

## Chapter 3

# The Financial Account<sup>1</sup>

### 1. NONRESIDENT INVESTMENT

#### a. Main developments

In 2001, the centrality of high-tech in nonresident investment was evidenced in full intensity; a decrease in the prices of high-tech shares and the global slowdown in these industries were the main causes of the \$8 billion decrease in the nonresident investment balance, to \$109 billion (Table 3.1.1). The decline in prices of high-tech products and the global slowdown in these industries were accompanied by regional security that, however, seem to have had a relatively slight effect on Israeli high-tech and, perforce, on nonresident investment.

Investment flows were \$4.5 billion in 2001, substantially lower than the levels in 1997, 1999, and 2000 and similar to the 1998 level, which was also a crisis year in global financial markets. Prices had a \$12.3 billion negative effect in the year reviewed, as against a positive effect of \$1.8 billion a year earlier.

The \$9.4 billion decline in the high-tech investment balance surpassed the decrease in total nonresident investment. The share prices of Israeli high-tech firms traded abroad fell by \$12.2 billion and these industries' investment inflow plunged to only \$2.8 billion as against \$7.9 billion and \$4.2 billion in 2000 and 1999, respectively (Figure 3.1.1).

The balance of nonresident investments in traditional industries in the private sector and the public sector, in contrast, climbed by \$1.4 billion. Investment flows in these industries also decreased but more gently, from \$3.3 billion in 2000 to \$1.7 billion in 2001. The share of the nonresident investment balance in high-tech in total nonresident investment decreased for the first time since 1997; after climbing steadily from 22 percent in 1997 to 71 percent in 2000, it slipped to 61 percent in 2001.

The decrease in the prices of high-tech shares and the global slowdown in these industries were the main causes of the \$8 billion decline in the nonresident investment balance.

<sup>1</sup> The analysis in all three parts of Chapter 3 is based on data from the Controller of Foreign Exchange that allow us to slice the figures in various ways for in-depth and detailed analysis. The figures serve as a basis for the balance-of-payments data that the Central Bureau of Statistics releases, but they are not identical to them. The differences between the two datasets in the past two years have narrowed greatly and stem mainly from differences in the timing of updates. The 2001 figures are different in respect to resident external investments: The Central Bureau of Statistics figures include the U.S. civilian grant that the Government of Israel received in early 2002 (\$0.6 billion) in the current account and the financial account, whereas this chapter does not include that figure.

**Table 3.1.1**  
**Nonresident Investment, 1997–2001**

						(\$ billion)	
	1997	1998	1999	2000	2001		
<b>Total investment flows</b>	<b>7.9</b>	<b>4.4</b>	<b>9.0</b>	<b>11.2</b>	<b>4.5</b>		
<b>of which High-tech</b>	<b>1.7</b>	<b>1.4</b>	<b>4.2</b>	<b>7.9</b>	<b>2.8</b>		
Direct investments	1.8	1.8	2.8	4.4	3.0		
Portfolio investments	3.9	2.5	2.7	5.0	0.1		
Other investments <sup>a</sup>	2.2	0.1	3.5	1.8	1.4		
						<b>Change in 2001</b>	
						Total <sup>b</sup> of which	
						Effect of	
						prices	
<b>Balance of investment</b>							
<b>(end of period)</b>	<b>74.6</b>	<b>77.7</b>	<b>104.1</b>	<b>117.0</b>	<b>109.0</b>	<b>-8.0</b>	<b>-12.3</b>
Direct investments	9.2	10.6	18.5	21.5	23.1	1.6	-1.1
Portfolio investments	25.9	27.0	43.0	51.5	40.4	-11.1	-11.2
Other investments	39.5	40.1	42.6	44.0	45.5	1.5	0

<sup>a</sup> Other investments include deposits with the Israeli banking system and loans to residents.

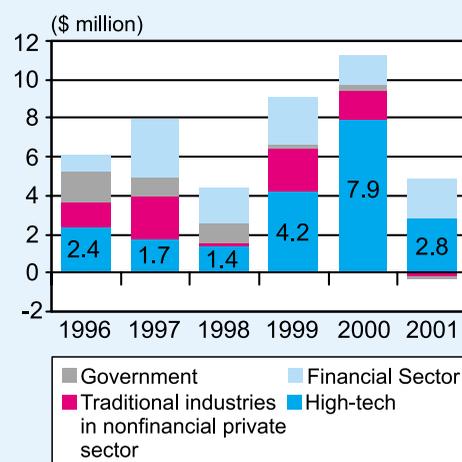
<sup>b</sup> The total change in the balance of investment is made up of investment flows shown in the upper part of the table, effective prices, exchange-rate differentials, and other adjustments not shown here.

SOURCE: Reports from banks, companies, and the government, processed by Controller of Foreign Exchange.

These trends began in the fourth quarter of 2000, coinciding with the eruption of the global high-tech crisis. Since then, prices of tech shares in global capital markets have been falling most of the time. From the end of the third quarter of 2000 to the end of the third quarter of 2001, the balance of investments declined by \$26 billion (Figure 3.1.2) and investment flows came to only \$1.4 billion on quarterly average. In the four quarters preceding the slump, high-tech experienced a ‘bull market,’ its balance of investments rising by \$41 billion and investment flows coming to \$3.3 billion on quarterly average (Figure 3.1.3). In the fourth quarter of the year reviewed, high-tech share prices rose steeply and the balance of investments increased by \$7.4 billion—but investment flows continued to contract at an accelerating pace and declined to only \$0.2 billion.

Nearly all of the decrease in nonresident investments occurred in equity investment, and the segments influenced by share prices and levels of activity in high-tech declined conspicuously (Figure 3.1.4).

**Figure 3.1.1**  
**Nonresident Investment Flows by Level of Technology and Sectors of the Economy, 1996–2001**

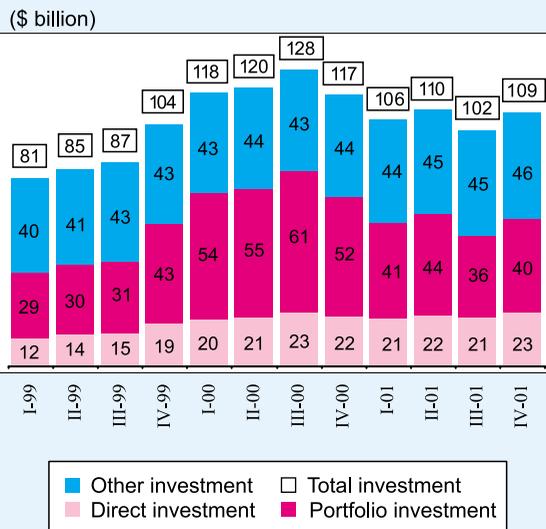


SOURCE: Reports from companies, banks, and government, processed by Controller of Foreign Exchange.

Overseas issues of high-tech companies plummeted from \$3.7 billion in 2000 to only \$0.5 billion in 2001; reinvested nonresident earnings of nontraded high-tech firms decreased steeply from \$1.5 billion in 2000 to only \$0.6 billion in 2001; and direct investments in nontraded technology companies ended 2001 at only \$1.6 billion as against \$2.1 billion a year earlier.

