

## CHAPTER XX

### THE SECURITIES MARKET

#### 1. MAIN DEVELOPMENTS<sup>1</sup>

The major development in the securities market in 1977 was an extraordinary boom on the primary as well as the secondary stock markets, expressed by a very steep increase in the volume of issues, the volume of trade and the price level, with a sharp downturn in prices occurring at the end of November. Bond issues displayed substantial growth after declining in the previous three years. The growth in bond issues took place despite the greatly decreased public demand for the direct holding of bonds, since institutional investors increased their demand in this field. The considerably expanded activity of those investors was not reflected in the secondary bond market, since their involvement in the secondary market is low.

The great real growth<sup>2</sup> of bond and share issues (about 120 percent) was expressed by the fact that the level of capital mobilization reached 29 percent of gross private savings<sup>3</sup>, although issues did not reach their level of 1973/74 in real terms. The great boom on the Stock Market altered the relative dimensions of the components of the securities market.

---

<sup>1</sup> In this chapter, securities issued with a prospectus (including securities of the government and the Jewish Agency, which are exempt from this obligation) and registered at the Stock Exchange are discussed. In the calculation of net issues we do not include the issues of compulsory loans (which are non-negotiable), but we deduct the redemption of compulsory loans which turned negotiable (and were held voluntarily). The discussion of capital mobilization through bond issues is not limited to bonds registered for trade: in the discussion of the portfolio of securities registered for trade, we have added bonds awaiting registration for trade, according to their estimated market value. The Short Term Loan is not discussed in this chapter; its discussion can be found in Chapter XVIII.

<sup>2</sup> In this chapter we have calculated purchasing power at constant prices (or real rates of growth) by deduction by the Consumer Price Index (or its rate of growth). Annual flow (such as issues) is deducted by the annual average of the price index.

<sup>3</sup> The presentation of the relation between issues and private savings is intended to supply the reader with a criterion for the evaluation of issues, and this relation (as presented in Table XX-1) has no other significance. It should be emphasized that an increase of liabilities might enhance gross financial saving per given saving. It should also be noted that saving is subject to many measurement errors which also change the measured relation.

**TABLE XX-1**  
**DEVELOPMENTS IN THE SECURITIES MARKET, 1971-1977**

	1971	1972	1973	1974	1975	1976	1977
<b>A. BONDS IN ISRAELI CURRENCY</b>							
1. Volume of issue at 1977 prices (IL million)	3,732	7,682	10,475	8,770	7,419	3,331	5,563
2. Increase or (-) decrease in the issue at constant prices compared to previous year (percent)	(-44)	107	36	(-15)	(-15)	(-55)	66
3. General real rate of return <sup>a</sup> (percent)	1	5	2	4	8	11	2
4. Volume of trade (at 1977 prices) in Stock Exchange <sup>b</sup> (IL million)	1,704	2,801	3,643	7,335	6,225	5,189	5,296
<b>B. SHARES (and securities for conversion into shares)</b>							
1. Volume of issue at 1977 prices (IL million)	247	821	2,152	1,066	1,440	1,015	3,990
2. Increase or (-) decrease in the issue at constant prices compared to previous year (percent)	<sup>c</sup>	232	162	-50	31	-27	293
3. General real rate of return (percent)	19	87	(-34)	(-27)	6	9	35
4. Volume of trade (at 1977 prices) in Stock Exchange (IL million)	494	3,150	2,178	1,278	1,379	1,928	11,347
<b>C. SECURITIES MARKET</b>							
1. Total issue at 1977 prices (IL million)	3,974	8,518	12,610	9,836	8,817	4,346	9,537
2. Increase or (-) decrease in issue at constant prices compared to previous year	(-26)	114	48	(-22)	(-10)	(-51)	119
3. Weight of bond issue in total mobilization of capital (percent)	94	90	83	89	84	77	58
4. Weight of trading in bonds in total Stock Exchange trading	78	47	63	85	82	73	32
5. Weight of issue in gross private saving from all sources (less compulsory loans)	13	29	27	22	22	14	28

a Until 1975 interest, which was deducted during calculation of price indexes, was added (estimated at 4 percent).

b Including trading (scant) in foreign currency bonds.

c No shares were issued in the previous year.

The weight of bonds in total issues, which had never dropped below 77 percent in the last decade, plummeted to 58 percent; the trade in bonds also decreased in 1977, to about a third of total transactions in the Stock Exchange.

The considerable increase of net issues on the securities market is connected with a real increase of total private savings in 1977 (which had decreased last year), and to a larger extent with the change in the structure of the public's portfolio: the attractiveness of investment in housing<sup>4</sup> decreased (and with it the acquisition of apartments), and the attractiveness of investment in shares increased. With the snowballing decline of public demand for bonds, public demand for institutionalized saving increased, promoting an increased demand for bonds on the part of institutional investors. It should be noted that part of the increased acquisition of bonds can be attributed to last year (with retroactive wage payments, leading to greater payments to institutionalized saving). Another part can be ascribed to the propensity to advance the date of acquisitions intended to be effected in 1978 (the motive for this advancement was the reform in the foreign exchange regulations, see below). The increased rate of investment required of social insurance funds also contributed to the increase in their acquisitions. Towards the end of 1977, some of the economic patterns changed course: there was a recovery in the housing market, new possibilities of investment in foreign currency were opened, and demand for index linked assets increased. These developments contributed their share to the turnabout on the Stock Market in November.

The unprecedented boom on the Stock Market in 1977 was expressed by a number of developments: new issues increased four-fold in real terms, while trade turnover rose by a factor of six from the previous year. The rate of overall real return on stocks, which amounted to an annual total of 35 percent, conceals opposing developments: a 99 percent rate of return in the months January to November (with the creation of considerable capital profits on total stocks traded on the Stock Exchange, about IL 15 billion) and a negative return of 32 percent in December. In the first third of 1978, there was a positive real return on stocks (except in February) amounting to 15 percent. Along with the increase in the return, the risk inherent in the return<sup>6</sup> increased in comparison to the pre-

---

<sup>4</sup> As in other cases, here, too, it is hard to distinguish between cause and effect; developments on the securities market have repercussions on the housing market.

<sup>5</sup> The term "return" in this chapter designates the rate of overall return to the holder of securities.

<sup>6</sup> The risk inherent in return to holders of stocks, calculated ex-post, measures the uncertainty stemming from fluctuations of their prices (as detailed in this chapter).

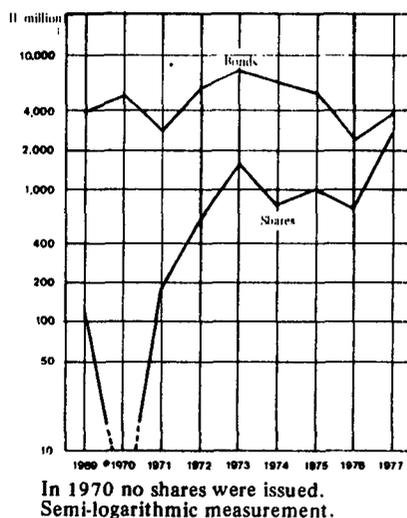
vious year. The boom on the Stock Market was fed by a slight real increase in private savings, and to a larger extent by the slackness in the housing market and the decreased attractiveness of bonds. It is possible that the new government also encouraged the Stock Market by stressing the central role it attaches to this market in the future mobilization of capital. The relatively slow growth of prices relative to earnings in 1973–1975 also contributed to the boom<sup>7</sup>.

The timing of self-fulfilling expectations, which embraced investors from increasingly numerous sections of the population, is hard to explain. Part of the demand for shares stemmed from the expectation of a continued rapid rise in their prices, and it would have been reasonable to assume that with the slowing of the price advance, demand would also decline, leading to a price drop, and expectations of a continued price decline would intensify, thus keeping the market in its doldrums. The changing economic trends mentioned above (the reform on the foreign currency market and the recovery of the housing market) contributed to the turnabout on the Stock Market.

