

## CHAPTER XVI

# MAIN DEVELOPMENTS IN THE MONEY AND CAPITAL MARKETS<sup>1</sup>

During 1974, the money supply grew considerably because of increased Government infusion and the rapid expansion of bank credit to the public. On the other hand, the real use of available resources expanded slowly. Another inflationary factor was a decline in the demand for real money balances, resulting from expectations that prices would rise—though this was not fully reflected in the demand in the commodity, service and real estate markets (the “real markets”), which was not strong.

It is reasonable to assume that the opportunity to invest in liquid assets linked to the exchange rate or to the consumer price index was, much more than in previous years, an important factor in diverting demand from the real markets. This helped the Government implement its policy of checking demand.

An analysis of the interrelations between developments in the real markets and developments in the financial markets from September 1973 to March 1975 requires the subdivision of the period into two shorter periods; these will be dealt with in detail insofar as the available data permit. The base period for comparison covers the first nine months of 1973. The first period includes the last quarter of 1973 and the first half of 1974; it was characterized by a war situation and by a deliberate reflationary policy designed to restore economic activity to its normal level (a reflationary policy was implemented from October 1973 until April 1974; in May and June 1974, no effective absorptive measures were introduced). It may be assumed that by the end of the second quarter of 1974 all the decline in private consumption, exports and investments caused by the war and the transportation shortage had been compensated, and that the processes connected with the elections and the formation of a new Government had ended. During the second period, which includes the second half of 1974 and the first quarter of 1975, the effects of

<sup>1</sup> This chapter attempts to integrate and sum up major phenomena dealt with in the chapters relating to monetary and financial developments (Chapters XVII to XIX). The tables in these chapters are the source of most of the data cited here, only a small part of which is presented in the tables of this chapter.

the war had disappeared, and developments reflected the policies adopted and the economic forces operating in the post-war period.

The expansionary policy of the Government and of the Bank of Israel during the first period infused much liquidity into the economy. The domestic expenditure of the Government rose rapidly, and was not covered by a parallel rise in revenue from taxes and compulsory loans. Thus, the net infusion totalled some IL 750 million in the last quarter of 1973, and another IL 1,000 million in the first half of 1974. By comparison, the monetary base (i.e., cash in circulation plus the banks' liquid assets) totalled IL 6,363 million at the end of September 1973.

These figures do not reflect the total volume of liquidity infused by the Government, since they include the big increase in the Government's revenue from sales of linked bonds to the public. In addition, there was a rapid expansion of bank credit to the public. Between the end of September 1973 and the end of June 1974, nondirected credit to the public grew by IL 1,400 million (33 percent), credit directed by the Bank of Israel expanded by IL 500 million (17 percent), and foreign currency credit (exclusive of credit from export funds) increased by IL 1,200 million (120 percent). However, despite the great potential growth in the money supply from these sources, the revival of economic activity proceeded slowly and the money supply increased only moderately.

The development of the money supply can be seen in Table XVI-1; it shows that between the end of September 1973 and the end of June 1974, means of payment increased by 9.3 percent although prices rose by 32.7 percent. The average monthly balance of the money supply divided by the consumer price index was 4.8 percent lower during this period than during the base period.<sup>2</sup>

The relative weakness in demand during the first period was partly due to the policy of restraining private consumption and investments while exports were expanding more slowly. However, monetary forces also played a part in checking demand. It may be assumed that the weakness was connected with the fall in disposable incomes and the pessimistic forecasts for real private incomes and economic growth. In addition, the high returns anticipated on the holding of financial assets linked to the consumer price index, as well as of goods and financial assets linked to the rate of exchange, diverted demand from the real markets to the linked assets market and to foreign currencies—constituting an incentive to reduce the demand for real monetary balances. Since the effect of the anticipated return on linked assets was of major importance in 1974, we shall explain this subject in more detail.

<sup>2</sup> This analysis was made on the basis of the consumer price index, since no data for the implicit GNP price deflator were available for the first quarter of 1975.