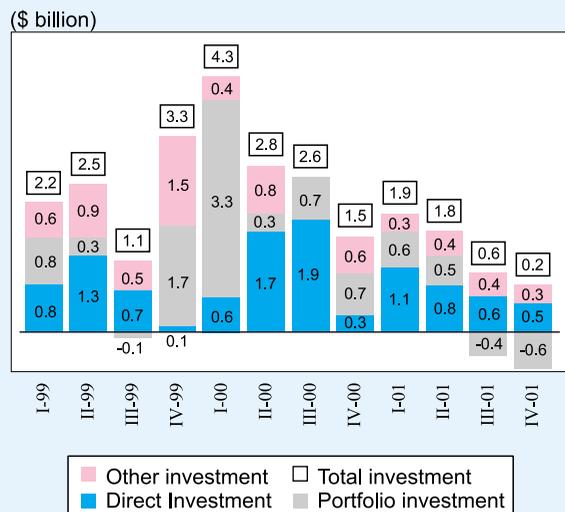
Deposits of non-banking nonresidents with domestic banks began to decline in 2000 and did so with growing momentum in 2001, possibly reflecting the effect of the regional security unrest. The balance rose by a sluggish \$0.2 billion this year as against increases of \$1.7 billion and \$2.4 billion in 2000 and 1999,

**Figure 3.1.2**  
**Balance of Nonresident Investment, 1999-2001**



SOURCE: Reports from companies, banks and government, processed by Controller of Foreign Exchange.

**Figure 3.1.3**  
**Nonresident Investment Flows, 1999-2001**



SOURCE: Reports from companies, banks and government, processed by Controller of Foreign Exchange.

respectively. In the last three quarters of the year, there were actually net withdrawals at an average of \$80 million, as against net deposits of \$460 million on average in the previous four quarters.

In 2001, in contrast to previous years, non-residents realized \$0.4 billion in tradable investments as against net investment of \$4.5 billion in 2000 (Figure 3.1.5).

According to various publications (Box 1.1), Israel's share<sup>2</sup> in private capital flows to emerging market econ-

Security events evidently prompted nonresidents to withdraw funds that they had deposited with the banking system.

<sup>2</sup> Institute of International Finance, *Capital Flows to Emerging Market Economies*, September 2001.

Israel's foreign investment situation worsened relative to the emerging markets.

omies<sup>3</sup> declined from 4 percent in 2000 and 1999 to 1 percent in 2001 (Figure 3.1.6). In the MSCI index—the accepted share index for emerging markets—Israel's share decreased from 6 percent in September 2000 to 4.5 percent at the end of the year reviewed. This reflects the large fraction of high-tech in Israel's nonresident investments as against other countries.<sup>4</sup>

### b. Direct investment

Direct investment flows ebbed relative to 2000 but remained higher than in previous years.

The balance of direct nonresident investment in Israel increased by \$1.6 billion. This balance, composed of investments in nontraded companies and real estate, loans from principals, and principals' holdings in companies traded in Israel and abroad, stood at \$23.1 billion at the end of 2001 (Table 3.1.2)—\$16.4 billion nontradable and \$6.7 billion tradable. Investment flows were \$3 billion, sharply down from the \$4.4 billion flow in 2000—an exceptional year—but higher than the level in earlier years. Almost all of the decrease in 2001 occurred in high-tech, in which direct foreign investment slipped from \$3.6 billion in 2000 to \$2.5 billion in 2001 (Figure 3.1.7). Tradable investment flows showed \$0.5 billion in realizations, as in 2000. In contrast, investment

**Table 3.1.2**  
**Direct Nonresident Investment, 1997–2001**

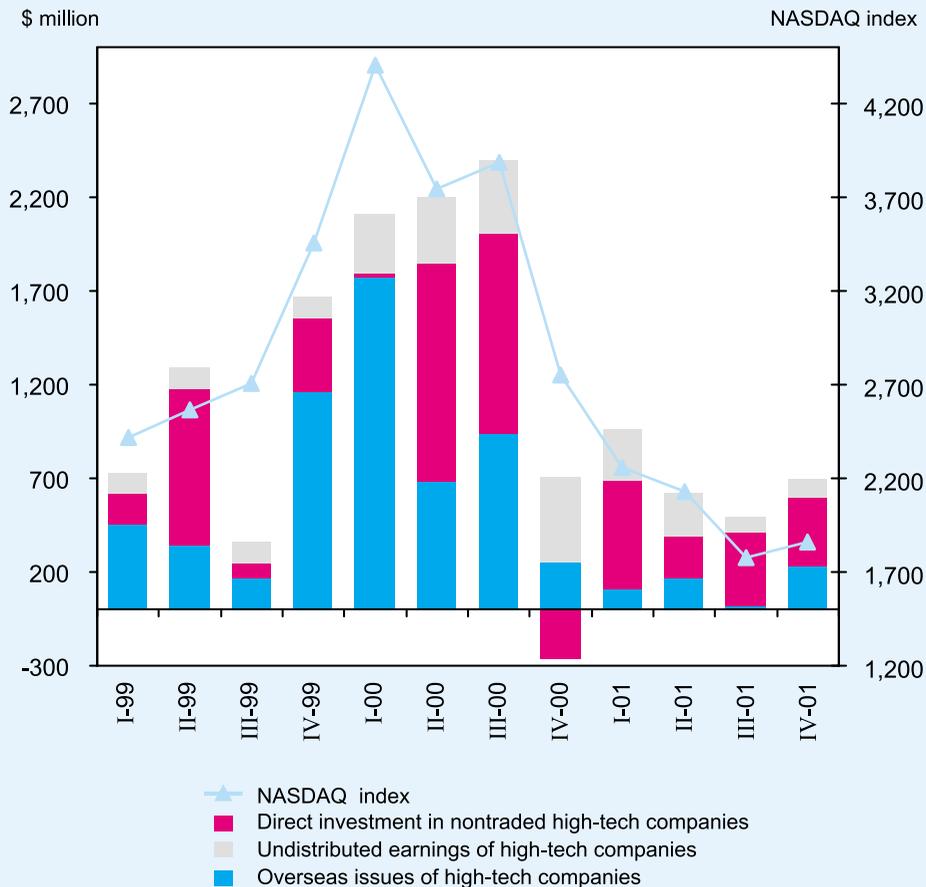
	1997	1998	1999	2000	2001	(\$ billion)	
<b>Total investment flows</b>	<b>1.8</b>	<b>1.8</b>	<b>2.8</b>	<b>4.4</b>	<b>3.0</b>		
<i>of which High-tech</i>	<b>0.5</b>	<b>1.2</b>	<b>2.7</b>	<b>3.6</b>	<b>2.5</b>		
1. Traded companies	1.4	0.7	0.3	−0.5	−0.5		
2. Nontraded companies	0.3	0.7	2.3	4.8	3.5		
<i>of which Full acquisition of companies</i>	0.6	0.8	1.8	2.5	1.6		
Start-up companies	0.1	0.2	0.4	0.5	0.3		
Undistributed earnings	0.1	0.0	0.5	1.5	0.6		
3. Real estate and equity-holders' loans	0.1	0.4	0.2	0.1	0.0		
						<b>Change in 2001</b>	
						Total <sup>a</sup> of which	
						Effect of prices	
<b>Balance of investment (end of period)</b>	<b>9.2</b>	<b>10.6</b>	<b>18.5</b>	<b>21.5</b>	<b>23.1</b>	<b>1.6</b>	<b>−1.0</b>
Traded companies	4.4	4.6	10.2	8.5	6.7	−1.8	−1.0
Nontraded companies	4.2	5.1	7.4	12.1	15.6	3.5	0.0
Equity-holders' loans	0.6	0.9	0.9	0.9	0.8	−0.1	0.0

<sup>a</sup> The total change in the balance of investments is made up of investment flows, shown in the upper part of the table; the effect of prices; exchange-rate differentials, and other adjustments that are not presented here.  
SOURCE: Reports from banks, companies, and the government, processed by Controller of Foreign Exchange.

