

CHAPTER VIII

MONEY AND CAPITAL MARKETS

1. MAIN DEVELOPMENTS

After two years of a very tight monetary policy, which reached its peak in the third quarter of 1985, the Bank of Israel gradually relaxed the restraint in the year reviewed. When it became clear that the government deficit had been substantially reduced and the economic stabilization program introduced in July 1985 was producing results, the Bank began to ease its policy measures in order to permit the expansion of business sector product and reduce the firms' financing costs.

The loosening of the severe monetary restraint was reflected by a sharp drop in lending and deposit interest rates, mainly in the first half of 1986. Short-term bank credit and unlinked short-term assets (money, CDs, treasury bills, and short-term deposits) also expanded strongly—a trend that accelerated in the second half of the year. But to a large extent these increases resulted from the more buoyant demand for unlinked assets following the waning of inflationary and devaluation expectations.

Monetary developments in the first half of the year were dominated by the swelling supply of short-term credit, which exceeded the increased demand and sharply depressed real interest on overdraft facilities (see Table VIII–A24).¹ The greater availability of credit is explained by the lowering of the liquidity ratios, which enabled the banks to step up their lending even though their sheqel resources (i.e. the money base) hardly changed (see Tables VIII–1 and VIII–5).² Initially the growth of credit was fueled by an increase in the Bank of Israel's discount-window lending to the commercial banks, which constitutes the marginal source of domestic credit supply. The reduction of the interest rates on the discount-window loan from their peak levels in the third quarter of 1985 induced a greater resort to this facility as a source of expanding credit. Subsequently the liquidity ratios were lowered, and this led to a smaller recourse to the discount window.

¹ This section analyzes the factors that influenced the demand and supply of short-term bank credit and their impact on the cost of overdraft facilities. But the factors that explain the growth of credit also explain the growth of unlinked short-term (interest-bearing) assets.

² A fuller description of these developments appears in section 4.

Table VIII-1
MONETARY INDICATORS, 1982-86

	Average balance as percent of GNP								Percent nominal monthly change					
					1985				1985			1986		
	1982	1983	1984	Total	Aug.- Dec. ^a	Total	1st half	2nd half	1984	Total	Aug.- Dec. ^a	Total	1st half	2nd half
Narrow money base ^b	2.6	2.4	1.9	4.4	6.1	6.4	6.4	6.5	15.3	18.4	9.9	2.5	0.2	4.9
Unlinked short-term assets ^c	6.3	6.5	5.5	9.8	12.2	14.6	13.6	15.5	14.9	15.8	9.8	4.6	2.5	6.8
Unlinked short-term assets plus resident deposits (Patam)	25.6	26.3	29.0	32.2	32.5	29.9	30.4	29.5	15.9	8.3	2.4	1.7	0.6	2.8
Total short-term assets ^d	37.3	35.6	35.7	39.0	39.8	38.8	39.2	38.4	15.4	8.5	3.3	1.9	1.7	2.0
Short-term assets plus bank shares ^d	59.2	58.9	46.1	52.4	53.6	51.1	52.3	50.1	15.5	8.8	3.4	1.7	1.6	1.7
Total financial assets ^d	174.1	169.7	152.1	181.3	191.2	185.3	186.8	183.9	16.4	9.1	4.6	1.9	1.9	2.0
Bank credit (excl. fuel) to private nonfinancial sector ^e	19.9	17.7	16.5	20.1	21.1	22.8	21.4	24.0	16.4	9.4	4.0	3.7	3.1	4.4
Medium- and long-term credit ^f	28.6	34.1	37.8	45.6	47.4	47.2	47.9	46.5	16.7	9.2	7.1	1.5	1.2	1.8
Net financial wealth of private nonfinancial sector ^g	117.2	111.4	94.0	113.5	117.7	115.3	119.4	111.7	16.3	9.1	6.6	1.2	1.3	1.0
Consumer price index ^h									15.2	9.1	2.7	1.5	1.4	1.6
Exchange rate (NIS/\$)									16.0	7.4	0.3	-0.1	-0.0	-0.1

^a The data on medium- and long-term credit and net financial wealth of the private nonfinancial sector are for July-December.

^b Source: Table VIII-A8.

^c M1, time deposits, CDs, and treasury bills as detailed in Table VIII-A12.

^d Detailed in Table VIII-A16.

^e Detailed in Table VIII-A26.

^f Detailed in Table VIII-A13.

^g Detailed in Table VIII-A24.

^h The CPI reflects changes in the average monthly price level, i.e. it approximates the change from mid-month to mid-month. As a result, the series is biased when there is a change in the rate of inflation (as happened, for example, in the second half of 1985).

SOURCE: Table VIII-A1.

In the second half of the year the growth of credit accelerated, but real interest rates declined only fractionally because of a greater balance between supply and demand.³ During this period the liquidity ratios were not revised, yet the sources of credit expanded appreciably owing to a larger government injection and an accelerated shift from indexed to nonindexed assets. The public sector deficit was slashed in 1985 and 1986, but in the first half of 1986 the government still borrowed more heavily from the public (and absorbed more liquidity) than in the three preceding years (see Table VIII-6). In the second half of 1986 the government reduced the sale of tradable bonds to the public in order to permit the releasing of long-term funds for investment financing (see Table VIII-3). The public reshuffled its financial portfolio, moving from indexed to nonindexed assets as the return on the latter rose with the slowing of inflation and ebbing of inflationary expectations. This shift, which had assumed large dimensions in the second half of 1985, weakened in early 1986 but again intensified, as stated, in the second half of the year (see Table VIII-5).

Demand for credit also accelerated in the second half of 1986, following the rebounding of domestic activity and the expansion of resource use, and in lagged response to the softening of interest rates (the elasticity of demand for credit is greater in the long run than in the short run, as evidenced by the small real change in short-term bank credit in the second half of 1985 despite the soaring of real interest rates during that period).

Short-term bank credit and nonindexed assets continued to expand strongly in the early months of 1987. This was made possible by the increased supply of credit generated by a large capital import. Since mid-1985 the exchange rate has served, along with fiscal and monetary policy, as the principal instrument for maintaining price stability. During this period there has been a fixed exchange rate regime: the sheqel was pegged to the dollar until August 1986, and thereafter to a five-currency basket. Examination of the public's expectations of a devaluation of the sheqel against the dollar, as measured by the agio on the black market dollar, shows a substantial weakening of such expectations in the second half of 1986 (despite the reduction of interest rates in the economy). This became more pronounced toward the end of the year and in early 1987 (apart from a brief span before the January 1987 devaluation). The trend in the public's expectations indicates that around the middle of 1986 it became convinced that the government was indeed pursuing a different exchange rate policy, and no large or frequent changes in the exchange rate were to be expected. This development, which was also associated with the general economic stability, has resulted in a greater substitutability between domestic financial assets and foreign

³ Deflating the rates charged on the various types of credit by the consumer price index reveals that real interest rates turned down in the second half of 1986 (see Table VIII-A24), but use of the wholesale price index as a deflator indicates that they held steady.

