and a moderate increase in the borrowing rate. It may reasonably be assumed that the fall in the 1992 inflation rate exceeded expectations and that the drop in nominal interest rates, mainly on credit, was perceived as a decline in real interest.

Medium- and long-term real interest rates, as reflected in the real yield to maturity on indexed government bonds, fell during 1992, after rising in the last quarter of 1991 in the wake of the surge in foreign-currency purchases in October 1991. Average rates remained at the 1991 levels, however. The slope of the yield curve flattened: the average real yield to maturity of short- and medium-term bonds (up to 5 years) was up slightly from the 1991 level, and on long-term bonds (more than 5 years) fell slightly (Table 7.3). The same trend applied to real interest on nondirected mortgages, i.e., the average rate remained stable at the 1991 level, with some flattening of the yield curve.

Table 7.1

The Principal Monetary Aggregates, and Changes in the CPI, 1989–92^a

(percent change, annual rate)

	M1	M2*	M2	M3	Credit			Foreign reserves ^b	CPI
					Unindexed local-currency	Short-term foreign-currency	Total short-term		
<i>End-period balance^c</i>									
1989	37	31	35	31	28	35	30	50	21
1990	30	37	38	30	29	-1	20	28	18
1991	15	20	27	29	25	25	25	27	18
1992	33	25	21	21	29	17	26	-17	9
1991									
I	61	62	65	48	7	71	22	140	13
II	2	-7	-7	11	27	59	36	126	27
III	40	23	22	8	43	-16	23	-28	30
IV	-23	12	40	55	25	6	20	-33	4
1992									
I	37	30	22	8	15	41	22	13	10
II	46	8	5	16	28	6	21	30	6
III	40	41	47	40	22	-7	14	-43	12
IV	14	23	15	22	56	37	51	-42	9
<i>Average balance^d</i>									
1989	26	15	18	22	35	31	33	18	20
1990	27	25	25	24	34	-2	21	10	17
1991	28	32	35	29	26	17	24	45	19
1992	19	21	24	24	25	14	22	-4	12
1991									
I	59	81	84	53	13	58	24	66	12
II	11	4	7	19	13	102	34	212	23
III	29	15	10	9	38	-13	21	-25	31
IV	-14	2	21	30	39	2	28	-27	10
1992									
I	19	43	49	31	11	26	15	-3	6
II	50	19	10	14	24	24	24	47	12
III	33	11	16	25	28	-8	17	-38	7
IV	12	61	52	40	37	22	33	-32	10

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

^b Foreign aid, which is usually received in October and November, has been spread evenly over the year.

^c End-period balance is the change from last month of period over last month of preceding period.

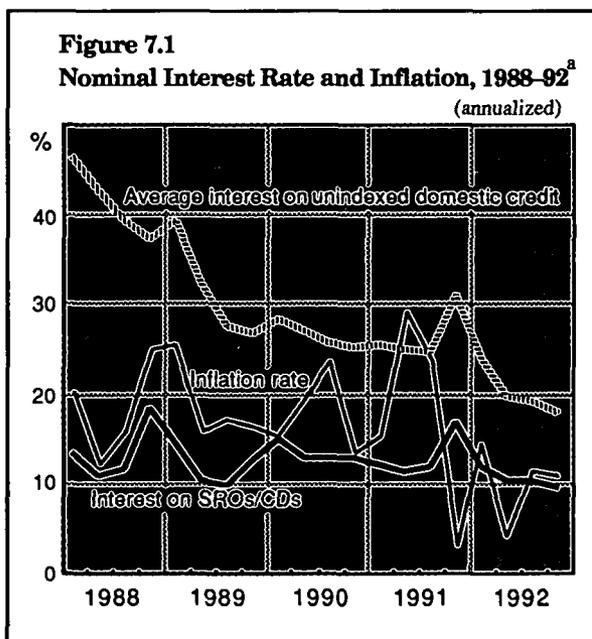
^d Average balance shows the change over preceding period average.

Table 7.2

Financial Assets of the Public^a in the Commercial Banks and the Bank of Israel, 1988-92

	Unindexed local currency	Foreign- currency deposits ^b	Residents' restitutions deposits	Savings ^c	Total assets ^d	Tradable government bonds	Earmarked bonds ^e	Private tradable bonds	Nonbank shares	Total A ^f	Total B ^g
Balance at end of period (NIS million)											
1988	11,467	8,233	6,340	34,385	60,425	18,562	37,140	3,058	6,578	125,764	116,128
1989	16,337	9,060	7,153	39,941	72,490	28,551	45,320	5,521	13,704	165,586	146,361
1990	23,368	10,186	8,572	43,814	85,940	33,253	53,977	7,099	18,931	199,201	173,171
1991	29,409	12,463	10,052	49,483	101,407	44,453	63,455	8,444	32,564	250,323	209,315
1992	35,236	16,933	12,075	50,809	115,054	57,983	69,416	9,711	81,907	334,071	242,453
Nominal change during period ^h											
1989	38.1	17.6	17.8	18.4	22.1	50.7	21.7	78.8	101.8	32.0	26.6
1990	39.0	14.3	20.7	9.6	17.8	20.8	19.7	33.7	41.9	21.4	19.0
1991	26.4	23.7	17.1	13.7	18.6	31.4	18.8	19.3	74.1	26.2	21.2
1992	21.9	32.1	20.4	2.3	13.3	28.5	8.9	12.7	134.4	31.0	15.2
Real change during period ^h											
1989	14.4	-2.5	-2.4	-1.9	1.2	24.9	0.8	48.2	67.2	9.3	4.9
1990	18.2	-2.8	2.6	-6.8	0.2	2.7	1.8	13.7	20.7	3.2	1.2
1991	7.1	4.8	-0.8	-3.7	0.4	11.4	0.6	1.1	47.5	6.9	2.6
1992	11.4	20.8	10.1	-6.5	3.6	17.5	-0.5	3.0	114.3	19.7	5.3
Real change in average balance ^h											
1989	-1.7	9.3	-3.7	2.9	1.9	0.1	0.2	34.1	29.1	3.4	1.0
1990	7.2	5.6	2.5	-4.3	0.1	16.8	2.4	31.3	38.5	7.0	3.8
1991	13.3	-2.1	-0.6	-5.9	-0.3	6.6	0.2	4.2	48.8	5.6	1.2
1992	10.1	10.5	5.1	-4.1	2.5	12.4	0.8	2.6	67.0	12.0	4.0

- ^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 health 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 note d, Table 7.1. Rates based on monthly averages calculated from end-of-month figures.



^a For definition of interest rates, see Table 7.3. Inflation rate calculated from 2-month moving average of CPI.

The NIS/currency-basket exchange-rate rose by about 1. percent during 1992 compare with the annual 11 percent increase in 1990-91. Most of the acceleration occurred in November and December, following the adjustment of the midpoint rate in November and the resulting surge in foreign exchange purchases, and does not reflect a change in the exchange-rate policy. Nevertheless, since the rate of devaluation was no slower than in 1990-91, while nominal interest rates and the inflation rate fell, nominal and real yields on foreign-currency denominated or indexed assets and liabilities rose significantly.

Most of the fall in nominal interest rates occurred in January and February 1992. The high rates which prevailed at the end of 1991, after rising in the last quarter of that year, resulted in a capital inflow, which continued in the first few months of 1992. This together with the depressed level of economic activity and the previous month's low rise in the CPI, indicated that conditions were right for a reduction in interest rates. Thus in January and February 1992 the Bank of Israel acted to reduce local-currency interest rates substantially. Interest on the discount-window loan went down from about 11 percent in December 1991 to 11.5 percent in March 1992, and remained at that level. At the beginning of November, the Bank of Israel adjusted the exchange-rate path, while at the same time further reducing interest on the discount-window loan to 10.5 percent (compared with an annual average of 15 percent in 1990-91).

In May, capital imports stopped, and purchases of foreign currency began, continuing (with fluctuations) till the end of the year. At the same time, demand for foreign-currency denominated or indexed domestic assets increased, and unrestricted foreign-exchange credit fell. Two factors seem to have contributed to this trend: first, the continued liberalization of the money and capital markets which, among other things, gave residents a wider choice of foreign investments (see Chapter 6), and second, the fall in nominal interest rates, in the light of reduced uncertainty regarding the expected development of the nominal exchange-rate path and the fact that the path itself was not changed.

Table 7.3
Selected Interest Rates, 1989-92

(percent p.a.)

	Local-currency short-term credit to the public					Financial assets of the public				Interest-rate gap ^e
	Overdraft facilities	Term credit	Average ^a	3-month Eurodollar ^b	Marginal cost of discount-window loan	SROs ^c (CDs)	Real yield to maturity of government bonds ^d			
							1-month TBs	5 years	10 years	
Nominal rate										
1989	34.3	26.6	31.2	9.1	14.5	11.6	13.2	1.7	2.5	22.8
1990	29.6	22.5	26.4	8.1	15.3	13.2	15.7	1.2	1.9	16.4
1991	29.9	22.3	26.4	5.7	15.1	12.9	14.9	2.1	2.9	17.0
1992	22.0	17.6	19.9	3.7	11.6	10.3	12.2	2.3	2.6	11.7
1991										
I	28.7	21.2	25.3	6.6	13.7	12.0	14.2	2.6	3.3	16.6
II	28.2	21.1	24.9	6.0	12.7	11.3	13.5	2.1	3.2	16.8
III	28.2	21.0	24.7	5.6	14.0	11.8	13.3	1.4	2.5	16.3
IV	34.7	26.1	30.8	4.6	20.3	16.6	18.8	2.2	2.8	18.1
1992										
I	26.1	20.4	23.5	4.1	12.8	11.7	13.9	2.8	3.2	14.4
II	21.2	17.4	19.4	3.9	11.5	10.0	12.5	2.5	2.8	11.1
III	21.2	16.9	19.1	3.2	11.2	10.1	11.3	2.0	2.2	11.1
IV	19.4	15.8	17.7	3.5	10.8	9.4	11.0	1.9	2.1	10.0

^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.

The public's desire to move from local-currency assets to foreign-currency-denominated or indexed assets inevitably exerted upward pressure on domestic interest rates. In effect, the forces working to reduce interest rates, which had run their course by May, were replaced by strong pressures for raising them. In order to counteract this pressure the Bank of Israel increased the discount-window loan, thus allowing the public to make the desired change in its portfolio without raising domestic interest rates.

The upward pressure on domestic interest rates reflects their strong link with the expected exchange-rate path, which results from the openness of the economy. The fact that the rate of devaluation did not slow down in the second half of the year, and in particular the steps taken in November in the context of the declining inflation rate reflected a tendency to allow real devaluation, based on the assessment that the appropriate conditions obtained in the goods and labor markets. However, expectation of real devaluation cause the expected relative real yield of foreign-exchange assets to rise, generating, at least in the short run, an increase in foreign-exchange purchases and an upward pressure on real domestic interest rates. Expectations of real devaluation, under conditions in which it can be sustained, tend to increase economic activity and employment in the tradables sector; on the other hand, the attendant increase in real domestic interest rates, especially long-term, is likely to dampen increased activity and employment in the nontradables sector. The fact that the expected path of devaluation was not slowed, while interest rates were prevented from rising, reflected a monetary policy aimed at stimulating economic activity and boosting employment in both the tradables and nontradables sectors. The underlying assessment was that the decline in the reserves, which stemmed in part from liberalization, was temporary, and would not undermine the credibility of the exchange-rate regime—effectively the main factor determining price trends.