<sup>3</sup> The twenty-nine countries that are defined as emerging markets. This publication does not define Israel as an emerging market.

<sup>4</sup> The number of companies listed for trading on the Nasdaq exchange may serve as an indication of this: eighty-five Israeli companies as against twenty-five from the twenty-nine emerging markets.

**Figure 3.1.4**  
**Nonresident Investment Flows in Israeli Technology Companies and**  
**the NASDAQ Index, 1999-2001**



SOURCE: Reports from companies and banks, processed by Controller of Foreign Exchange.

in nontraded companies—the main component of this form of investment in recent years—continued to rise, as it has since 1997, but at a much less vigorous pace—\$3.5 billion as against \$4.8 billion in 2000, an unusual year in this respect.

The decline in direct investment flows relative to 2000 is traceable to three important processes that began in the last quarter of 2000 due to the global high-tech slowdown:

1. A steep decrease in acquisitions of Israeli high-tech companies by multinational firms, a procedure that allows the acquiring company to integrate the technology or the product line of the acquired company into its activities;
2. An abrupt downturn in the earnings of nontraded high-tech companies and, as a result, in reinvested earnings;
3. A gentle decrease in start-up investments, despite the sharp decline in capital raising by venture-capital funds, which provide such companies with their main source of funding.

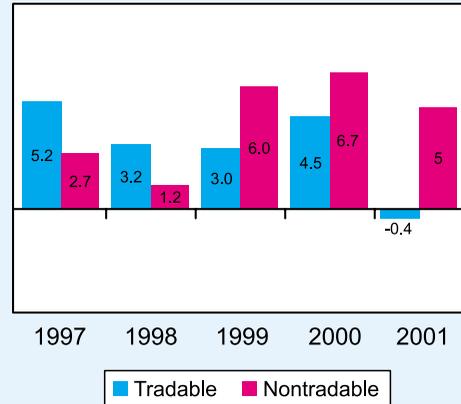
Almost all the decline in direct investment took place in high-tech industries.

Acquisitions of Israeli high-tech firms decreased.

In respect to the global downturn in the acquisition of high-tech companies, only four Israeli companies were acquired in 2001, for total consideration of \$1.6 billion; what is more, these transactions had been largely concluded in 2000. In 2000, in contrast, nine companies were acquired for \$2.5 billion. Additionally, the companies acquired this year were 'mature,' i.e., they had demonstrable economic track records. In 2000, many of the companies acquired had not engaged in economic activity and, indeed, several of them were shut down this year.

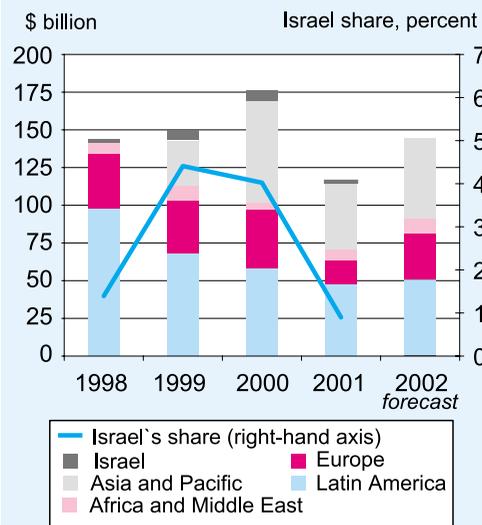
The consideration for the sellers—residents and nonresidents—resembled that in previous years, all of which in the purchasing companies' shares, for which residents received \$0.4 billion in tradable foreign shares. The sizable contraction in planned acquisitions of Israeli companies, including several cancellations of such transactions, was prompted mainly by the steep decrease in technology share prices.

**Figure 3.1.5**  
Nonresident Investment Flows, by Tradability, 1997-2001



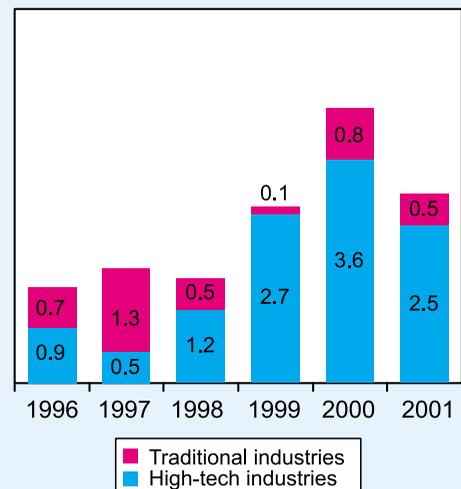
SOURCE: Reports from companies and banks to Controller of Foreign Exchange.

**Figure 3.1.6**  
Private Capital Movements to Emerging Markets, by Region, 1998-2002



SOURCE: Institute of International Finance, Capital Flows to Emerging Market Economics, September 2001.

**Figure 3.1.7**  
Nonresident Direct Investment Flows, by Technological Level, 1996-2001



SOURCE: reports from companies and banks, processed by Controller of Foreign Exchange.

The global high-tech slowdown also reduced the revenues of high-tech companies that market their products in foreign markets only. These companies' earnings declined precipitously in 2001 and nonresidents' share in reinvested earnings was only \$0.6 million this year as against \$1.5 billion in 2000. Some types of companies, however—technologically innovative 'niche' enterprises—were less severely affected than firms in other areas of high-tech.

Examination of total financing sources shows that nonresident financing of start-up ventures decreased only slightly. Although investments in the shares of start-ups did decline from \$470 million in 2000 to \$280 million this year, nonresidents financed start-up companies' activities in other ways, e.g., by spending \$440 million on services and payroll as against \$350 million a year ago (Box 3.1.1).

The main slowdown in investments in start-ups occurred among fledgling firms and, unless this industry mounts a recovery, will be reflected later on in the number of companies that reach the exit phase. Most of the decrease in investment was observed in telecom; software investment lost only a little ground and investment in biotechnology actually increased. The downturn in start-up investments was not unique to Israel. In the U.S., for example, it was even more severe—from \$90 billion in 2000 to only \$30 billion this year.

High-tech companies' earnings plummeted.