Developments on the Stock Market also had monetary implications: the great increase of activity on the market enhanced demand for money, thus preventing an increase of demand on the real market. On the other hand, the great mobilization of equity capital by banking institutions through the issue of stocks and capital notes made possible the expansion of credit and served to expand real activity.

The bond market was characterized in 1977 by a real 66 percent increase in new issues, while the secondary market was moribund. There was a real increase of 2 percent in turnover, and a real return of 2 percent to holders of bonds. In 1977, the decrease of public demand for bonds sharpened in the wake of increasing fears of worsened terms for bonds held by the public. The emphasis placed on the considerable weight of expected payments with respect to linked bonds in the State Budget also contributed to this (some came to the conclusion that the government might not fulfill its obligations to holders of bonds).

FIGURE XX-1  
**ISSUE OF BONDS AND SHARES,**  
**1969–1977**  
 (1976 consumer prices)



<sup>7</sup> The use of the price/profit per share ratio is problematic, as explained in this chapter.

Since no fears of impairment to the obligations of institutional saving arose (such as the savings schemes of banks, social insurance funds and life insurance), demand was deflected to these assets. In addition to the increase of the risk attributed by the public to return on bonds, the decrease in the demand for bonds was also caused by the decrease in their yield due to an additional reduction of the rate of their linkage to the index (at the end of 1976). It seems that the public did not realize that linkage at the rate of 80 percent provides full insurance against inflation, even at very high rates<sup>8</sup>. The demand for bonds was also impaired by the great expectations of return on investment in shares on the part of the public. The decrease in the demand of the public at large for bonds was reflected by stagnation on the secondary market, while in the months of January to October the Consumer Price Index increased 6.5 percent over the overall return on bonds. The reform of the foreign currency market intensified expectations that inflation would occur during a transition period, thus increasing the attraction of bonds, whose real return reached 9 percent in the months of November and December. The increased public demand for institutionalized savings (covered by bonds)<sup>9</sup> in 1977 caused a rise in net issues despite the decrease of direct demand for bonds on the part of the public. In view of the fact that the involvement of institutional investors in trade on the secondary market is low, the increase in their demand was not expressed on this market.

As to securities traded in foreign currency, it should be noted that the increase of the Natad agio in the first five months of 1977 was connected with expectations of a devaluation, which intensified with the approach of parliamentary elections. These expectations decreased after the elections, and the agio decreased gradually<sup>10</sup> until the reform in October, when the rate of the dollar increased considerably. The real return on assets traded in foreign currency varies with the Natad agio (since the reform, with the rate of the dollar), and reached 11 percent in 1977 on bonds traded in foreign currency, and 8 percent to holders of Natad. Until the reform, as in previous years, the balance of Natad deposits grew more rapidly than the balance of securities traded in foreign currency.

---

<sup>8</sup> Bonds with an interest rate of 4 percent have a net real return of 0.67 (0.42) percent at an inflation rate of 20 (30) percent respectively. Bonds issued since October 1977, with an interest rate of 6 percent, give a return of 1.92 (1.65) percent at the inflation rates mentioned above.

<sup>9</sup> Bonds issued in 1977 to institutional investors were not registered for trade, so they are not included in the file of securities registered for trade discussed above.

<sup>10</sup> There is no full coordination between the various indicators of expectations of a devaluation, since the agio to Natad is affected, apart from these expectations, by other factors as well.

TABLE

**SÉCURITIES LISTED FOR TRADING ON THE STOCK  
AND FOREIGN SECURITIES (MARKET**

	Market values			
	1972	1974	1976	1977
	(IL billion)			
<b>BONDS</b>				
1. Linked to foreign currency	0.1	0.1	0.2	0.4
2. Traded in foreign currency	1.2	1.6	3.2	4.0
3. Total foreign currency (1)+(2)	1.3	1.7	3.4	4.4
4. Index-linked	2.3	8.2	19.4	28.9
5. Option-type linkage	3.7	9.4	14.3	15.9
6. Total COL linked (4)+(5)	6.1	17.7	33.7	44.8
7. Subtotal (3)+(6)	7.5	19.4	37.1	49.2
8. Bonds not yet listed for trade <sup>d</sup>		0.7	1.4	0.6
9. Total bonds (7)+(8)	7.5	20.1	38.5	49.8
<b>SHARES</b>				
10. Traded in IL	2.6	3.5	9.8	23.1
11. Traded in foreign currency	0.2	0.3	1.0	2.0
12. Total shares (10)+(11)	2.8	3.7	10.8	25.1
13. Convertible bonds	0.1	0.5	0.9	1.9
14. Total convertible bonds and securities (12)+(13)	2.9	4.2	11.7	27.0
15. Foreign securities <sup>c</sup>	0.3	0.5	0.9	1.8
16. Total securities portfolio <sup>e</sup> (12)+(14)+(15)	10.7	24.8	51.1	78.6
17. Total securities linked or traded in foreign currency (3)+(11)+(15)	1.9	2.4	5.3	8.2

<sup>a</sup> Not including securities not intended to be listed for trade, such as certain institutional bonds.

<sup>b</sup> The 1977 data are temporary.

<sup>c</sup> The market value of securities traded in foreign currency was calculated until 1976 at the Natad rate (and of year). The 1977 data are for end of October, but were converted into IL according to the representative exchange rate of end of the year.

**EXCHANGE (LISTED AND MARKET VALUES)<sup>a</sup>  
VALUES), SELECTED YEARS, 1972-1977<sup>b</sup>**

Weight at market prices in total listed securities portfolio			Increase or (-) decrease			
1974	1976	1977	Market values 1976	Real market values	Market values 1977	Real market values
(percent)			(percent)		(percent)	
			10.1	20.2	110.6	47.8
			20.8	-12.5	26.3	-11.3
6.8	6.7	5.6	20.2	-12.9	30.9	-8.1
			52.0	10.1	48.9	4.5
			20.6	-12.6	11.3	-21.9
71.4	65.9	57.0	36.9	-0.8	32.9	-6.7
78.2	72.6	62.6	35.4	-1.9	32.6	-6.9
81.2	75.3	63.4	31.3	-4.9	29.4	-9.2
			85.2	34.2	135.7	65.4
			44.1	4.4	92.8	35.3
15.1	21.1	31.9	78.1	29.0	132.4	63.1
			5.8	-23.3	122.5	56.1
16.9	22.9	34.4	72.1	24.7	130.8	61.9
1.9	1.7	2.3	51.0	9.4	112.8	49.3
100.0	100.0	100.0	38.9	0.6	53.8	7.9
9.7	10.4	10.4	29.3	-6.3	54.7	8.6

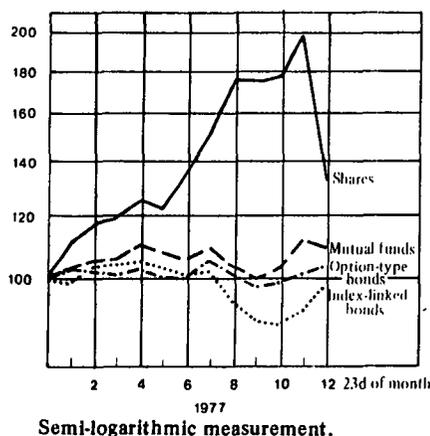
<sup>d</sup> The market value of bonds issued but not yet listed for trade estimated according to accumulate index differentials and interest.

<sup>e</sup> Including bonds not yet listed for trade in the Stock Exchange.

The intervention of the Bank of Israel in trade on the secondary market was intended to "smooth" temporary fluctuations in the return on government bonds, while it took the monetary situation into consideration as well. The reduced risk to investors in bonds resulting from this action was intended as a stimulus to bond sales. By intervening in trade, the Bank of Israel substituted for the institutional investors, whose involvement in trade and in price regulation on the secondary market is low. The great weight of the Bank of Israel in bond turnover on the Stock Exchange in 1977, 9 percent, stemmed to a great extent from the purchase of bonds totalling IL 400 million in October-November. These acquisitions came on the heels of extensive offers which originated in expectations of improvement in the terms of issues at source, as well as sales of bodies which, following the reform in the exchange rate, found that they had overpurchased at source and hoped to benefit from price increases after the devaluation.

