Chapter 6
The Balance of Payments

The deficit in the balance of payments current account increased in 1999 to $2.6 billion. This is still lower than the deficits in 1995 and 1996, but it is higher than in most developed countries. The rise in the deficit in 1999 reflected an increase in investment, mainly due to two exceptional transactions, and a decline in the saving rate, reflecting a reduction in public saving. In foreign-trade terms, the increase in the deficit this year reflects a slight slowdown in export growth and a perceptible increase in imports. The downturn in exports, most of which occurred in the first half of the year, traces to the protracted slump in world trade and was attenuated by the real currency depreciation, which made exports more profitable. Imports expanded mainly because of two exceptional transactions but also in response to more vigorous domestic demand and a continued decline in import prices.

Net capital inflow (the financial account less the change in foreign reserves) was $3.1 billion in 1999 as against $1.5 billion in 1998. The most salient phenomenon this year was the recovery of nonresident investment (direct and in shares for trading) to the 1997 level. Events in world capital markets affected nonresident investment more strongly in 1999 than in past years; the impact of events related to the domestic economy was less conspicuous. Nonresident investment took place along two main paths—$2.3 billion in direct investment and $2 billion in acquisitions of shares issued abroad by Israeli companies, foremost in software and communications. Net direct and financial investment by individuals surpassed the current-account deficit in 1999, allowing Israel's net external debt to decline.

1. MAIN DEVELOPMENTS

In 1999, the current-account deficit climbed to $2.6 billion.

The deficit in the balance-of-payments current account increased from $0.8 billion in 1998 to $2.6 billion in 1999. This reflects an increase in the investment rate, stemming mainly from two exceptional transactions, and a decrease in the saving rate, resulting from a decline in public saving. Expressed in foreign-trade terms, the expansion of the deficit this year reflects a slackening of export growth and a marked increase in imports.

The export growth rate slowed slightly this year, as exports of goods slackened and exports of services expanded.

Exports (net of capital, diamonds, and exports to the Palestinian Autonomy) increased by 9.7 percent in quantity terms, slower than in 1998, reflecting a slowdown in the growth rate of goods exports and faster growth in services exports. The export trend was uneven during the year: decreases in the first half followed by a marked recovery in the second half—in both high-tech and traditional industries. The trend in exports of goods in 1999 reflected the contrasting effects of two major factors: the ongoing world trade slump, which affected Israeli exports adversely, and the real depreciation of the NIS in 1999, which made exports more profitable and affected them favorably. An increase in world demand for products in Israel's leading high-tech industry—communications, control, and medical equipment—also contributed to the upturn in goods exports. The increase in services exports in 1999 reflected, in the main, the uptrend in exports of tourism services.

Imports accelerated significantly, with much of the increase due to two exceptional transactions.

Imports (net of capital, diamonds, fuel, and imports from the Palestinian Autonomy) increased vigorously by 12.7 percent in quantity terms. Much of the increase traces to two exceptional transactions—acquisition of aircraft and an investment by Intel in a domestic plant—but even net of these transactions the import growth rate accelerated to 8.4 percent this year, despite the low growth rate of business-sector gross product and the real currency depreciation during the year. The acceleration is attributable to the expansion of domestic demand, prompted by expectations of economic recovery and the continued decreases in import prices, along with concern about price increases in the future.

The most salient phenomenon this year is the recovery of nonresident investment (direct and in shares for trading) to the 1997 level.

Net capital inflow (the financial account less the change in foreign reserves) was $3.1 billion in 1999 as against $1.5 billion in 1998. The most conspicuous phenomenon this year was the recovery of nonresident investment (direct and in shares for trading) to the 1997 level. When the global financial crisis erupted in late 1997, the inflow of nonresident financial investment slowed severely and remained sluggish in 1998. Throughout the crisis period, it was feared that nonresidents would reduce their investment in Israel and might even create a large capital outflow. This concern vanished in 1999 as the impact of the world financial crisis on emerging markets ebbed, and nonresidents' investment—direct and in shares for trading—climbed from $2.4 billion in 1998 to $3.7 billion this year.

Nonresident investment took place on two main paths—direct investment and acquisitions of shares issued abroad by Israeli companies.

Nonresident investment took place along two main paths—$2.3 billion in continued direct investment and $2 billion in acquisitions of shares issued abroad by Israeli corporations, foremost in software and communications. On the Tel Aviv Stock Exchange (TASE), in contrast, nonresidents were conspicuous by their absence. One possible explanation is that Israeli companies' overseas issues, and the levels of nonresident investment in these equities, have become a substitute for nonresident investment on the TASE. The decline in the latter may also reflect a temporary increase in the risk of investment in Israel as perceived by nonresidents, much like the decline in financial investment in emerging markets generally. According to this hypothesis, nonresidents' attitude towards Israeli companies traded abroad, most of which are export-oriented high-tech firms, is different from their attitude towards Israeli firms traded in

Tel Aviv. In December 1999 and January and February 2000, nonresidents invested $350 million on the TASE, a sizable sum that may portend their return to that exchange.

Net direct investment and investment in shares for trading (nonresident investment less resident investment abroad), which totaled more than $3 billion, coupled with $1.7 billion in capital transfers, surpassed the current-account deficit and made it possible to finance and reduce the net external debt (in nominal values and as a percent of GDP).

2. THE CURRENT ACCOUNT

Macroeconomic analysis of the current account

Although the current deficit increased in 1999, it remained smaller than in 1995 and 1996, but higher than in most developed countries.

The deficit in balance-of-payments current account was $2.6 billion in 1999 as against $0.8 billion in 1998.[1] In terms of percent of GDP, the deficit climbed to 2.6 percent, still much lower than the peak levels observed in 1995 and 1996. An international comparison shows that Israel has a higher deficit/GDP ratio than most developed countries, although not substantially so (Table 6.1).