Table VIII-2
INCREMENTAL DOMESTIC LIQUIDITY GENERATED BY EXTERNAL INJECTIONS, 1984-86

	Millions of current NIS				Percent of GNP ^a						
	1985	1986			1979-83	1984	1985		1986		
		Total	1st half	2nd half			Total	2nd half	Total	1st half	2nd half
Source											
Public sector injection ^b	669	-538	-357	-181	10.0	9.9	3.6	0.0	-1.3	-1.8	-0.8
Bank of Israel injection ^b	350	316	563	-247 ^c	2.0	1.5	1.5 ^c	0.2 ^c	0.9	3.0	-1.2
Total external injection	1,019	-222	206	-428	11.9	11.4	5.0	0.2	-0.4	1.2	-2.1
Less: Balance of payments leakage	1,135	984	437	547	4.2	8.6	4.8	2.2	2.5	2.4	2.6
Total injection	-116	-1,206	-231	-975	7.8	2.9	0.3	-2.0	-2.9	-1.1	-4.7
Destination											
Money creation (= change in money base)	1,862	737	21	716	1.8	2.9	6.5	10.6	1.9	0.3	3.5
Addition to liquid asset base	-1,544	498	239	259	1.5	-1.6	-5.2	-9.2	1.1	1.1	1.2
Resident deposits (Patam)	-1,754	-927	-405	-521	2.1	0.9	-5.5	-11.0	-2.4	-2.2	-2.5
Tradable bonds ^{d,e}	210	1,425	645	780	-0.6	-2.5	0.4	1.8	3.5	3.3	3.7
Medium- and long-term asset base	-434	-2,441	-491	-1,950	4.6	1.6	-1.0	-3.3	-5.9	-2.5	-9.3
Restitution deposits	194	112	68	44	0.5	0.4	0.8	0.7	0.3	0.4	0.2
Savings schemes and social insurance funds ^{d,f}	-628	-2,553	-560	-1,994	4.0	1.2	-1.8	-4.1	-6.2	-2.9	-9.5

^a Calculated as the arithmetic mean of monthly ratios. The numerators are at current prices; the denominator (GNP) is derived from quarterly data and corrected for the change in prices during the quarter.

^b For details see Table VIII-4.

^c The figures are downward-biased because they are net of the export funds transferred from the Bank of Israel to the commercial banks. The amount that has to be added in order to make these figures comparable to the others is to be found in Table VIII-4.

^d Excludes accrued interest.

^e The data in this table differ from those in Table VIII-3, line c(2), as purchases of tradable bonds by institutional investors are included here but not in Table VIII-3.

^f Net long-term government borrowing from the private sector (net of early redemption of State of Israel Bonds).

currency assets. Thus under a fixed exchange rate regime one can expect that after a certain period the highly differential interest rates on these assets—i.e. a higher rate on sheqel assets—will lead to an inflow of foreign capital, monetary expansion, and downward pressure on interest rates until equilibrium is restored in the public's assets portfolio.

A big domestic-foreign interest rate differential—reflected, for example, in the interest charged on overdraft facilities and on free (discretionary) foreign currency credit—existed throughout 1986 and early 1987 (see Table VIII–A24). Indeed, toward the end of the year reviewed and to an even greater extent after the January 1987 devaluation, which greatly weakened expectations of another devaluation in the near future, there was a larger inflow of foreign capital (despite the foreign exchange controls, which are not effective for all balance of payments components). Foreign currency conversions by the public from the beginning of 1987 to the end of April totaled approximately \$750 million; this helped to generate excess liquidity in the financial system, and in April, for the first time in years, banks lowered the interest on overdraft accounts without waiting for the Bank of Israel to first reduce the interest on the discount-window loan.

The drop in short-term interest rates was one of the factors that stimulated the buildup of inventories in 1986, but it did not induce a larger fixed investment (although an indicator of capital asset imports points to an upturn in early 1987). On the other hand, the lower interest rates contributed to a heavier purchase of durable goods. The growth of consumer credit was probably responsible for an increase in other private consumption items. Only part of the incremental domestic demand for goods and services augmented business sector product, mainly in the second half of 1986 (and to an increasing degree apparently also in early 1987); because of the supply-side constraints, the bulk of the incremental demand was diverted to imports. Presumably the brisk demand sparked by the lowering of interest rates was largely a temporary phenomenon, which could be accommodated because of the balance of payments position. Part of the additional demand may also have flowed to nontradables and pushed up their prices, chiefly in the second half of the year. Nevertheless the easing of interest rates brought down financing costs, which had impeded the expansion of business sector product in the previous year and severely strained the financial position of a growing number of firms.

The sustainability of a fixed exchange rate policy depends, among other things, on preventing a large-scale speculative purchase of foreign currency by the private sector. Because of the general economic stability, the lowering of interest rates also checked the outflow of capital for speculative purposes: foreign currency purchases by the private sector shrank appreciably in 1986 to stand at \$620 million, as opposed to \$1,070 million in 1985 and \$2 billion in 1984.

In estimating the share of financing costs in total production costs, one must look at

Table VIII-3
CHANGE IN FINANCIAL ASSETS OF THE PUBLIC, 1984-86

	Millions of current NIS				Percent of GNP ^a					
	1986				1985			1986		
	1985	Total	1st half	2nd half	1984	Total	2nd half	Total	1st half	2nd half
1. Contribution of injections and financial intermediation										
a. Total injection	-116	-1,209	-231	-978	2.9	0.3	-2.0	-2.9	-1.1	-4.7
(1) To money base	1,862	737	21	716	2.9	6.5	10.6	1.9	0.3	3.5
(2) To linked short-term asset base ^c	-1,544	498	239	259	-1.6	-5.2	-9.2	1.1	1.1	1.2
(3) To medium- and long-term asset base ^d	-434	-2,444	-491	-1,953	1.6	-1.0	-3.3	-5.9	-2.5	-9.3
b. Domestic financial intermediation	414	3,705	1,269	2,436	0.5	1.6	1.0	9.2	6.7	11.7
c. Purchase of assets by the public (a+b)	298	2,496	1,038	1,458	3.5	1.8	-1.0	6.3	5.6	6.9
(1) Unlinked assets	2,366	2,472	439	2,033	3.0	8.1	12.6	6.0	2.4	9.7
(2) Resident deposits (Patam) and tradable bonds ^c	-1,091	-772	186	-958	-4.2	-3.2	-7.4	-1.8	1.0	-4.6
(3) Medium- and long-term assets ^d	-977	796	413	383	4.6	-3.0	-6.2	2.0	2.2	1.8
2. Contribution of asset revaluation										
d. Total revaluation	41,382	12,054	5,431	6,623	254.7	169.6	129.5	30.3	29.2	31.5
(1) Unlinked assets	1,288	673	251	422	5.4	5.0	4.8	1.7	1.4	2.0
(2) Resident deposits (Patam) and tradable bonds	5,730	730	467	263	51.3	25.2	12.5	1.9	2.5	1.2
(3) Medium- and long-term assets ^d	34,364	10,651	4,713	5,939	198.1	139.4	112.2	26.8	25.4	28.2
<i>Percent change in balances;^e monthly rate</i>										
3. Total change in asset holdings (c+d)	41,680	14,550	6,469	8,081	16.7	9.2	6.7	1.7	1.6	1.8
a. Unlinked assets	3,653	3,145	690	2,455	14.7	16.2	18.4	4.6	2.5	6.8
b. Resident deposits (Patam) and tradable bonds	4,640	-42	654	-696	15.5	6.5	1.6	-0.0	1.2	-1.3
c. Medium- and long-term assets ^d	33,387	11,447	5,125	6,322	17.0	9.3	7.0	1.7	1.6	1.8