Table XVI-1

**GROWTH OF REAL MONEY BALANCES, CURRENCY, AND DEMAND  
DEPOSITS, 1973 TO 1975 I**

	Jan.-Sept. 1973 (base period) (0)	Oct. 1973- June 1974 (1st period) (1)	July 1974- March 1975 (2nd period) (2)	Percent increase	
				(1/0-100)	(2/1-100)
<b>Average monthly balances</b>					
Money supply (IL million)	6,005	7,200	8,393	19.9	16.6
Consumer price index	100.0	126.0	165.5	26.0	31.4
Real money balances (IL million)	6,005	5,714	5,071	-4.8	-11.2
Turnover velocity of demand deposits	26.1	23.8	30.8		
	<u>Sept. 1974</u>	<u>June 1974</u>	<u>March 1975</u>		
<b>Balances at end of period</b>					
Money supply (IL million)	6,695	7,320	9,587	9.3	31.0
Consumer price index	100.0	132.7	180.7	32.7	36.2
Real money balances (IL million)	6,695	5,516	5,306	-17.6	-3.8

NOTE: The data in this table have not been adjusted for seasonality.

In 1974, there were strong expectations that prices would rise. These were due to sharp increases in the prices of raw materials abroad, as well as to expectations for a devaluation of the Israeli pound and for new indirect taxes. In view of the very liquid character of the various types of linked assets (such as bonds, deposits linked to foreign currencies, stocks of imported goods and foreign currency credits), the cost of money to consumers and investors was very high.

It should be stressed that in an economy with large quantities of linked assets, the cost of money is almost automatically adjusted to expectations; there is no need for the central bank to act to accelerate the rise of interest rates. Consequently, though the Bank of Israel did nothing to raise interest rates, the very existence of a supply of linked bonds exerted pressure to raise the cost of money in the free market. In one important sphere, the cost of money was not adjusted to expectations: nondirected bank credit became somewhat more expensive in March 1974, but certainly not to

an extent reflecting the anticipated rise in prices or devaluation of the IL.<sup>3</sup> Hence, it is reasonable to assume that despite the rapid expansion of nondirected bank credit during the first half of 1974, the banks were compelled to institute a kind of credit rationing for their clients. Accordingly, the rise in the price of bank credit at the beginning of 1974 should not be regarded as an indicator of the real increase in the cost of money.

The higher cost of money for the private sector was not identical for households and business enterprises; it seems that the increase was greater in the case of business enterprises. These had the option of investing in assets linked to the consumer price index or purchasing foreign currency (often at the official rate of exchange.)<sup>4</sup> In the end, the consumer price index rose by an annual average of 40 percent during 1974, the Israeli pound was officially devalued by 43 percent, and the GNP price deflator rose by 35 percent. Thus, the rise in prices during 1974 was considerably affected by fiscal operations, the devaluation, and price increases abroad; those able to forecast these developments had an incentive to invest in liquid linked assets. Obviously the uncertainty concerning the pace of economic growth strengthened this trend.

For consumers, the effect of the expected return on refraining from consumption was less pronounced. First and foremost, this sector cannot buy foreign currency at the official exchange rate, so that its ability to obtain high returns in the foreign currency market is more circumscribed than that of the business sector. Secondly, past experience shows that a restrictive fiscal policy is reflected in higher relative prices of imported consumer goods, especially durable goods; consequently, there is an incentive for advancing the purchase of such goods.

Table XVI-2 shows that during 1973 the volume of bonds held by "the public" increased by 88 percent, whereas the money supply grew by 32 percent. Nevertheless and despite the worsening of the terms of linked bonds in February 1974, purchases of bonds continued to expand during the first half of 1974, when they totalled IL 900 million (net of redemptions). This figure should be compared with purchases totalling IL 1,300 million during the whole of 1973. Moreover,

<sup>3</sup> In economies where there are no linked assets, there is normally a quite lengthy process of adjustment between the accelerated pace of inflation and the rise of nominal interest rates, so that during the boom stages borrowers are actually paying negative real interest rates. This lag in the adjustment process is prevented when there are liquid linked assets such as linked bonds.

<sup>4</sup> Data cited in Chapter VIII indicate that in the business sector, the expectation of devaluation was also reflected in larger imports of equipment.

<sup>5</sup> The reference here is to bonds not held with provident funds or banks.