The composition of the portfolio of securities traded on the Stock Exchange, whose real value increased during 1977 by 55 percent, reflects changes in public demand, both through quantitative changes and through the adjustment of prices. In the course of the year, the growth trend continued in the weight of stocks in the portfolio at the expense of the weight of bonds: the weight of stocks in Israeli currency increased from 21 percent at the end of 1976 to 32 percent at the end of 1977, while the weight of bonds in Israeli currency decreased from 66 percent at the end of 1976 to 57 percent at the end of 1977. The weight of the component of securities connected with foreign currency remained unchanged in 1977 – 10 percent.

FIGURE XX-2  
**INDEXES OF GENERAL REAL RETURN  
 RATE FOR SECURITIES AND  
 MUTUAL FUNDS**  
 (base: 23.12.76 = 100)



The volume of net issues of trust funds decreased in 1977 in real terms by 9 percent as compared with the previous year as a result of an increase in the issue of mixed funds and funds with a high share component, and the redemption of funds with a low share component, but heavily weighted with linked securities. Real return to holders of certifi-

rates <sup>11</sup> was 17.5 percent between January and November, -2 percent in December, and 10 percent throughout the year. This last rate reflects the success of the funds, since it is higher than the rate deriving from the structure of their asset portfolio and from the overall returns obtained on the market with its various components (see Section 5 below).

## 2. THE STOCK MARKET

The Stock Market in 1977 was characterized by an exceptional boom, expressed by the increase of prices, of turnover, and of volume of issues. The level of new issues was about 290 percent higher this year than in 1976, and the turnover in transactions increased by about 470 percent. The stock issues amounted to IL 4 billion, and turnover to IL 22 billion. During the first eleven months of the year the rapid rise of prices brought an overall real return of 99 percent. At the end of November the market turned, and holders of stocks sustained real losses at the rate of 32 percent during December. In the first four months of 1978 there was a positive real return on shares (except in February) amounting during this period to 15 percent. Along with the great overall real return to stock holders in 1977 – 35 percent – the risk inherent in the fluctuations of their prices also increased considerably.

The harbingers of the boom on the Stock Market, which halted in November 1977, were discerned as early as the second half of 1975. A number of factors created this boom: on the one hand, the decreased attractiveness of alternative investments: bonds<sup>12</sup> (except in the first half of 1976, when their rate increased rapidly owing to the process of

---

<sup>11</sup> Without deducting the rate of addition at purchase or the rate of reduction to the seller.

<sup>12</sup> The discussion is based on the price-to-earning ratio, called the multiplier. This tool of analysis is commonly used for comparing various types of stocks, but not for the macro-economic evaluation of the entire Stock Market as done here. When using this tool, we work on the assumption that there is a stable relation between the accounting profits of companies and their economic profits. Since there is no confirmation of this assumption, we do not attribute any significance to the slight difference in the value of the multiplier on the market, but only to its significant changes.

The rate that served for the calculation of the multiplier index is the average (over a calendar year) of the index of stock prices. The profit index per share was calculated on the basis of profits for the 12 months ending in August, divided by the estimate of the average share capital during this period.

It should be noted that the decrease that had taken place in recent years in the real rate of return on the redemption of bonds, if it served for the capitalization of future profits of companies by the market, would enhance the significance that one should attribute to the decrease of the multiplier, since it influences its rise.

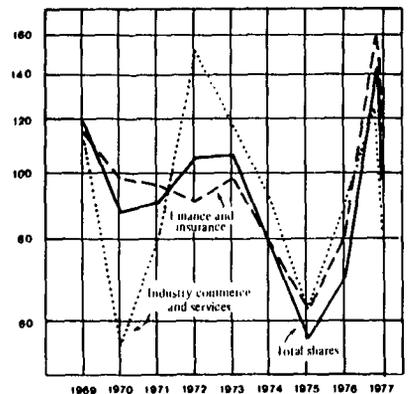
adjustment to the changes in their terms of issues), and in the housing market, which had undergone a recession until the end of 1977. It is possible that the new government also contributed to the boom through its declarations as to the importance it attaches to the Stock Market in mobilizing capital for the economy. On the other hand, the lagging of share prices behind the increased earnings of the companies that had issued them in recent years created a convenient setting for boom (see Figure XX-4). The momentum of the stock market created expectations of a continued increase in prices. As mentioned, it is not clear why this mechanism of "self-fulfilling expectations" began in the period discussed, when investors from extensive sections of the population flocked to the Stock Market and the demand they created brought about an accelerated rise of prices.

Towards the end of 1977 there were changes in the setting for Stock Market activity, which contributed to the crisis that befell it. The reform of foreign currency control opened new investment horizons to the public and also increased the profitability of investing in assets linked to the price index. The housing market started to recover, enhancing its attractiveness as an investment channel. Since many had invested in stocks in expectation of rapid price rises, the sluggishness in this market deterred investors, and the mechanism of self-fulfilling expectations sharpened price drops on the market for a while during the period under review.

The Stock Market has experienced two boom periods in the past which peaked in mid-1963 and the end of 1972 respectively. Shareholders then received a real return of 61 and 87 percent in the 12 months ending in mid-1963 and at the end of 1972 respectively. The real growth of turnover amounted to 232 and 538 percent respectively. During these booms, as in 1977, the stock issues lagged behind price rises and turnover: stock issues increased laggardly but remained high even after prices had already decreased in real terms. It should be noted that this time-lag had a destabilizing effect on prices: had there been a shorter time-lag between the increase in the amount of stocks and the increase of their prices, the rise of prices would have been slower and the speculative increase in demand for stocks would have been smaller. At the same time, when the corollary process of di-

FIGURE XX-3

INDEX OF GENERAL RETURN RATE  
(IN REAL TERMS) FOR SHARES,  
1968-1977  
(base: 1976 = 100)



Semi-logarithmic measurement.

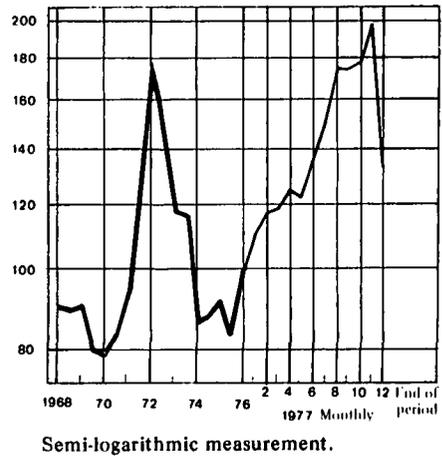
minished demand for stocks then set in, the continued growth in their supply would not have contributed to the drop in their prices. The previous boom periods had also occurred during times of rapid monetary expansion; what is particular to the last boom as compared to the previous ones is the contribution of the recession in the housing market.

Figure XX-3 presents the index of overall real cumulative return on stocks in the years 1969-1977. Since in recent years the rate of real return to redemption of bonds (which can serve as the rate of rediscount for the capitalization of future profits of companies) decreased, it would have been reasonable to expect that the overall return index should increase in the long run. A study of the Figure shows that this is not so, a fact which can be explained by the waves of speculation on the Stock Market, which caused great short-term fluctuations in returns.

A comparison between the index of the price-to-earning ratio and the index of return on stocks (Figures XX-3 and 4) reveals that these indices have changed similarly since 1971. This stems from the fact that real profits per stock and the rate of dividend return were relatively stable, while the considerable fluctuations in prices brought about sharp changes in these two indices. An examination of figures characterizing the Stock Market in the seventies (see Table X-1) reveals that 1977 was an exceptional year with reference to the volume of issues (almost IL 4 billion), turnover (about IL 2 billion), and the rate of overall real return (99 percent in the months January– November).

FIGURE XX-4

**INDEX OF PRICE/PROFIT RATIO FOR SHARES, 1969–1977**  
(base: average 1969 – 1972 = 100)



The great increase of stock prices created substantial capital gains. The repercussions of the price rises in the months January – November on total stocks registered for trade on the Stock Exchange at the end of 1976 shows that capital gains were created to the extent of IL 15 billion. For the sake of illustration we shall mention the fact that this

amount is equivalent to 12 percent of total gross free private income, or one third of gross saving in 1977<sup>13</sup>.