The reduction of both the budget deficit and net borrowing, as well as the approval of the US government loan guarantees and the decline in demand for housing, also helped to moderate the upward pressure on real, especially long-term, interest rates.

The reduction of the interest on the discount-window loan in January–February 1992 and its continued stability through the rest of the year, was based on a significant increase in the size of the loan. This was expressed as an increase in the money supply (M2*), the greater expansion of unindexed local-currency credit, and a fall in the foreign reserves. At the same time, demand for shares revived and strengthened, resulting in a persistent increase in their prices.

The average level of the money supply (M1), demand for which should reflect the level of economic activity, rose at a rate similar to the increase in nominal GDP, i.e. about 19 percent. The average balance of the M2* aggregate (i.e., including interest-bearing local-currency deposits) rose slightly faster, by 21 percent.

The average balance of unindexed local-currency credit increased by a significant 2 percent, reflecting marked acceleration during the year, especially in the second and fourth quarters. The increase in this credit category during 1992 was a real 19 percent compared with an annual average of 7 percent in 1989–91.

Table 7.4
Sources of Change in Unindexed Local-Currency Assets^a, 1988-02

	(percent of GDP)										
	1988	1989	1990	1991	1992	1991		1992			
						III	IV	I	II	III	IV
General government	-0.7	-1.4	3.3	3.0	3.1	-1.0	14.5	-2.1	4.9	6.6	3.0
<i>of which</i> Foreign-currency transfers	0.1	-0.1	1.1	2.6	3.2	0.0	3.7	1.7	3.3	0.4	7.2
Bank of Israel	4.7	-0.7	-1.7	0.5	2.3	8.1	-7.1	2.2	2.1	-0.9	5.7
Discount-window loan	3.4	0.3	-1.5	1.8	3.3	8.7	-3.9	4.1	2.5	-0.5	7.3
Open-market operations	0.6	-1.0	0.3	-0.7	-0.1	0.2	-2.2	-1.0	0.6	0.7	-0.5
Other ^b	0.8	0.0	-0.5	-0.6	-1.0	-0.8	-1.0	-0.8	-0.9	-1.1	-1.1
Injection from foreign-currency deposits	-0.3	1.1	0.0	0.5	1.1	-0.6	0.6	0.9	0.4	1.8	1.2
Private foreign-currency transfers	-5.1	1.7	-1.0	-3.5	-5.9	-5.6	-8.3	-1.2	-5.2	-7.7	-9.4
Total change in monetary base	-1.4	0.8	0.5	0.5	0.6	1.0	-0.2	-0.2	2.1	-0.2	0.5
Domestic banking operation ^c	1.7	4.4	5.3	2.3	3.3	1.2	7.5	0.3	0.9	6.1	5.8
Change in unindexed local-currency assets	0.3	5.1	5.8	3.0	3.8	2.0	7.3	0.3	3.1	6.1	5.8
Money supply	0.5	1.9	1.5	0.7	1.4	-0.1	1.1	0.7	2.0	1.7	1.3
Time deposits and SROs (CDs)	-0.2	3.2	4.3	2.3	2.4	2.0	6.2	-0.4	1.1	4.4	4.4

^a Excluding Treasury bills.

^b Directed credit and 'other' (items from the Bank of Israel's profit and loss statement and miscellaneous net transactions between the government and the Bank of Israel).

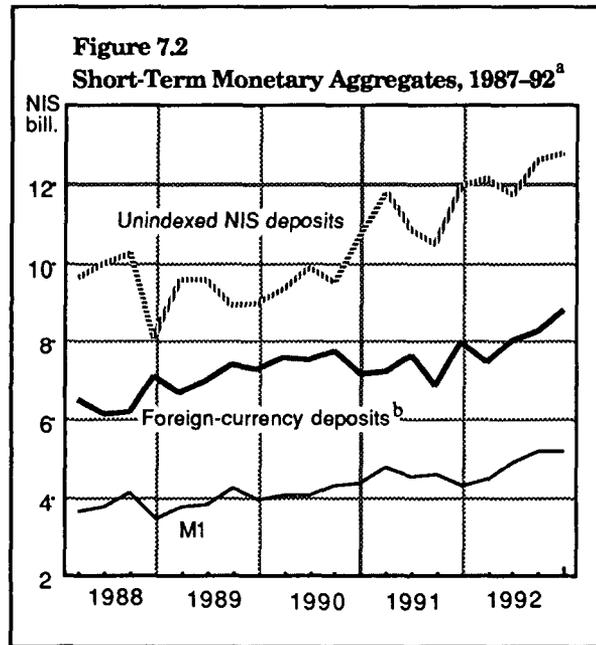
^c This is the residual item (i.e., change in unindexed local-currency assets *less* change in money base), and represents the effect of the deposit multiplier.

The money base, which is the source of the growth in the money supply (M2*) and the amount of unindexed local-currency credit, increased its share of GDP at a rate similar to that of 1990 and 1991 (0.6 percent of GDP in 1992, an annual 0.5 percent in 1990–91, Table 7.4). The government injection in 1992 was similar in extent to its transfer of foreign exchange, remaining close to the 1991 level (about 3.1 percent of GDP). The injection from the Bank of Israel, on the other hand, rose substantially, reaching 2.3 percent of GDP, the increase matching that of the absorption from the money base resulting from foreign-exchange purchases by the private sector. (The absorption resulting from the foreign-exchange transactions of the private sector amounted to 4.9

percent of GDP in 1992, compared with 3 percent in 1991 (Table 7.4).

The growth in the discount-window loan also explains the appreciable increase in credit relative to that in the money supply (M2*). Unlike deposits, the loan is not subject to liquidity requirements, so that offsetting foreign-exchange purchases or government absorption by expanding the discount-window loan increases local-currency credit, even though the money base and the money supply remain unchanged.

The domestic budget deficit (government and Jewish Agency) on a cash basis fell to 4.9 percent of GDP in 1992 (from 6.5 percent in 1991), with a similar decline in net



^a End of quarter balances at December 1988 prices.
For definition of aggregates, see Table 7.1

^b Foreign-currency denominated and indexed deposits.

public-sector borrowing. Domestic borrowing amounted to 4 percent of GDP (5.4 percent in 1991). A reduction of the government deficit and public-sector borrowing generally eases pressure on the resources available to the business sector, thereby encouraging investment and employment. Nevertheless, as in 1991, a relatively large share of sources of finance, about 2.2 percent of GDP, was earmarked for private-sector credit in 1992. (The government's involvement as an intermediary in the capital market does not contribute to efficient resource-allocation.)

The increase in the public's demand for shares and the contraction of public-sector borrowing resulted in an unprecedented surge in new share issues, about NIS 3,600

million (2 percent of GDP) compared with an annual average of NIS 700 million (at 1992 prices) in 1989–91. Flotations of public-sector corporations also rose substantially, amounting to NIS 600 million.

Together with the upswing in private-sector issues, the rapid growth of the medium- and long-term credit extended by the commercial banks continued in 1992, amounting to a real increase of about 8 percent (7.5 percent in 1991).

The public's real credit balance with the mortgage banks grew by some 10 percent during 1992 (19 percent during 1991). This trend reflects real growth in the flow of new loans, made up of the continued expansion of directed loans and a substantial reduction in nondirected loans.

Demand for shares rose throughout the year, pushing their prices up substantially. The real overall rate of return went up by about 70 percent during the year, following annual increases of 30 percent in 1989–91. The greater demand for shares continued the trend which started with the influx of immigrants from the former USSR, and reflected expectations of accelerated growth and improved profitability.¹ Monetary policy was not altered to moderate the increase in share prices, and local-currency interest rates remained stable; in other words, demand for credit was fully satisfied at the existing interest rates, including credit required for share purchases. Note, however, that as long as share-price increases are not encouraged by artificial demand, they imply a rise in the prices of productive assets (relative to their production costs); this expands investment even if it is in part the result of monetary expansion (or accommodation).

The considerable increase in the real value of the share market, about 114 percent during the year, contributed to the acceleration of the real growth of the public's domestic assets, from 7 percent during 1991 to 20 percent during 1992. The real balance of financial assets, excluding shares and bonds issued by the private sector, which mainly reflects the public's claims on the banks and the government, rose by 5.3 percent during 1992 (2.6 percent in 1991), the increase comprising a substantial growth in liquid assets, e.g., unindexed local-currency assets, deposits denominated in or indexed to foreign-currency, and tradable bonds, and a continued real decline in long-term assets such as CPI-indexed deposits, savings schemes, and nontradable bonds (Table 7.2).

7. MONETARY DEVELOPMENTS AND POLICY

Developments in the money and capital markets from May were marked by a significant change in the composition of the public's portfolio—increased net demand for foreign-currency denominated or indexed assets, continued growth in the demand for shares, and a decline in the demand for other domestic assets. The mirror image of these developments was an increase in the demand for local-currency credit, on the one hand, and a

¹ The rising trend in share prices actually started in 1989, in the context of the substantial decline in interest rates that year.

Table 7.5

Domestic Budget Deficit (Consolidated Balance Sheet of Central Government and Central Bank), 1988-92^a(percent of GDP^b)

	1988	1989	1990	1991	1992	1992			
						I	II	III	IV
Deficit									
Government expenditure	43.7	44.3	40.1	41.2	44.0	50.2	38.3	42.5	44.9
<i>of which</i> Interest on internal debt ^c	4.8	5.1	5.0	4.7	4.4	3.7	5.0	4.0	4.9
Government income ^d	41.8	39.2	36.4	35.6	40.1	48.3	35.5	37.2	39.4
Budget deficit ^e	1.9	5.1	3.6	5.6	3.9	1.9	2.7	5.4	5.5
Non-budgetary injection	0.5	0.2	0.2	0.0	0.3	-1.5	1.4	1.2	0.4
Jewish Agency injection	0.6	0.6	0.9	0.8	0.6	1.1	0.6	0.4	0.5
Total domestic deficit	3.0	5.9	4.8	6.5	4.9	1.4	4.7	6.9	6.4
Financing									
Change in monetary base	-1.4	0.8	0.5	0.5	0.6	-0.2	2.1	-0.2	0.5
Net borrowing via Bank of Israel ^f	-4.4	-0.4	1.7	-1.0	-3.3	-3.1	-2.5	-0.9	-6.8
<i>of which</i> Treasury bills	-0.4	1.1	-0.2	0.7	0.4	1.1	-0.3	-0.1	1.1
Discount-window loan	-3.4	-0.3	1.5	-1.8	-3.3	-4.1	-2.5	0.5	-7.3
Net domestic borrowing	3.7	7.3	1.6	3.4	1.8	3.6	-0.1	0.3	3.4
Bonds and deposits ^g	4.6	7.4	1.5	5.0	3.2	3.4	2.6	2.1	4.7
Sales of assets and capital income	0.0	0.2	0.3	0.4	0.8	1.4	0.0	0.2	1.4
<i>less</i> Net credit to private sector	0.9	0.2	0.3	2.0	2.1	1.2	2.7	2.0	2.7
Sales of foreign currency	5.1	-1.7	1.0	3.5	5.9	1.2	5.2	7.7	9.4

^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 monthly flow as percent of estimated GDP for that month.

^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 Via resident deposits (including restitution deposits) and Treasury bills *less* injection arising from discount-window loan, directed credit and other sources.

^g Tradable bonds and nontradable deposits and bonds (excluding Treasury bills and resident deposits).