A technical analysis of the current account shows that the increase in 1999 traces to an increase in the import surplus (Tables 6.2 and 6.A.2, and Figure 6.1). The change in current transfers did not contribute to the increase in the deficit; the small rise in this indicator actually offset a small portion of the increase. The import surplus widened because of the goods account and the account of income from factor inputs, in which the difference between imports and exports widened significantly. The import surplus on the services account, in contrast, continued to decline. Within the goods account, the import surplus widened as imports expanded more vigorously than exports. Notably, much of the increase in imports of goods traces to the two large transactions described above. Net of these transactions, which were recorded as imports of capital goods, the import surplus surpassed that in past years only slightly.

The widening of the deficit reflects quantity changes. Price changes offset some of this increase.

The current-account trend may be analyzed from two points of view. First, one may analyze the factors that affect imports and exports. An extensive analysis of this kind appears in the continuation of this chapter, which elaborates on the factors that affected both imports and exports this year. A summary of this analysis is presented below, dividing these factors into two types of effects—price effects and quantity effects. Thus,

[1] The current-account deficit figures for 1990–1998 were adjusted downward this year because of a downward revision of the tourism services import data for these years. The data were revised because the estimate of imports of tourism services used by the Central Bureau of Statistics in those years was biased upward. This occurred for two main reasons: (1) the estimate related to all Israelis who go abroad as tourists, even though some are Israelis who reside abroad permanently and come to Israel for "home visits," and (2) the average per-day expenditure used in this estimate far exceeded that obtained in a recent survey by the Central Bureau of Statistics. The retroactive adjustment reduced the current-account deficit figures by $1.2 billion–$1.5 billion in each of the years 1995–1997. The adjustment for 1990–1994 was smaller—up to $650 million per year.

Table 6.1
Investment, Saving, and the Current Account, 1990–99

(percent of GDP)

	Saving	Investment	Current account[a]
1. Israel			
Average 1990–93	21.8	23.7	–1.9
1994	19.3	24.0	–4.7
1995	19.6	25.4	–5.8
1996	18.8	24.4	–5.6
1997	18.2	21.7	–3.5
1998	18.7	19.5	–0.7
1999	17.6	20.2	–2.6
2. Selected developed countries (1998)			
US	16.8	17.8	–1.1
Canada	21.0	19.1	1.9
Japan	28.5	26.2	2.2
France	21.4	18.5	3.0
Germany	24.2	19.2	5.0
UK	17.2	17.6	–0.4
Italy	20.8	16.7	4.1
Spain	22.4	21.3	1.1
Australia	22.8	23.8	–1.0
New Zealand	19.7	19.2	0.5
3. Selected emerging markets (1998)			
Mexico	22.4	21.3	1.1
Argentina	17.4	19.9	–2.5
Brazil	18.6	19.9	–1.3
Chile	22.5	25.5	–2.9
Korea	33.4	29.4	4.0
Thailand	36.1	26.7	9.4
Poland[b]	20.4	23.6	–3.2
Czech Republic	28.5	27.5	1.0

[a] Current account as defined in National Accounts (saving *less* investment).
[b] Data for 1997.
SOURCE: Israel, based on CBS data; other countries, IFS.

the increase in the import surplus this year reflects the result of two contrasting effects: that of prices narrowed the surplus;[2] that of quantity expanded it (Tables 6.3, 6.4).

The effect of price change traces to the continued improvement in terms of trade: the decrease of import prices, by outpacing the decrease in export prices, mitigated the import surplus. The trend in import prices reflected the continued decline of world prices of goods, foremost raw materials—apart from oil prices, which increased during the year and offset this trend somewhat. The trend in export prices reflects a relatively small erosion in the prices of exported goods.

[2] This refers to the direct effect of the change in prices and not to the indirect effect occasioned by the quantity change.

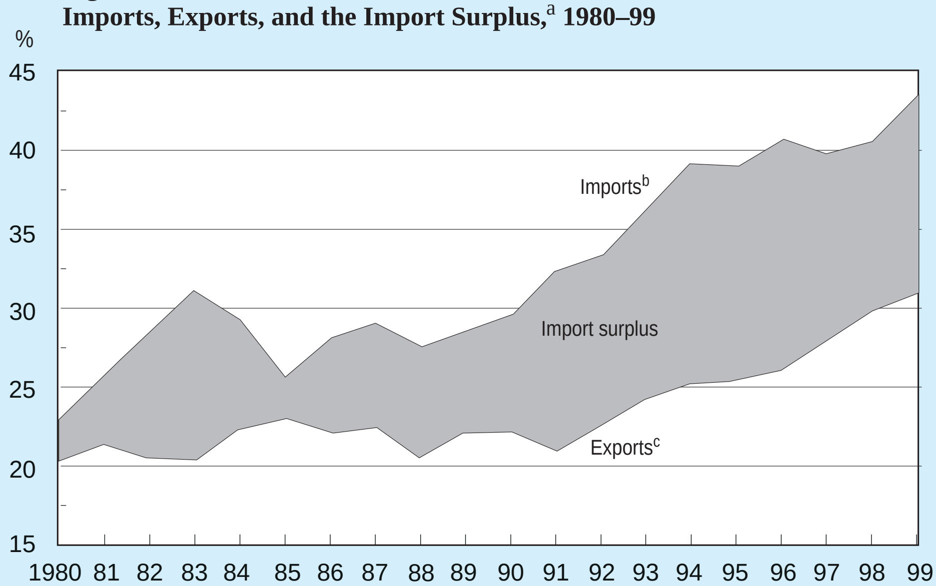
Table 6.2
The Current Account and its Financing, 1993–99

($ billion)

	Average 1993–96	1997	1998	1999
Current account	–4.1	–3.5	–0.8	–2.6
Total import surplus	10.0	9.7	7.0	9.0
Civilian import surplus	8.3	8.0	5.1	6.9
Exports	26.7	33.2	35.0	38.6
Civilian imports	35.1	41.2	40.1	45.5
Current transfers	5.8	6.2	6.1	6.4
Financing				
Capital transfers	1.8	2.2	1.8	1.7
Direct investment	0.2	0.8	1.0	1.6
Portfolio investment[a]	2.4	4.1	2.5	1.7
Other investment[b]	0.7	4.5	–2.0	–0.2
Rise (–) in foreign-exchange reserves	–1.5	–9.3	–1.9	–1.3
Errors and omissions	0.6	1.2	–0.6	–0.9

[a] Shares and tradable bonds.
[b] Mainly credit and deposits.
SOURCE: Based on Central Bureau of Statistics data.