Alongside the high overall real rate of return to stockholders during 1977 (35 percent), the increased fluctuations in these rates (mainly the decrease in December) raised capital risks to stock owners, both when compared to last year (a 3- to 4-fold increase), and when compared to other assets (Table XX-4). The high capital risk to stockholders can also be deduced from the deviation in the standard rate of monthly price changes (measuring the risk to stockholders during one month), as well as from the deviation in the standard of difference between stock prices and price trends over the course of the year (measuring the risk to stockholders during a longer period of time).

The majority of stocks issued in 1977 (82 percent) were of companies in the financial sector, as in the past (see Table XX-9). Despite the fact that the role of this group in stock issues decreased somewhat in 1977, it still remained proportionally higher than its percentage of stocks registered for trade. This enhances the weight of the stocks of the financial sector in total stocks registered for trade on the Stock Exchange. The issues of companies not belonging to the financial group increased considerably in 1977 (particularly the group of industrial companies, which doubled the volume of its issues; this amounted to 10 percent of investments in industry in 1977)<sup>14</sup>, although their share in issues is still very low. The great volume of issues in the financial sector was prompted by the high marginal cost incurred by the banks in the expansion of their activity through the increase of their liquidity deficits, while the cheap government financing of investments in industry led to a low volume of issue for industrial companies. It is reasonable to expect that government financing will encourage investment through equity capital, by being complementary to it. In fact, government financing serves as a substitute for issues on the Stock Exchange, and investors prefer to obtain additional government financing, while mobilizing equity capital through other channels.

The need to open company books to the public upon issuing shares might also account for the small number of companies which have presented issues to the public for the first

---

<sup>13</sup> The estimate is deflected downwards because the increase of prices acted on a larger base due to extensive issuing in the course of the year. However, if we wish to deduce the amount of demand in the economy from capital profits, there is also a deflection in the opposite direction: part of the profits is credited to institutions, such as pension funds, and the short-term demand stemming from them is not dependent on capital profits.

<sup>14</sup> This figure is given in order to provide the reader with a criterion for evaluating the volume of issues; we are not of the opinion that the entire amount mobilized through issues was in fact invested.

time this year<sup>15</sup>. Almost all issuing companies were companies whose shares were already registered for trade on the Stock Exchange.

Activity on the Stock Market in 1977 had monetary repercussion: it is possible that the sharp increase of issues and of the volume of transactions increased demand for money. This had the effect of reducing activity on real markets. A reverse influence was exerted by the great increase in equity capital mobilized by banks, which lowered the reserve level dictated by the liability side of their ledger. This increased their ability to grant credit. Short term banking credit abetted the success of the issues<sup>16</sup> whose non-continuous nature did not always suit the ability of the public to finance them from other financial resources.

The increased return on stocks in 1977 was accompanied by a greater spread of returns (see Table XX-11). The group of stocks that yielded the highest return this year was the finance and insurance group. Like last year, the spread of returns in this group was lower than that of other groups, and the standard deviation of its annual return (as a measurement of the risk involved in the holding of these shares, see Table XX-4) was lower than that of the other groups. Institutional investors connected with banking concerns contribute to this situation; by trading in the shares of the banks belonging to these concerns, they apparently reduce the fluctuations of their stocks, thus stabilizing activity on the market.

It should be noted that institutional investors (some of them connected with the banking concerns) purchased 20 percent of the issues by ordering in advance. Since the proportion of stocks in their balance sheets is low, it is reasonable to assume that they have sold part of the stocks they acquired (almost always at a profit) and this action contributed to the regulation of the prices after the issue.

The central position of banking concerns and the great role they play on the money and capital markets, raises fears as to the possibility of a conflict of interests between the banks and their clients, and the dramatic increase of activity on the Stock Market this year made the problem more acute.

With a view to enlarging the representation of the public in the management of the Stock Exchange, new members unaffiliated with the banks were added to it in 1977.

It should be remarked that changes have taken place this year in trading procedures. Until 1977, trade on the Stock Exchange was conducted in 2 stages: the stage of

---

<sup>15</sup> Two companies in the industrial group, one in the insurance group.

<sup>16</sup> In 1977 there were sharp fluctuations of credit, close to the time of a number of issues.

TABLE

DOMESTIC ISSUES OF SECURITIES AND  
(IL

	Gross sales of IL secu-				
	Total bonds (1)	Savings schemes (2)	Provident fund insurance, and pension institutions (3)	Others <sup>b</sup> (1)-(2)-(3) = (4)	Shares <sup>c</sup> (5)
1975	8,044	2,135	3,751	2,158	467
1976	9,352	2,454	5,240	1,658	660
1977	16,982	6,586	9,393	1,003	2,636
January	881	308	556	17	9
February	835	281	523	31	10
March	1,133	215	698	220	252
April	939	301	586	52	370
May	1,078	313	670	95	6
June	1,320	404	759	157	528
July	1,820	1,101	673	46	310
August	1,000	244	719	37	270
September	1,128	233	861	34	292
October	3,161	1,512	1,373	276	-
November	2,296	1,390	901	5	45
December	1,391	284	1,074	33	544

a Rounded figures.

b To the public, mutual funds, etc.

c The parent company of one of the commercial banks undertook to purchase IL 522 million worth of the issues of its bank (IL 154 million in 1976), while the parent company itself issued shares worth even more. In order to prevent double counting of this issue, the sum has been deducted from the value of the share issue.

## NET MOBILIZATION OF CAPITAL, 1975-1977

million)<sup>a</sup>

urities	Net estimated mobilized capital					
	Convertible bonds (6)	Redemption of tradeable loans <sup>d</sup> (7)	Net Bank of Israel acquisitions on Stock Exchange and over-the-counter (8)	Total bonds less redemptions and Bank of Israel acquisitions <sup>e</sup> (1)-(7)-(8) = (9)	Total net IL capital mobilized (5)+(6)+(9) = (10)	Net foreign currency bonds
	325	3,697	145	4,196	4,988	-135
	94	6,231	646	2,475	3,229	-100
	1,354	11,180	239	5,563	9,553	-346
	15	653	103	125	149	-8
	61	602	-43	276	347	12
	113	649	-26	510	875	-31
	361	710	-70	299	1,030	-36
	24	767	-42	353	383	7
	79	1,067	-8	261	868	-53
	7	1,070	-47	797	1,114	-25
	177	696	21	283	730	-54
	277	706	52	370	939	-39
	18	1,005	103	2,053	2,071	-20
	4	1,335	228	733	782	-42
	218	1,920	-32	-497	265	-57

<sup>d</sup> Maturity of principal and interest and linkage payments are included in redemptions.

<sup>e</sup> Of which government bonds and deposit in the Ministry of Finance: 5.6 IL billion in 1977, 1.8 IL billion in 1976.

SOURCE: Bank of Israel calculations.

“opening” – in which trading orders were placed in advance, and in the course of trading only offers bringing the market nearer to balance were accepted; certificates of any security were traded only at a single price, which balanced the quantities demanded and offered. In the stage of “variable prices”, no advance orders were placed, and bilateral transactions were made at various prices.

The drastic increase in the turnover in stocks in 1977 caused difficulties beyond those created to members of the Stock Exchange by such a large volume of trade. It was feared that the trade in “variables” provided an advantage to professional traders at the Stock Exchange, while discriminating against the investing public at large<sup>17</sup>. This prompted a decision to suspend trading at this stage. Another difficulty in the trading of “variables” stemmed from the offsetting orders of buyers and sellers by members of the Stock Exchange, which prevented the small investor from following the prices of his securities. (At the stage of “variables”, as mentioned, transactions at various prices are effected<sup>18</sup>). Due to fear of stock price manipulations in issues with a relatively low negotiability, the trade in certain stocks was restricted to one day per week.