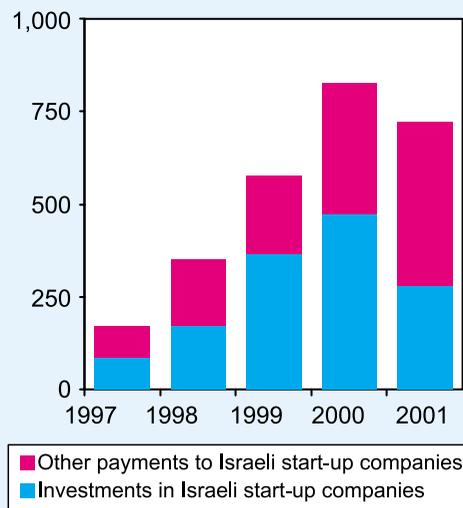
Investments in start-up companies decreased mildly.

### Box 3.1.1 Start-Up Companies and How They Are Financed

Israel's high-tech activity has increased massively in recent years, and much of the growth is powered by start-up companies. In the estimation of the Central Bureau of Statistics, start-ups accounted for 2 percent of GDP in 2000. These companies have several specific characteristics: they operate in high-tech, produce mainly knowledge, and still do not have substantial revenues. Furthermore, much of their share equity is held by venture-capital funds.

At the end of 2001, Israel had an estimated 2,000–2,500 start-up companies that were financed by about 130 venture-capital funds. About eighty of these funds are defined as Israeli, i.e., their management companies are registered in Israel; the rest are foreign. Most of the money invested in these funds, including Israeli funds, comes from nonresidents.

**Figure 3.1.8**  
Nonresident Investments in and Other Payment to Start-Up Companies, 1997-2001



SOURCE: Reports from companies and banks, processed by Controller of Foreign Exchange.

Nonresidents transferred \$720 million to Israeli start-up companies in 2001 as against \$820 million a year earlier. Only some of this money is reflected in the financial account of the balance of payments. In 2001, only \$280 million in nonresident transfers to start-up companies was invested in share equity; the rest of the sum—\$440 million—was used for the purchase of services, payment of wages, and other purposes (Figure 3.1.8).

Since most nonresident investment in 2001 was directed to continuing investments, the decline in nonresident transfers to start-up companies was much gentler than the precipitous decrease in total nonresident investments in high-tech firms. Thus, most of the slowdown occurred in investments in companies that are in their development phases and have relatively small investment needs. The slump will be reflected in the future in the number of companies that reach the exit phase, at which they ‘go public’ or are sold.

Apart from Israeli start-up companies, some additional ventures of this type have an Israel connection because, although registered abroad, they keep their development centers and most of their staff in Israel. The tendency to register abroad gathered momentum in 2000 because foreign registration has tax and accounting advantages.

According to estimates and surveys by Israeli research agencies, Israeli venture-capital funds, which have held a 35–45 percent share in start-up investments in recent years, raised \$1.4 billion in 2001 as against \$2.4 billion and \$1.6 billion in 2000 and 1999, respectively. According to these sources, Israeli venture-capital funds raised \$9.8 billion in 1992–2001, of which \$5.7 billion has been used thus far. Of the accrued capital stock, \$3 billion is intended for continuing investments and the remaining \$1.1 billion for new investments.

### c. Portfolio investment

Nonresident portfolio investment is composed of nonresidents’ financial holdings in various types of shares and bonds (straight and convertible) of Israeli companies that are traded in Tel Aviv and abroad, and in bonds issued by the Government of Israel. The balance of the portfolio declined this year by \$11 billion, to \$40 billion (Table 3.1.3). Almost all the decline occurred in shares of Israeli high-tech companies that are listed abroad. Investment flows in these companies plunged from \$5 billion in 2000 to only \$0.1 billion this year, and nearly all of the decrease occurred in high-tech, in which investment flows contracted from \$4.4 billion in 2000 to only \$0.3 billion in 2001 due to the cessation of issues in global capital markets (Figure 3.1.9).

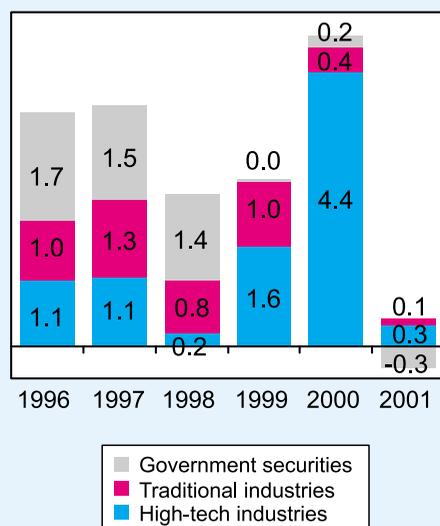
#### *(1) Nonresident investments in shares of Israeli companies*

The balance of nonresident shareholdings in Israeli companies, traded abroad and in Tel Aviv, decreased by \$11.5 billion in 2001 (Figure 3.1.10)—almost entirely due to the decrease in share prices abroad—and came to \$20.1 billion at year’s end.

Investment flows amounted to \$0.5 billion in net realization as against \$3.3 billion

Portfolio investment flows decreased sharply, nearly all in high-tech, due to the cessation of issues abroad.

**Figure 3.1.9**  
**Nonresident Portfolio Investment Flows, 1996-2001**



SOURCE: Reports from companies and banks, processed by Controller of Foreign Exchange.

in net investment in 2000. Public share issues abroad—the main type of tradable equity issue in recent years—raised only \$0.3 billion this year, nearly all of which in the last quarter, when technology share prices in the U.S. mounted a recovery, as against \$2.8 billion a year earlier (Figure 3.1.11).<sup>5</sup>

The issue proceeds shown here do not include Israeli companies' receipts from the exercise of options that they gave to foreign employees. These, however, also decreased steeply, from \$470 million in 2000 to only \$60 million in 2001 (Box 3.1.2).

Israeli firms raised only \$0.3 billion in public share issues abroad in 2001, as against \$2.8 billion in 2000.