Figure 6.1
Imports, Exports, and the Import Surplus,[a] 1980–99



[a] As a percentage of GDP, at 1995 prices.
[b] Imports, net of taxes, excluding diamonds, defense imports, fuel, ships, and planes.
[c] Exports, net of subsidies, excluding diamonds.
SOURCE: Based on Central Bureau of Statistics data.

The quantity effect reflected two main factors in 1999. The first is the expansion of domestic demand, which caused imports to grow. This expansion originated mainly in an increase in investment demand, resulting largely from the two aforementioned exceptional transactions. The second factor that had an expansionary impact on the deficit in 1999 was the continued slump in world trade, which dampened exports. The real depreciation of the NIS and the continued improvement in terms of trade offset these effects slightly and helped narrow the import surplus in quantity terms.

Table 6.3
Background Conditions, 1993–99

(rate of change, percent)

	Average 1993–96	1997	1998	1999
World trade[a]				
Volume expansion				
Goods and services	7.3	9.9	3.6	3.7
Goods	7.6	10.5	3.9	3.9
Prices ($)—goods and services	1.5	–4.9	–5.1	–0.8
Relative prices and exchange rates				
Import prices/GDP deflator[b]	–2.2	–4.8	–2.3	0.8
Export prices/GDP deflator[c]	–2.6	–2.7	0.1	1.4
Tradables/nontradables	–4.3	–2.9	–1.4	0.8
$/NIS	6.8	8.2	10.2	9.0
Currency basket/NIS	7.0	4.3	9.6	8.3
$/currency basket[d]	–0.5	9.2	1.3	1.1
Terms of trade	–0.6	2.4	2.0	0.8
Export prices ($)[e]	1.0	–1.8	–3.1	–0.6
Import prices ($)[e]	1.7	–4.1	–5.0	–1.4

[a] Source: IMF, *World Economic Outlook*, October 1999.
[b] National Accounts data. Import prices excluding diamonds. GDP deflator—prices of business-sector output (including housing).
[c] National Accounts data. Export prices excluding diamonds. GDP deflator—prices of business-sector output (including housing).
[d] Currency basket excluding US dollar.
[e] Excluding capital services and diamonds.
SOURCE: Central Bureau of Statistics and Bank of Israel.

The second way of looking at the current account is to examine its behavior by analyzing factors that affect investment and saving, the difference between which determines the level of the deficit. This perspective is more appropriate for an analysis of long-term trends in the current account and an estimation of its future behavior, since both investment and saving reflect long-term considerations. This perspective shows that the decline in the deficit relative to GDP in 1997 and 1998 stemmed almost totally from the decline in the investment rate. Several factors explain this decrease, including exhaustion of the effect of mass-immigration demand, the sizable accumulation of capital stock, macroeconomic restraint (imposed in response to the large current-account deficit, among other reasons), and a decline in return on equity. The deficit expanded in 1999 because the investment rate rose—almost entirely due to the two exceptional transactions mentioned above—and because the saving rate declined, reflecting a decline in public saving.

The widening of the deficit reflects more investment and less saving.

International comparison shows that Israel's high deficit rate traces mainly to a low saving rate and, to a certain extent, a high investment rate (Table 6.1). Israel has a lower saving rate than most developed countries even though its proportion of adults in the population is lower than in most of those countries—a demographic situation that, in itself, favors a higher saving rate. Two factors may explain the low saving rate. The first is based on the theory of permanent income, according to which today's low saving rates may reflect expectations of faster economic growth in the future; the second is associated with Israel's large proportion of recent immigrants, who save little during their first years in the country.

Israel has a lower saving rate than most developed countries, and this has a strong effect on the rate of deficit.

Table 6.4
Direct Contributions to Increase in Import Surplus,[a] 1993-99

($ billion)

	Average 1993–96	1997	1998	1999
Total prices effect	0.17	–1.19	–0.82	–1.15
World prices	0.12	–0.16	–0.18	–0.04
Terms of trade	0.05	–1.03	–0.64	–1.10
Volume change	0.93	–1.04	–1.24	2.29
Total change in civilian imports excluding factor inputs	1.10	–2.23	–2.06	1.14

[a] The reference in this table to imports and exports excluding capital and labor is consistent with that in the National Accounts (excluding import taxes).
SOURCE: Based on Central Bureau of Statistics data.

As for investment, Israel's rate is high relative to most developed countries but not relative to developed *and* developing countries that are in the midst of rapid growth. Thus, Israel's high investment rate reflects a catching-up process vis-à-vis the world's most advanced countries. Moreover, the increase in Israel's investment rate in the early 1990s has not yet been offset. This increase, which originated in an adjustment of capital stock for the immigrant-absorption process, has left Israel with a high investment rate in historical terms.

Israel's high investment rate resembles that in countries that are experiencing rapid economic growth.

Exports

Export quantity (excluding capital) increased by 10.9 percent in 1999, following a 6.4 percent increase in 1998 (Tables 6.5 and 6.A.3). The rapid recovery of diamond exports this year explains much of this development; net of diamonds the growth rate declined. Thus, excluding capital, diamonds, and exports to the Palestinian Autonomy, quantity

Table 6.5
Total Exports Excluding Capital Services, 1993–99

(rate of change, percent)

	Volume change				Price change	Distribution
	Average 1993–96	1997	1998	1999	1999	1999
Total	9.7	6.9	6.4	10.9	0.7	100.0
Total[a]	9.7	10.8	10.8	9.6	–0.8	78.4
Total (adjusted to balance-of-payments data)[a]	11.9	14.4	10.7	7.3	–1.6	49.8
Manufacturing[a]	11.1	13.9	11.7	7.1	–1.5	49.8
of which[b] Traditional industries	3.4	–4.1	1.9	3.7	–1.0	5.1
Mixed industries	9.5	3.7	3.7	3.4	–1.5	8.1
Advanced industries	13.7	20.8	16.1	8.6	–1.6	32.4
Agriculture	12.5	8.5	7.1	1.6	–4.9	2.2
Diamonds	10.0	–0.6	–13.5	22.0	7.1	15.8
Total services exports and receipts from factor inputs[c]	6.2	3.9	11.1	14.3	0.3	28.6
Exports to Palestinian Autonomy	9.4	4.4	5.5	–1.5	–1.6	5.2

[a] Excluding diamonds, and exports to the Palestinian Autonomy.
[b] For the classification of industries see note to Figure 6.4.
[c] Excluding exports to Palestinian Autonomy.
SOURCE: Based on Central Bureau of Statistics data.

exports increased by 9.7 percent in 1999 after 10.8 percent growth in 1998. These figures reflect a decline in the growth rate of exports of goods (excluding diamonds and exports to the Palestinian Autonomy)—from 10.7 percent in 1998 to 7.3 percent this year—coupled with a rise in the growth rate of services exports, to 14.3 percent.