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

decline in its supply sources, on the other. The interaction of these forces from the middle of the year resulted in upward pressure on local-currency, mainly short-term, interest rates. The increase in the discount-window loan enabled credit supply to adapt to the greater demand, allowing the public to adjust its portfolio at current interest rates.

Apart from monetary policy, other factors which may have eased the upward pressure on real, mainly long-term, interest rates include the contraction of public-sector borrowing—expressed as negative net borrowing via earmarked bonds—the approval of the loan guarantees, and the moderation of housing demand. These factors may also explain the flattening of the yield curves of both bonds and mortgages.

The public's greater (net) demand for foreign-currency assets in the second half of the year expressed itself in the relatively large increase of foreign-currency purchases, in the rise in domestic assets denominated in or indexed to foreign currency, and the decline in foreign-currency credit.

The public's shift to foreign-currency assets was due in part to the continued reform of the capital market, which extended the possibilities for firms and households to invest in foreign assets (see Chapter 6). Broadening the range of foreign assets enables the public to improve the quality of its portfolio (risk diversification), and thus results in capital outflow. However, the continuation of the process and the resulting increased net demand for domestic assets denominated in or indexed to foreign currency, reflects expectations of a greater yield differential between domestic and foreign assets (as, in fact, occurred). In the first half of the year, the public's assessment that inflation was declining dramatically, and that the low level of nominal interest rates (compared with the past) was not a temporary phenomenon, apparently firmed. If expectations were that the rate of devaluation would remain the same as in previous years, the expected yield differential would widen, resulting in portfolio adjustment—a greater share of assets denominated in or indexed to foreign currency.

The process of foreign-exchange purchases which started in May gained momentum between mid-June and mid-July, the time of the general election. This may be attributed to a combination of factors: a) the increase in the expected yield gap, following the interest-rate reduction of the previous months; b) fears of a change in exchange-rate policy after the election, i.e., a substantial devaluation; c) seasonal factors (foreign travel); and d) extension of Israelis' rights to invest in foreign securities from the beginning of July, as part of the continuing reform of the capital market.

Private-sector purchases of foreign exchange tend to fluctuate, sometimes widely, due to factors not necessarily connected with expected changes in yield differences. These fluctuations should be permitted to appear as changes in the foreign reserves without giving rise to sharp changes in interest (or exchange) rates, which may impair economic activity, and harm employment. For these reasons, the Bank of Israel kept local-currency interest rates stable in the period under discussion. From August to October foreign-currency purchases fell to a level close to that required to cover the private-sector current deficit. Nevertheless, the absence of a compensating adjustment for the June–July capital outflow shows that this reflected portfolio adjustment, not an isolated fluctuation.

Table 7.6
Commercial Bank Credit to the Public, 1990-92

	(nominal percent change over preceding year)								
	End-year, NIS million		Average balances ^a			End-year balances ^a			
	1991	1992	1990	1991	1992	1990	1991	1992	
Unindexed local-currency credit	29,990	39,266	34.0	26.4	25.4	29.3	24.9	30.1	
Credit lines and overdrafts	16,548	19,750	23.4	22.0	23.3	23.4	26.5	20.2	
Other	13,442	19,516	50.6	32.1	28.0	37.1	23.0	42.3	
Foreign credit ^b	10,083	11,958	18.6	62.4	13.5	61.9	27.5	17.5	
Directed export credit	300	441	-29.7	-86.8	20.1	-88.1	-28.3	46.5	
Subtotal	40,373	51,665	20.9	23.6	22.2	19.8	24.8	27.1	
Indexed local currency ^c	19,273	26,748	50.1	36.4	36.0	41.9	39.6	38.8	
Credit out of earmarked deposits ^c	21,857	21,884	2.8	9.6	10.9	3.2	17.7	-0.6	
<i>of which</i>									
Out of government deposits ^c	6,267	9,500	22.3	76.4	77.6	42.6	73.5	51.9	
Total bank credit	81,503	100,297	19.0	21.8	22.1	18.2	25.9	22.4	
Consumer Price Index			17.2	19.0	11.9	17.6	18.0	9.4	

^a Based on monthly averages, i.e. averages of end-month and end of previous month figures.

^b Commercial banks and their overseas offices.

^c In November 1992 banks were granted permission to reclassify reported transactions as earmarked or unrestricted. As a result, about NIS 6 billion was transferred from earmarked deposits to indexed credit. For continuity, the figures in this Table follow the previous classification.

At the beginning of November the midpoint NIS/currency-basket exchange-rate was raised by 3 percent, and the slope of the band (i.e., the daily rate of change, annualized) adjusted from 9 to 8 percent. In November and December the Bank of Israel took steps to reduce the unindexed local-currency interest-rate spread. The commercial banks reduced the lending rate by 2 percentage points and the borrowing rate by 1 percentage point, while the Bank of Israel reduced the marginal cost of the discount-window loan by 1 percentage point.

At the same time, foreign-exchange purchases rose again to the June-July rate, a trend which strengthened the view that a process of portfolio adjustment was under way. As domestic and foreign assets are not perfectly substitutable, this process—whether it arises from expectations of an increased yield differential or from the removal of restrictions, allowing the public to improve the quality of its portfolio—will eventually come to an end, even if the central bank keeps interest rates down. Rising domestic interest rates will moderate foreign-currency purchases, and reduce the period of adjustment, but persistently rising (especially long-term) interest rates will hamper economic activity and employment. On the other hand, a continuing high rate of foreign-exchange purchases is likely to harm the credibility of the policy-makers' ability to maintain the exchange-rate policy, and thus have an adverse effect on expectations of stability, which play an important role in stimulating business-sector investment. The fact that the Bank of Israel refrained from raising interest rates in November and December shows that greater importance was attached to the objective of encouraging economic activity and employment; this was almost certainly influenced in part by the approval of the loan guarantees. The guarantees may enable a lower level of reserves to be held than in previous years, without impairing the credibility of the exchange-rate policy.

There may have been a connection between the adjustment of the exchange-rate path at the beginning of November and the reduction in the interest rate, on the one hand, and the increased purchases of foreign currency in November and December, following continued liberalization, on the other. The relative slowdown in these purchases from August to October may reflect increased expectations of an easing in the rate of devaluation, in the light of the fall in nominal interest rates and the slower rate of price increases in the previous months. The steps taken at the beginning of November can be interpreted as adhering to the devaluation path of previous years, i.e., about 11 percent per annum, despite the decline in both nominal interest rates and the rate of price increases. This implies a greater yield differential than had presumably been expected before the November change.

Another explanation for the surge in foreign-exchange purchases in November and December lies in expectations of the continued strengthening of the dollar relative to other currencies, implying devaluation of the NIS against the dollar, even if the exchange rate against the currency-basket remains unchanged. The weights of the various currencies comprising the basket were determined according to the composition of Israel's foreign trade. This system has the advantage of minimizing the effects on trade

of inter-currency changes. Nevertheless, the weight of the dollar in the composition of capital movements may be greater than in the composition of trade. In such a case, the expected trend in the exchange rate of the NIS against the dollar may be more relevant to capital movements than its exchange rate against other currencies (among other things, because of inter-currency transaction costs and other restrictions). In this situation, when the dollar is expected to weaken against other currencies, there will be a capital inflow (as happened at the end of 1990), whereas an expected strengthening of the dollar will result in an outflow. It is reasonable to assume that capital movements of this type reflect mainly changes in the timing of foreign-exchange receipts and payments, and are therefore temporary.

The surge in foreign-exchange purchases which started in November 1992 continued in January 1993, and in that month—and even more so in February—the Bank of Israel allowed the marginal cost of the discount-window loan to rise, from 10.5 percent in December 1992 to about 12 percent in February 1993. This, together with the slowdown in the rate of devaluation and the weakening of the dollar in world markets, put an end to the surge in foreign-exchange purchases, and in March and April 1993 there were positive conversions of foreign currency.

Monetary policy-makers have two main objectives: price stability and economic growth. The former (or a low inflation rate) is also a prerequisite of the latter. In 1992 the prime target was the stimulation of economic activity and employment, in view of high unemployment and a weakening of the forces operating to bring about real appreciation, reflecting pressures to reduce inflation. The principal measures for encouraging activity and employment were the continued liberalization of the money and capital markets, exchange-rate policy, and interest-rate policy. It seems, however, that interest-rate policy can be used only in the short term as a means of encouraging economic activity, and is of limited efficiency.

The continued liberalization of the money and capital markets increases the scope of trade and improves the efficiency of resource-allocation, and is therefore a *sine qua non* for long-term economic growth. In December 1991 the sloping band exchange-rate system was adopted, in order to increase certainty regarding the path of the exchange rate, based on the assessment that this would encourage export investment and growth. However, these two elements (greater certainty regarding the exchange-rate path and the liberalization of capital movements) limit the effectiveness of interest-rate policy as a means of expanding economic activity and employment.

Reducing domestic nominal interest rates may stimulate economic activity and employment, but if there is no concomitant reduction of the expected rate of return on foreign assets, this will result in a lower expected return on domestic than on foreign assets. The effect of an increase in the yield differential, especially in a more open economy, is an outflow of capital and a reduction in the reserves, a trend which will sooner or later damage the credibility of the exchange-rate regime. This will in turn impair economic stability, which is so essential for growth. Note, too, that even if it were possible to keep interest rates low relative to the price of capital available to the

economy, this would not be advisable, as it would lead to inefficient resource-allocation, thereby harming growth.

3. CREDIT

Credit to the public is usually divided into two main categories, short-term (up to one year), and medium- and long-term. Short-term credit is available from the commercial banks and their overseas offices, and is intended mainly to finance the current transactions of firms and households. Medium- and long-term credit is generally used to finance investment in industry and housing. The different types of credit are not perfect substitutes, because they differ in destination, and considerations of bank stability require sources and applications to match within each category.

Table 7.7
Mortgage Banks, Credit Flows and Balances, 1989-92

	1989	1990	1991	1992
<i>NIS million^a</i>				
Credit flows				
Directed mortgages	1,186	1,688	3,517	5,109
Other mortgages	1,186	1,582	2,357	2,102
Total mortgages	2,372	3,270	5,875	7,210
Total less repayments	710	961	2,849	3,291
Other loans	145	314	414	641
Total mortgage-bank loans	2,517	3,584	6,289	7,851
Credit balance				
At end of period	13,689	18,037	25,369	30,523
Average	12,065	15,748	21,839	28,496
<i>Real annual change, percent</i>				
Credit flows				
Directed mortgages		21.6	76.9	28.8
Other mortgages		15.3	24.7	-20.3
Total mortgages		18.4	51.5	9.2
Total less repayments		18.0	152.0	2.0
Total mortgage-bank loans		21.5	47.5	11.5
Credit balance				
At end of period		12.0	19.2	10.0
Average		11.4	16.5	16.8

^a At current prices.

In the past some medium- and long-term credit was granted by specialized banks (investment finance banks and financial institutions) with close ties to the government's credit framework. Nowadays, as a result of the reform of the capital market, the role of these specialized institutions has contracted greatly, and nearly all credit activity is handled by the commercial and mortgage banks.

In 1992 the real expansion of short-term credit accelerated, and the rapid rise in medium- and long-term credit granted by the commercial banks continued. On the other hand, the rate of growth of the mortgage banks' credit balance eased somewhat, after soaring in 1991.