Table XVI-2

**FINANCIAL ASSETS PORTFOLIO, 1972-74**  
(IL million; balances after revaluation or at market prices)

End of year	1972		1973		1974	
	IL m.	%	IL m.	%	IL m.	%
Currency	1,974		2,715		3,173	
Demand deposits	3,613		4,677		5,549	
Total money supply	<b>5,587</b>	<b>21.6</b>	<b>7,392</b>	<b>22.2</b>	<b>8,722</b>	<b>18.5</b>
Time deposits in IL	3,874		3,838		3,601	
Short-Term Loan <sup>a</sup>	745		390		162	
Total unlinked interest-bearing assets	<b>4,610</b>	<b>17.8</b>	<b>4,228</b>	<b>12.7</b>	<b>3,763</b>	<b>8.0</b>
Shares and bonds in foreign currencies <sup>b</sup>	1,898		1,914		<b>2,393</b>	
Foreign currency deposits	4,712		6,144		8,519	
Total assets linked to foreign currencies	<b>6,610</b>	<b>25.6</b>	<b>8,058</b>	<b>24.2</b>	<b>10,912</b>	<b>23.2</b>
Bonds linked to consumer price index (market prices) <sup>c</sup>	2,800	10.8	5,100	15.3	8,700	18.4
Approved saving schemes <sup>d</sup>	2,400	9.3	3,600	10.8	7,200	15.3
Provident funds administered by commercial banks	1,100	4.3	2,000	6.0	4,100	8.7
Total index-linked assets	<b>6,300</b>	<b>24.4</b>	<b>10,700</b>	<b>32.1</b>	<b>20,000</b>	<b>42.4</b>
Shares and convertible bonds (market prices)	2,712	10.5	2,919	8.8	3,690	7.8
Grand total	<b>25,928</b>	<b>100.0</b>	<b>33,297</b>	<b>100.0</b>	<b>47,087</b>	<b>100.0</b>

<sup>a</sup> Including certificates held by banks.

<sup>b</sup> Bonds linked to the exchange rate, bonds and shares traded in foreign currency, and foreign securities held by Israeli residents.

<sup>c</sup> The market value of option-type, Absorption Loan, 6.4, 4, and 3.5% bonds issued by the government and others, net of the estimated amount held by banks. The data also include bonds held by the public indirectly through mutual funds.

<sup>d</sup> Including compound interest and accumulated linkage increments.

during the first half of 1974, there was a particularly rapid growth in the public's deposits in approved saving schemes and in provident funds administered by banks (such as "Otzma", "Tamar", etc.). During the same period, the private sector purchased some \$ 635 million worth of foreign currency from the Bank of Israel; though it is impossible to distinguish between purchases with "legitimate" motives and purchases due to expectations of a devaluation, there are signs that the influence of such expectations was far from insignificant (see discussion above).

During the second half of 1974 and the first quarter of 1975, the decline in real money balances accelerated. From August 1974, however, the money supply began to expand at an average monthly rate of 3 percent. The renewed growth of the money supply moderated the contraction of real balances; this was connected with

the temporary depression in the bond market that started in August, and ended with the devaluation of the Israeli pound in November. This development was reflected in an increased infusion of liquidity from the Government, along with an expansion of the money supply—since receipts from sales of bonds declined sharply, and the absorption of liquidity caused during the pre-devaluation period by the private sector's foreign currency purchases ceased abruptly.

During the above period, the average monthly balance of the money supply rose by 16.6 percent, while the average price level rose by 31.4 percent (the increase in the money supply between the end of June 1974 and the end of March 1975 was 31 percent). The continued decrease in real money balances during this period was accompanied by a recession in economic activity. During the last nine months reviewed, domestic uses were only about 1 percent larger than during the preceding nine months. Since the second quarter of 1974, there appears to have been a real decrease in the volume of uses. However, it is reasonable to assume that the renewed rise in the money supply after August 1974 and the contraction of nondirected bank credit are connected chiefly with the termination of the cycle of speculative holdings of linked assets.

At the beginning of this cycle (which lasted from November 1973 to July 1974), holders of means of payment invested in assets linked to foreign currencies or to the consumer price index in expectation of high returns over a short period. When the cycle ended, after expectations of high returns had proved correct, the switch was back to money, especially when real money balances began to contract sharply owing to rapidly rising prices. Speculative buying of assets linked to foreign currencies ended with the devaluation, and speculation in bonds appears to have eased during the August-October period. According to the estimates cited in Table XVI-3, redemptions of linked bonds held by the public during the second half of 1974 exceeded the volume of new bond issues by some IL 350 million. Since purchases of bonds exceeded redemptions in November and December, it is reasonable to assume that the net volume of redemptions during the August-October period exceeded IL 500 million. Moreover, the decrease in the volume of bonds held was probably still greater, since banks and provident funds bought large quantities of bonds in the secondary market during these months (the volume of these purchases may have reached hundreds of millions of IL).