Exports slumped in the first half of the year but recovered in the second half.

The slowdown in exports of goods was uneven in the course of 1999. Generally speaking, the two halves of the year were markedly different: in the first half, pursuant to a trend that began in the second half of 1998, exports of goods decelerated so acutely as to result in real decreases in quarterly export levels. In the second half of 1999, the trend reversed direction, exports of goods expanding vigorously and mitigating the decline for the year as a whole.

To explain the behavior of goods exports in 1999, we should contemplate the important explanatory variables in Israel's estimated export equations (as spelled out in Box 6.1): the rate of world growth, real currency depreciation, and change in terms of trade. These variables had contrasting effects in 1999: the first-mentioned—evidently the most dominant—dampened exports, the second helped them expand, and the third supposedly had no significant effect.

Box 6.1

Israel's Export Equation,[1] 1960–1998

This box presents an export equation for the Israeli economy, recently estimated on the basis of annual data for 1960–1998. The estimation was performed in two stages: the long-term correspondence between exports and additional variables, followed by an equation for the short term, reflecting the factors that affect changes in exports in the short term.

The conceptual framework

The equations estimated are based on the conceptual framework of a small open economy that faces totally elastic demand for its tradable products under given external terms of trade. Consequently, exports of a given tradable good are the difference between the domestic supply of the good and domestic demand for the good under a given level of the terms of trade. Since the external terms of trade are stable in the long term, they do not affect exports during that time. Moreover, in the long term, domestic demand adjusts itself to the aggregate supply; accordingly, the factors that affect it have no long-term effect on exports. Thus, only the factors that affect domestic supply are those that affect exports in the long term. These factors are the economy's production potential, represented in the estimation by business capital stock; the relative price of the tradable goods in the domestic market, which reflects the apportionment of production potential between tradable and the nontradable product and is represented by the export price relative to the business-GDP deflator; and world trade, which affects the cost of penetrating the world market and, therefore, has a supply-side effect.[2]

Various inelasticities and errors in estimation create a disparity between the long-term equilibrium and the short-term dynamic. Thus, the short-term equation includes the following variables in addition to those of the long-term equation: external terms of trade; exogenous variables that affect domestic demand, such as immigration and the government deficit; and the unexplained error in the long-term equation at a one-year lag, which assures a convergence towards a solution in this term.

[1]For an additional estimation of such an equation, see Yakov Lavi, *The Influence of the Real Exchange Rate on the Trend of Import Surplus as Share of GDP, 1961–1996*, (Hebrew) (not yet published).

[2] In an alternative estimation—in which the economy faces world demand which declines from left to right, the effect of world trade is exerted on the demand side, and the export price is determined endogenously—the result would be less auspicious.

Main Results

The main results of the estimation follow:

- The factors affecting exports in the long term are: business capital stock at 0.7 elasticity, domestic relative price at 0.25 elasticity, and world trade at 0.74 elasticity.
- The direct short-term effect of world trade is small and insignificant, perhaps because penetration into (or disengagement from) international markets is affected mainly by long-term considerations due to its high cost.
- The effect of relative domestic price is twice as powerful in the short term as in the long term. This result is somewhat surprising because logic seems to indicate that an economy is better able to adjust to changes in the long term. This result may also reflect additional short-term effects such as demand surpluses.
- External terms of trade (export price relative to import price) have a rather strong short-term effect, at 0.6 elasticity.
- Other factors that are important in the short term are immigration and the government deficit. Their effect on exports is significant and negative because they expand domestic demand in the short term. Inflation, unemployment, and taxation have no significant short-term effect.
- A deviation from the long-term trend due to a nonrecurrent, temporary shock is corrected, in greater part, in three to four years.
- The industrialized countries were found to have no effect on Israeli exports beyond that exerted via overall world trade. This may reflect the strong upturn in the influence of emerging markets on Israeli exports in the past decade.

The continued slump in world trade affected exports adversely this year.

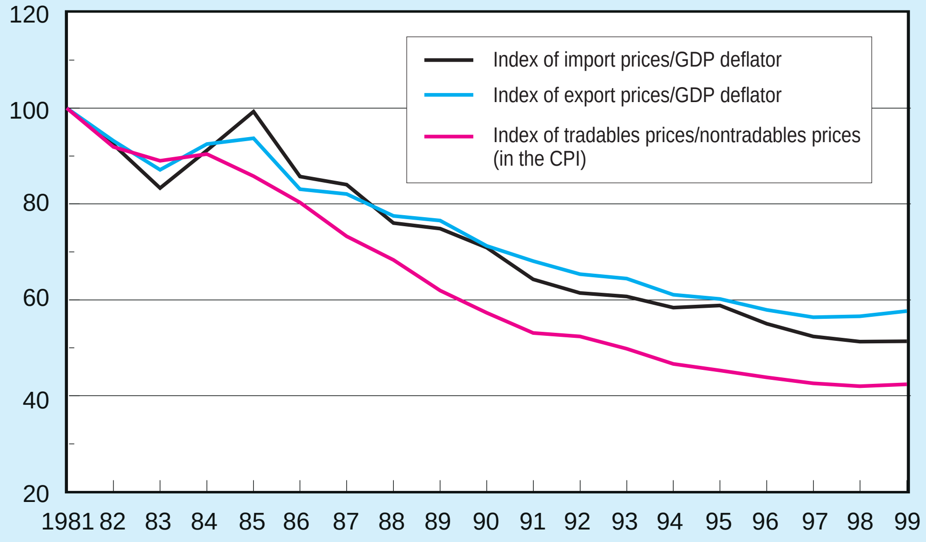
As for world trade, this variable evidently dampened the growth rate of Israeli exports for the second straight year. The growth of world trade plummeted to 3.6 percent in 1998 after several years of vigorous 9 percent growth on annual average. In 1999, world trade growth remained almost equally sluggish, at 3.7 percent. The powerful effect of world trade on Israeli exports, as estimated in many empirical studies and in the examination on which Box 6.1 is based, certainly helped slow the growth of Israeli exports during these two years.