### 3. THE BOND MARKET IN ISRAELI CURRENCY

In 1977 a considerable increase took place in the volume of issues of Israeli currency bonds, after a continuous decline in recent years. This recovery on the primary market was not accompanied by a parallel boom on the secondary market. The issue of bonds, which increased in 1977 by 66 percent in real terms from the previous year, reached the level of issues for 1971–1972 and totalled IL 5.5 billion. The issues increased despite the decrease of public demand for the direct holding of bonds, and was fed by the growth of demand for bonds on the part of institutional investors. The overall real return on bonds in 1977 was about 2 percent and the turnover in bonds on the Stock Exchange also increased at a similar rate (in real terms).

In 1977, the decline in public demand for the direct holding of bonds deepened, due to the continued decreasing returns on bonds issued to the public (at the end of 1976, the

---

<sup>17</sup> In the absence of tools for disseminating information to the public quickly, orders reaching the stage of “variables” were placed by the public without the knowledge of data on trade at the opening stage, or orders were not recorded in time for the opening stage for which they were intended.

<sup>18</sup> This difficulty has been overcome since May, when a price at which most transactions at the stage of variables are made was determined as the offsetting price.

rate of their linkage to the index was lowered to 80 percent) and the fear of further damage<sup>19</sup>. It seems that the public did not recognize the fact that linkage of 80 percent fully insures the investor against inflation<sup>20</sup>. Despite the fact that it is to be expected that a deterioration in the terms of bond issues at source will bring with it capital profits to their holders, demand for them in fact decreased. It can be assumed that the public feared impairment of previously-issued bonds; the expected parliamentary elections and the change of government following them exacerbated this fear. In the course of 1977 the weight of redemptions of bonds in the State Budget was pronounced, giving rise to fears that the government would not meet its obligations. The public's expectation of substantial return on investments in stock also contributed to the decreasing attractiveness of bonds. The decreased demand for bonds was also fed by information published in the course of the year concerning the expected increase of returns on issues at source and by the argument, prevalent at the beginning of 1977, that the pace of inflation would slow down.

The decrease in public demand for direct holding of bonds harmed net issues to the public, which hardly renewed the redemption of bonds it held, and lowered the overall real returns on bonds. The increase in institutionalized saving through deposits by the public in savings schemes (which granted special benefits) and in social insurance funds (part of the increase of which is due to retroactive wage payments, see Chapter XIX) led to an increased demand for bonds on the part of institutional investors and a boom in issues. The increase in the rate of obligatory investments by social insurance funds also contributed to this. The increase in issues to institutional investors during the last quarter of the year stands out in particular, when the profitability of investment in linked assets increased; this phenomenon was touched off by the growing expectations of short-term price increases after the reform in the exchange rate and the considerable devaluation. Since institutional investors are almost entirely detached from the secondary bond market, and bonds issued to them are preferable to those issued to the public at large, the boom created on the primary market was not reflected on the secondary market as well.

---

<sup>19</sup> The public refrained from extending its holding of the Savings Loan in 1977, despite the attractive terms that were offered (as detailed below), while increasing its deposits in savings schemes. It is not clear whether one can relate this to the fear of the public to hold bonds, because the liquidity of the Savings Loan is dissimilar to that negotiable bonds, and because the terms for extending the Savings Loan were not clarified to the public in time, while savings schemes have a sophisticated marketing mechanism.

<sup>20</sup> Bonds with an interest rate of 4 percent, have a net real return of 0.67 (0.42) percent at an average inflation rate of 20 (30) percent respectively. Moreover, real return is positive at any higher inflation rate.

TABLE

**YIELD AND STANDARD DEVIATION OF MONTHLY REAL CHANGES IN  
POWER OF THE**

	Index- linked bonds	Option- type loans
Arithmetic average for 1972-1974		
Annual yield	5.31	2.12
Annual standard deviation	2.12	2.19
Monthly standard deviation	2.01	2.62
1975 Annual yield	9.95	6.26
Annual standard deviation	2.17	1.60
Monthly standard deviation	3.08	2.44
1976 Annual yield	15.74	5.26
Annual standard deviation	4.02	4.55
Monthly standard deviation	3.66	3.55
1977 Annual yield	(-)0.08	3.92
Annual standard deviation	4.89	2.27
Annual standard deviation	4.43	3.00

**NOTES:**

The rates were discounted by the Consumer Price Index.

Monthly standard deviation: measures the capital risk of holding an asset for one month. Calculated by taking the square root of the square of the differences between the monthly rate index change and the average rate of change in it, divided by degrees of freedom.

Annual standard deviation: measures the capital risk of holding an asset for more than

**PRICES OF BONDS, SHARES, NATAD DOLLAR AND PURCHASING  
MONEY, 1972-1977**

All regular bonds	Finance & insurance shares	Industrial shares	Natad dollar	Purchasing power of the money	Index- linked bond yields
0.39	0.43	(-) 1.09	-13.98	(-)22.63	4.8
5.44	4.34	4.07	2.66	1.74	
5.59	4.65	7.34	2.96	1.79	0.7
10.45	5.59	23.6	16.20	-19.0	1.0
4.73	3.43	10.12	4.32	1.74	
3.91	3.01	7.30	2.76	1.65	2.6
6.61	8.23	0.83	-19.4	(-) 27.5	1.0
5.34	5.63	4.52	2.80	1.11	
3.04	3.21	4.61	2.21	1.66	1.3
34.58	48.34	(-)6.70	8.63	(-) 29.8	2.6
18.37	16.88	16.20	6.64	2.69	
12.63	11.96	12.67	6.01	2.69	2.7

one month. Calculated by taking the square root of the square of the differences between the monthly rate index and trend of the index during the year (end of previous year = 100), divided by the levels of freedom. The trend of the index during the year was calculated by means of the regression of rates of the "time" variable.

Yield: while the table refers to the rate of general real yield, the last column refers to the rate of yield to maturity.

TABLE XX-6

**AVERAGE REAL NET YIELDS TO MATURITY OF BONDS  
TRADED ON THE STOCK EXCHANGE, MONTHLY, 1976-1977**  
(percent)

		Option-type loans, 1-1½ years to redemption	6½%, fully linked, 3-3½ years to redemption	4% fully linked, 7-8 years to redemption	Traded in foreign currency, 5-6 years to redemption
1976	November	1.7	1.1	1.6	2.00
	December	3.6	2.1	1.3	2.02
1977	January	2.0	1.8	1.5	2.12
	February	0.3	0.7	1.0	1.98
	March	2.0	0.9	0.9	1.56
	April	1.5	1.0	0.8	1.85
	May	2.4	1.3	0.8	2.01
	June	4.0	2.0	1.3	1.97
	July	1.4	0.9	1.4	2.08
	August	1.7	1.2	2.3	2.13
	September	5.6	2.6	3.5	2.20
	October	4.9	2.7	3.9	1.90
	November	2.7	3.3	3.7	2.70
	December	-4.5	0.1	2.5	3.67

**NOTES:**

1. The yield shown in this table is an average of end-of-week data for government bonds.
2. The yield is calculated according to the price index of each month.
3. Hollis' bonds represent the tradable bonds in foreign currency.

SOURCE: Bank of Israel computations.

In order to increase the sale of bonds to the public, they were diversified during 1977, and the return on issues was improved. A non-governmental body offered to the public an unlinked bond at a high rate of interest, and sold bonds amounting IL 148 million. In the middle of October, interest on bonds issued at source with 80 percent linkage to the index

TABLE

**CUMULATIVE OVERALL MONTHLY RETURN INDEX OF  
OF MUTUAL FUNDS AND OF NATAD DOLLARS,  
AND AGIO FOR**

	Index linked IL bonds			Bonds traded in foreign cur- rency correct- ed for Natad rate
	Total	Linked to index only	Option- type	
1972	27.4	24.3	30.5	
1973	34.1	30.9	37.2	
1974	53.1	49.8	56.7	
1975	67.8	65.1	71.6	91.7
1976	100.0	100.0	100.0	100.0
1977				
January	100.8	99.0	102.8	105.5
February	103.9	104.4	103.3	105.7
March	105.8	107.0	104.5	114.5
April	110.4	111.7	108.7	124.2
May	110.4	111.6	108.9	124.8
June	111.4	111.8	111.0	120.7
July	112.9	114.9	119.7	119.2
August	113.4	109.4	118.8	120.1
September	112.6	107.9	118.9	120.1
October	116.9	110.8	124.5	121.4
November	135.3	129.2	143.0	156.5
December	144.9	142.4	148.1	158.2
Real Index for December	101.7	99.9	103.9	111.0
1978				
January	145.6	143.9	148.0	164.7
February	148.8	145.7	153.3	154.0

<sup>a</sup> In 1977 – Data of the 23rd of each month. Previously indexes were calculated for end of the month, discounted by interest payments and cash dividend.