The August turning point in the bond market was caused by the freezing of nondirected bank credit and the raising of debitory interest rates, which created pressures to sell bonds held as liquid assets. Moreover, the consumer price index for June, July and August (published in July, August and September) indicated a sharp deceleration in the pace of price increases, apparently creating expectations that this trend would continue. From this aspect, the accelerated growth of the money supply

since August 1974 may be viewed as a readjustment of the demand for money, rather than a phenomenon reflecting changes in supply. The renewing of large-scale linked bond issues after the devaluation and during the first four months of 1975 indicates that the events of the August-October 1974 period in the bond market reflected a temporary aberration rather than a change in the general trend.

To sum up, developments in the money supply, bank credit and holdings of linked assets during the two periods defined above may indicate the infusion of liquidity into the economy on a considerable scale. Much of this liquidity was channelled into the linked assets market, and did not create strong demands in the real markets. The fairly sharp fluctuations in the money supply during the two periods reflects mainly the changes in the demand for money, and are connected largely with the flow of funds between the money market and the linked assets market. The flow of funds between the money market and the real markets is much less significant in this respect. It is worthy of note that in 1974—much more than in previous years—a number of factors combined to make investments in linked assets profitable.

1) In many economic sectors, there were expectations that activity would decelerate. This was especially true of the real estate and construction sector. On the other hand, as regards the consumer price index and the exchange rate, there were expectations that the value of the Israeli pound would decrease owing to higher indirect taxes, devaluation, and the rise of the price level abroad.

2) Since 1972, linked bonds have been a liquid asset. It was thus possible to hold money in this form for short periods and benefit from a high return without any risk (see discussion below).

3) The liberalization of the foreign currency market (a process that began during the late 1960s) facilitated speculation in foreign currencies.

4) The banks failed to adjust their interest rates to the alternative returns obtainable on linked bond holdings.

The demand to hold various financial assets is chiefly transmitted to the short- and long-term credit market by institutional factors. In capital markets free from intervention, the supply and cost of various types of credit are determined in the process of determining the composition of the financial assets held by the public. In Israel, however, the institutional arrangements governing the capital and money markets have created a dichotomy between the stage at which financial savings are raised from the public and the stage when the cost and volume of most types of credit utilized in the economy are determined. There is no immediate connection between the volume of the economy's financial savings and the savers' return on the one hand, and the cost of medium-term and long-term credit offered to borrowers on the other.

The above applies to medium-term and long-term credit (most of which is granted on subsidized terms) as well as to short-term directed credit, the outstanding balance of which is already greater than that of nondirected bank credit to the public. The main sphere in which the supply of credit is influenced by market forces is the banks' uncontrolled credit transactions. Yet even in this sphere, market forces do not appear to have operated in sufficient measure, as the unprecedented liquidity deficits accumulated during May-July 1974 prove. Nevertheless, it may be assumed that short-term credit transactions unconnected with banks—such as suppliers' and customers' credit, or credit from insurance companies and brokers—are made at interest rates reflecting market forces. These transactions are implemented over comparatively short periods, and the volume of medium-term and long-term credit granted at the going market rates is very limited.

The conclusion that must be drawn from the above is that the supply of subsidized credit (particularly medium-term and long-term credit) is perhaps best analyzed with the development expenditure appearing in the state budget.

Gross medium-term and long-term credit channelled to industry, agriculture and services showed only a modest increase in 1974; it totalled some IL 1,700 million, compared with IL 1,380 million in 1973. Credit to the hotel industry did not even expand in nominal terms, because of the depression in tourism. On the other hand, there was a strikingly large increase in the volume of credit granted to the construction sector and to households for purchases of housing: it totalled IL 2,100 million gross in 1974, as against IL 1,200 million in 1973. These developments help to explain the changes in the volume of investment within the economy and the rise in apartment prices during 1974.