### Box 3.1.2

**Table 3.1.3**  
**Nonresident Portfolio Investment, 1997-2001**

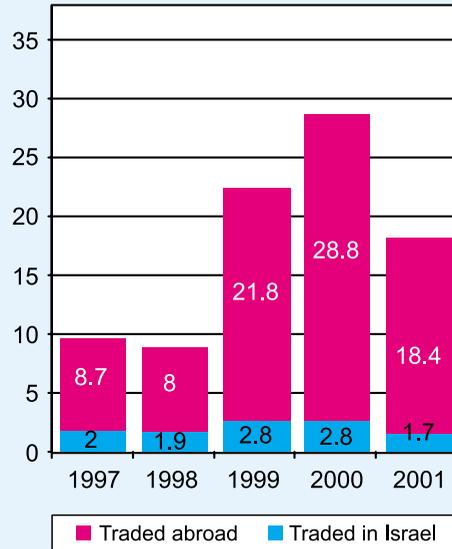
	(\$ billion)						
	1997	1998	1999	2000	2001		
<b>Total investment flows</b>	<b>3.9</b>	<b>2.5</b>	<b>2.7</b>	<b>5.0</b>	<b>0.1</b>		
<b>of which High-tech</b>	<b>1.1</b>	<b>0.2</b>	<b>1.6</b>	<b>4.4</b>	<b>0.3</b>		
Shares and bonds traded on TASE	0.5	0.2	-0.1	-0.3	-0.7		
Shares traded abroad	1	0.2	1.6	3.6	0.2		
Corporate bonds traded abroad	1	0.6	1.2	1.5	0.9		
Government bonds traded abroad	1.4	1.5	0	0.2	-0.3		
						<b>Change in 2001</b>	
						Total <sup>a</sup> of which	
						Effect of prices	
<b>Balance of investment (end of period)</b>	<b>25.9</b>	<b>27.0</b>	<b>43.0</b>	<b>51.5</b>	<b>40.4</b>	<b>-11.1</b>	<b>-11.2</b>
<b>of which High-tech</b>	<b>8.6</b>	<b>8.2</b>	<b>21.9</b>	<b>29.9</b>	<b>19.7</b>	<b>-10.2</b>	<b>-11.0</b>
Shares and bonds traded on TASE	2.1	1.9	2.8	2.8	1.7	-1.1	-0.2
Shares traded abroad	8.7	8	21.8	28.8	18.4	-10.4	-11.0
Corporate bonds traded abroad	1.6	2.2	3.4	4.8	5.6	0.8	0.0
Government bonds traded abroad	13.5	14.9	15	15.1	14.7	-0.4	0.0

<sup>a</sup> The total change in the balance of investment is made up of investment flows shown in the upper part of the table, effective prices, exchange-rate differentials, and other adjustments not shown here.

SOURCE: Reports from banks, companies, and the government, processed by Controller of Foreign Exchange.

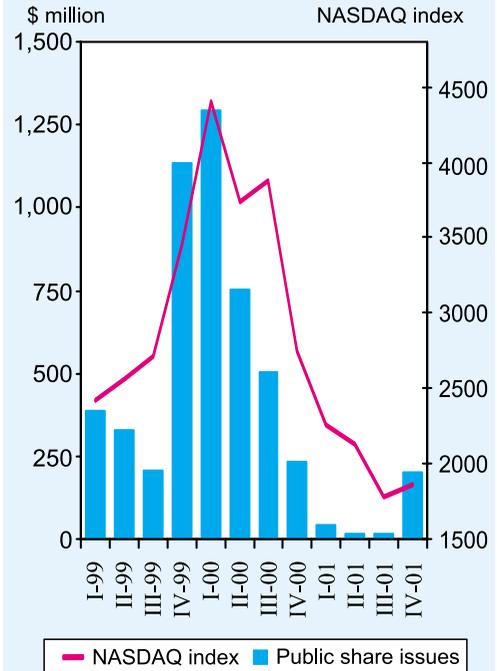
<sup>5</sup> The results of equity issues shown here pertain to Israeli firms only, i.e., those registered in Israel, although additional companies have their center of activity in Israel but, due to tax considerations or other rationales pertaining to the capital market, prefer to register themselves abroad and are defined as foreign firms. In 2000, eleven Israeli firms raised \$2.3 billion by issuing shares; no companies did so in 2001.

**Figure 3.1.10**  
**Balance of Nonresident Portfolio**  
**Investments in Israeli Shares,**  
**by Location of Trading, 1997-2001**



SOURCE: Reports from companies and banks, processed by Controller of Foreign Exchange.

**Figure 3.1.11**  
**Public Share Issues Abroad by Israeli**  
**Companies and NASDAQ Share Index,**  
**1999-2001**



SOURCE: Reports from companies and NASDAQ Stock Exchange, processed by Controller of Foreign Exchange.

### Employee Options in the Balance of Payments

The allocation of share options to employees affects the factor inputs account and the financial account; it is also a source of sizable future capital inflows. All the figures below, insofar as they pertain to the financial account, are included in the balance-of-payments chapter, although this is not their correct classification. In contrast, only some of the figures pertaining to the factor inputs account are included in this chapter.

Share options are an accepted way of rewarding employees, especially in high-tech companies. Their use in Israel has expanded considerably in recent years, as high-tech development has accelerated and the prices of high-tech shares have risen. The spurt of overseas issues by Israeli technology companies in 1999–2000 also helped to make this device more prevalent, because the allocation of employee options is usually part of the organization of such companies. Almost all Israeli and Israel-related companies that are traded abroad distribute share options to their employees, both Israeli and foreign. The average lifespan of the options is about 2.5 years.

The tax authorities, aware that this practice is an important way of strengthening employee-company relations, tax employees' gains from this source at 42.5 percent in most cases. Although this falls short of the 50 percent rate that applies to the employees' labor income, it is still much higher than the accepted tax rate in the U.S. on this type of income. This gives firms a strong incentive to register abroad even if most of their activity is in Israel.

When Israeli companies' foreign employees profit by exercising their options in these companies, and when foreign firms' Israeli employees profit by exercising options in those companies, the proceeds should be regarded as wage payments and, as such, should be included in the domestic factor inputs account.

The shares that Israeli workers receive when they exercise their options in Israeli companies are sold to nonresidents. The proceeds of these sales, and the payment that foreign employees deliver to Israeli companies at point of exercise, are part of capital inflow in the financial account

Israeli companies' reports to the Controller of Foreign Exchange show that the decrease in prices of high-tech shares traded abroad in 2001 caused the capital inflow in the financial account, as derived from the exercise of options, to decline steeply from \$1 billion in 2000 to only \$0.3 billion this year (see table below). Most of the decrease occurred in foreign employees' payments to Israeli companies, which fell from \$470 million in 2000 to only \$60 million in 2001. In contrast, residents' consideration for shares that they sold as part of the exercise of options declined rather gently, from \$0.5 billion to \$0.3 billion, because most companies carried out a large downward repricing of the exercise prices of outstanding options—an action that greatly mitigated the adverse effect on employees' gains.

The decrease in prices of Israeli shares traded abroad also induced an abrupt downturn in the value of options (the spread between share price and exercise price) held by foreign and Israeli employees, from \$3.6 billion at the end of 2000 to \$1.5 billion a year later.

The capital inflow in the financial account, as derived from the exercise of options, declined steeply from \$1 billion in 2000 to only \$0.3 billion this year.

### Effect of Employee Options on the Balance of Payments, 2000–2001

(\$ millions)

	2000	2001
<b>1. Net factor payments</b>	<b>na</b>	<b>–224</b>
1.1 Wage receipts of Israeli workers from foreign companies	na	96
1.2 Wage payments to foreign workers by Israeli companies	366	320
<b>2. Net financial account</b>	<b>964</b>	<b>344</b>
2.1 Acquisition of Israeli shares from Israeli workers by nonresidents	495	285
2.2 Payments by foreign workers to Israeli firms for exercise of warrants	469	59

SOURCE: Companies' reports and processing by Controller of Foreign Exchange.

Finally, analysis of the data shows that if the prices of Israeli shares traded abroad remain at their current level for the next five years, the capital inflow originating in options will be \$1.9 billion and that if share prices rise by 1 percent on average, the value of the options and the capital inflow will increase by 2 percent.