^a See note a to Table VIII-8.

^b Public sector and Bank of Israel injections, less balance of payments leakage. The discrepancies between the data here and in Table VIII-2 stem from the inclusion there of government purchases of bank shares.

^c Purchases of tradable bonds are larger in line a(2) than in c(2) as they include purchases by institutional investors (banks and social insurance funds).

^d Includes shares of financial concerns.

^e End-of-period balances.

SOURCE: Bank of Israel calculations.

the average interest rate on the various types of credit. After the sharp reduction of interest in 1986, the average real cost of short-term credit came to 6.6 percent for the year (and an annualized 5 percent rate in the second half); this was fairly low compared with the rates that had prevailed since the beginning of the 1980s. But the average rate hides a very wide variance between free sheqel, directed, and free foreign currency credit, as well as a differential between the cost of the individual firms' credit baskets. The effective cost of overdraft facilities, which is the marginal source of credit for firms that do not export their output (and hence are not entitled to directed credit), averaged 31 percent in 1986, which was well above the going rate in industrial countries. A further easing of these firms' financing burden necessitates a comprehensive reform of the money and capital markets, which would allow some opening of the local market to foreign credit.

The Knesset Finance Committee recently endorsed a proposal to liberalize the import of capital, which provides for some replacement of the existing quantitative restrictions with a levy on foreign credits. Implementation of this proposal would lead to a closer relationship between domestic and foreign interest rates, narrow interest rate differentials between the various types of credit, and result in a less arbitrary allocation of credit; but it would greatly limit the interest rate range within which monetary policy operates.

Total financial assets (excluding shares of nonfinancial concerns) rose 3 percent in real terms in the year reviewed. This occurred despite the contraction of the asset base due to the reduction of the public sector deficit from 3 percent of GNP in 1985 to a positive (i.e. a surplus) 2.6 percent of GNP (excluding interest payments on the internal debt) in 1986. The expansion of financial assets was generated entirely by the growth of credit (21 percent in real terms in the case of both net long-term credit and short-term bank credit). The larger volume of bank credit was made possible by the lowering of the liquidity ratios and a decrease in the average ratio on the asset base (caused by the shift from linked to unlinked assets, which are subject to lower ratios). Since the growth of financial assets was due entirely to the expansion of credit, there was no increase in the public's net financial wealth, and in fact it even shrank 3.7 percent in real terms.

This was an outcome of both a drop in the private saving rate and a shift from financial to tangible assets. Total net wealth of the public, including tangible assets (deflated by the price index of the component items), held steady this year. The public's wealth has grown by 7 percent in real terms since 1984, mainly because of the mastering of inflation, which has reduced the loss from nonpayment of the final month's indexation increment on CPI-linked assets. The public became increasingly aware that the containment of inflation was not a temporary phenomenon; it therefore began to perceive the late-1984 gain in wealth as a permanent increase, and this goes some way to explain the heavier consumer spending in 1985 and to some extent also in 1986.

The decline in interest rates, inflation, and inflationary expectations prompted the

Table VIII-4
EXTERNAL INJECTION AND BALANCE OF PAYMENTS LEAKAGE, 1984-86

	Millions of current NIS				Percent of GNP ^a						
	1985	1986			Average 1980-83	1984	1985		1986		
		Total	1st half	2nd half			Total	2nd half	Total	1st half	2nd half
1. Public sector^b											
a. Expenditure ^c	13,154	19,791	9,727	10,064	53.0	49.8	51.4	49.4	50.2	52.5	47.8
b. Tax revenue	12,589	20,857	10,179	10,678	46.7	41.5	48.4	49.6	52.8	54.9	50.7
c. Domestic deficit (a-b)	565	-1,066	-452	-614	6.3	8.3	3.0	-0.2	-2.6	-2.3	-2.9
d. Credit to private sector ^d	104	527	95	433	4.1	1.6	0.5	0.2	1.3	0.5	2.1
e. Total public sector injection (c+d)	669	-538	-357	-181	10.4	9.9	3.6	0.0	-1.3	-1.8	-0.8
2. Bank of Israel											
a. Directed credit granted	125	-52	-37	-16	0.3	4.0	0.7	-0.5	-0.1	-0.2	-0.1
b. Transfer of export funds to commercial banks	170	0	0	0	1.2	0.0	0.5	1.1	0.0	0.0	0.0
c. Discount-window loan	-26	166	223	-57	0.6	0.6	-0.0	-1.0	0.5	1.2	-0.3
d. Other factors	251	202	377	-174	0.3	-3.2	0.8	1.7	0.6	2.0	-0.9
e. Total Bank of Israel injection											
Excl. transfer of export funds to banks	350	316	563	-247	1.2	1.5	1.5	0.2	0.9	3.0	-1.2
Incl. transfer of export funds to banks	520	316	563	-247	2.4	1.5	2.0	1.3	0.9	3.0	-1.2
3. Balance of payments, private sector											
a. Deficit on current account	-63	682	232	450	4.6	6.0	0.1	-1.4	1.7	1.2	2.2
b. Capital imports	-1,198	-302	-205	-97	0.6	-2.5	-4.7	-3.6	-0.8	-1.2	-0.5
c. Leakage via balance of payments ^e (a-b)	1,135	984	437	547	4.0	8.6	4.8	2.2	2.5	2.4	2.6

^a See note a to Table VIII-2.

^b The government and Jewish Agency.

^c Domestic purchases, payrolls, transfer payments, and subsidies; excludes interest on the internal public debt.

^d Includes credit subsidy.

^e Purchases of foreign currency by the public.

public to reshuffle its financial portfolio, favoring unlinked assets and nonbank shares over assets linked to foreign currency. The weight of unlinked assets went up from 6.8 percent at the end of 1985 to 9.2 percent at the end of 1986, while that of foreign currency-linked assets fell from 35.4 to 30.3 percent. The lower interest rates also contributed to the recovery of the share market, reflected by an increase in both trading volume and quotations.