XX-7

**SECURITIES ON THE TEL AVIV STOCK EXCHANGE,  
1977 (DECEMBER 1976 = 100),  
NATAD DOLLAR**

IL shares		Natad dollar <sup>b</sup>		
Ordinary and preferred	Convertible bonds	Agio	Index	Mutual funds
(percent)				
60.3		0.7	43.6	
47.8		8.6	47.0	
53.6		0.7	62.3	
70.2	71.7	22.7	89.4	
100.0	100.0	11.0	100.0	100.0
110.8	108.9	14.4	105.5	102.7
118.4	112.9	14.5	105.7	105.9
122.0	115.2	19.4	114.4	109.3
131.8	121.6	28.7	122.7	116.1
132.0	121.5	29.6	123.5	116.3
149.9	134.5	23.9	120.3	117.5
168.1	139.3	18.0	117.8	122.9
204.1	188.0	13.8	117.9	121.4
211.6	180.8	13.8	117.5	121.4
222.4	195.4	12.6	118.7	129.3
277.9	255.0	—	153.1	157.1
191.8	152.5	—	154.1	157.3
134.6	107.0	—	108.1	110.4
212.0	168.3	—	160.0	158.8
188.8	150.9	—	162.1	157.5

<sup>b</sup> From November onwards — the representative exchange rate.

SOURCE: Central Bureau of Statistics. Mutual funds return: Bank of Israel computations.

was raised from 4 to 6 percent<sup>21</sup> and an option for their early redemption after 5 years was provided. Yields to maturity were then higher on the secondary market (almost 4 percent on 4 percent notes, full linkage, 7–8 years until repayment). Therefore, despite the improvements, no significant increase in bond acquisitions was discerned on the part of the public. In February 1978, bonds with new terms were offered to the public; interest on bonds with 80 percent linkage to the index was increased to 7 percent. A bond was offered with an interest rate of 5 percent with the option of full linkage to the dollar or 80 percent linkage to the index. A bond linked to the dollar was also offered, bearing an interest rate of 5.5 percent.

In 1977, too, the call to refrain from the redemption of Saving Loans that matured in October went unheeded. The public was given the offer of holding these bonds for another 2–4 years in return for interest that grew in proportion to the time of holding and with linkage of the funds to the June index (instead of the October, as per the original terms of bond redemption). It seems that the improvements offered did not counterbalance the public fears of a deterioration in the terms of the loans and their lack of liquidity. It also appears that the terms for extending the savings were not fully explained to the public in time.

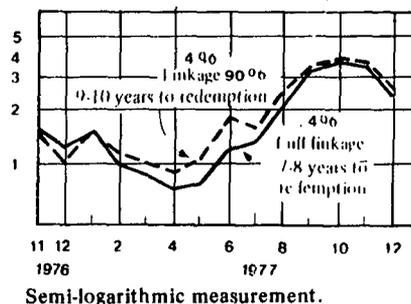
In the absence of data on net issues to various buyers, we shall examine data on gross issues (Table XX-3). These reveal that at the same time as the great decrease (40 percent) in bond purchases by the public (including trust funds), there was in 1977 a very great increase in gross acquisitions for savings schemes of the banks (170 percent) and of social insurance funds (80 percent). In view of the growth of the share of the public at large in total redemptions in 1977, it is almost certain that the decrease in net issues to the public is sharper than can be drawn from our analysis<sup>22</sup>.

An examination of the trend in net bond issues (see Table XX-3) shows an increase of issues in March, deriving from the obligations of that body issuing shares to purchase bonds: in July issues increased due to acquisitions by bank savings schemes which were then expanding. As mentioned, the economic policy change in October also increased deposits in savings schemes and the acquisition of bonds for them. Since this meant that deposits (and acquisitions) were made in advance, there was a decrease in the acquisitions of bonds, and in December 1977 and January 1978 there was even net redemption of bonds at the rate of IL 400–500 million. In the month of February 1978, in which – as mentioned – new types of bonds were issued, net redemption halted.

<sup>21</sup> This means an increase (at the rate of 1.26 percent) to 1.92 percent of the real return on bonds held until their redemption in 10 years time, on the assumption that the inflation rate will be 20 percent.

<sup>22</sup> Estimates point to a net redemption of about IL 4 billion on the part of the public.

**FIGURE XX-5**  
**REAL RATE OF RETURN AT**  
**REDEMPTION FOR BONDS WHOSE**  
**DATE OF MATURITY IS REMOTE**  
 (Source: Table XX-6)



In 1977 a relatively small rate of return was recorded for long-term bonds and a relatively high one for those set to mature shortly. These developments coincided with expectations in the market for a rise in the return on issues at source (which did occur in October 1977 and in February 1978). This was reflected in an overall real return of 3.9 percent for linkage-option loans and -0.1 percent for index-linked loans whose average maturity date was further off. The risk to capital stemming from real price fluctuations was smaller in linked-option loans for the short term (see Table XX-4), since the rate of return upon redemption has a relatively greater influence on the prices of long-term bonds. The risk to capital for the holders of linkage-option loans decreased in 1977 while the risk to holders of linked bonds rose<sup>23</sup>.

The rate of overall return on bonds decreased in the months August-October, when peak increases were recorded on the Stock Market in prices and in turnover. In September, when the press published news of an expected improvement in the return on bonds issued at source, there was an additional reason for a decline in the prices of bonds negotiated on the secondary market, but the improvement itself, which took place in October, did not exert such an influence<sup>24</sup>. The reform on the foreign currency market at the end of October, which created expectations of more rapid inflation, increased both the profitability of holding bonds and their prices. This was not fully expressed in prices recorded in November, since on the secondary market many surplus bonds were then being sold, following substantial acquisitions of bonds effected at the end of October, in expectation of increases in the price index following devaluation.

The Bank of Israel, in its capacity as agent for the government in the issue of government bonds, also intervenes in their trade on the secondary market (see Table XX-8). Thus, the Bank reduces temporary fluctuations in the yields to maturity of government bonds, while being guided also by monetary considerations. The reduction of variance in

<sup>23</sup> A rise only on absolute values. In comparison to fluctuations of the purchasing power of money, the risk was reduced by half from 1976. See the above-mentioned table.

<sup>24</sup> Even after its improvement, return at source remained lower than return on the secondary market, and therefore no demand for bonds issued at source was created. In any case, no decrease of demand for bonds negotiated on the secondary market was felt, and prices on this market did not drop (and returns increased).

bond prices deriving from this promotes the sale of bonds at source, by reducing the risk inherent in their holding (and the increase of their liquidity). By intervening in trade, the Bank of Israel regulates prices in lieu of institutional investors, whose involvement in trade on the secondary market is low. The weight of the Bank in bond transactions effected at the Stock Exchange in 1977 was 9 percent; most of its activity was in the purchase of bonds, in the amount of IL 400 million in the months of October-November: in October, when the decrease of prices brought about by expectations of improvements in the terms of issue at source was perceived; and in November, from sales of bodies that had overpurchased after the reform in the foreign currency regulations, and wished to create profits in expectation of increases in the price index following the devaluation.

#### 4. SECURITIES TRADED IN FOREIGN CURRENCY AND THE NATAD MARKET

Developments in this segment of the securities market were affected, to a decisive extent, by the intensified expectations of a devaluation (as reflected by the agio to the Natad dollar) in the first part of 1977 with the approach of elections, and the attenuation of these expectations afterwards. At the end of the year, the reform in the foreign currency regulations left its imprint on the market.