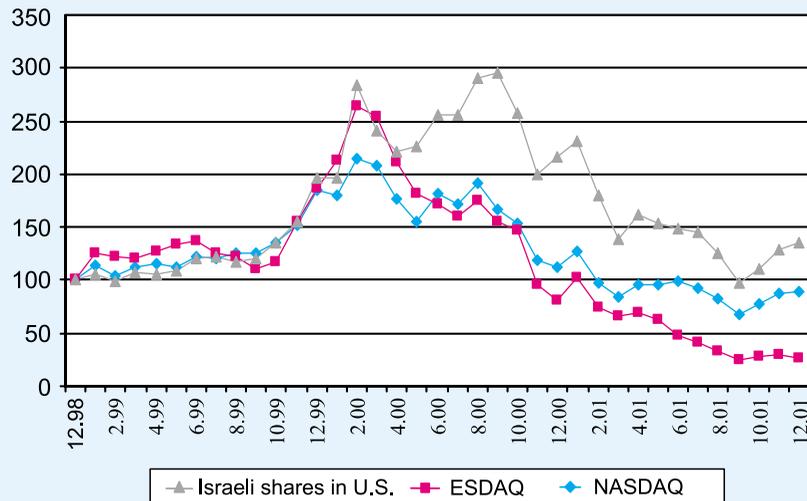
The cessation of high-tech issues was not unique to Israeli companies.

The steep decrease in issues was not unique to Israeli high-tech companies. During the year reviewed, only \$32 billion was raised on the Nasdaq Stock Exchange by 230 firms, as against \$134 billion by 700 firms in 2000. Issue proceeds declined both in the primary market (IPOs) and in later rounds. Most of the decrease occurred in the Internet, software, and telecom industries, in which many issuable Israeli firms operate. In infrastructure and commerce industries, which accounted for many of this year's issues in the U.S., no Israeli firms seemed fit to issue themselves in the American capital market. In the fourth quarter, as issuing activity in the U.S. recovered somewhat, Israeli issues climbed to \$200 million after only \$70 million in the first three quarters of the year.

In view of Israeli companies' vigorous issuing activity in the first three quarters of 2000, many additional Israeli firms planned issues for 2001. However, the slump that befell the American market caused them to postpone many issues and, in several instances, to cancel them altogether. Some \$2.2 billion in issues were canceled or postponed in the course of the year, in some cases after prospectuses had been filed.

**Figure 3.1.12**  
**Change in Prices of NASDAQ Shares, Israeli Shares in U.S., and**  
**ESDAQ Stock Exchange, 1999-2001**

Share prices (September 1998=100%)



SOURCE: Reports from companies and NASDAQ, and ESDAQ Stock Exchange, processed by Controller of Foreign Exchange.

Only two companies made IPOs in 2001, at \$93 million (including principals). One of them revalued itself downward by 60 percent for the purpose of the issue; the other operates in the medical instrumentation industry, which absorbed a gentler blow than the other industries.

Due to the globalization and integration of global capital markets, the weakness

in Israeli firms' issues was not unique to American stock exchanges. Israeli companies did not turn to European exchanges for their capital needs; no Israeli firm issued itself in Europe in 2001, as against twelve issues that raised \$850 million in 2000. In previous years, issues in Europe were feasible due to strong demand and more lenient listing terms than on the Nasdaq exchange, but the decline in European share indices, which was even more severe than that in the U.S. (Figure 3.1.12), deterred Israeli companies from issuing in these exchanges this year.

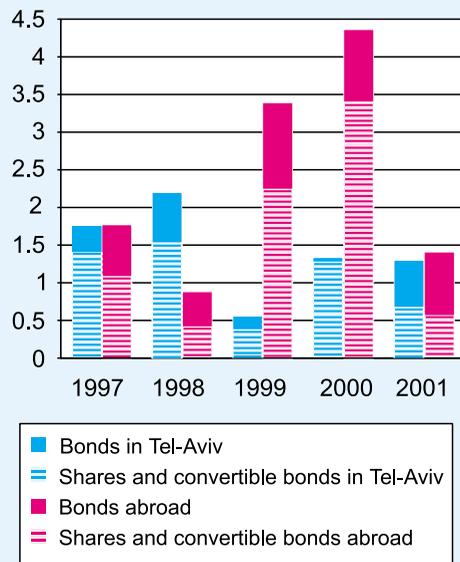
High-tech companies did not tap the Tel Aviv Stock Exchange as an alternative source of capital. Some \$0.7 billion was raised in shares and convertible bonds on the TASE this year (Figure 3.1.13), but none of the issuers was from the high-tech sector.

In the course of 2001, sixteen companies listed themselves for trading in Tel Aviv under the dual-listing method,

a procedure that allows Israeli companies that are listed on any of the three main stock exchanges in New York to list their shares on the TASE as well without having to meet additional regulatory requirements. They joined twenty-two companies that had already consummated this procedure. The dual-listed companies had \$28.5 billion in market capitalization at year's end—53 percent of the 'market cap' of shares on the TASE and 60 percent of the capitalization of traded Israeli companies listed abroad. By inaugurating dual listing, the TASE intended (among other things) to create a primary market for high-tech companies and to lure foreign investors who were committed to investing some of their assets in emerging markets. In 2001, however, high-tech companies did not issue themselves and foreign investors did not invest in them on the TASE—for reasons including the effects of the global slump on the TASE, like the other exchanges, and the absence of market depth.

Nonresidents hold the large majority of shares of Israeli companies traded abroad (Figure 3.1.14). The prices of these shares declined by 37 percent in 2001, mirroring the average rate of decrease in software and telecom industries on the Nasdaq exchange,

**Figure 3.1.13**  
Israeli Companies' Issues in  
Tel-Aviv and Abroad, 1997-2001



SOURCE: Companies' reports and Tel Aviv Stock Exchange, processed by Controller of Foreign Exchange.

Israeli high-tech companies did not turn to stock exchanges in Europe and Tel Aviv in 2001 for their capital needs.

Dual listing did not lead to greater foreign investment on the Tel Aviv Stock Exchange.

where a large majority of Israeli firms operate.

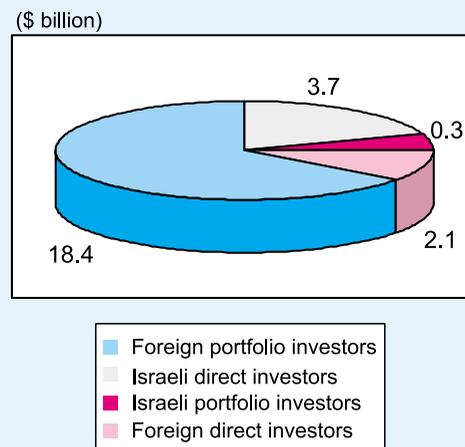
In shares of companies traded in Tel Aviv, foreign investors' realizations escalated from \$0.3 billion in 2000 to \$0.7 billion in 2001. This trend actually began in 1999, in view of the global tendency to divert investments from traditional to high-tech industries. In Israel, this tendency was manifested in the transfer of investments from companies in traditional industries, traded on the TASE, to Israeli high-tech firms, nearly all of which are traded abroad.