Despite the much smaller purchase of foreign currency by the private sector (because of the decline in its expected yield), the government's sales, together with the printing of money (money creation), sufficed to finance its deficit, and it did not have to borrow from the public; in fact, in the second half of the year it even paid domestic debts equivalent to 3 percent of GNP (see Table VIII-6). This reflected, first and foremost, the slashing of the deficit, and to some extent also the steadily rising demand for money as inflation cooled, as well as deliberate government policy. Since the government did not have to borrow from the public, some long-term funds became available for financing private investment. The government's accumulated receipts from the special U.S. government aid grant were used to pay foreign debts and to augment official reserves. A greater reliance on foreign currency sales to the public for financing the fiscal deficit, together with a larger reduction of the internal public debt, might have depressed long-term interest rates even more and encouraged investment, but at the cost of a deterioration in the current account.

As a first step in reforming the capital market the government reduced the obligation to invest long-term indexed savings in government bonds from 83 to 75 percent, and in the case of social insurance funds, from 90 percent or more to 80 percent or less (at the beginning of 1987 the government approved a further reduction to 65 percent in the case of some indexed savings schemes). The government also decided to eliminate development loans from the budget, and in their place to provide investment grants equal to the subsidy element in such finance. Would-be borrowers were directed to the private market, where they could either float bond issues themselves or obtain credit from financial institutions. The private sector placed NIS600 million worth of new bond issues this year (compared with NIS260 million in 1985), about two-thirds of it through banks. (It should be noted that not all bond flotation applications were approved.) These measures apparently did not substantially lower the cost of financing investments in 1986.

Table VIII-5
MONETARY POLICY INDICATORS, 1983-86
 (Percent of GNP^a)

			1985		1986		
	1983	1984	Total	2nd half	Total	1st half	2nd half
Addition to unlinked short-term asset base^b							
1. Discount-window loan	1.8	0.6	-0.0	-1.0	0.5	1.2	-0.3
2. Increase in banks' liquidity deficiencies	0.5	0.6	0.8	1.1	0.1	-0.6	0.8
3. Open-market operations	-0.0	0.0	0.0	-0.0	-0.0	-0.0	0.0
4. Bank of Israel injection due to other factors	-1.8	-3.2	0.8	1.7	0.6	2.0	-0.9
5. Injection generated by directed credit ^c	3.8	4.0	1.3	0.6	-0.1	-0.2	-0.1
6. Total addition to unlinked short-term asset base (1 through 5)	4.2	2.1	2.8	2.4	1.0	2.5	-0.4
7. Increase in assets due to changes in unlinked asset base ^d	11.9	9.4	7.5	4.9	2.4	4.9	-0.1
Other increments to unlinked short-term assets							
8. Due to changes in foreign currency credit ceilings	-0.4	-0.3	-0.1	-0.7	0.3	0.5	0.2
9. Due to changes in liquidity ratios ^e	-0.3	-0.6	-4.8	-9.6	4.3	8.5	0.0
10. Total increase in assets, excl. composition effect of monetary policy (8+9)	-0.7	-0.9	-4.9	-10.3	4.6	9.1	0.2
11. Composition effect ^f	-0.9	-0.1	6.3	11.0	2.4	0.9	4.0
12. Total other asset increments (10+11)	-1.6	-1.1	1.4	0.8	7.1	10.0	4.1
13. Total increase in assets (7+12)	10.3	8.4	8.9	5.7	9.4	14.9	4.0

^a See note a to Table VIII-2.

^b The increments to the asset base and assets are not comparable because of the operation of the multiplier.

^c Adjusted for the transfer of export credit funds from the Bank of Israel to the commercial banks in 1985.

^d Total addition to the asset base times the unlinked asset multiplier.

^e The changes in the sources of commercial bank sheqel credit due to changes in the liquidity ratios on sheqel assets during the period.

^f A change in the composition of assets due to a change in yields alters the volume of credit as a result of the policy of differential liquidity ratios.

Table VIII-6
DOMESTIC DEFICIT OF THE PUBLIC SECTOR (GOVERNMENT
AND BANK OF ISRAEL) AND ITS FINANCING, 1981-86
 (Percent of GNP^a)

	1981	1982	1983	1984	1985		1986		
					Total	2nd half	Total	1st half	2nd half
Deficit									
Deficit excl. interest paid ^b	9.4	6.3	3.3	8.3	3.0	-0.2	-2.6	-2.3	-2.9
Interest (adjusted) ^c	2.2	3.6	2.8	3.8	5.9	5.9	5.3	5.3	5.3
Total	11.6	10.0	6.0	12.1	9.0	5.7	2.6	2.9	2.3
Financing the deficit									
Money creation	2.0	1.7	2.3	2.9	6.5	10.6	1.9	0.3	3.5
Net increase in domestic debt ^d	8.1	6.2	-1.0	0.8	-1.2	-6.1	-0.4	2.6	-3.4
Sale of foreign currency	1.9	2.6	6.3	8.6	4.8	2.2	2.5	2.4	2.6
Net effect of monetary policy on sheqel segment ^e	-0.4	-0.6	-1.6	-0.2	-1.1	-1.0	-1.4	-2.3	-0.4
Total deficit finance	11.6	10.0	6.0	12.1	9.0	5.7	2.6	2.9	2.3
Revenue from money creation ^f	1.7	1.2	0.8	2.7	5.4	9.6	0.5	-2.0	3.1
Thereof: Net interest paid	-0.5	0.2	0.3	0.4	-1.1	-2.0	-0.9	-1.1	-0.6

^a See note a to Table VIII-2.

^b Source: Table VIII-4, line 1c. The discrepancy between the deficit here and in Chapter V is due to the fact that the data here are calculated on a cash-flow rather than an accrual basis, and also to the use of different data sources.

^c See Chapter V.

^d Addition to the government debt base (including Patam and excluding net credit granted by the government).

^e Interest on the money base, plus the fiscal burden of discount-window lending, less fines for liquidity deficiencies (see Table VIII-A5).

^f Money creation, plus the net effect of monetary policy.