Importantly, the dampening effect of world trade on Israeli exports was stronger in 1999 than in 1998, as indicated by the growth rate of Israeli exports during those two years and the other background variables that were at work during that time. The difference seems to be consistent with the empirical finding, shown in Box 6.1, that world trade affects Israeli exports mainly in the long term, not in the short term. Accordingly, one would expect the dampening effect of this variable on Israeli exports to gain strength in 1999, when world trade continued to grow sluggishly.

In contrast to world trade, the real exchange rate had an expansionary effect on Israel's exports in 1999. After many years in which the real exchange rate appreciated steadily, as expressed in export prices relative to the GDP deflator, the trend turned around in 1998 and a slight real depreciation occurred. This trend gathered momentum in 1999, as reflected in a faster rate of real depreciation (Table 6.3, Figure 6.2). As a direct consequence of the foregoing definition of the real exchange rate, it stands to reason that this depreciation helped exports increase by making them more profitable and viable. This assessment is based largely on empirical findings (presented in Box 6.1) that demonstrate that the real exchange rate, when defined in this fashion, has a significant impact on the export trend.

The real exchange rate affected exports auspiciously.

Figure 6.2
Indices of Relative Prices of Tradable and Nontradable Goods, 1981–99



SOURCE: Based on Central Bureau of Statistics data.

The terms of trade continued to improve in 1999, to the unquestioned benefit of exports. However, whereas the improvement in 1998 occurred because of a steep decrease in the prices of imported raw materials, prices of these goods decreased less precipitously in 1999. Increases in fuel prices during the year offset some of the decline in prices of other imported raw materials and resulted in the aforementioned trend in the prices of imported raw materials overall. Accordingly, since manufacturing for export is heavily dependent on imported raw materials, the effect of terms of trade was evidently smaller in 1999 than in 1998, when the improvement in this indicator contributed substantially to the expansion of exports.

The terms of trade do not seem to have had a significant effect on exports in 1999.

The global crisis had a more powerful dampening effect on Israeli exports than that predicted by the long-term export equation.

Insertion of the above factors into the Israeli export equation estimated in Box 6.1 shows that exports generally, and exports of goods particularly, did not expand as rapidly as the equation predicted. The reason, as adduced from examination of the sensitivity of the equation to changes during the sample period, is that in the past three years the dampening impact of world trade on Israeli imports has gathered momentum whereas the expansionary effect of terms of trade on these exports has decreased. Hence, the recent world crisis that caused a severe deceleration of world trade and an improvement in Israel's terms of trade had a slowing effect on Israel's exports that was much stronger than that predicted by the long-term export equation.

The export trend during the year lends further support to the belief that the crisis had a stronger effect than predicted. As stated, exports were especially sluggish between the second half of 1998 and the first half of 1999—as the global crisis peaked—and recovered in the second half of 1999, as the global crisis eased somewhat. This trajectory suggests that the crisis and the shock it created in world markets had a strong and immediate impact on the Israeli economy, an effect that the equation failed to predict. Notably, however, the dampening effect of the crisis on exports was weaker in the Israeli case than in many developed countries (Table 6.7).

The distribution of exports by regions shows an acceleration in exports to South East Asia and a slowdown in exports to the United States and Europe.

The distribution of exports by target regions shows large fluctuations among destinations in 1999, as in 1998 (Table 6.6). However, the fluctuations this year were the opposite of those in 1998, and two main phenomena stand out—a slackening of growth in exports to the United States and the European Union, and a recovery of growth in exports to South East Asia.[3] Both developments reflect South East Asia's recovery from the crisis that beset it several years earlier. This recovery prompted Israeli exporters to return to the markets of South East Asia and obviated the need to

Table 6.6
Goods Exports (Nominal), Excluding Diamonds, by Geographical Destination, 1995–99

(rate of change, percent)

	Rate of export growth			Contribution to total export growth		
	Average 1995–97	1998	1999	Average 1995–97	1998	1999
US	9.1	10.9	5.8	2.4	2.8	1.6
EU	11.4	10.6	4.5	3.7	3.5	1.5
South East Asia	17.9	–12.6	18.1	1.7	–1.4	1.6
Rest of world	8.3	2.4	12.4	2.3	0.7	3.7
Total exports	10.2	5.7	8.4	10.2	5.7	8.4

SOURCE: Based on Central Bureau of Statistics data.

[3] Exports to South East Asia were uneven during the year: strong increases in exports to Japan, Taiwan, China, Singapore, and South Korea, and declines in exports to Hong Kong, the Philippines, and Thailand.

redirect exports from these markets to the United States and Europe—a redirection that evidently helped propel the expansion of exports to those destinations in 1998.[4]

The slowdown in exports to the United States and Europe also reflected the slowdown in trade between developed countries. This deceleration was evident not only in the slowing of these countries' imports but also, and mainly, in the downturn in their exports, which stimulated competition in international markets (Table 6.7). The slowdown began in 1998 but was not reflected in Israel's export data for that year, probably because of the aforementioned redirection of exports from South East Asia to these regions. It is also noteworthy that the deceleration in exports to the EU countries was especially severe this year, evidently for reasons including the weakening of the euro against the dollar.