In 1992 the average balance of short-term bank credit rose by more than nominal GDP, about 22 percent and 19 percent respectively. This increase reflects significant real growth during the year, of about 16 percent, compared with an annual 5 percent in 1989–91. There was a concurrent change in the composition of credit, reflecting the public's portfolio adjustment—a significant real rise in unindexed local-currency credit on the one hand, and a reduction in the dollar balance of unrestricted foreign-currency credit on the other.

Medium- and long-term bank credit continued its rapid rise in 1992. The real balance expanded by some 7.4 percent, after a 7.6 percent increase in 1991. The two main components of this credit are unrestricted indexed credit, and credit from approved earmarked deposits. As a result of the reform of the capital market, there has been a significant and constant increase in the former in recent years, and a parallel contraction in the real balance of the latter. These trends persisted in 1992. The real balance of unrestricted credit rose by some 26 percent in 1992 (18 percent in 1991), while the real balance of earmarked deposits fell by about 10 percent, as a result of the substantial reduction of credit from private earmarked deposits, and the continued considerable expansion—a real 40 percent—of credit from government deposits.

Medium- and long-term credit balances are affected by capital profits (and losses) which arise from changes in the real exchange rate and other factors. The flow of credit, i.e., new credit granted during the year, is a better indication of additional resources directed to new investments. Unfortunately, information on the flow of long-term credit granted by the commercial banks is not yet available. (In short-term credit the difference between flows and balances is less important, as such credit is renewed frequently.) Nonetheless, the substantial and continued rise in unrestricted indexed credit indicates that there was continued real growth in the flow of new medium- and long-term unrestricted credit.

The balance of mortgage-bank credit rose by about 10 percent during 1992 in real terms (19 percent in 1991). This growth reflects an increase of 9 percent in new mortgages, following their 52 percent climb in 1991. (The flow of housing loans less repayments rose by about 2 percent in 1992, in real terms, after soaring by 152 percent in 1991, Table 7.7.)

The sources of the increase in new mortgages reveal a continued expansion in directed loans and a real fall in the flow of nondirected mortgages. The real interest on the latter

Table 7.8
Financial Asset Holdings of the Public, 1990-92^a

	End-of-period balances, NIS million								
	1991	1992				Percent of total			
		I	II	III	IV	1990	1991	1992	
Unindexed short-term assets	26,690	27,187	28,297	31,096	32,517	10.7	10.9	9.9	
Money supply (M1)	7,455	7,829	8,589	9,469	9,753	3.3	3.1	3.0	
Time deposits and SROs ^b	15,968	16,229	16,698	18,281	19,699	6.7	6.5	6.0	
Treasury bills	3,267	3,129	3,010	3,347	3,066	0.8	1.3	0.9	
Resident deposits and tradable bonds	28,983	30,688	33,895	33,807	39,683	11.9	11.9	12.0	
Deposits ^c	12,463	12,822	14,476	14,822	16,933	5.3	5.1	5.1	
of which Nonresident deposits of Israelis	7,196	7,530	8,527	8,777	10,208	2.8	3.0	3.1	
Bonds	16,520	17,866	19,420	18,984	22,749	6.6	6.8	6.9	
<i>subtotal</i> : Short-term assets	55,673	57,875	62,192	64,903	72,200	22.6	22.8	21.9	
Bank shares (non-Arrangement)	1,110	1,448	1,787	2,091	3,059	0.3	0.5	0.9	
Nonbank shares	28,346	38,057	47,842	56,544	70,995	8.8	11.6	21.5	
Total short-term assets, tradable bonds, and nonbank shares	85,129	97,380	111,822	123,538	146,254	31.7	34.9	44.4	
Restitutions deposits	10,052	10,151	10,986	11,580	12,075	4.5	4.1	3.7	
Provident and indexed deposits	33,820	33,940	34,570	34,120	34,199	15.9	13.9	10.4	
Provident funds and life assurance	114,886	118,847	123,769	129,912	136,992	47.9	47.1	41.6	
Total financial assets	243,887	260,318	281,147	299,151	329,520	100.0	100.0	100.0	
of which Nonbank shares ^d	32,594	43,794	55,335	65,674	81,907	9.8	13.4	24.9	
Foreign-currency assets ^e	35,689	36,529	39,727	40,609	45,292	17.1	14.6	13.7	
CPI-indexed assets ^f	148,915	152,807	157,788	161,771	169,804	62.4	61.1	51.5	

^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 those held by provident funds.

^e Arrangement bank shares and other savings schemes with CPI/exchange-rate indexation-options are regarded as foreign-currency indexed assets.

^f Includes total assets of provident funds, excluding nonbank shares, as most of their portfolio is CPI-indexed.

Table 7.9
Real Change in Financial Asset Holdings of the Public, 1990-92^a

	(percent)									
	Average			During period						
				1990		1991		1992		
1990	1991	1992	1990	1991	Total	I	II	III	IV	
Unindexed short-term assets	4.9	13.2	11.4	16.3	9.6	11.4	-0.6	2.5	6.9	2.3
Money supply (M1)	7.2	8.2	7.4	7.3	-0.5	19.6	2.5	8.0	7.2	0.8
Time deposits and SROs ^b	6.4	12.1	7.7	20.9	5.4	12.8	-0.8	1.3	6.5	5.4
Treasury bills	-16.0	49.1	53.1	21.0	89.4	-14.2	-6.6	-5.3	8.1	-10.4
Resident deposits and tradable bonds	1.3	3.9	9.3	-4.0	7.0	25.2	3.3	8.8	-3.0	14.9
Deposits ^c	5.7	-1.7	11.0	-4.4	3.7	24.2	0.4	11.2	-0.4	11.8
<i>of which</i> Nonresident deposits of Israelis	13.7	10.3	17.1	0.1	13.6	29.7	2.1	11.5	0.1	13.8
Bonds	-1.9	8.4	8.0	-3.7	9.7	25.9	5.5	7.0	-4.9	17.3
<i>subtotal: Short-term assets</i>	2.9	8.0	10.2	4.7	8.2	18.6	1.4	5.8	1.5	8.8
Bank shares (non-Arrangement)	9.3	31.1	83.4	-9.5	61.9	152.0	27.3	21.5	13.8	43.1
Nonbank shares	34.7	47.1	65.4	14.7	41.9	129.0	31.0	23.8	15.0	22.9
Total short-term assets, tradable bonds, and nonbank shares	10.1	18.9	29.8	7.1	18.1	57.1	11.6	13.1	7.5	15.8
Restitutions deposits	2.7	-0.7	5.2	1.9	-0.7	9.8	-1.5	6.6	2.5	2.0
Savings schemes and indexed deposits	-4.2	-8.2	-6.3	-9.2	-6.7	-7.5	-2.1	0.3	-4.0	-1.9
Provident funds and life assurance	8.5	4.2	6.9	4.2	5.6	9.0	0.9	2.6	2.1	3.2
Total financial assets	6.3	6.4	12.8	2.6	7.3	23.5	4.1	6.4	3.5	7.8
<i>of which</i> Nonbank shares ^d	36.4	46.7	73.6	17.5	45.9	129.8	31.1	24.4	15.4	22.0
Foreign-currency assets ^e	-2.4	-8.5	0.1	-10.2	-7.9	16.0	-0.1	7.1	-0.6	9.1
CPI-indexed assets ^f	5.8	3.7	3.5	2.4	5.0	4.3	0.1	1.7	-0.3	2.7

^a For notes, see Table 7.8

SOURCE: Bank of Israel.

continued to decline in 1992 to about 4.4 percent, (4.6 and 5.4 percent in 1991 and 1990 respectively). Thus, the reduction in the flow of nondirected loans reflects a fall in demand and their substitution by directed mortgages, which are cheaper, and whose supply continued to expand.

4. THE PUBLIC'S PORTFOLIO

In 1992 the public's portfolio grew by some 24 percent in real terms, compared with a 7 percent increase in 1991. There was a marked change in the composition of the portfolio, with the proportion of shares soaring from 13 percent in 1991 to 25 percent in 1992 (Table 7.8). The rise in the proportion of shares reflects mainly the rapid increase in share prices, as well as new issues. The market value of shares held by the public (excluding provident funds) was about 130 percent higher in real terms at the end of 1992 than at the end of 1991, and amounted to NIS 74 billion, representing about 66 percent of gross business-sector product, whereas new share issues of NIS 4 billion accounted for 20 percent of the business sector's investment in fixed assets.

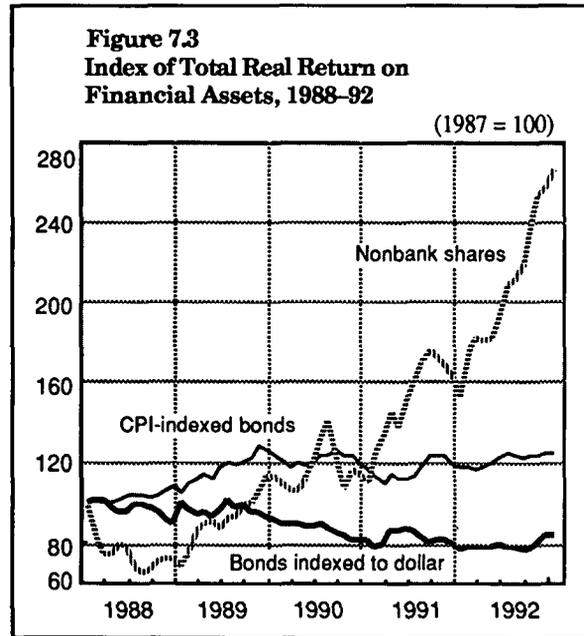
Among the assets whose share in the portfolio fell, those indexed to the CPI were particularly notable, dropping from 61 percent at end-1991 to 52 percent at end-1992. The proportion of provident funds (excluding shares) declined, as did that of life insurance, savings schemes, and indexed deposits, (all of these being long-term assets).²

Tradable shares held by the public are in effect the public's financial assets, reflecting ownership of physical assets evaluated at market prices. It is of interest, therefore, to examine trends in the portfolio excluding shares, which reflects principally the public's financial claim on the banks, the Bank of Israel and the government. The rise in this area was a more modest 7 percent; foreign-exchange assets increased by 16 percent, unindexed short-term assets rose by 11 percent, and indexed assets by only 4 percent. Overall, during 1992 there was a slight increase in the proportion of foreign-exchange assets and a decrease in those indexed to the CPI, after a long period during which foreign-exchange assets fell, from 27 percent of the portfolio (excluding shares) at end-1987, to 17 percent at end-1991. The reversal of the trend in 1992, i.e., the shift from CPI-indexed to foreign-exchange-indexed assets, reflected changes in their expected yields, particularly in the light of expectations of continued nominal devaluation, as nominal interest rates fell and the rate of domestic price increases slowed. The main increase in demand for foreign-exchange assets came in the second half of the year, following the sharp rise in share prices, the persistent fall in long-term interest rates, and the stabilization of short-term rates, which had fallen at the beginning of the year. Note that the portfolio does not include foreign assets, including shares and bonds held through mutual funds or directly by the public, which grew substantially during the year.

² The public holds financial assets both directly and indirectly—the latter mainly through mutual and provident funds.