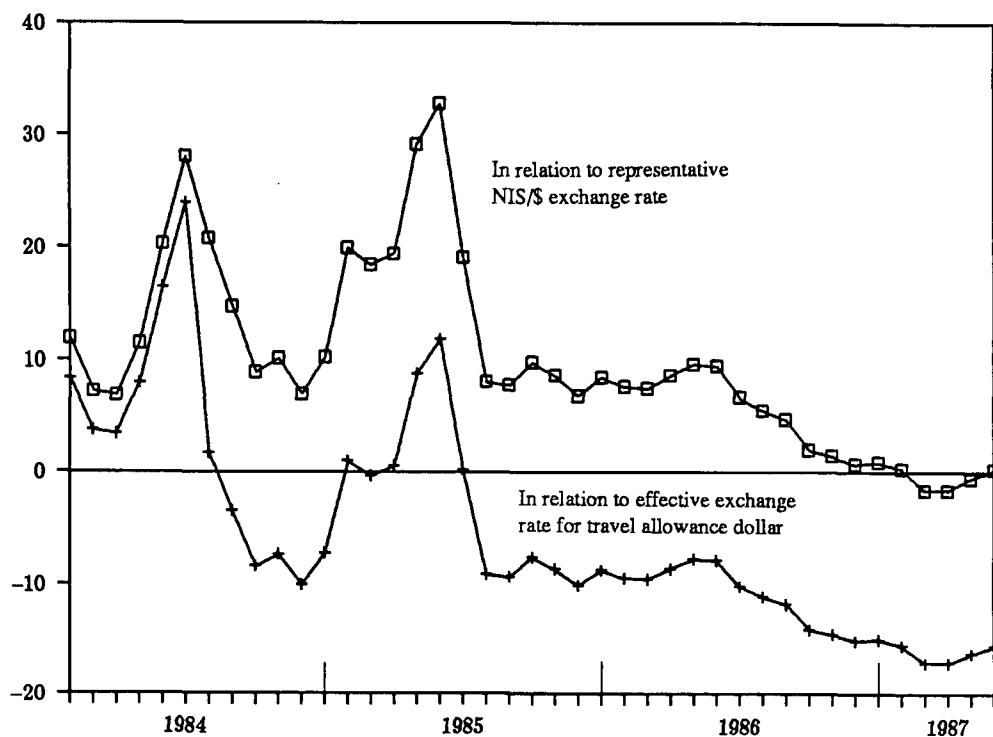
2. SOURCES OF CHANGE IN THE PUBLIC'S FINANCIAL PORTFOLIO

Total financial assets (excluding nonbank shares) expanded by 23 percent in 1986, or 3 percent in real terms. The public's financial portfolio can increase in value as a result of a net purchase of assets (from the government, Bank of Israel, and the financial system) or the appreciation of the stock of existing assets (due to a rise in secondary market prices of tradable securities and the accruing of interest and linkage differentials on nontradable securities). In 1986 the real growth of the financial portfolio did not result from the appreciation of the stock of assets.

Two sources contribute to the accumulation of financial assets: the expansion of the asset base⁴ and the stepping up of credit. In 1986 the asset base contracted in real terms,

⁴ As a result of public sector deficits (including the Bank of Israel) and net credit granted by the sector, less private sector conversions of foreign currency (see Table VIII-4).

Figure VIII-1
PREMIUM ON BLACK MARKET DOLLAR, 1984-87
 (Percent, monthly average)



SOURCE: Daily press.

so that the real increase in the financial portfolio can be attributed entirely to the growth of credit (see Table VIII-3).

The financial intermediaries' contribution to financial asset accumulation was equal to 9.2 percent of GNP this year. This far eclipsed the figures for 1984 and 1985 (0.5 and 1.6 percent of GNP respectively—see Table VIII-3), and reflected a real increase in both short- and long-term credit. This year's larger volume of short-term bank credit was made possible, as stated, by the lowering of the liquidity ratios, while the rest of the financial system's contribution is explained by the start of the capital market reform: the reduction of the percentage of government bonds in the savings schemes' and social insurance funds' required liquid cover, the abolition of development loans, and the directing of firms seeking credit to the private market, a step that shrinks the asset base and enlarges the contribution of the financial system.

The contribution of injections (the change in the asset base) was negative in 1986, amounting to -2.9 percent of GNP, compared with 0.3 and 2.9 percent in 1985 and 1984 respectively. This year's negative figure was mainly due to a smaller external injection—the outcome of a further narrowing of the public sector deficit and a smaller

decrease in foreign currency purchases by the public. The better fiscal performance was the net result of some pruning of government spending (including subsidies) and a steep jump in tax revenue since the introduction of the emergency stabilization plan in July 1985. The government deficit kept on shrinking throughout 1986 and the first quarter of 1987; excluding interest expenditure, there was even a surplus equal to 2.9 percent of GNP in the second half of the year, compared with 2.3 percent in the first half (see Table VIII-4).

The government deficit would have been pared even more if it were not for the larger volume of credit granted directly by the government this year (1.3 percent of GNP, as against 0.5 percent in 1985). This occurred despite the aforementioned capital market reform, and is explained by an increase in mortgage finance and the aiding of enterprises that ran into financial trouble. The Bank of Israel injection was also smaller in 1986, but this was mainly due to a technical change—the transfer of directed export credit funds to the commercial banking system. As stated, private sector purchases of foreign currency declined more slowly than the external injections and the government deficit—a reflection of the steep upturn in private consumption and the dipping of the national saving rate (see Chapter II).

The financial intermediaries were, as stated, the decisive factor in the expansion of the public's financial portfolio. A glance at Table VIII-A10 reveals that the banking system was also most responsible for the growth of the unlinked assets aggregate: this resulted from the stepping up of short-term bank credit, which is subject to Bank of Israel control.

3. MAIN DEVELOPMENTS IN ASSET AGGREGATES AND SHORT-TERM INTEREST

In 1986 the short-term monetary aggregates moved up at widely divergent rates: nonindexed assets, including money (M1) and close substitutes, grew much faster than the broader aggregates, which also include Patam resident deposits (M3) and tradable bonds (M4); the ratio between the broader aggregates and GNP was even lower than in 1985.

The main factors that influenced trends in the short-term asset aggregates were diminishing inflationary and devaluation expectations, the drop in real interest rates, and termination of new Patam deposits for less than one year. The weakening of inflationary expectations induced a massive shift to nonindexed short-term assets.⁵ Past experience shows that adjusting real money balances to variations in the rate of inflation is a fairly long process, which may take a year or more, and that it is hard to

⁵ The lowering of short-term deposit interest rates in late 1985 and early 1986 caused a shift from short-term interest-bearing assets to money.

accurately estimate the expected variations in money demand in periods of money-market structural changes and highly variable rates of inflation. The termination of new Patam demand deposits may have moderated the switch from Patam to nonindexed assets. It is therefore hard to conclude whether the enormous increase in the money supply in 1986 met the incremental demand for money, either in full or in part. The changes in the asset aggregates also make it hard to assess their monetary implications, and we shall therefore concentrate on the trends in interest rates.

Real lending and deposit interest rates for short and medium terms fell sharply in 1986 in comparison with the second half of 1985 (in the case of lending rates also in comparison with all of 1985). Most of the decline occurred in late 1985 and the first four months of 1986. The effective real cost of overdraft facilities came to 31 percent in 1986, as against an average annual rate of 171 percent between August and December 1985 and 100 percent in the year as a whole. The average real cost of total short-term credit was 6.6 percent in 1986, compared with a 40 percent annual rate between August and December 1985 and 14 percent in all of 1985. Real interest on CDs plunged from 18 percent in August–December 1985 to –2 percent in 1986 (–7 percent for all of 1985). Yields to maturity of tradable bonds also turned down: in the case of 3–4½-year bonds they fell from 5.7 percent in 1985 to 3.1 percent.