Israel was not the only place where portfolio investments declined in 2001. Portfolio investment of private foreign capital in emerging-market shares amounted to \$1 billion in net realization this year, as against \$16 billion and \$15 billion in net investment in 2000 and 1999, respectively. The increase in riskiness of global stock exchanges in 2001 seems to be the factor that prompted investors to curtail their portfolio investments in shares in favor of less risky assets. Additionally, the price decreases on foreign stock exchanges may have forced foreign institutional investors in Israel—mainly emerging-market investment funds, pension funds, and trade unions—to recompose their portfolios. These investors, which constitute a large majority of the foreign-investor community on the TASE, align their portfolios with the composition of international share indices. Thus, by all appearances, nonresidents were influenced by international developments and only slightly, if at all, by regional security events.

Nonresidents conduct most of their activity by means of a small number of brokers who focus their investments on several heavily traded shares. The relatively small trading volumes on the TASE are a deterrent to nonresidents, most of whom, as stated, are institutional investors. Indeed, the share of nonresidents in total trading volume on the TASE has been declining steadily (Figure 3.1.15).

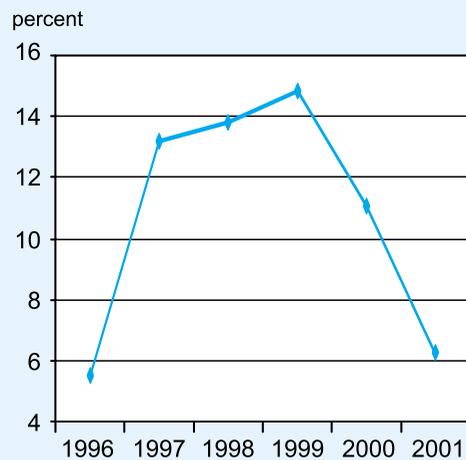
Global processes spurred a trend of realizations on the Tel Aviv Stock Exchange.

**Figure 3.1.14**  
**Holder of Israeli Companies' Shares Listed for Trading Abroad, Dec. 31, 2001**



SOURCE: Companies' reports processed by Controller of Foreign Exchange.

**Figure 3.1.15**  
**Nonresidents, Share in Trading Volumes on Tel Aviv Stock Exchange, 1996-2001**



SOURCE: Companies' reports and Tel Aviv Stock Exchange, processed by Controller of Foreign Exchange.

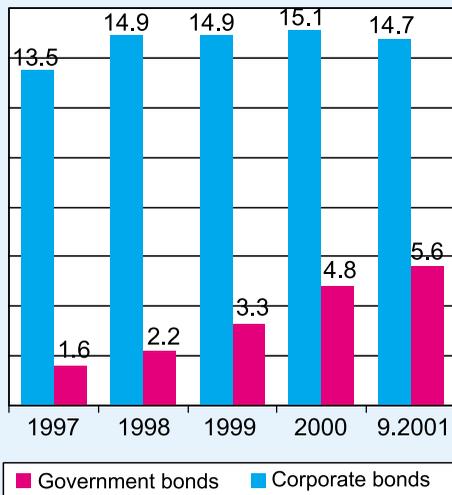
(2) *Nonresident investments in bonds*

*Corporate bonds:* Outstanding corporate bonds—including convertible bonds—issued by Israeli firms abroad and held by nonresidents have been rising steadily in recent years, from \$1.6 billion in 1997 to \$5.6 billion at the end of 2001 (Figure 3.1.16). The main factors behind the increase are the inability of large companies in traditional industries to obtain credit from the banking system, due to the individual-borrower limits, and the inability of technology companies to issue even small amounts of tradable debt in view of low price expectations. Israeli companies raised \$1.5 billion abroad in 2000, including \$0.9 billion in convertible bond issues by high-tech companies. In contrast, this year's issues came to only \$0.9 billion, all of which by infrastructure

High-tech companies made no bond issues in 2001, after issuing \$0.9 billion in 2000.

**Figure 3.1.16**  
**Balance of Nonresident Investment in Tradable Bonds, 1997-2001.**

(\$ billion)



SOURCE: Reports by companies and the government, processed by Controller of Foreign Exchange.

companies that issued straight bonds. The decline in high-tech share prices and the increase in the riskiness of these investments catapulted the yields of traded convertible bonds to high levels that made this method of raising capital less attractive.

Yields on 'straight' bonds were also volatile in the past year, in view of security developments in the Middle East and the United States. At year's end, however, the spread of Israel Electric Corporation bonds—which accounted for 80 percent of bonds issued this year—was only 2.1 percentage points over the issue interest rate of U.S. government bonds of similar term, even smaller than the 2.3–2.4 percentage-point spread that preceded the eruption of violence in the Middle East. A relatively new phenomenon in this regard is the acquisition of these bonds by residents. These purchases, which came to \$750 million this year, may explain the

narrowing of the spread during the period reviewed, i.e., there may be a difference between residents and nonresidents in their attitude toward the 'Israel risk.'

*Government bonds:* The balance of nonresident investments in tradable government bonds was \$14.7 billion at the end of 2001, down \$400 million from 2000.

Israel is rated A– by S&P. In July 2000, Moody's adjusted its rating upward to A2. Neither service changed its rating in the course of 2001 even though important domestic industries took a severe beating and despite the security unrest. In recent years, the Government of Israel has issued bonds on the Yankee market in the U.S., the euro bonds market in Europe, and the Samurai market in Japan, as well as 'global' bonds that are traded concurrently in all international markets. This diversification policy

was designed to create new issuing possibilities not only for the government but also for the private sector, in the period following the expiration of the U.S. Government loan guarantees. The Government created an infrastructure for the private sector by showing its presence in the global markets and by establishing a benchmark against which yields on Israeli corporate issues could be determined. In each of the years 1996–1998, the Government raised \$1.4 billion–\$1.7 billion in issues backed by the U.S. Government guarantees. Since 1999—after the guarantees were exercised—borrowing using this method amounted to about \$200 million–\$500 million per year. The cost of this method of issuing is affected, among other things, by security events in the Middle East and the U.S. For a long time, this cost was about 2 percentage points over the yield on U.S. Government bonds to a similar term. When security unrest in our region broke out in October 2000, the cost to the state climbed to 2.3 percentage points above the cost to the U.S. government for an issue to similar term. The spread narrowed steadily afterwards, but after the terror attack in New York it widened again to 1.9 percentage point. At year's end, the spread stood at 1.6 percentage point, lower than the level shortly before the regional security unrest erupted. By acquiring \$0.2 billion in Government bonds this year, residents exerted a downward effect on the spread. Due to the high cost of such issues for most of the year, the Government did most of its issues—\$225 million—by means of a syndicate of foreign banks.

The spread on Israel bonds traded abroad—corporate and government—narrowed.

Nonresidents also invest in tradable bonds issued in the domestic market and in Treasury bills, albeit in insignificant sums. The balance of such investments in recent years has been stable at \$100 million–\$200 million. Despite the NIS-forex interest spread, nonresidents did not make large investments of these types, evidently because the market in these instruments is not efficient enough. (See Part 2.)