The change in the composition of the portfolio since 1990, with an increase in shares and a decline in the proportion of CPI-indexed assets, is due partly to certain basic elements, including the reduction of the budget deficit and its attendant net borrowing, and the reform of the capital market, and partly to factors specific to recent years, such as the influx of immigrants, improved profitability, and the relaxation of monetary restrictions since the end of 1988. In the absence of other policy measures, a reduction of the deficit and net borrowing by the government tends to cause long-term interest to fall and demand to be directed towards financial assets (domestic and foreign), including long-term nontradable assets such as provident funds, life insurance, and savings schemes, which bear requirements to purchase government bonds. These requirements would thus create a financing surplus, due to the unforeseen rise in the stock of

nontradable bonds. However, within the framework of the reform of the capital market, a number of steps were taken to reduce government intervention in the money market and increase reliance on market forces as a mechanism for allocating savings and making investment decisions. Particularly notable were the gradual reduction of the required investment by provident funds in government assets—from 92 percent in 1987 to 50 percent in 1992—the cancellation of savings schemes based on deposits with the Treasury (1990), and the reduction of the required



investment in government bonds to about 40 percent. The issue of nontradable bonds specific to the provident funds was also stopped.

These steps, together with the reduction of the budget deficit since the ESP, reduced the supply of government financial assets and, in conjunction with the easing of monetary restraints since 1989, contributed to the fall of long-term interest rates.

The demand for other financial assets, mainly shares, also rose in 1992, extending to foreign-exchange denominated assets. Demand for shares rose principally as the result of the influx of immigrants from the former USSR, which led to expectations of accelerated growth in business-sector product with improved productivity and profitability. The falling inflation rate also increased certainty in the business sector, causing a shift from indexed assets to those less indexed, including shares.

Table 7.10
Estimated Wealth of Nonfinancial Private Sector, 1987-92^a

	NIS billion					(real annual change, ^b percent)					
			Average	Average	1990	1992					
	1991	1992	1987-90	1991-92		1991	Total	I	II	III	IV
Financial Assets	224.2	265.8	3.5	5.5	0.1	2.7	8.4	0.5	2.7	0.9	4.0
Short term ^c	55.0	73.3	-1.5	14.5	0.4	7.5	21.8	1.9	6.6	2.6	9.4
Medium and long term	169.2	192.5	4.9	2.6	0.0	1.2	4.0	0.1	1.5	0.3	2.1
Financial Liabilities	115.7	140.9	10.9	7.5	4.6	3.7	11.4	1.9	3.7	0.7	4.7
Short term ^c	43.0	54.1	16.0	8.7	10.5	2.7	14.9	3.7	2.7	-0.9	8.9
Long term	72.7	86.8	8.5	6.8	1.3	4.3	9.3	0.7	4.3	1.6	2.3
Net financial wealth	108.5	124.9	-1.7	3.4	-4.2	1.6	5.2	-0.9	1.7	1.2	3.3
Tangible assets^d											
Nominal	275.6	332.6	3.0	7.6	4.2	4.9	10.4	1.8	3.2	2.1	2.9
Real ^e			2.5	7.2	2.9	6.5	7.9	2.4	1.7	1.8	1.8
Total net wealth											
Nominal	384.1	457.5	0.4	6.4	1.6	4.0	8.9	1.0	2.8	1.8	3.0
Real ^e			1.1	6.1	0.8	5.1	7.1	1.4	1.7	1.6	2.2

^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. Financial institutions not subject to the supervision of the Supervisor of the Banks are not, owing to lack of data, 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 in other tables of this chapter.

^b Deflated by the CPI, unless otherwise specified.

^c Includes 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.

SOURCE: Bank of Israel, Research Department.

Asset holdings abroad rose substantially, mainly via mutual funds. Enabling the public to invest in foreign assets appears to have contributed to the increase in savings, and, indirectly, to have prevented a worsening in the current account, which would otherwise have resulted from an increase in private consumption.

5. WEALTH

The public possesses both physical and financial wealth. The former consists of homes, durable goods, and the fixed and current assets of the business sector. Financial wealth is the difference between financial assets and liabilities, its composition being determined primarily by considerations of profitability, risk, and liquidity.

Total wealth rose in 1992 by an appreciable 8.9 percent—physical wealth by 10 percent and financial wealth by 5.2 percent—with both financial assets and liabilities increasing rapidly (Table 7.10). The influx of immigrants in recent years has resulted in a steep rise in the accumulation of physical assets for use by households (furniture, appliances, and private vehicles). Purchases of durables increased by 23 percent in real terms, and consequently inventories rose by 12 percent. Following the influx of immigrants and the resultant building boom, housing investment rose, and there was a rapid real increase (7 percent) in housing stock. With improved profitability and expectations of accelerated growth, business capital expanded by a real 6 percent during 1992, similar to the 1991 rate. These growth rates were the highest since the 1980s.

The cumulative increase in financial wealth in 1990–92 was far lower than that in GDP and population; in other words, there was a shift from financial to tangible assets, reflecting reduced public-sector borrowing, together with an increase in investment in fixed assets, and in the public's medium- and long-term liabilities. The composition of financial wealth did in fact change in 1992, short-term wealth rising quickly, while medium- and long-term wealth held relatively stable.

The expansion of short-term wealth reflects mainly the fall in short-term nominal interest rates and the decline in the yield to maturity of long-term bonds during 1992. As a result, the public increased its money-supply holding. Higher prices of tradable bonds also increased wealth, the tradable part of which is reflected in market prices.

Expectations of a higher yield on foreign-exchange denominated assets was reflected by a relatively rapid rise in foreign-currency indexed wealth (20 percent in real terms, compared with only 3 percent in other financial assets) excluding the increase in direct overseas investments of mutual funds.

6. THE CAPITAL MARKET

The stock market boom of recent years persisted and even strengthened in 1992. The real total return on share holdings during the year was about 74 percent, and the market value of shares rose by 130 percent in real terms. More than NIS 4 billion was raised by

Table 7.11
Principal Stock Market Indicators, 1990–92

	1990	1991	1992		
			Total	1st half	2nd half
New issues ^a (NIS million ^b)	1,007	1,578	4,222	2,101	2,121
<i>of which Shares</i>					
Public sector corporations	212	262	605	605	
Private firms	582	818	3,179	1,281	1,898
Market value (NIS million ^b)	27,925	35,648	81,907	58,145	81,907
<i>of which (percent)</i>					
Arrangement bank shares ^c	12	0	0	0	0
Other shares ^c	88	100	100	100	100
Volume of stock-exchange trade (NIS million ^b)	15,611	24,335	36,835	14,472	22,363
<i>of which (percent)</i>					
Arrangement bank shares	11	10	0	0	0
Other shares	89	90	100	100	100
Velocity of circulation^c					
Arrangement bank shares	0.58	0.67	0.65	0.63	0.66
Other shares	0.50	0.73			
All shares	0.60	0.65	0.65	0.63	0.66
Real overall rate of return^d (percent)					
All shares	-2.3	31.8	74.4	37.0	27.2

^a Shares, convertible securities, and exercised warrants.

^b At December 1992 prices. Market value—end-of-year figures; volume of trade—on and off the floor.

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

^d Deflated by end-of-month CPI.

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

of issues of shares and convertible securities (Table 7.11), as well as through the exercise of warrants; this unprecedented sum accounted for some 20 percent of total business-sector investment in fixed assets, compared with 10 percent in 1991, and negligible amounts in previous years. The stock market boom was reflected in increased turnover and reduced variance of the return on share holdings.

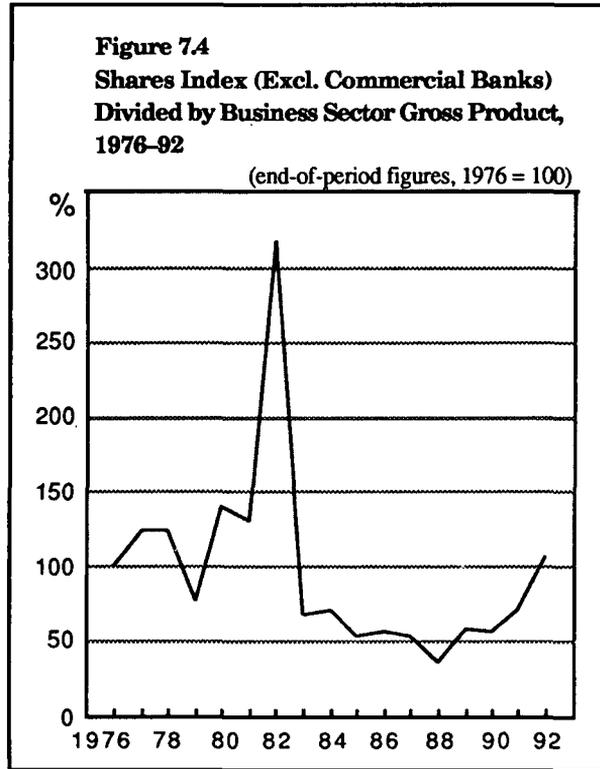
The 1988 recession was followed by the stock market boom, which began in 1989 as interest rates fell, and the supply of government bonds contracted due to the reduction of the budget deficit following the ESP. The reduction of supply caused demand in general to be directed to financial assets, and specifically by institutional investors to the stock market. Demand for share holdings was stimulated by improved macroeconomic conditions. Since the ESP there has been a process of adjustment and structural change in the business sector, and this was particularly marked in 1988–89; its results should be reflected by a permanent increase in manufacturing productivity. Moreover, the influx of immigrants from the former USSR contributed to a substantial increase in the labor supply,

a fall in real wages, and a rise in profitability. Immigration accelerated the rate of increase of business-sector product, and generated expectations of further growth. The fall in interest rates during the year also helped to improve profitability and increase the rate of return on equity, and thus to raise demand for shares. Progress in the peace talks, and the approval of the loan guarantees by the US government in the course of 1992, also played a part in boosting demand for shares. Thus, there is clearly a great difference between the current boom and that of the early 1980s, when there was high inflation and business uncertainty (Figure 7.4).

The substantial investment funds raised through flotations were insufficient to satisfy

the increased demand or moderate the persistent price rises. A faster rate of privatization of government corporations (in 1992 there were only two such issues, Israel Chemicals and Israel Discount Bank) would have helped to moderate price increases.

The price/earnings ratio was 19 at the end of 1992 (16 at end-1991). It is not clear to what extent the end-year prices reflect a long-term equilibrium level. On the one hand, the profitability of companies traded on the stock exchange, which had reached a trough in 1988, has continued to improve in recent years, and the return on equity has risen from 3 percent in 1989 to 7 percent in 1991, and according



to preliminary data, to 11 percent in 1992. Taking into account the fall in interest rates during 1992, and the continued increase in productivity and profitability, together with the improvement in the basic factors which motivate the business sector (including the reform of several markets), the adjusted P/E ratio turns out to be lower. On the other hand, the cash flow resulting from current activity has grown minimally compared with the increase in profitability, so that the latter may not be permanent.