Table 6.7
Changes in Foreign Trade of Industrialized Countries, 1995–99

(volume rate of change, percent)

	Imports			Exports		
	Average 1995–97	1998	1999	Average 1995–97	1998	1999
US	10.6	10.6	9.3	10.9	1.5	3.6
EU	6.8	7.8	4.8	7.7	5.2	3.2
of which Germany	6.1	6.6	4.3	7.6	5.4	2.4
France	6.1	7.8	2.9	6.1	6.1	2.8
Italy	5.4	6.1	2.1	8.0	1.3	1.3
UK	8.0	8.4	5.3	8.6	3.0	2.0
Japan	8.9	–7.7	–2.5	7.8	–2.3	–2.3
Canada	8.4	6.4	6.0	7.6	8.1	7.2

SOURCE: IMF *World Economic Outlook*, October 1998.

Exports of Israel's leading high-tech industry group—communication, control, and medical equipment—continued to grow vigorously as exports of other high-tech industries slackened.

Analysis of the trend in industrial exports using the classification of traditional, mixed, and high-tech industry groups is somewhat complex this year because an examination of the matter at the level of individual industries points to mixed trends within each group (Table 6.A.5). The high-tech industry group displayed considerable variance this year. On the one hand, Israel's main high-tech export industry group—communications, control, and medical equipment—continued to grow vigorously. The continued uptrend in the exports of this industry group—which has the highest concentration of skilled personnel in all industries (more than 60 percent)—despite the lethargy in world markets, again substantiates Israel's large comparative advantage in human-capital-intensive manufacturing and the vigorous global demand for these products—a demand that certainly mitigated the dampening effect of world trade on Israeli exports.

[4] See discussion in Chapter 6 of the *Bank of Israel Annual Report, 1998*.

In contrast, the exports of other high-tech industries in which human capital is less intensive—machinery and equipment, motors and electrical equipment, and electronic components, office machinery, and computers—slowed and even decreased in quantity terms. The decreases occurred largely in the first half of the year, as the world crisis peaked, and a recovery took place in the second half. Thus, it seems at the present writing that the export slowdown in these industries is not an ominous omen for the continued development of Israeli exports. This aside, developments within these industries suggest that, in some cases, the slowdown reflects a correction for steep increases in previous years.

The trends in traditional industries' exports were mixed; several of these industries showed strong increases.

The traditional industries also exhibited much variance: quantity decreases in the exports of some industries alongside impressive quantity increases in those of others—especially textiles and clothing, and rubber and plastics. These industries evidently benefited from the past two years of real currency depreciation, since they had been the main casualties of the previous appreciation. Furthermore, the activity patterns of companies in these industries that made breakthroughs into world markets indicate that their success in overseas markets traces to correct management, efficient marketing, and successful brand development. These factors, which entail the employment of well schooled and highly skilled personnel, point to a new trend that blurs the distinction between traditional and high-tech export industries—the use of sophisticated human capital by Israeli manufacturers of traditional products to compete in foreign markets.

In services exports, the trend in tourism services stood out this year. After three years of decline, incoming-tourism revenue increased by a vigorous 11.6 percent. (For an extensive survey of the tourism industry, see Box 2.4.) Two main factors may explain this trend. First, security and political factors had a favorable effect on tourism this year, due to rising optimism concerning the continuation of the peace process and the relative calm in the region during the year. Second, Israel's holy places commanded growing interest in advance of the turn of the new millennium. The improvement in tourism was reflected in the recovery of incoming tourism in October–November 1999 to the level of 1995, Israel's record year in this respect.

In exports of services, tourism services stood out in particular but did not expand as strongly as expected.

Notably, however, the increase in tourism-services exports this year fell short of the great expectations that millennium tourism had aroused, and incoming tourism actually decreased perceptibly in the last month of the year. Furthermore, Israel's tourism-services exports relative to its population are still much lower than in many other countries. As for future years, the trend in tourism-services exports will probably depend heavily on regional geopolitical developments. However, even favorable developments will not assure the continued growth of tourism due to several substantial problems in the industry, foremost the relatively high cost of Israel's tourism services compared to those in neighboring countries and the absence of an adequate hospitality infrastructure to accommodate different kinds of tourism.

Imports

Total civilian imports (excluding capital) increased in quantity terms by a hefty 15.9 percent in 1999 after a 2.0 percent upturn in 1998 (Table 6.8). Imports excluding capital, diamonds, fuel, and imports from the Palestinian Autonomy grew in quantity terms by 12.7 percent as against 2.8 percent in 1998. The acceleration was driven by quantity increases of 13.8 percent in imports of goods (excluding fuel, diamonds, and imports from the Palestinian Autonomy) and 10.9 percent in imports of services.

Table 6.8
Total Imports Excluding Capital Services, 1993–99

(percent)

	Volume change				Price change	Distribution
	Average 1993–96	1997	1998	1999	1999	1999
Total	10.6	2.9	2.4	15.7	–2.1	100.0
Total civilian imports	11.1	2.6	2.0	15.9	–2.1	95.2
Total civilian imports[a]	12.4	1.2	2.8	12.7	–2.3	74.3
Total civilian imports (adjusted to balance-of-payments data)	11.3	1.3	1.9	13.8	–4.3	46.1
Consumer goods	13.4	2.9	3.6	3.8	–1.8	9.1
of which Durables	9.5	1.6	0.1	4.4	–0.5	4.1
Factor inputs	10.1	2.9	0.4	15.4	–3.7	47.3
of which Excluding fuel and diamonds	10.4	2.0	4.8	7.5	–6.1	29.9
Capital goods	13.1	–2.8	–3.4	34.8	–2.0	14.1
of which Machinery and equipment	14.3	–0.2	4.7	26.0	–2.4	10.4
Total services imports and payments for factor inputs[b]	14.5	0.9	4.4	10.9	1.1	28.3

[a] Excluding fuel, diamonds, and imports from the Palestinian Autonomy.
[b] Excluding imports from the Palestinian Autonomy.
SOURCE: Based on Central Bureau of Statistics data.

Within the category of imports of goods, the 34.8 percent quantity increase in imports of capital goods was particularly conspicuous. In the main, the increase reflects two exceptional events—a large acquisition of aircraft and a major investment in the establishment of an Intel plant in Israel. These events, especially the latter, expanded the economy's capital stock and, for this reason, are expected to improve its future production capacity. However, since they do not reflect the macroeconomic forces in 1999, it is important to isolate them from total imports in any analysis of import trends. Thus, net of these events, the quantity increase in imports of goods (excluding fuel,

The increase in imports was affected largely by two exceptional events, but would have occurred even without them.

diamonds, and imports from the Palestinian Autonomy) was 6.8 percent in 1999, also substantially higher than the 1998 performance.