The rise in apartment prices by 43 percent between October 1973 and October 1974 was made possible largely by the abundance of subsidized credit streaming to the purchasers and—indirectly—to construction companies.<sup>6</sup> The fact that such a rapid rise of housing prices took place at the same time as there was a contraction in building starts may be explained as follows: The decline in housing starts was due to the adjustment of the construction sector to the growing accumulation of housing stocks. This adjustment took place despite the additional credit channelled to the sector. Had abundant financial resources for the purchase of apartments not been created, the building companies would have suffered from a shortage of liquidity, and would have reduced their prices. Undoubtedly, the proportion of own capital in

<sup>6</sup> It is impossible to identify exactly the distribution of credit between housing purchasers and construction companies. Since the end of 1973, the regulations have been altered to permit the execution of a mortgage loan as soon as the facade of a building has been completed; this apparently benefited building companies more than housing purchasers.

the resources used to purchase apartments declined in 1974. This means that the Government caused a substantial drop in apartment prices—from the purchaser's viewpoint—by increasing its subsidy in the form of cheap credit. In adjusting the supply of apartments to the demand for them, the Government lowered the price to the buyers while the sellers raised their prices. This development was probably influenced by the fact that a large portion of the unsold apartments belonged to the public sector's construction companies or had been built for the Ministry of Housing.

The influence of credit upon investments in agriculture and industry is more difficult to analyze. In these two sectors, long-term and medium-term credit expanded more slowly than the volume of investments (in contrast to the trend of previous years). In regard to industry, one is left with the impression that this development was connected with the change in the composition of investments and in the differential ratios of financing provided in each category.

The outstanding balance of credit for financing exports (exclusive of diamonds) rose some IL 1,000 million in 1974 (64 percent), as against only 16 percent in 1973.<sup>7</sup>

The old working capital funds were expanded in 1974 by approximately IL 200 million (38 percent), compared to 11 percent in 1973.

There was an increase in controlled financing of two types: First, an Employers' Loan Fund was created, which provided credits totalling IL 358 million from the beginning of August on terms identical with those of the Compulsory Loan from employers (principal linked to consumer price index, interest unlinked at 5 percent per annum). Secondly, the volume of credit for financing imports was appreciably expanded: IL 500 million was provided in the form of emergency credits in Israeli currency to finance imports of vehicles and earth-moving equipment. In addition, about \$ 400 million was provided in credits for financing imports and stock accumulation of various raw materials, compared with approximately \$ 180 million in 1973. The financing of diamond imports decelerated in 1974, increasing by some \$ 40 million as against \$ 57 million in 1973. This development reflects the depression in the branch, and perhaps also the diamond importers' expectations of a forthcoming devaluation.

The big expansion of controlled credit in 1974 was part of the foreign exchange and liquidity policies implemented by the Government and the Bank of Israel. The foreign exchange policy was to raise short-term credits abroad through Israeli

<sup>7</sup> The discussion of long-term credit relates to gross credit extended to borrowers; the data for short-term credit are for "net" credit, reflecting the change in the outstanding balance of the borrowers' liabilities between the end of one year and the end of the following year.

borrowers (with banks serving as intermediaries) in order to prevent a decline in foreign currency reserves. For this purpose, the Foreign Exchange Division of the Treasury granted permits, and apparently also guaranteed the exchange rate. The Bank of Israel expanded controlled credit during 1974 as part of its policy of infusing liquidity at the beginning of the year, within the framework of operations to offset the contraction of the monetary base caused mainly by the private sector's purchases of foreign currency during the pre-devaluation period.

As mentioned, the growth of uncontrolled credit was very moderate in 1974, totalling 32 percent. Developments in this sphere during the two halves of the year contrasted sharply: between the end of 1973 and the beginning of July 1974, uncontrolled credit expanded by IL 1,500 million, whereas between July and the end of December it contracted by some IL 300 million. Approximately one-third of the entire 1974 increment of nondirected credit was channelled to industry; this represents a change from the past, when the industrial sector resorted to this type of credit only on a limited scale. Possibly, this development may be due to the smaller percentage of investments financed by directed credit.