These interest rate trends indicate a considerable relaxation in 1986 of the severe monetary stringency that had marked the second half of the previous year.

Figure VIII-2
AVERAGE CREDIT BALANCES AND FLOWS RELATIVE
TO BUSINESS SECTOR PRODUCT, 1980-86

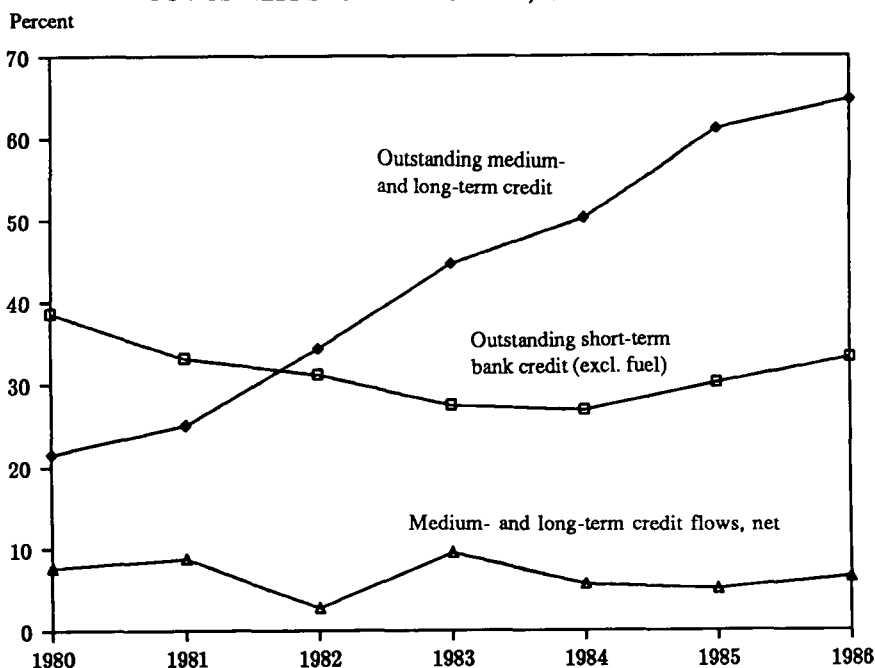
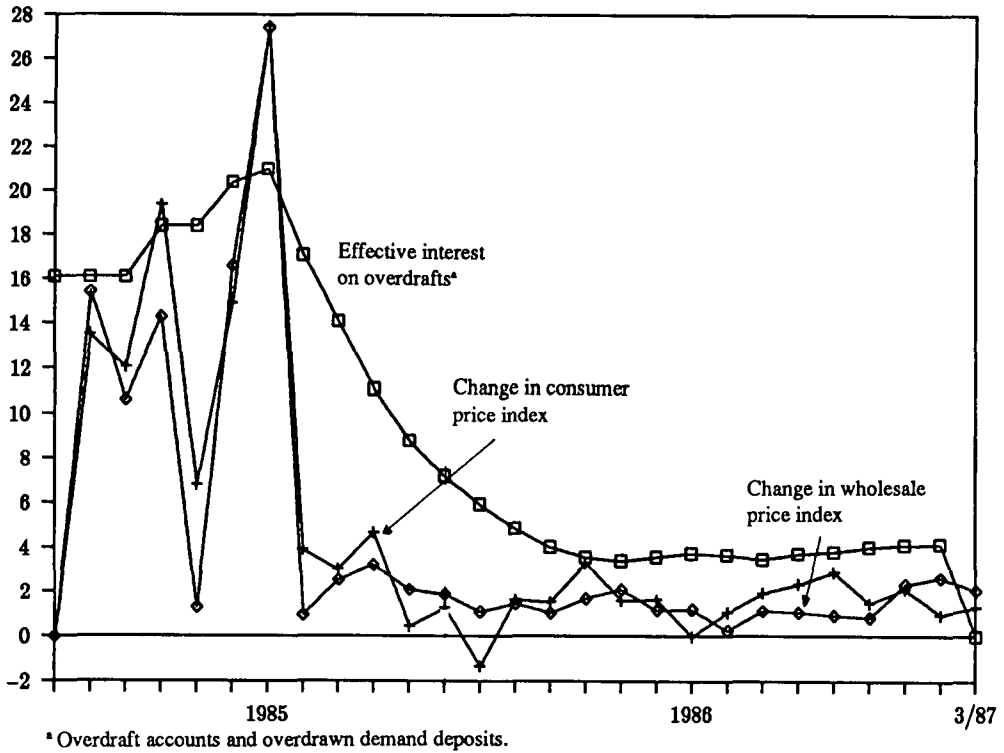


Figure VIII-3
EFFECTIVE INTEREST ON OVERDRAFTS*
AND RATE OF INFLATION, 1985-87
 (Percent per month)



4. MONETARY POLICY INSTRUMENTS IN 1986

The principal monetary policy instruments employed by the Bank of Israel this year were the setting of the interest rates on the discount-window loan to the commercial banking system and on the financial institutions' required liquid asset cover, the setting of ceilings on free foreign currency credit, and the revision of the liquidity ratios (see Table VIII-5). Because of the effective quotas on foreign currency credit, the discount-window facility has constituted the marginal source of short-term credit expansion.

After peaking at 20 percent on the eve of the economic stabilization plan, the nominal monthly interest rate in the highest bracket of the discount-window loan was progressively scaled down to 2 percent by April 1986. In the third quarter of 1985 nominal interest went down more slowly than the rate of inflation, with the result that real interest shot up to a very high 8 percent average monthly level between August and