It is problematic to explain this year's steep increase in imports of goods by means of the two ordinary factors that make up Israel's import equation— business-sector gross product, which reflects the level of activity, and the real exchange rate. Since the growth rate of business-sector gross product slackened this year and the real exchange rate, as defined by the ratio of import prices relative to the GDP deflator, depreciated somewhat, the growth of imports of goods should have slowed. Instead, it increased significantly.

The acceleration of imports reflected expectations of an economic recovery and the continued downtrend in import prices.

However, a more thorough analysis of imports may illuminate the reasons for their growth this year. Most of the increase originated in an upturn in imports of raw materials (excluding fuel and diamonds), a reflection not only of current economic activity but also, to a large extent, of expectations of future economic development. Therefore, this year's increase in imports may, to some extent, reflect expectations of continued economic recovery. The acceleration of growth in imports may also stem from the steep and steady decline in import prices over the past four years. Following this line of analysis, one may presume that the increase in imports this year also reflected concern about an imminent increase in prices of imported products.

The upturn in imports of goods embraced all three main import categories: consumer goods, capital goods, and raw materials.

Within the category of imports of goods, quantity increases occurred in each of the three import product groups, foremost in raw materials and capital goods and less so in private consumption goods. In the last-mentioned rubric, imports of consumer durables expanded markedly after two years of stagnation that reflected the countrywide economic slowdown. The increase in durables imports may have reflected the beginning of economic recovery but may also have resulted from the advancing of purchases, prompted by concerns about an imminent increase in the local-currency prices of these imports. Imports of capital goods (net of the two events mentioned above) increased by a vigorous 7.0 percent, reflecting, among other things, preparations to head off the Y2K bug and, evidently, a favorable change in the business sector's expectations about the state of the economy. Imports of raw materials (not including fuel and diamonds) grew by 7.5 percent in quantity terms, mostly in the last few months of the year.

3. THE FINANCIAL ACCOUNT

General survey

Net capital inflows were $3.1 billion in 1999 as against $1.5 billion in 1998.

Net capital inflows (the financial account less the change in foreign reserves) were $3.1 billion in 1999 as against $1.5 billion in 1998. The most salient phenomenon this year was the recovery of nonresident investment (direct and in shares for trading) to the 1997 level.[5] Nonresident investment was more heavily affected in 1999 than in the

[5] Total nonresident investment decreased relative to 1996 and 1997 because in 1993–1998 this indicator included $9 billion of acquisitions of Israel government bonds backed by US government guarantees.

Table 6.9
The Financial Account,[a] 1995–99

($ million)

	1995	1996	1997	1998	1999
Financial account	**2.5**	**2.3**	**0.1**	**–0.4**	**1.8**
Financial account (excl. foreign-exchange reserves)	3.5	5.6	9.4	1.5	3.1
Direct investment	**0.6**	**0.3**	**0.8**	**1.0**	**1.6**
Investment abroad by residents	–0.7	–1.0	–0.8	–0.8	–0.7
Investment in Israel by nonresidents	1.3	1.4	1.6	1.9	2.3
Portfolio investment	**1.8**	**4.1**	**4.1**	**2.5**	**1.7**
Assets	0.1	0.3	0.0	0.0	–0.5
Investment in shares by residents	0.0	0.2	0.0	0.1	0.2
Investment in bonds and derivatives by residents[b]	0.0	0.1	–0.1	0.2	–0.5
Investment in bonds by banks	0.1	0.1	0.0	–0.3	–0.7
Liabilities	1.7	3.8	4.2	2.5	2.6
Investment in shares by nonresidents	1.0	1.4	2.0	0.5	1.5
Investment in bonds by nonresidents	0.7	2.3	2.2	2.0	1.2
of which Government	0.7	1.7	1.5	1.4	0.1
Corporate	0.0	0.6	0.7	0.6	1.1
Other investment	**1.1**	**1.2**	**4.5**	**–2.0**	**–0.2**
Government assets	–1.2	0.9	0.0	0.0	–0.2
Private-sector assets	–0.2	0.4	–0.1	–1.1	–1.8
Government liabilities	0.2	0.1	–0.3	–0.3	0.2
of which Long term	0.1	0.1	–0.2	–0.3	0.2
Short term	0.0	0.0	0.0	0.0	0.0
Private-sector liabilities	1.4	0.4	0.8	–0.3	0.0
of which Long term	0.3	0.7	0.8	0.0	0.0
Short term	1.1	–0.3	0.0	–0.3	0.0
Assets and liabilities of banks	1.0	–0.6	4.0	–0.3	1.7
Decline in foreign-exchange reserves[c]	**–1.1**	**–3.4**	**–9.3**	**–1.9**	**–1.3**

[a] Figures may not add due to rounding; positive figures denote capital inflow, and negative figures denote outflow.
[b] Excluding the banking system.
[c] Including change in the government's reserves abroad.
SOURCE: Based on Central Bureau of Statistics data.

past by developments in world capital markets, whereas the effect of domestic economic events made a smaller impact. The inflow of nonresident investment in shares slowed greatly when the global financial crisis erupted in late 1997 and remained sluggish throughout 1998. Throughout the crisis, there was concern that nonresidents would reduce their investment in Israel and create a large outflow. This concern ebbed this year as the impact of the global financial crisis on the developing economies diminished, and the flow of nonresident direct investment and investment in shares for trading increased from $2.4 billion in 1998 to $3.7 billion.

Nonresident investment was more heavily affected in 1999 than in the past by developments in world capital markets.

Nonresident investment took place along two main paths—direct investment and acquisitions of shares issued abroad by Israeli firms.

In 1999, for the first time since 1993, nonresidents realized investments on the Tel Aviv Stock Exchange.