The provident funds played a prominent part in the stock market in 1992, their presence being potentially complementary to the activity of the mutual funds. While the investment horizon of the latter is relatively short, the former can invest in the long term,

Table 7.12
Principal Bond Market Indicators, 1990-92

	1990	1991	1992		
			Total	1st half	2nd half
Market value of listed bonds (NIS million^a)					
Government	53,183	63,959	74,509	70,436	74,509
Private ^b	10,185	10,378	10,791	10,719	10,791
Total	63,368	74,337	85,300	81,155	85,300
<i>of which: Percent held by</i>					
The public	22	25	28	26	28
Commercial banks	20	20	18	19	18
Provident funds	55	52	52	52	52
Bank of Israel	3	2	2	2	2
Volume of stock-exchange trade (NIS million^a)					
Government	7,506	8,847	11,919	5,468	6,451
Private ^b	1,831	1,837	1,243	681	562
Total	9,338	10,684	13,163	6,149	7,013
Bank of Israel intervention ^c	0.54	0.03	2.04	0.30	3.78
Issues of tradable bonds (NIS million^a)					
Government	1,308	9,790	3,296	1,399	1,897
Private ^b	1,556	369	326	88	238
Total	2,864	10,159	3,622	1,487	2,134
Velocity of circulation of bonds^d					
Government	0.14	0.15	0.17	0.08	0.09
Private ^b	0.18	0.18	0.12	0.07	0.05
Total	0.15	0.15	0.17	0.16	0.17
Real overall yield^e					
CPI-indexed bonds					
Government	-6.0	-1.2	5.2	4.9	0.2
Private ^b	-2.7	6.6	7.9	7.1	0.8
Total	-5.6	1.5	5.9	5.6	0.3
Exchange-rate indexed bonds					
Government	-12.8	-1.4	19.2	6.8	11.6
Private ^b	-6.9	0.6	25.9	11.8	12.5
Total	-10.8	-1.7	20.3	7.7	11.7

^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 previous period.

SOURCE: Bank of Israel (Monetary Department and Research Department) and Central Bureau of Statistics.

Table 7.13
Assets of Mutual Funds, 1990–92

	(percent, end of period)			
	1990	1991	1992	
			First half	Second half
Mutual fund assets (NIS million)	8,263	13,331	19,149	28,661
Real annual overall rate of return	-3.4	6.9	28.2	29.2
Standard deviation of real monthly rate of return ^a	2.4	2.7		
Mutual funds' share of total tradable assets ^b	14.8	17.7	20.2	22.2
CPI-indexed bonds	8.8	9.6	10.0	10.6
Foreign-currency indexed bonds	10.0	18.6	31.7	36.6
Nonbank shares	10.8	11.7	12.2	13.4
Unindexed assets	5.0	9.0	10.4	11.6
Composition of portfolio				
CPI-indexed bonds	47.1	43.7	35.9	27.5
Foreign-currency denominated assets	16.4	11.6	14.7	22.2
<i>of which</i> Arrangement bank shares	10.7	0.0	0.0	0.0
Nonbank shares	24.7	28.6	35.3	38.3
Unindexed assets	11.9	16.0	14.0	12.0
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 deposits, shares, and convertible securities.

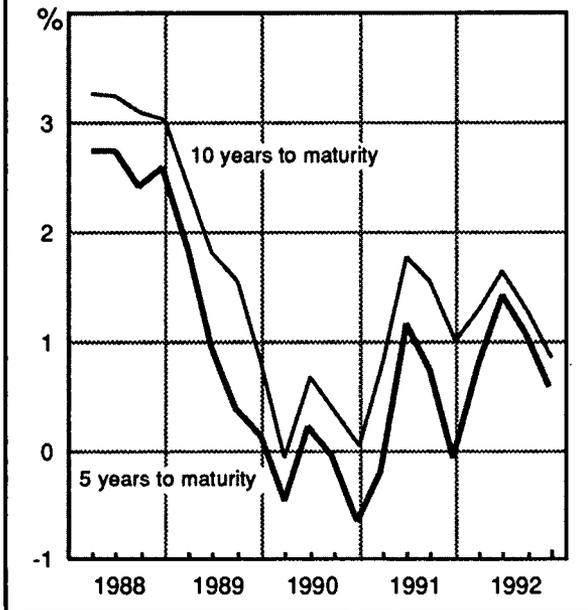
SOURCE: Bank of Israel Research and Monetary Departments.

thus moderating short-term fluctuations, helping to reduce the risk in holding shares, and thereby expanding this market. During 1992 the provident funds doubled the proportion of shares in their portfolios, bringing it up to about 10 percent, after it had doubled in 1991 too. Much of the rise stems from the increase in share prices, but in addition, the provident funds' demand for shares during the year amounted to more than NIS 1 billion (about a third of all share issues). In attempting to maximize their returns relative to other funds, fund managers may therefore have increased their share holdings too rapidly. The steep rise in their holdings, which was not matched by supply, was partly responsible for the surge in share prices. The highly centralized nature of provident fund management, with the banks' involvement in determining investment policy, calls into question the funds' role as a stabilizing influence in the stock market.

The market value of bonds rose during the year by some 15 percent in real terms, reaching NIS 85 billion (similar to the market value of shares, Table 7.12). This reflects both the increase in bond prices—about 8 percent in real terms—partly compensating for the fall in bond prices at end-1991, and considerable public-sector borrowing.

The real yield on bonds amounted to about 8 percent in 1992, reflecting the fall in their yield to maturity during the year. At the beginning of 1991 there was an exceptional rise

Figure 7.5
Real Average Net Yields to Maturity of
CPI Indexed Bonds in the Secondary Market,
1988-92



in bonds' yield to maturity, following a persistent fall since 1988. The rise in long-term interest rates at the beginning of 1991 resulted partly from expectations of an increase in the budget deficit and greater public-sector borrowing, based on apprehensions associated with the Gulf war and immigrant-absorption requirements. Yields to maturity followed a downward trend during 1991, but the government's surplus borrowing moderated the decline. The latter amounted to some NIS 1 billion in 1991, following a negative figure in 1990. Borrowing was negative in 1992, too, resulting from NIS 3.4 billion via tradable bonds, and net repayments (including interest) of non-

tradable bonds of NIS 5 billion. The government's negative contribution to the supply of long-term assets, together with the fall in short-term nominal interest rates, brought yields to maturity down, from an average of about 3.2 percent at the beginning of the year to about 1.6 percent at the end. The decline in the inflation rate affected yields to maturity in two conflicting ways, reducing the relative demand for indexed assets, and creating expectations of a smaller supply, which increased demand for indexed bonds. Although the issue of new unindexed bonds strengthened these expectations, the first factor appears to have had the greater effect (Figure 7.5).

Table 7.14
Assets of Provident Funds, 1988-92

	(percent, end of year)				
	1988	1989	1990	1991	1992
Total provident fund assets (NIS billion)	30.5	44.6	53.6	67.5	81.9
Tradable assets of funds (percent of total tradable assets)					
Tradable government bonds ^a	43.5	54.1	54.4	51.3	51.2
Private bonds	51.1	55.9	58.4	59.4	56.9
Nonbank shares	2.3	3.6	6.5	9.7	10.1
Unindexed assets	4.1	5.8	9.7	7.1	5.6
Composition of portfolio					
Special bonds issued to provident funds	52.1	39.4	35.0	28.9	22.5
Tradable government bonds ^a	32.4	42.6	41.8	44.0	46.0
Private bonds	6.1	7.8	8.6	8.4	7.5
Nonbank shares	0.7	1.3	2.6	4.7	10.1
Indexed deposits	4.6	4.4	5.4	7.4	8.3
Loans to members	0.3	0.1	0.1	0.1	0.1
Other loans	0.7	0.6	0.5	0.5	0.6
Other assets	3.3	3.8	6.0	6.1	5.0
Total	100.0	100.0	100.0	100.0	100.0

^a Including Arrangement bank shares.

SOURCE: Based on data of the Ministry of Finance.

**Principal Data on Israel's Economy:
a Long-Term Perspective**

Table A1a
Resources and Use of Resources, 1961-70

	(annual rate of change, percent)										
	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	Average 1961-70
Resources											
Gross domestic product	11.0	10.0	10.6	9.8	9.4	1.0	2.3	15.4	12.8	7.8	9.0
Imports of goods and services ^a	23.5	15.0	6.9	13.8	2.0	-0.6	9.5	29.8	15.1	17.7	13.3
<i>of which</i> Civilian	23.2	14.9	6.8	14.2	1.9	-0.6	8.4	30.7	12.5	7.3	11.9
Total resources	14.4	11.4	9.5	11.0	7.2	0.6	4.3	19.6	13.5	10.9	10.2
Use of resources											
Private consumption	11.0	10.6	10.1	10.9	8.7	2.1	2.0	13.6	10.1	2.3	8.1
Public consumption											
Total	16.1	10.4	11.1	3.6	11.4	9.5	33.5	8.7	15.6	24.8	14.5
Excl. direct defense imports	15.6	10.2	11.0	4.0	11.4	9.6	32.2	9.3	11.9	11.6	12.7
Gross domestic investment											
Total	19.3	10.2	3.6	20.8	0.5	-16.2	-22.4	48.7	26.7	13.5	10.5
Fixed ^b	19.4	10.1	3.7	20.6	0.7	-16.2	-22.3	47.7	28.8	14.5	10.7
Domestic use of resources ^c	14.0	10.4	8.5	12.0	6.9	-1.2	3.2	18.2	14.1	7.2	9.3
Exports ^a	16.0	17.5	14.9	6.1	8.4	10.5	8.3	27.7	6.9	9.0	12.6
Use of resources											
Total	14.4	11.4	9.5	11.0	7.2	0.6	4.3	19.6	13.5	10.9	10.2
Excl. direct defense imports	14.3	11.4	9.5	11.1	7.1	0.6	4.0	19.8	12.7	7.6	9.8
Gross product of business sector ^d	12.3	11.1	11.4	10.7	9.8	-1.0	0.6	17.6	14.5	8.3	9.5

^a Imports (c.i.f.), exports (f.o.b.), excluding factor payments and general government interest from or to rest of world. Exports at effective exchange rate.

^b Excluding changes in inventory.

^c Excluding direct defense imports.

^d GDP less gross product of public services and ownership of dwellings (data for 1961-68 are Bank of Israel estimates). At market prices.

SOURCE: Central Bureau of Statistics.

Table A1b
Resources and Use of Resources, 1971-80

	(annual rate of change, percent)										
	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Average 1971-80
Resources											
Gross domestic product	11.1	12.5	4.8	5.5	3.9	1.6	1.9	4.0	4.5	3.0	5.3
Imports of goods and services ^a	10.8	1.2	35.4	0.5	4.2	-3.0	-2.9	10.6	2.8	-6.2	5.3
<i>of which</i> Civilian	19.1	3.3	19.1	4.7	-4.4	2.3	5.9	6.3	10.2	-10.6	5.6
Total resources	11.0	8.7	14.3	3.7	4.0	-0.1	0.1	6.4	3.9	-0.4	5.2
Use of resources											
Private consumption	5.4	10.0	8.4	7.6	0.0	4.9	5.1	8.5	8.0	-3.7	5.4
Public consumption											
Total	2.6	-0.4	40.4	3.2	10.0	-8.0	-11.4	7.7	-6.7	8.1	4.6
Excl. direct defense imports	11.0	2.2	17.2	11.0	-0.1	-2.8	-1.1	-0.4	3.1	3.4	4.4
Gross domestic investment											
Total	22.1	12.5	5.5	-4.1	5.1	-12.0	-7.5	2.4	11.8	-13.5	2.2
Fixed ^b	21.9	13.3	10.6	-2.7	0.5	-10.5	-9.1	2.6	11.9	-9.1	2.9
Domestic use of resources ^c	11.0	8.7	9.7	5.3	1.2	-1.6	0.5	4.9	7.6	-4.2	4.3
Exports ^a	23.6	13.5	5.5	5.5	1.9	14.7	11.7	4.6	3.0	6.1	9.0
Use of resources											
Total	11.0	8.7	14.3	3.7	4.0	-0.1	0.1	6.4	3.9	-0.4	5.2
Excl. direct defense imports	13.4	9.7	8.8	5.3	1.4	1.8	3.2	4.8	6.4	-1.6	5.3
Gross product of business sector ^d	12.5	14.4	1.9	4.9	3.6	0.0	0.9	3.8	4.7	3.5	5.0

^aFor footnotes, see Table A1a.