#### d. Other investments

Finally, nonresidents make NIS and foreign-currency deposits with the Israeli banking system and provide financial and commercial credit to the public sector and the nonbanking private sector. The balance of these 'Other Investments' rose by \$1.5 billion during the year reviewed and came to \$45.5 billion at year's end (Table 3.1.4). An item-by-item examination of these components elicits the following picture:

##### *(1) Nonresident deposits with the Israeli banking system*

The balance of nonresident deposits in Israel climbed by \$1.4 billion in 2001 and came to \$23.5 billion. About 98 percent of the deposits are in foreign currency—and thereof, 80 percent are in U.S. dollars—and only 2 percent are in NIS. Some 85 percent of the forex deposit sum is deposited for terms not exceeding one year, and about 60 percent is deposited for no longer than three months. Practically speaking, however, the deposits are renewed when they come due and are kept for very long terms.

Security events evidently prompted nonresidents to withdraw funds that they had deposited with the banking system.

Nonresident deposits by nonbank depositors—90 percent of the deposit balance—increased by only \$0.2 billion during the period reviewed after increases of \$1.7 billion and \$2.4 billion in 2000 and 1999, respectively. Net deposits (deposits less withdrawals) began to slow in November 2000 and a net withdrawal trend has been evident since June 2001 (Figure 3.1.17). Net withdrawals also occurred in October 2000, in view of

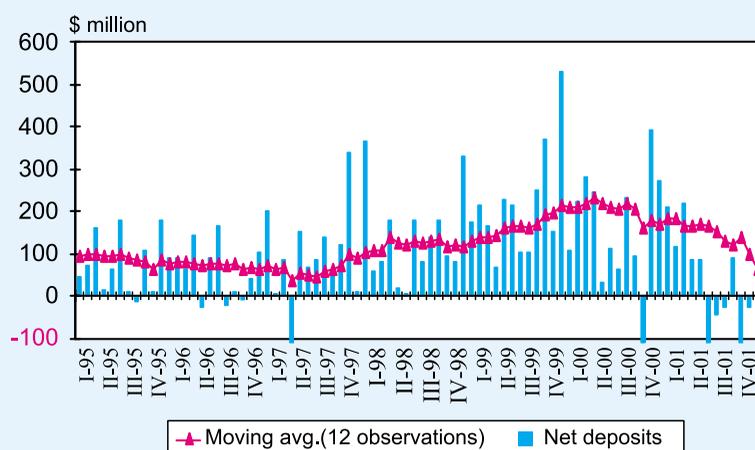
**Table 3.1.4**  
**Other Foreign Investment, 1997–2001**

	1997	1998	1999	2000	2001	
						(\$ billion)
<b>Total investment flows</b>	<b>2.2</b>	<b>0.1</b>	<b>3.5</b>	<b>1.8</b>	<b>1.4</b>	
Nonresidents' forex deposits	1.2	1.4	2.6	1.9	0.3	
Foreign banks' forex deposits	0.8	-0.1	-0.3	-0.4	1.2	
Deposits in NIS	0.1	0.2	0.1	0.1	0.4	
Credit to private sector	0.6	-1.1	0.9	-0.1	-0.8	
Credit to general government	-0.5	-0.3	0.2	0.3	0.3	
<b>Balance of investment</b>						<b>Change in 2001</b>
<b>(end of period)</b>	<b>39.5</b>	<b>40.1</b>	<b>42.6</b>	<b>44.0</b>	<b>45.5</b>	<b>1.5</b>
Nonresidents' forex deposits	15.3	16.7	19.1	20.8	21.0	0.2
Foreign banks' forex deposits	2.1	2.1	1.7	1.3	2.5	1.2
Deposits in NIS	0.1	0.3	0.4	0.5	0.9	0.4
Credit to private sector	9.3	8.4	8.9	8.7	8.2	-0.5
Credit to general government	12.7	12.6	12.5	12.7	12.9	0.2

SOURCE: Reports from banks, companies, and the government, processed by Controller of Foreign Exchange.

the security unrest that broke out at that time, after three and a half years of uninterrupted net depositing. Most withdrawals in the second half of the year were made by private depositors who had large deposit balances and long-time depositors who were related to Israel in some way. The withdrawals in October 2000, in contrast, were made primarily by business firms.

**Figure 3.1.17**  
**Net Nonresident Deposits (excl. Banks) with Domestic Banking System, 1995–2001**



SOURCE: Reports by banks processed by Controller of Foreign Exchange.

There is reason to believe that the change in depositors' behavior in the second half of 2001 was due to the persistence of the regional security unrest and the decline in dollar interest rates, which gave depositors an incentive to move to other financial assets—not necessarily Israeli ones.

(2) *External credit to residents*

There was \$8.2 billion in outstanding external credit to the nonbanking private sector at the end of 2001, as against \$8.7 billion at the end of 2000. Outstanding direct credit amounted to \$5 billion. Half of the direct credit came from foreign banks because external credit is less expensive than credit from the domestic banking system or because borrowing companies face the 'single borrower' restriction, which makes it impossible for them to receive further credit from Israeli banks. Almost all of the remainder came from foreign firms. Since 1999, outstanding credit from foreign banks has declined by about \$600 million and outstanding credit from foreign companies has increased by a similar sum.

External credit for residents was stable this year.

Direct credit from abroad is highly concentrated. In 2001, more than 50 percent of credit from foreign banks was taken by three companies and about two-thirds was received by five firms. Since these companies are dollar-oriented in their activity, their forex credit does not create a currency position from their standpoint. Nearly 80 percent of such credit is taken for terms of more than five years; the rest is taken for one to five years. About 48 percent of credit from foreign companies is taken for terms exceeding five years and 38 percent is for terms of one to five years.

The public sector had \$12.9 billion in nontradable forex credit at year's end as against \$12.7 billion and \$12.5 billion at the end of 2000 and 1999, respectively. This credit is made up of three components:

- (1) Israel Bonds, of which \$9.7 billion were outstanding at the end of 2001. The Government raised \$1.1 billion by selling Israel Bonds in 2001, as against \$0.9 billion in 2000, and paid out \$750 million in redemptions. In response to declining interest rates in the U.S., the Bonds organization stopped issuing bonds at the prime rate, which adjusts itself at a lag, and issued mainly five-year bonds that pay fixed interest at half a percentage point higher than the rate on similar U.S. Government bonds (mainly to compensate purchasers for the lack of liquidity) or at variable interest indexed to the LIBOR rate. There is a wide variety of Israel Bonds, tailored to different target segments of the market. Most investors in Israel Bonds have some form of relationship with Israel.
- (2) Credit from foreign governments and international institutions, of which \$2.8 billion was outstanding at the end of 2001. Some 75 percent of this sum is dollar-denominated; the rest is euro-denominated. All such credit was originally taken for terms surpassing five years.
- (3) Credit from foreign banks, of which \$0.4 billion (most denominated in dollars) was outstanding at year's end. About 40 percent of this credit is taken for terms exceeding five years; the rest is for terms of one to five years.