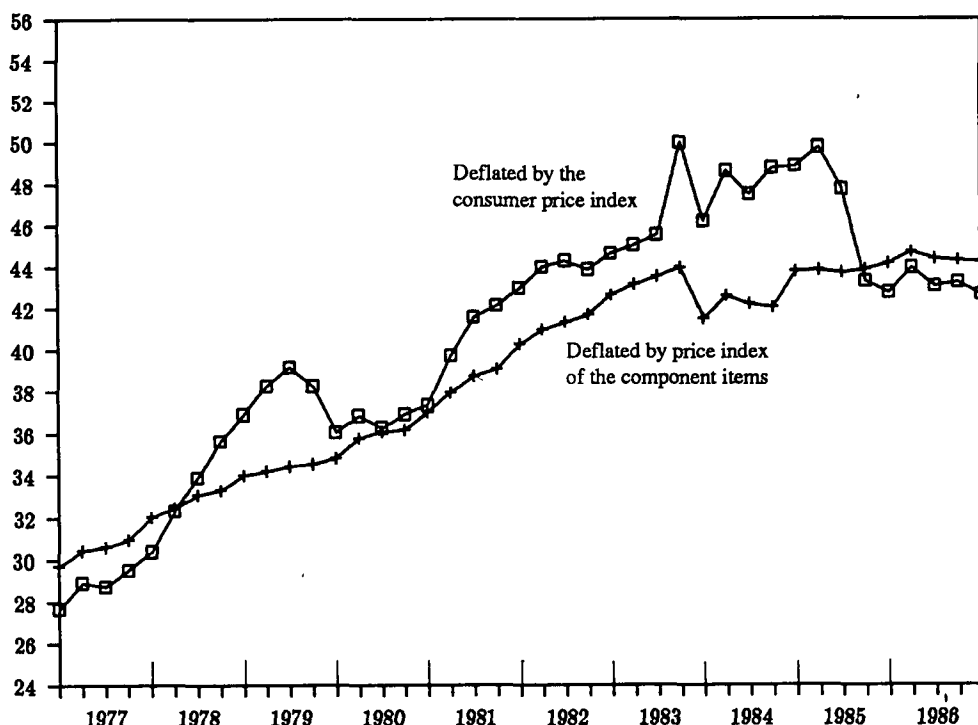
October. In the final months of 1985 and early 1986 nominal interest fell faster than inflation, depressing the average real monthly interest rate to 1.8 percent in the first four months of 1986. Between April and October nominal interest held steady in the highest bracket, while the real rate dipped to 0.6 percent a month. Toward the end of October interest was raised by a third of a percentage point a month. Since consumer prices went up faster than this in the final months of the year, real interest was close to zero. In February 1987, following the devaluation of the sheqel the month before and in anticipation of high consumer price indexes, the Bank of Israel temporarily upped the interest on the discount-window loan by 1 percentage point a month; in April it restored the rate to its previous level.

It should be noted that deflating nominal interest by the wholesale price index (instead of the consumer price index) shows a slight rise in real interest in the fourth quarter of 1986. It is also noteworthy that in every month since mid-1985 the banks have fully utilized the discount-window loan quotas in the lowest bracket, and even taken additional loans in the highest bracket. The easing of interest was accompanied in the first months of 1986 by a greater recourse to the discount window; besides the interest-rate effect, this can be attributed to the absorption of liquidity through sales of tradable government bonds. The banks' demand for liquidity increased somewhat following the public's shift from nonindexed interest-bearing assets to money because of the drop in expected yields on CDs and short-term deposits. In January, March, and May the liquidity ratios were lowered on sheqel assets, and this enabled the banks to repay a large part of their outstanding discount-window loan.

In 1986 the interest paid by the Bank of Israel on the banks' reserves was revised concurrently with the changes in the discount-window rate. The downtrend in interest since the third quarter of 1985 has been accompanied by the narrowing of the margin between the discount-window rate and the rate on the money base: the spread between the highest discount-window bracket and the marginal bracket for the banks' reserves at the Bank of Israel declined from 5.5 and 3.4 percent in the third and fourth quarters of 1985 respectively to 2.3 and 0.8 percent in the first and second quarters of 1986, at which level it more or less held steady until the end of the year.

In the first part of 1986 the government absorbed liquidity through the sale of tradable bonds (see Table VIII-2), while the Bank of Israel injected liquidity—first through the discount-window loan (see Table VIII-4), and later through the lowering of the liquidity ratios. This contrasting pattern is explained by the desire to reduce the liquidity ratios on sheqel assets after they had been hiked in the second half of 1985, but it points up the need to coordinate the government's capital market operations with the employment of the other monetary policy instruments.

Figure VIII-4
THE PUBLIC'S WEALTH, 1977-86
 (NIS thousand per capita, Dec. 1975 prices)



5. MONETARY POLICY RESULTS

The consumer price index went up 20 percent during 1986, which was far less than in the previous year. The rise in the first half of 1986 is explained by the depreciation of the sheqel against European currencies, the adjustment of controlled prices, and the awarding of wage increases; but the continuation of the uptrend in the second half of the year can hardly be attributed to these factors. Furthermore, the prices of non-tradables (which are not controlled) apparently moved up faster than those of tradables (see Chapter III). This suggests that the monetary expansion contributed to the advance of prices this year.

Resource uses sensitive to interest rate variations expanded strongly in 1986. Purchases of durable goods soared 46 percent in real terms, while inventory investment was stepped up by NIS852 million, following a NIS81 million contraction the year before. The softening of interest rates in the economy was apparently a major factor in

these developments (along with such other factors as the fall in oil and other raw material prices). Presumably the brisk purchases of durables in 1986 mainly reflected the adjustment of the public's assets portfolio to the fall in interest rates, and they can be expected to slacken. Total private consumption was up 14 percent, an unduly large increase considering the modest gain in disposable income. The expansion of credit this year, especially consumer credit, probably goes some way to explain this development.

The more buoyant aggregate demand in 1986 augmented the business sector product, but most of it was channeled to imports and led to a widening of the civilian import surplus. Supply-side constraints were apparently responsible for the disparate development of demand and product (see Chapter II).

Despite the growth of the civilian import surplus, foreign currency purchases by the private sector fell off sharply. This can be attributed to a much smaller capital export, an outcome of the general economic stability achieved since the introduction of the emergency plan in July 1985. Against this background, the reduction of short-term interest rates also discouraged the flight of speculative capital and thus averted a devaluation of the sheqel. At the beginning of 1987 the capital inflow, as stated, assumed large proportions.

Fixed investment (excluding ships and aircraft) sagged 6 percent in real terms this year. The continued stagnation of capital expenditure despite the sharply lower interest rates requires an explanation. The wage and effective tax hikes in 1986 apparently squeezed business profits and created a climate that did not encourage long-term investment. In view of this, it is doubtful if the softening of interest rates could have stimulated such investment. Businesses apparently use short-term bank credit mostly for working capital, but presumably some of it is also used to finance long-term investment, mainly by firms that lack other sources of funds. Free (nondirected) sheqel credit constitutes the marginal source of short-term finance in the economy, while for longer terms firms that market their output abroad can obtain additional finance from directed credit funds. It is reasonable to assume that for such firms there is some degree of substitutability between the various types of credit. Moreover, there is reason to believe that banks market some of their short-term credit in bundles of free foreign currency and sheqel credit. Therefore, in analyzing the cost of credit, one should examine both the average cost of total short-term credit and the cost of overdraft facilities.

The real cost of total short-term credit averaged 6.6 percent in 1986, and in the second half it even dipped to 5 percent. For borrowers who may deduct interest as a recognized expense, the cost of such credit in 1986 as a whole and in the second half came to 3.1 and 2.3 percent respectively (see Table VIII-A24).