Table A1c
Resources and Use of Resources, 1981-90

	(annual rate of change, percent)										
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	Average 1981-90
Resources											
Gross domestic product	4.6	1.3	2.5	2.1	4.0	4.1	6.1	3.1	1.3	5.8	3.5
Imports of goods and services ^a	10.3	3.6	6.7	-1.0	-1.0	9.2	19.0	-2.9	-5.1	9.0	4.8
<i>of which</i> Civilian	8.2	11.2	11.4	-3.9	-4.0	15.8	11.4	-0.4	0.5	8.3	5.9
Total resources	6.6	2.2	4.2	0.9	2.1	6.0	10.5	0.9	-1.0	6.9	3.9
Use of resources											
Private consumption	12.9	8.1	8.8	-7.0	0.6	14.6	8.9	4.3	0.4	5.3	5.7
Public consumption											
Total	6.5	-6.5	-3.8	6.3	3.5	-9.3	18.0	-2.5	-7.4	4.6	0.9
Excl. direct defense imports	2.0	3.1	2.2	1.9	-1.1	-2.4	4.1	2.6	2.3	2.7	1.8
Gross domestic investment											
Total	-5.1	15.2	10.1	-7.5	-10.6	10.3	3.3	0.1	-4.0	26.2	3.8
Fixed ^b	4.1	5.6	12.6	-11.8	-7.8	-0.2	13.7	-0.5	-3.8	22.4	3.5
Domestic use of resources ^c	6.0	8.0	7.2	-4.9	-2.2	9.2	6.7	3.2	0.1	8.1	4.1
Exports ^a	5.1	-3.5	1.8	13.6	9.0	5.9	10.9	-1.3	3.6	2.5	4.7
Use of resources											
Total	6.6	2.2	4.2	0.9	2.1	6.0	10.5	0.9	-1.0	6.9	3.9
Excl. direct defense imports	5.7	4.7	5.8	-0.1	1.0	8.1	7.8	2.0	1.0	6.6	4.3
Gross product of business sector ^d	5.7	0.5	3.0	2.3	5.7	6.4	8.1	3.0	1.2	7.2	4.3

^aFor footnotes, see Table A1a.

Table A2a
Gross National Product and Disposable Income, 1971-80

											(percent)
	Real change over preceding year ^a										Average
	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1971-80
GNP at market prices	12.2	11.2	5.1	2.8	2.7	0.8	8.2	4.2	5.4	2.3	5.5
Indirect taxes on domestic production (net)	10.3	5.7	-9.5	10.8	15.0	18.9	6.2	2.1	7.1	6.6	7.3
Subsidy element in directed credit						56.8	-6.0	-15.4	28.0	-7.3	5.6
Government income from property and interest	-1.0	26.9	-42.5	29.5	24.7	28.5	5.2	5.4	61.0	40.6	17.8
Direct taxes	18.6	2.1	7.1	2.2	11.4	28.0	3.9	1.9	12.2	8.6	9.6
Net transfer and interest payments on the domestic public debt	29.6	22.8	14.5	25.9	9.5	17.1	13.1	10.2	9.4	2.5	15.5
Private transfers from rest of world	31.9	23.8	-16.4	-24.1	-7.7	-8.4	24.9	15.0	-2.6	-7.5	2.9
Gross private disposable income from all sources	15.2	15.8	5.8	2.4	3.6	-2.4	10.7	5.9	3.5	-2.1	5.8
Net compulsory loans	126.1	-9.4	6.2	37.5	-45.9	-94.6	-264.1	21.0	-234.8	-463.0	-92.1
Disposable income excl. compulsory loans	12.5	17.0	5.8	1.0	6.1	-0.0	11.1	6.0	2.9	-0.7	6.2

^a Deflated by implicit price index of private consumption.

Table A2b
Gross National Product and Disposable Income, 1981-90

	Real change over preceding year ^a										(percent)
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	Average 1981-90
GNP at market prices	9.9	2.4	5.9	-0.6	-5.5	7.8	6.8	6.8	1.0	6.1	4.1
Net indirect taxes on domestic production	1.4	-2.7	1.3	3.3	-5.2	5.0	8.1	1.3	0.7	3.7	1.7
Direct taxes on net domestic production	-50.6	50.0	25.7	-18.9	58.2	35.8	5.6	-0.6	3.6	12.1	12.1
Subsidy element in directed credit	-11.9	-11.5	-16.3	-8.7	-8.2	-11.3	5.3	-23.6	-33.0	-13.6	-13.3
Government income from property	-1.6	9.4	-30.3	-26.6	-76.5	199.2	-36.4	24.0	31.1	50.5	14.3
Direct taxes	7.6	5.3	0.9	-20.3	16.2	9.7	0.5	4.2	-8.1	1.1	1.7
Net transfers and interest on domestic public debt	3.1	6.1	-0.5	5.9	-0.6	12.6	1.6	3.5	6.2	10.8	4.9
Private transfers from rest of world	6.6	-31.3	-13.3	-10.9	12.9	33.0	27.7	-14.1	19.1	-3.2	2.6
Gross private disposable income from all sources	16.0	-2.7	5.5	8.1	-11.2	4.0	9.5	6.3	3.9	6.0	4.5
Net compulsory loans	-50.7	-1.9	12.0	46.8	-57.1	118.2	-34.5	226.2	31.1	-72.2	21.8
Disposable income net of compulsory loans	15.0	-2.7	5.5	8.3	-11.6	4.5	9.1	7.5	4.3	4.3	4.4

^a Deflated by implicit price index of private consumption.

Table A3
Selected Price Indexes, 1960-92

(average rate of change, percent)

	CPI						Whole: prices industri output
	Total	Excl. fruit & vegetables	Housing	Excl. housing, fruit & vegetables	Agricultural products	Industrial products	
1960	2.29	1.50	3.39	1.42	0.7	1.4	
1961	6.71	5.80	7.63	5.29	6.7	6.0	
1962	9.47	9.11	18.59	9.05	5.9	7.0	
1963	6.57	6.73	19.47	3.58	4.4	3.6	
1964	5.15	5.35	23.38	4.96	1.1	1.3	1.0
1965	7.70	7.63	10.17	7.13	11.8	4.8	3.8
1966	7.99	8.46	7.60	8.63	3.3	6.4	4.7
1967	1.63	1.71	-1.95	2.32	3.7	1.8	1.1
1968	2.12	2.36	4.70	1.95	0.3	1.7	2.3
1969	2.49	1.65	2.50	1.62	7.7	1.5	2.0
1970	6.10	6.44	12.52	5.31	2.0	4.7	6.6
1971	12.00	12.08	12.90	11.91	12.9	11.4	9.1
1972	12.90	13.08	20.90	11.36	9.3	10.8	11.6
1973	20.00	19.27	32.10	16.52	25.6	17.5	19.0
1974	39.71	40.58	43.27	40.10	32.9	42.7	51.4
1975	39.30	38.55	30.86	40.38	44.9	41.9	40.7
1976	31.30	31.51	23.29	33.46	30.1	30.9	20.1
1977	34.60	33.72	21.80	37.09	45.4	36.7	50.8
1978	50.60	50.00	46.89	52.05	42.7	53.5	53.1
1979	78.30	78.50	121.65	68.13	77.8	67.9	79.1
1980	131.00	129.17	118.47	132.55	160.4	128.7	135.7
1981	116.80	117.21	130.65	113.56	105.9	108.6	121.9
1982	120.30	121.30	134.57	117.39	105.4	112.8	124.6
1983	145.70	143.70	145.44	143.14	170.6	140.3	142.2
1984	373.80	378.77	403.69	370.79	321.22	383.0	396.0
1985	304.60	302.86	296.66	304.98	345.31	285.0	265.7
1986	48.10	46.04	32.30	50.51	78.68	39.7	44.3
1987	19.90	19.80	17.70	20.35	18.50	14.1	17.9
1988	16.30	16.20	17.00	15.98	17.01	13.3	17.3
1989	20.20	21.30	32.30	18.93	6.08	16.0	21.0
1990	17.20	18.20	34.20	14.31	1.17	11.1	11.3
1991	19.00	19.40	31.60	15.91	13.49	13.6	15.8
1992	11.90	11.70	11.20	11.91	19.06	9.6	10.2

Table A4
Labor Market Indicators, 1960-92

(percent)

	Unemployment rate	Rate of change			Real wages per employee post
		Working-age population	Business-sector employment	Public-services employment	
1960	4.6	2.8			
1961	3.6	4.1	5.3	10.2	
1962	3.7	4.5	7.5	-0.9	5.3
1963	3.6	5.2	2.4	6.1	6.3
1964	3.3	4.0	4.9	5.5	5.4
1965	3.6	4.3	1.6	7.6	9.1
1966	7.4	3.3	-0.2	0.3	10.2
1967	10.4	2.5	-6.5	-1.7	-1.2
1968	6.1	4.9	10.1	8.3	1.1
1969	4.5	2.6	3.3	5.6	2.6 ^a
1970	3.8	2.7	2.2	0.6	2.3
1971	3.5	3.2	3.1	4.8	3.1
1972	2.7	3.4	5.1	4.7	0.7
1973	2.6	3.6	3.5	5.3	6.1
1974	3.0	3.0	-1.6	5.9	-2.4
1975	3.1	0.7	0.0	5.5	-2.1
1976	3.6	3.2	0.8	2.8	1.4
1977	3.9	2.1	2.4	4.1	10.6
1978	3.4	1.9	3.1	8.5	1.5
1979	2.9	2.6	1.9	3.4	9.5
1980	4.8	2.5	0.8	1.7	-3.2
1981	5.1	1.8	1.4	3.7	10.4
1982	5.0	1.8	1.4	1.6	-0.3
1983	4.5	2.0	4.0	1.3	6.1
1984	5.9	2.2	1.5	1.5	-0.4
1985 ^b	6.7	2.2	0.3	1.7	-9.0
1986	7.1	1.9	1.7	0.7	7.8
1987	6.1	1.9	3.9	-0.4	7.9
1988	6.4	2.0	3.2	4.2	6.0
1989	8.9	2.0	0.0	1.9	-1.3
1990	9.6	3.9	2.0	2.3	-1.0
1991	10.6	7.1	5.9	6.6	-3.0
1992	11.2	4.3	4.7	3.2	1.1

^a New series, including residents of the administered areas.

^b New series from 1985, with lowest limit of working-age population raised from 14 to 15.

SOURCE: Central Bureau of Statistics.