Explanations concerning the contrasting behavior of nondirected credit during the two halves of 1974 link up with the stages of the speculative cycle described at the beginning of this chapter. We will confine ourselves here to explaining why Israeli borrowers utilized the full amounts allotted to them from the Employers' Loan Fund, despite the fact that credit from this fund was granted on what were practically linked terms during a period when the liquidity of banks was improving. The receiving of credit from the Employers' Loan Fund signified that the Bank of Israel prematurely redeemed part of the bond certificates held by the industrialists (and, to a lesser extent, by other sectors). Though the employers gave up a linked asset by "selling" these bonds to the Bank of Israel, the bonds were of no practical use to them until sold, since, until August 1974, it was not permissible to sell them or mortgage them. Obviously, no financial harm was caused to the bond sellers when they agreed to receive credit from the fund, since the receipts from the premature redemption of the Employers' Loan certificates could, at worst, be invested in marketable bonds whose return was higher than that on the Employers' Loan. Accepting credit from the fund resulted in an appreciable improvement in the borrowers' liquidity at virtually no cost to them. Thus, one need not wonder at the great demand for credit from the Employers' Loan Fund, or at the utilization of all rights to draw credit within this framework. The size of the fund was increased several times. In the conclusion on the general survey presented in this chapter, we shall discuss in greater detail the changes that occurred in the portfolio of assets held by the general public during 1974.

A striking manifestation in 1974 was the contraction of real money balances

(here narrowly defined, as cash in circulation plus demand deposits). A similar development (though in this case the contraction of real balances was appreciably sharper) occurred if the money supply is more widely defined to include cash, demand deposits, time deposits in Israeli currency and the Government Short-Term Loan. The steep decline in the balance of time deposits and the Short-Term Loan began during the last quarter of 1973, and continued until August 1974. It can be explained by the failure to adjust interest on liquid assets of this kind to the accelerated rate of inflation. In fact, the outstanding balance of the Short-Term Loan began to decrease at the end of 1972; however, the process was temporarily arrested in January-September 1973, following the signing of an underwriting agreement with the banks.

The failure to adjust bank interest rates has already been mentioned in connection with developments in debitory interest rates. Here, it was reflected in a contraction in the real balance of the money supply (as narrowly defined)—but the funds were not transferred to time deposits or to the Short-Term Loan, since the nominal return on these assets was substantially lower than on linked assets. Moreover, it can be assumed that the failure to raise interest rates also led to the liquidation of some time deposits and Short-Term Loan holdings that formed part of long-term savings portfolios.<sup>8</sup>

Checks carried out by the Research Department revealed that the actual decline in real monetary balances (as narrowly defined) during 1974 was on a scale that can be explained by the pace of price increases. On the other hand, the decrease in real monetary balances (as widely defined) was much faster than might have been expected in terms of the inflation.<sup>9</sup> The failure to adjust creditory interest rates to the accelerated rate of inflation since 1973 made interest-bearing unlinked assets lose their status as an attractive substitute for money holdings and as an instrument of savings. This is not surprising, since the real interest paid to their owners was negative.

Tables XVI-1, XVI-2 and XVI-3 show that, along with the slower growth of

<sup>8</sup> In a money market free of official intervention, it might have been expected that a growing demand for bank credit, caused by the anticipation of rapid price increases, would have caused a rise of debitory interest rates and thus of interest rates on time deposits as well. This would have increased the quantity of bank credit offered. The process would have continued until debitory interest rates had been adjusted to the returns expected by the borrowers. The central bank could have aided it by open market operations and the raising of interest rates on rediscounts, if it considered that the adjustment effected by market forces was not being implemented with sufficient speed.

<sup>9</sup> See Bank of Israel *Annual Report 1973*, Chapter XIII, p. 344.

the money supply since 1973, there was an enormous increase in the demand for linked assets—especially assets linked to the consumer price index.

It is reasonable to assume that in 1973 and 1974, linked assets fulfilled the function traditionally assumed by interest-bearing unlinked liquid assets. This led to the steep decline in the demand for means of payment when the pace of inflation accelerated, despite the fact that time deposits and the Short-Term Loan had ceased to be an effective substitute for monetary holdings. Another study carried out by the Bank of Israel indicates that in 1972, 1973 and the first half of 1974, it was possible to invest funds in linked bonds for short periods and benefit from high returns anticipated with a high degree of certainty. This means that, owing to the failure of banks to adjust their interest rates, linked bonds and other linked assets played the part previously assigned to time deposits and the Short-Term Loan.