After averaging 9 percent a year in 1980-83, real interest on total credit shot up to 20 percent in 1984-85. Compared with this, the average interest on short-term credit was

not exceptionally high; however, this is partly explained by the low cost of foreign currency credit due to the real appreciation of the sheqel against the dollar in 1986. To those who did not foresee the latter development the *ex ante* expected interest rate was higher than the *ex post* rate.⁶ The real cost of overdraft facilities averaged 31 percent in 1986 (25 percent in the second half of the year), whereas in 1980–83 and 1984–85 it averaged 13 and 84 percent respectively. In general, it can be said that the interest on overdrafts remained fairly high this year.

The bulk of investment (50–60 percent) is financed by long-term credit. In 1986 the amount of long- and medium-term credit granted, net of repayments, rose steeply (see Table VIII–A21), even though the changes introduced to encourage capital investment did not greatly affect the cost of such financing. In this connection it should be added that the foreign exchange controls do not restrict the procurement of long-term credit from abroad for financing investment.

The reduction of interest in 1986, as already mentioned, did not stimulate investment, apart from inventory buildup, but the blame can hardly be placed on the existence of high interest rates on short-term credit. In general, investment can be expected to respond with a lag to a drop in interest rates, and the upturn in imports of capital goods in early 1987 suggests such a response.

6. THE CAPITAL MARKET REFORM

In the past, Israel's capital market was characterized by government intervention in the saving-investment process—the administrative determination of rates of return, discriminatory taxation, and determination of financial saving and credit terms. The outcome was a system of differential interest rates and other investment terms, a situation that adversely affected the allocation of capital and economic growth.

In the last few years the government began to reduce its intervention in order to increase competition and to enable the market to play a greater role in the investment selection process. This mainly took the shape of the reduction of public sector credit (long-term development loans and directed export credit) and the subsidy component of such finance. The government also reduced its borrowing from the public, thereby allowing a larger share of private saving to be channeled to financing investment—through the provision of free credit by financial intermediaries and the placing of

⁶ The public's expectations with respect to the depreciation of the dollar can be traced from the agio on the black market dollar, which is the difference between the price of this currency in the black market and the representative exchange rate. The average agio was, at 8.7 percent, fairly stable from September 1985 to May 1986; between June and August it slipped to 4.7 percent, and following the stabilization of the sheqel exchange rate against a basket of currencies, it fell to 1.1 percent between September and December 1986.

private bond issues. Further evidence of the government's diminished intervention was the reduction of the obligation to invest indexed savings scheme deposits in government bonds from 83 percent to 75 percent and then to 65 percent in April 1987, and in the case of social insurance funds (other than pension funds), from 90 percent or more to under 80 percent. Besides enlarging the freely loanable portion of such saving, the government increased the weight of tradable bonds in the required liquid cover, and in June 1985 the issue of special bonds to institutional investors (apart from pension funds, insurance companies, and dollar savings schemes) was in effect discontinued. Increasing the weight of tradable securities and the issuance of bonds by tender have made for a more efficient capital market; thanks to this, the prices now more closely reflect market forces instead of being determined administratively. In 1986 tradable bond issues totaled approximately NIS2 billion, while the amount raised through special bond issues and deposited with the Ministry of Finance was negative (–NIS2.6 billion). The first steps in reforming the capital market were already apparent in 1985, when there was a positive mobilization of tradable capital, as opposed to a net redemption of special bond issues.

In 1985 the government decided to abolish development loans for financing business investments, and in their place to provide grants in an amount equal to the implicit subsidy component of the loans. At the same time, private tradable bond issues were stepped up appreciably, reaching more than NIS600 million in 1986, as against NIS260 million the year before. So far the capital market reform has been reflected by a more market-determined interest on private capital mobilization, as a result of the expansion of long-term free credit and the placing of private security issues. Nevertheless the government still has a decisive say in the allocation of credit, as it determines the scope of private capital mobilization through its approval of new issues according to criteria similar to those applicable in the past to development loans.

Even if the government amends the capital market tax legislation and repeals various related regulations, it will still exercise considerable influence over the capital market because of its need to roll over the internal public debt, which in the last two years was equivalent to 15 percent of GNP. In 1986 the pruning of the government deficit decreased the public sector financing requirement, but the cost of borrowing from the public declined only fractionally, and this influenced the cost of raising private capital. The latter ranged between 6.5 and 9 percent p.a., which was 2–4 points higher than what it cost the government. The difference mainly reflected the risk premium associated with an investment in private financial assets as opposed to government securities.

The prices of the new private bond issues did not differ greatly. It may be that the fact that close to two-thirds of the issues were placed through the banking system reduced their riskiness, and thanks to this the interest rates on private bonds were fairly similar. The interfirm differences in the cost of raising capital may have been larger, owing to disparate underwriting and distribution fees. These ranged between 5 and 9 percent of

the amount of the issue, and added 0.5–1 percentage point to its overall annual cost. This should not be regarded as the cost of private capital in the long run, as the sector did not have free access to the primary market and the government restricted the total volume of issues. The right to issue private bonds thus gives them a certain advantage, and so the price of long-term private external capital cannot be directly estimated.

Besides the government's diminishing role in the capital market, it is necessary to reform the banking system's operations while expanding the activities of other financial institutions. Reducing the banks' intervention is essential not only because of the high degree of concentration of the banking industry, which works against a competitive market, but also because a conflict of interests is liable to arise when banks engage in many different areas of the capital market, such as investment counseling, underwriting, and management of mutual and provident funds. This problem should be thoroughly studied, but it must be borne in mind that any reform will require a long period of adjustment.

Reforming the capital market is a protracted process, whose effects become apparent only after quite some time. It is hard to assess the impact of the changes implemented in 1986. But it can be said that the narrowing of the government deficit released resources for financing investment, and despite the poorer private saving performance, there did not seem to be any supply-side constraints this year, for there are actually no restrictions on the import of long-term investment capital. In addition, more long-term investment finance (credit and private bond issues) was available this year than in the past.

In 1986 the government provided credits to bail out firms and institutions that ran into financial difficulties. Such aid is incompatible with the capital market reform and the government's withdrawal from the market, and is liable to have widespread repercussions. It disrupts the price determination process, which should also reflect interfirm risk differentials, and is liable to give a premium to purchasers of private bond issues, as these securities yield a higher return than government bonds. This is because they are theoretically a riskier investment, but in fact the risk may be no greater than that of government bonds, because if the company should flounder the government would probably come to its rescue.

In April 1987 the Ministry of Finance granted a general permit to issue private bonds (with a quantitative restriction on issues by commercial bank affiliates), subject only to supervision by the Securities Authority. In addition, several changes were introduced to equate the terms of government and private issues and to abolish the tax advantages enjoyed by government bonds. Moreover, it was proposed to expand the import of capital by raising the foreign credit ceilings. The purpose of these changes is to gradually increase the market's role in the selection of investments beneficial to the national economy, while creating competition between the government and the private sector and strengthening the relationship with foreign markets.