Table A5a

Principal Components of General Government Receipts and Expenditure, 1970-79

(percent of GNP)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Expenditure										
Domestic										
Civilian	9.6	9.7	9.5	10.0	9.9	9.6	10.2	11.2	11.1	12.3
Defense, net	13.9	14.5	12.3	15.1	17.9	16.8	15.2	14.1	13.4	14.0
Investment	4.8	4.8	6.9	5.4	5.7	5.2	4.4	3.8	4.2	4.4
Direct domestic demand	28.3	29.0	28.7	30.5	33.4	31.6	29.7	29.1	28.6	30.7
Transfer payments	9.3	9.7	10.1	11.8	13.9	15.2	16.9	17.0	16.8	16.5
Nominal interest payments	3.2	3.3	3.9	4.0	4.3	4.4	4.8	5.2	6.5	7.5
Subsidies	4.1	5.6	4.9	6.4	6.5	6.9	7.1	7.6	3.8	4.0
Credit subsidies	1.0	4.4	6.3	9.4	15.5	5.0	7.6	7.5	6.6	7.9
Subtotal	17.6	23.0	25.2	31.6	40.3	31.4	36.4	37.3	33.7	35.8
Total domestic expenditure	45.9	52.0	53.9	62.1	73.7	63.0	66.1	66.4	62.3	66.5
Abroad										
Direct defense imports	11.6	8.9	8.4	17.5	12.8	16.8	14.4	9.2	13.0	7.8
Advance payments on defense imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nominal interest payments	1.7	1.2	1.3	1.2	1.6	1.6	1.9	2.6	3.2	3.3
Other	0.0	0.0	0.0	0.0	0.0	-0.0	-0.1	-0.0	-0.1	-0.1
Total expenditure abroad	13.3	10.1	9.8	18.8	14.4	18.4	16.3	11.7	16.2	11.1
Total expenditure	59.2	62.1	63.6	80.9	88.1	81.4	82.4	78.1	78.5	77.6

Receipts**Domestic**

Taxes	36.8	41.1	38.7	39.5	42.8	42.3	49.2	46.4	44.2	47.0
From property	2.3	2.0	2.3	1.3	1.6	1.8	2.5	2.1	2.0	3.0
Transfers	2.5	2.5	2.3	2.2	2.1	2.3	2.6	2.2	2.0	2.0
Imputed pensions	0.6	0.6	0.5	0.7	0.6	0.6	0.6	0.7	0.7	0.7
Depreciation	1.1	1.1	1.2	1.4	1.5	1.6	1.8	1.9	2.1	2.1
Total domestic	43.4	47.4	45.0	44.9	48.6	48.7	56.7	53.2	51.1	54.9

From rest of world

Interest	0.3	0.5	0.1	1.0	1.1	0.9	0.8	0.6	1.0	1.8
Intergovernmental transfers	0.3	-0.1	0.8	8.8	5.7	5.3	8.9	6.6	7.4	8.1
Publicly-financed nonprofit institutions	3.6	2.6	2.9	6.8	2.6	3.3	3.3	2.4	2.3	1.8
Total from rest of world	3.5	3.0	3.8	16.6	9.3	9.5	13.0	9.6	10.7	11.7

Total receipts

46.9	50.4	48.8	61.6	58.0	58.1	69.7	62.8	61.8	66.5
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General government deficit (-)/surplus (+)

Domestic	-2.5	-4.6	-8.9	-17.2	-25.1	-14.3	-9.4	-13.2	-11.2	-11.7
Foreign	-9.8	-7.1	-5.9	-2.1	-5.0	-8.9	-3.3	-2.1	-5.5	0.6
Total deficit	-12.3	-11.7	-14.8	-19.3	-30.1	-23.3	-12.7	-15.3	-16.7	-11.1

Gross National Product

(NIS million, at current prices)	1.851	2.315	2.982	3.757	5.33	7.693	9.969	14.67	23.531	43.948
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Table A5b
Principal Components of General Government Receipts and Expenditure, 1980-92^a

	(percent of GNP)												
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Expenditure													
Domestic													
Civilian	17.9	17.7	17.5	17.3	17.9	16.3	16.2	16.2	16.8	17.2	17.3	16.9	16.8
Defense, net	14.0	14.0	15.0	14.1	14.3	12.7	11.0	11.0	10.4	10.2	9.9	8.9	8.5
Investment	2.5	2.5	2.6	2.5	2.1	1.9	2.1	2.5	2.7	2.6	2.7	3.3	3.3
Direct domestic demand	34.4	34.2	35.1	34.0	34.2	30.9	29.2	29.8	29.9	30.0	29.9	29.2	28.6
Transfer payments	12.3	11.1	11.5	10.9	10.3	10.3	11.3	11.1	12.3	13.0	12.6	13.8	14.2
Nominal interest payments	7.7	8.0	7.8	6.9	8.1	7.8	7.9	7.1	6.5	6.8	6.8	6.2	5.7
Subsidies	2.9	7.6	5.8	5.7	6.3	4.8	3.1	3.1	3.4	3.0	2.7	2.4	2.9
Credit subsidies	6.9	5.2	3.9	3.3	3.2	2.0	1.5	1.4	1.0	0.7	0.6	0.4	0.3
Subtotal	29.8	31.8	29.0	26.8	27.9	25.0	23.7	22.8	23.2	23.4	22.7	22.8	23.1
Total domestic expenditure	64.3	66.1	64.1	60.8	62.1	55.9	52.9	52.5	53.1	53.5	52.6	52.0	51.7
Abroad													
Direct defense imports	8.1	9.3	5.6	3.9	6.3	7.3	4.0	7.1	4.8	2.7	2.9	3.3	2.3
Advance payments on defense imports	0.9	-2.3	0.2	0.5	0.3	0.6	2.2	-2.1	-1.1	0.4	0.3	0.4	-0.1
Nominal interest payments	3.2	3.7	4.0	4.0	5.3	5.9	4.6	3.9	3.5	3.1	2.7	2.3	2.1
Other	0.4	0.7	0.9	0.7	0.7	0.6	0.5	0.6	0.5	0.4	0.4	0.4	0.4
Total expenditure abroad	12.7	11.4	10.7	9.0	12.6	14.5	11.4	9.5	7.7	6.6	6.3	6.3	4.7
Total expenditure	76.9	77.4	74.8	69.8	74.7	70.3	64.3	62.0	60.8	60.1	58.9	58.3	56.4

Receipts**Domestic**

Taxes	42.6	40.9	43.6	43.6	37.0	44.2	46.6	44.1	43.1	39.0	38.8	38.1	39.6
From property	5.1	4.5	4.8	3.2	2.3	0.6	1.6	1.0	1.1	1.4	2.0	1.8	1.9
Transfers	1.2	1.4	2.3	2.5	1.3	1.2	1.6	1.9	1.9	2.2	2.4	2.6	2.3
Imputed pensions	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.8	0.9	0.9	0.8	0.8	0.8
Depreciation	1.8	1.8	1.8	1.7	1.8	1.8	1.7	1.7	1.6	1.6	1.6	1.4	1.5
Total domestic	51.7	49.6	53.5	52.0	43.5	48.6	52.3	49.5	48.6	45.2	45.7	44.7	46.0

From rest of world

Interest	1.5	1.9	2.0	1.7	1.4	1.2	1.0	0.8	0.8	1.1	1.2	1.3	1.0
Intergovernmental transfers	8.3	6.4	5.0	7.9	13.9	18.8	13.2	8.6	6.8	6.4	6.4	6.6	5.7
Publicly-financed nonprofit institutions	2.3	2.5	1.8	1.8	2.0	2.2	1.8	1.4	1.2	1.3	1.6	1.4	1.3
Total from rest of world	12.1	10.8	8.8	11.4	17.3	22.2	16.0	10.8	8.8	8.8	9.2	9.3	8.0

Total receipts

Total receipts	63.8	60.4	62.4	63.4	60.8	70.8	68.3	60.3	57.5	54.0	54.9	54.0	54.1
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General government deficit (-)/surplus (+)

Domestic	-12.5	-16.5	-10.6	-8.8	-18.6	-7.2	-0.6	-3.1	-4.5	-8.3	-6.9	-7.3	-5.7
Foreign	-0.6	-0.6	-1.9	2.4	4.8	7.7	4.6	1.4	1.2	2.2	2.9	3.1	3.3
Total deficit	-13.1	-17.0	-12.5	-6.4	-13.9	0.5	4.0	-1.7	-3.3	-6.1	-4.0	-4.3	-2.4

Gross National Product

(NIS million, at current prices)	107,809	258.8	578,559	1,494.13	7,303	27,324	43,041	55,095	68,435	83,450	102,682	133,321	158,122
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^a Data prior to 1980 according to old SNA.

Table A6a
Imports and Exports, 1975-83^a

	1975	1976	1977	1978	1979	1980	1981	1982	1983
<i>Millions of current \$</i>									
Exports									
Goods	2,187	2,679	3,414	4,088	4,776	5,820	5,930	5,582	5,563
Services	1,722	1,922	2,270	2,781	3,569	4,300	4,885	4,876	4,675
Total	3,909	4,600	5,685	6,869	8,345	10,120	10,815	10,458	10,238
Imports									
Civilian goods	4,054	4,037	4,659	5,535	7,198	7,749	7,799	7,895	8,364
Defense	1,799	1,519	1,047	1,565	1,183	1,693	2,205	1,488	1,028
Services	1,884	2,077	2,289	2,782	3,487	4,287	4,891	5,592	5,792
Total	7,737	7,633	7,995	9,883	11,869	13,728	14,896	14,975	15,184
Civilian import surplus	2,029	1,514	1,264	1,448	2,340	1,916	1,875	3,028	3,918
Total import surplus	3,828	3,033	2,311	3,013	3,523	3,608	4,081	4,517	4,946
<i>Percent of GNP</i>									
Exports									
Goods	18	21	24	31	28	28	26	24	21
Services	14	15	16	21	21	21	22	21	17
Total	32	37	40	51	49	49	48	44	38
Imports									
Civilian goods	33	32	33	41	42	37	35	33	31
Defense	15	12	7	12	7	8	10	6	4
Services	15	17	16	21	20	21	22	24	21
Total	64	61	57	74	69	66	66	63	56
Civilian import surplus	17	12	9	11	14	9	8	13	14
Total import surplus	31	24	16	22	21	17	18	19	18

^a Imports c.i.f., exports f.o.b. Data prior to 1988 adjusted to new classification introduced in 1988.

Table A6b
Imports and Exports, 1984-92^a

	1984	1985	1986	1987	1988	1989	1990	1991	1992
<i>Millions of current \$</i>									
Exports									
Goods	6,214	6,629	7,703	9,133	9,997	11,061	12,133	12,024	13,282
Services	4,511	4,409	4,367	5,151	5,665	6,141	6,730	7,164	8,215
Total	10,725	11,038	12,070	14,283	15,662	17,202	18,863	19,188	21,496
Imports									
Civilian goods	7,941	7,814	9,160	11,318	11,978	12,663	14,765	16,319	18,272
Defense	1,418	1,829	1,178	2,448	2,082	1,204	1,501	1,973	1,466
Services	6,095	5,380	5,506	6,190	6,771	7,204	7,954	7,950	8,614
Total	15,454	15,023	15,844	19,956	20,832	21,071	24,220	26,241	28,351
Civilian import surplus	3,311	2,157	2,596	3,225	3,087	2,665	3,856	5,081	5,389
Total import surplus	4,729	3,985	3,774	5,673	5,170	3,869	5,357	7,053	6,855
<i>Percent of GNP</i>									
Exports									
Goods	25	29	25	26	23	25	23	21	21
Services	18	19	14	15	13	14	13	12	13
Total	43	48	39	41	37	40	36	33	33
Imports									
Civilian goods	32	34	30	33	28	29	28	28	28
Defense	6	8	4	7	5	3	3	3	2
Services	24	23	18	18	16	17	15	14	13
Total	62	65	51	58	49	48	46	45	44
Civilian import surplus	13	9	8	9	7	6	7	9	8
Total import surplus	19	17	12	16	12	9	10	12	11

^a Imports c.i.f., exports f.o.b. Data prior to 1988 adjusted to new classification introduced in 1988.