Although the switch to linked assets prevented a flight from money accompanied by demand pressures in the real markets, it also had quite grave implications for the structure of banking in Israel and monetary policy. The early forerunners of the problem appeared during the first nine months of 1973, when the banks did not adjust their interest rates to the accelerated pace of inflation and the growing demand for credit.<sup>10</sup> Things became more serious after October 1973. Though the faster rate of inflation raised the anticipated return on money, the banks failed to adjust their interest rates accordingly. Instead, they satisfied the enormous demand for credit, accumulating substantial liquidity deficits in the process. The switch of funds to linked assets increased the financial resources at the disposal of the Government, but did not decrease the financial resources available to the private sector. Meanwhile, monetary policy ratified this development by a continuous expansion of rediscounts and a lowering of liquidity ratios; yet, despite these measures, the liquidity deficits of the banks increased from IL 720 million at the end of April 1974 to IL 1,100 million at the end of July. In the final accounting, the Bank of Israel supplied a considerable proportion of the liquid assets needed to reduce these deficits. The banks refused to increase the resources at their disposal for the granting of credit, or to reduce the demand for credit by raising interest rates for depositors and borrowers; instead, they preferred to borrow from the Bank of Israel and introduce a kind of rationing of credit for the public. After the rise in bank interest rates in August 1974, which was substantially greater than that of March, the banking institutions returned to more normal circumstances.

The basic rate of interest rose by 1 percent in March 1974, whereas interest on loans deviating from the framework of approved overdrafts rose by 2.5 percent. On

<sup>10</sup> See A. Merom, "The Demand for Money in Israel," Bank of Israel, *Economic Review* (forthcoming).

Table XVI-3

## INDIRECT ESTIMATE OF NET PURCHASES OF INDEX-LINKED BONDS, 1972-74

(IL million)

Purchasing sector	1972	1973	1974	
			Jan.-June	July-Dec.
Social insurance funds and insurance companies	900	1,000	700	700
Commercial banks	150	400	650	750
Rest of the economy (residual)	150	1,300	900	-350
<b>Total sales, net</b>	<b>1,200</b>	<b>2,700</b>	<b>2,250</b>	<b>1,100</b>

NOTE: The data in this table should be treated with caution as they are only indicative of general trends and orders of magnitude. For lack of data, the operations of social insurance funds and banks in the secondary market have not been taken into account in all cases. Moreover, the distribution of purchases of social insurance funds and insurance companies between the two halves of 1974 is based on the breakdown of deposits between these two periods.

reasonable assumptions, this means that effective interest charged to borrowers rose by some 2 percent. In August 1974, the basic interest rate rose by an additional 2 percent, while interest on deviations was raised by approximately 3.5 percent—with the rise in the effective interest rate also being some 3.5 percent. Since the second half of July 1974, the liquidity deficits of banks have been decreasing for various reasons; there can be no doubt that the raising of interest rates in August contributed to this end. The raising of interest paid on the Short-Term Loan by 1 percent in April 1975 caused a parallel rise in the interest paid on time deposits and a 1 percent increase in the rate charged borrowers. This can be regarded as a continuation of the interest rate adjustment process.

The above developments and the liquidity situation of the banks indicate that since the raising of interest rates in August, a stabilization has taken place in the bank credit market. It is reasonable to assume that the rationing of credit came to an end.

In this connection, it should be noted that the worsening of bond terms implemented during a period of inflation is an unusual phenomenon. Monetary theory holds that one of the ways in which higher interest rates helps to check demand is by reducing security quotations (especially of bonds), thus causing capital losses to owners of securities. Yet this did not happen here in 1974. On the contrary, after the terms of bonds were made less attractive, considerable capital gains accrued to the public on linked bonds already in its possession. The reason for altering the

terms of new bonds was the arbitrage that flourished from November 1973: the private sector borrowed relatively cheap money from the banks, drew upon its time deposits with banks and redeemed its Short-Term Loan holdings in order to purchase linked bonds. A remedy that would not have caused capital gains on the linked bonds would have involved ending the arbitrage by steeply raising the interest rates paid and charged by banks. This was not done until August 1974.

In connection with the growing demand for index-linked bonds since 1973, one should note the strikingly large increase in the outstanding balance of linked bonds held by the public in 1973 (about 88 percent), while the public's holdings of approved saving schemes and provident funds administered by banks (which include linkage increments and accumulated interest) grew less rapidly (by some 60 percent). In 1974, the situation was the exact opposite: the public's holdings of approved saving schemes and provident funds expanded by some 100 percent, while the outstanding balance of linked bonds held by the public increased by about 70 percent. The difference is explained by a number of factors:

(a) The "4000 Plan" (later expanded to a "10,000 Plan"), which accounted for most of the increase in deposits, came into effect only in May 1973.