Similar to developments that had taken place in the election year of 1969, the agio to Natad increased gradually in 1977 as well with approach of the elections, owing to fears of a massive devaluation following the elections, and it declined afterwards, together with the decline of these expectations<sup>25</sup>. The agio, which stood at 11 percent at the end of 1976, reached 30 percent in May (see Table XX-7), thus bringing high returns to holders of Natad and securities traded in foreign currency. The downward trend that characterized the agio of the Natad after the elections (which was also affected by the high alternative returns on the share market), continued until October, prior to the reform in the regulations controlling foreign currency (since then, the Natad has been included in local residents' foreign currency deposits, hereinafter called "Patam"), when an agio of 13 percent was recorded. The increase in the rate of the dollar following the reform led to a considerable increase in returns to holders of Natad deposits and securities linked to foreign currency. In 1977 as a whole, as well as in its subperiods discussed here, the return on bonds traded in foreign currency was higher than the return on Natad deposits (these last did not carry interest).

---

<sup>25</sup> Changes in the Natad rate are also explained by factors unrelated with expectations of a devaluation, among them changes in demand for Natad on the part of banking institutions for the purpose of financing their activities abroad. Other indicators, pointing to the above-mentioned changes in expectations of devaluation, also have additional explanations (see Chapter XVIII, Section 2).

TABLE XX-8

**BANK OF ISRAEL ACTIVITIES IN THE SECURITIES EXCHANGE,  
1974-1977<sup>a</sup>**

Year	Net injection (IL million)	Volume of business (IL million)	Share in IL bond trade (Percent)
1974	47	246	4.1
1975	173	614	8.7
1976	412	691	9.5
1977	485	840	8.9

<sup>a</sup> Not including the Short-Term Loan, not including over-the-counter transaction.

SOURCE : Bank of Israel.

Until the reform in 1977, the rapid growth of Natad deposits compared to securities traded in foreign currency (a phenomenon that had existed for years) continued. This is connected with an inelastic supply of securities traded in foreign currency and their inferiority to Natad as short-term investments. Data on the balances of securities traded in foreign currency for the end of 1977 are unavailable.

Prices of bonds traded in foreign currency did not change significantly in the last months of 1977, and it seems that the adjustment of the foreign currency component in the assets of the public was made through the change in local residents' foreign currency deposits. After remaining steady in November, deposits in Patam accounts in December and January increased considerably.

Bonds linked to the exchange rate and issued to the public for the first time in May gradually lost their attractiveness with the decrease of the Natad agio. Their issue was discontinued in October, after bonds amounting to IL 142 million had been purchased. The supply of bonds in foreign currency is inelastic, and during 1977 net bonds in the amount of IL 346 million were redeemed.

With the reform on the foreign currency market, new channels of investment were opened to Israeli residents: the purchase of Patam and foreign securities without resort to the Natad dollar was made possible. It is not clear which of these investments is preferable from the taxation point of view.

TABLE XX-9  
**MARKET VALUES OF SHARES ISSUED, BY ISSUING GROUP, AND NEW ISSUES  
 OF SHARES AND CONVERTIBLE SECURITIES, 1977**

	Market value of shares and convertible securities listed on the Stock Exchange <sup>a</sup>			Issue of new shares for cash <sup>b</sup> of shares and convertible securities, 1977		
	Share of group in total market value, end of 1977 <sup>c</sup>	Rise in market value of shares in 1977		Share of the group in total issue	Share of new issue in total market value of the group's shares at end of 1977	
	(percent)	(percent)	(IL million)	(percent)	(percent)	(percent)
Commercial banks and companies	16,440.6	61.0	174.3	2,793 <sup>d</sup>	70.0	46.6
Mortgage banks	2,099.0	7.8	169.4	202	5.0	26.0
Specialized financial institutions	2,038.4	7.6	100.1	67	1.7	6.6
Insurance	687.6	2.6	257.2	199	5.0	103.4
<b>Total financial sector</b>	<b>21,265.6</b>	<b>79.0</b>	<b>166.4</b>	<b>3,261</b>	<b>81.7</b>	<b>40.9</b>
Commerce and services	498.5	1.9	77.0	31	0.8	11.0
Land, building, development and citrus	1,085.4	4.0	126.2	75	1.9	15.6
Industry	2,597.8	9.6	92.2	493	12.4	36.5
Investment and holding companies	1,481.8	5.5	3.0	128	3.2	8.9
<b>Total</b>	<b>26,929.1</b>	<b>100.0</b>	<b>130.8</b>	<b>3,990</b>	<b>100.0</b>	<b>34.6</b>

<sup>a</sup> The market value of those traded in foreign currency was calculated according to the official rate of the dollar.

<sup>b</sup> Excluding bonus issues, conversion of convertible bonds, issues not for cash and registration for trading of existing shares.

<sup>c</sup> The total data for end of 1977 are temporary.

<sup>d</sup> See note c in Table XIX-3. This correction was not made in the calculation of the total shares listed for trade.

TABLE XX-10

**CUMULATIVE OVERALL RETURN INDEX OF SHARES QUOTED FOR TRADING ON STOCK EXCHANGE, 1973-1977**  
(Base: December 1976 = 100)

	General Stock Exchange index	Finance and insurance					Industry	Commerce and services	Land, building, develop- ment & citrus	Shares traded in foreign currency
		Total	Mortgage banks	Specialized financial institu- tions	Invest- ment com- panies					
End of year										
1973	41.7	41.5	44.7	36.5	53.8	43.8	41.3	23.1	40.2	
1974	51.0	50.7	56.8	47.8	56.9	49.1	45.3	41.3	39.3	
1975	69.0	69.5	71.6	58.3	70.1	69.3	69.1	75.4	59.8	
1976	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1977, end of quarter										
March	122.0	118.6	114.8	133.2	134.9	124.3	119.1	174.3	128.6	114.8
June	149.9	144.7	138.8	167.2	171.6	155.2	138.6	232.7	176.5	122.8
September	211.6	208.4	181.9	318.2	256.9	224.6	174.7	273.5	241.8	137.5
November <sup>c</sup>	277.9	291.2	275.8	370.2	298.1	286.1	188.0	268.6	266.0	178.1
December	191.8	211.4	207.2	239.2	182.3	161.5	132.9	159.2	167.9	172.9

a In 1977 - not including citrus.

b Index of rates and not overall return rate, calculated by multiplying by the Natad agio (base: December 1976=100). As from November the dollar rate replaces the Natad rate.

c The November data (which is not end of quarter) are given here because there was then a turning point in the shares market.

SOURCE: Central Bureau of Statistics.

TABLE

**NET OVERALL RATES OF RETURN ON LISTED ORDINARY STOCKS,  
SECURITIES CONVERTIBLE INTO SHARES**  
(per-

Year	Arithmetic average	Overall rate of return				
		Weighted by listed capital <sup>a</sup>	Weighted annual turnover	Volume of Stock Exchange trade	Minimal	Maximal
						<b>A. ORDINARY</b>
						1. Banking,
1976	56.1	50.7	62.0	4.0		126.8
1977	117.0	102.2	104.4	44.0		261.7
						2. Land
1976	73.5	69.8	74.0	16.0		122.5
1977	122.9	119.4	102.1	24.1		248.7
						3. Industry
1976	60.0	42.4	68.3	-18.8		211.7
1977	63.7	51.2	74.9	-16.3		248.1
						4. Investment
1976	145.4	49.1	139.9	2.3		903.9
1977	69.8	80.8	75.4	19.1		165.0
						5. Total ordinary shares
1976	79.4	50.2	76.6	-18.8		903.9
1977	88.7	91.5	95.1	-16.3		261.7
						<b>B. INTEREST-BEARING (PREFERRED SHARES)</b>
1977	81.1	86.1	83.7	69.0		312.9

<sup>a</sup> Weighted by listed capital at market value, at end of previous calendar year.

<sup>b</sup> Weighted by Stock Exchange trade volume over the calendar year.

<sup>c</sup> The distribution index is calculated as follows: The index of return per 10 percent

XX-11

**ON INVESTMENT IN ORDINARY SHARES, PREFERRED SHARES AND  
IN TEL AVIV STOCK EXCHANGE, 1976-1977**

(cent)

Distribution of shares by rate of return by deciles					Distribution index	Number of stocks	Number of companies
10	25	50	75	90			
<b>SHARES</b>							
financing, insurance							
18.9	39.9	49.3	74.4	92.0	0.49		
79.0	84.2	94.0	145.7	188.3	0.56	34	22
and development							
16.7	66.1	71.4	93.0	114.2	0.56		
58.5	76.9	112.0	143.1	244.0	0.88	13	10
and commerce							
4.0	25.3	53.6	83.2	105.0	0.68		
0.8	17.0	52.0	76.4	167.1	2.09	36	24
companies							
26.7	36.7	52.3	128.3	458.0	2.83		
23.4	42.1	69.0	88.2	110.9	0.52	27	21
of companies listed							
16.7	34.6	58.8	83.9	126.1	0.69		
19.1	52.0	80.6	115.8	173.5	1.41	110	77
<b>AND SECURITIES CONVERTIBLE INTO SHARES)</b>							
19.4	45.0	78.9	105.4	157.7	0.77	50	36

share is subtracted from the general rate of return per 90 percent share, by percentile. This remainder is divided by 1 plus the return rate per share (when the percent of return in the index is about 0.01).

SOURCE: Bank of Israel.

## 5. MUTUAL INVESTMENT FUNDS

In 1977 the real decrease in the issue of certificates of participation of mutual funds was moderated<sup>26</sup>, reaching 9 percent, as against 26 percent in the previous year. This development occurred despite the advantage possessed by mutual funds over the small investor in stock, the "hit" of 1977. The advantage of the funds derives from the knowledge they possess, as well as from the low commissions they pay. This advantage was indeed reflected in the increase of issues by the funds, in which the stock component was high; however, the decrease in issues by funds investing in bonds was sharper, since many redeemers of certificates were using their money for direct investment in stocks.

The rate of overall real return to holders of certificates reached its peak in November (12.5 percent), decreased in December (by 1.8 percent), and provided a 10 percent return throughout the year (as against -1 percent in 1976). A gross examination shows that this return is higher than the return that would have been yielded by the portfolio held by the funds at the beginning of the year, had they refrained from trading during 1977, or had its composition been adjusted to the actual distribution of the assets of the funds in the middle of the year<sup>27</sup>. Holders of certificates, mostly small investors, also enjoyed a greater diversification of their investment than that rendered possible by direct investment. The real average monthly return of the funds, at the rate of 0.9 percent, had a relatively low monthly mean deviation, at the rate of 3.8 (compare data given in Table XX4).

An examination of the rate of return among the various groups of funds (Table XX-13) reveals a correlation between returns and the composition of investments of the funds: funds with a high stock component (lines 5 and 6 in Table XX-13) show the highest return, while those specializing in investments in Israeli currency bonds have the lowest return.

The distribution of the funds' assets reflects (approximately) the preferences of investors in these funds. This division differs from the division of total securities registered for trade on the Stock Exchange, while the trends of issue by the funds according to their

---

<sup>26</sup> We wish to remark that the definition of net issue of certificates in this chapter, the issue of certificates of participation after deduction of the redemption of certificates on a cash basis, is not identical with the definition used in Chapter XIX, whose point of departure is saving through mutual funds.

<sup>27</sup> The examination is carried out by crediting the overall rate of return in the discussed group of assets (such as linked bonds, or the total amount of stocks) to each group of assets within the funds separately.

TABLE XX-12

**MUTUAL FUND ACTIVITY, 1974–1977**  
(percent)

Year	Net issue <sup>a</sup> (IL mil- lion)	Net change in issue	Net issue divide by funds' assets at end of previous year	Share of fund's assets in secu- rities portfolio registered for trade at end of year	Structure of fund's assets portfolio at end of year <sup>c</sup>		
					IL secu- rities	IL shares	Assets con- nected to foreign currency
1974	1,000	317	108 <sup>b</sup>	9	74.1	7.7	18.2
1975	1,869	87	80	15	72.5	8.2	19.6
1976	1,822	-3	35	18	68.5	7.5	22.7
1977	2,182	20	25	20	61.0	12.3	25.1

<sup>a</sup> Net issue is defined as issue of participation certificates at issue price, less redemption of participation certificates at redemption value.

<sup>b</sup> An approximation. This datum was calculated using the sum of fund assets at the end of 1973, according to a set of data which is not exactly the same as our data for the following year.

<sup>c</sup> Cash is not presented in this composition.

Source: Computations of the Research Department, Bank of Israel.

specialization are similar to developments on the securities market as a whole<sup>28</sup>. The major part of the issues of funds specializing in assets connected with foreign currency and shares, and with the index-linked bonds and stocks, was made in the months July to November, when momentum on the Stock Market was at its peak. In December, when stock prices declined, these funds showed a net redemption of certificates. The issue patterns of funds specializing in investment in assets linked to the index, and to the index

<sup>28</sup> The significant weight of mutual funds on the securities market as a whole, and particularly on the active market, is worth mentioning. It is obvious that developments on the market are not exogenous to mutual funds, and the net acquisition of certificates or redemption were among the cause of developments on the market.

TABLE

## MUTUAL FUNDS ASSETS AND THEIR COMPOSITION,

Classification of funds by their specialization <sup>a</sup>	Composition of assets portfolio <sup>b</sup> 31.6.1977			Assets at market value (end of year)	
	Index and option- type linked	Foreign currency (percent)	Shares in Israeli currency	1976	1977
1. All types of securities	53	25	20	1,207	3,984
2. Index linked, and option-type assets connected to foreign currency	57	42	0	2,506	3,244
3. Index linked and option- type	83	12	5	4,820	6,078
4. Assets connected to foreign currency	9	86	4	308	620
5. Index linked and option-type and shares	46	3	47	203	1,377
6. Shares, or assets connected to foreign currency and shares	8	30	62	11	424
7. Total funds	65	25	9	9,055	15,747

<sup>a</sup> The funds were classified into groups according to their actual specialization in the middle of 1977 (non-specialized funds are presented in the first line). Two groups of funds were assembled in line 6.

## NET ISSUES AND RATE OF RETURN OF MUTUAL FUNDS, 1977

Net issues <sup>c</sup>				Real rate of return weighted by market value of funds			
January- June	July- November	December	Entire 1977	January- June	July- November	December	1977
532	994	(-)18	1,508	12.8	8.9	-4.4	13.9
107	(-)355	(-)2	(-)250	5.5	-1.4	2.5	6.5
273	(-)827	133	(-)421	3.6	-2.1	3.2	4.6
109	(-)66	61	104	13.3	-0.2	1.7	14.9
291	775	(-)149	917	20.4	22.9	-13.2	28.4
90	283	(-)49	324	24.8	34.3	-23.1	28.8
1,402	804	(-)24	2,182	6.6	5.5	-1.8	10.4

<sup>b</sup> Does not amount to 100 percent, because cash is not presented here and due to differences in rounding figures.

<sup>c</sup> Net issues – new units of funds, less redemptions, on the basis of cash.

SOURCE: Bank of Israel.

and foreign currency, was contrary to this: most of the issues of funds investing in assets connected with foreign currency were made in the months of January to May, when returns on assets connected with foreign currency increased, and in November and December, too, an increase in their issue was recorded, following net redemptions in June-November.

In the course of 1977, the component of stocks and assets connected with foreign currency in the funds' total assets increased, and the bond component in Israeli currency decreased (see Table XX-12). At the same time, the change in the composition of the investments of mutual funds was more moderate than the change that took place in 1977 in the structure of the securities portfolio registered for trade on the Stock Exchange. During the year, the weight of funds specializing in investment in bonds in Israeli currency decreased, and the weight of funds with a high stock component in their investments increased.