(b) The worsening of the terms of new index-linked bond issues in February 1974 reduced the profitability gap between saving schemes and linked bonds (taking into account liquidity as well as the real return). Moreover, the change in the principles governing the linkage of bonds introduced in February 1974 reduced the profitability of purchasing such bonds after the devaluation of November 1974.

(c) An energetic sales campaign mounted by the banks promoted saving schemes and provident funds during 1974. This happened after the banks had reached a stage where obtaining new unlinked deposits became virtually impossible.<sup>11</sup> (d) It may well be that rumors concerning the intentions of the Treasury to impose a retroactive tax on linkage increments from bonds, without imposing a similar tax on linkage increments from saving schemes and provident funds, helped to persuade the public to put its trust in these schemes and funds. However, it should be noted that these rumors gained currency chiefly after the devaluation, and not during August-October 1974 when linked bond holdings were substantially reduced.

It should be stressed that the composition of the linked assets portfolio of the public does not exert a significant influence upon the supply of medium-term and long-term credit, since revenue from issues of all types of index-linked assets finally

<sup>11</sup> The influence of sales promotion by commercial banks is also reflected by the large increase that occurred in 1974 in mutual funds investing in bonds. It is doubtful whether the normal considerations of spreading investments and expert administration justify the establishing of funds which invest exclusively in linked bonds.

finds its way to the Treasury. The decision concerning the proportion of such revenue to be reinfused into the economy in the form of credit is affected only very slightly by the fund-raising instruments used.

The decrease in the weight of bonds within the portfolio of linked assets held by the public is of considerable importance to the public's liquidity. Deposits in saving schemes and provident funds administered by banks are not very liquid; consequently, from the viewpoint of national saving, it is important to raise funds in this manner.<sup>12</sup>

In regard to the demand for assets linked to the exchange rate, it should be stressed that the data cited in Table XVI-2 refer to only one category of these assets—those available to households (and in particular to recipients of personal restitution payments from Germany). The business sector, on the other hand, tends to protect itself against an expected devaluation by transactions in short-term credit (such as redemption of foreign currency loans, non-renewal of foreign currency loans due for redemption, granting credit to Israeli clients and advances to local suppliers, etc.), as well as by approved transfers of profits and the accumulation of raw material stocks. Operations of this kind are particularly common during periods when the sector expects price increases abroad. Such behavior, naturally, is reflected chiefly by balance of payments data rather than by the balance sheets of banking or financial institutions. Yet it is reasonable to assume that a significant part of the decrease in the State's foreign currency reserves before November 1974 was caused by the speculative demand for foreign currency. One indication of this is the close correlation since October 1973 between changes in the price of the Natad dollar and the black market dollar, on the one hand, and the net volume of foreign currency purchases by the private sector from the Bank of Israel, on the other. During months when the expectation of a devaluation was strong and the unofficial exchange rate of the IL fell (January, April, June and October), purchases of foreign currency rocketed upwards. During months when devaluation was considered less likely and the unofficial exchange rate of the IL rose, foreign currency purchases were on a smaller scale.<sup>13</sup>

The data cited in Table XVI-2 concerning deposits linked to the exchange rate

<sup>12</sup> In view of the enormously fast expansion of saving schemes in 1974, the authorities have begun to suspect that not all depositors will be able to freeze their monies for the entire 5-year period. Premature withdrawals involve a significant loss of income—a fact which not all depositors have sufficiently considered. (See 25th Report of the State Comptroller, pp. 54-63.)

<sup>13</sup> Available data do not enable us to separate the individual items showing increases in foreign currency purchases or decreases in sales of foreign currency.

indicate that these deposits expanded by only 39 percent during 1974 (inclusive of devaluation increments), despite the fact that a devaluation was expected during the year, whereas in 1973 they had grown by some 30 percent.

The relatively moderate increase in deposits linked to foreign currencies in 1974, compared with 1973, was due first and foremost to the fact that between the devaluation and the end of 1974 these deposits contracted by IL 670 million; the process of portfolio adjustment was very rapid. Most withdrawals were from deposits held in expectation of a devaluation (Nataf and Pazak B) while withdrawals from Pazak B and Tamam accounts were small. Moreover, the holders of deposits linked to German marks profited considerably during 1973 from the revaluation of the DM; it must be assumed that the slow accumulation during the pre-devaluation months of 1974 (i.e., until November) reflected the adjustment of the portfolios to the revaluation profits created in 1973.