Nonresident investment took place along two main paths—$2.3 billion in continued direct investment and $2 billion in acquisitions of shares issued abroad by Israeli firms, foremost in software and communications. The large nonresident investment (both direct and in shares for trading) in the computer and communications industry reflect the worldwide efflorescence of these industries. On the TASE, in contrast, nonresidents were conspicuous by their absence. In 1999, for the first time since 1993, nonresident investment on the domestic exchange was negative (i.e., repatriation) even though the General Share-Price Index climbed by some 60 percent during the year. One possible explanation for the dearth of nonresidents on the TASE is that the overseas issues by Israeli companies and the magnitude of nonresidents' investment in them have become a substitute for nonresident investment in Israel. The decline in investment in the TASE may also be due to a temporary upturn in the level of risk that nonresidents attribute to investment in Israel (including exchange-rate risk), corresponding to the decline in financial investment in emerging markets generally. According to this hypothesis, nonresidents relate differently towards Israeli companies traded abroad, most of which are export-oriented high-tech firms, than they do towards Israeli firms traded in Tel Aviv.

Between December 1999 and February 2000, nonresidents returned to the TASE and invested $350 million there.

The ratio of net external debt to GDP continued to decline in 1999, as it has almost uninterruptedly since the 1985 Economic Stabilization Program. In recent years, nonresidents' direct investment and investment in shares for trading have made it possible to finance the current-account deficit without increasing external debt, thus abetting the decline in the debt/GDP ratio. However, the sale of assets to nonresidents deprives the economy of further benefits from these assets (except for taxes). The use of nonresidents to finance investment at levels that surpass national saving shifts some of the risk in this investment from residents to nonresidents. Indeed, a considerable portion of recent nonresident investment has been in high-tech industries, in which high yield and high risk march together.

Investment

Nonresidents' investment[6]

In 1999, nonresidents' direct and portfolio investment was $4.9 billion.

In 1999, nonresidents' direct and portfolio investment was $4.9 billion. Net of bonds, the figure was $3.7 billion—an increase of more than 50 percent over 1998. The upturn in investment in 1999, after a considerable decline in 1998, reflects the ebbing of the impact of the global financial crisis in most types of nonresident capital inflow. The recovery of nonresident investment inflow—direct and portfolio—to a level resembling that of 1997 evidently supports this estimation. Investment in shares for trading purposes, which came to a virtual halt in 1998, was $1.5 billion this year, mainly due to successful

[6]The investment figures in this section are flow data as shown in the balance of payments, unless explicitly stated to the contrary.

Table 6.10
Net Direct and Portfolio Investment in Israel by Nonresidents, and Abroad by Residents,[a] 1995–99

($ million)

	1995	1996	1997	1998	1999
Nonresidents investment	**3.1**	**5.2**	**5.8**	**4.3**	**4.9**
Direct and in shares for trading	2.3	2.8	3.6	2.4	3.7
Direct	1.3	1.4	1.6	1.9	2.3
Shares for trading	1.0	1.4	2.0	0.5	1.5
On TASE	0.4	0.3	0.7	0.2	–0.1
Offerings abroad	0.3	0.8	1.1	0.3	2.0
Bonds	0.7	2.3	2.2	2.0	1.2
Residents[b] investment	**0.7**	**0.8**	**0.9**	**0.6**	**0.9**
Direct	0.7	1.0	0.8	0.8	0.7
Portfolio[c]	0.0	–0.2	0.0	–0.3	0.2

[a] Figures may not add due to rounding.
[b] A positive figure denotes investment abroad by residents (capital outflow).
[c] Excluding the banking system.
SOURCE: Based on Central Bureau of Statistics data.

issues by Israeli companies abroad. Direct investment was $2.3 billion, similar to the level in previous years. Nonresident activity in domestic currency was negligible.

Israeli firms raised more than $2 billion in public issues abroad—a record sum, exceeding by $1 billion the previous record, set in 1997.

Overseas public issues by Israeli firms[7] exceeded $2 billion this year—a record sum that outpaced the previous record, set in 1997, by approximately $1 billion. This represents a vigorous recovery after a steep decrease in 1998, when the global financial crisis inhibited overseas issues. Issues abroad, most of which (more than 70 percent this year) occurred in the United States, were significantly affected by developments in capital markets there. Nasdaq had a record year in issues in 1999, and the blossoming of the issues market created a convenient environment for Israeli companies that wished to issue abroad. In an itemization at the industry level, more than 75 percent of issues were made by companies in software and communications—industries that have been attracting investment, growing rapidly, and generating larger corporate value around the world in recent years. Global developments project strongly onto the Israeli scene in at least three respects:

1. The blossoming of foreign stock exchanges enables Israeli companies to issue shares at levels that the domestic economy has not witnessed before. However, it should be born in mind that successful capital raising depends on developments in these foreign stock exchanges, and a decline in the levels of issues in world capital markets, especially those in New York—because of a change in trend in share prices there,

[7]Firms registered in Israel, whether the owners are residents or nonresidents. Foreign-registered companies held by Israelis are considered foreign companies.

for example—would probably lead to a decrease in issues by Israeli companies abroad, irrespective of events in Israel.

2. The increase in the value of high-tech companies is allowing software and communications firms to make much larger overseas issues than in the past. For example, the Nasdaq index, made up mainly of high-tech shares, climbed by more than 200 percent between early 1997 and the end of 1999 and by 85 percent in 1999 only. Since most issuing companies are active in the software and communications industries, as stated, some of the increase in the issues of Israeli firms abroad traces to the global upward valuation of high-tech companies.
3. The success of technology companies, as reflected in their capital raising abroad—in public issues or in private issues for nonresidents—at seemingly high prices is diverting the orientation of these industries in Israel. The successes of several companies that went into action several years ago as start-ups, and the large sums of money raised by older firms, are creating a greater incentive among those in the field to form new start-ups and invest more in existing firms.

An additional consequence of the rise in technology share prices and the successful issues of Israeli firms abroad is the "wealth effect": the increase in prices expands the value of the public's financial assets and contributes to an increase in consumption. When the market capitalization of companies traded abroad rises, so does the value of private high-tech firms that have not yet gone public. Since their shareholders expect to reap a capital gain when the issue is finally made, the wealth effect pertains to them, too.

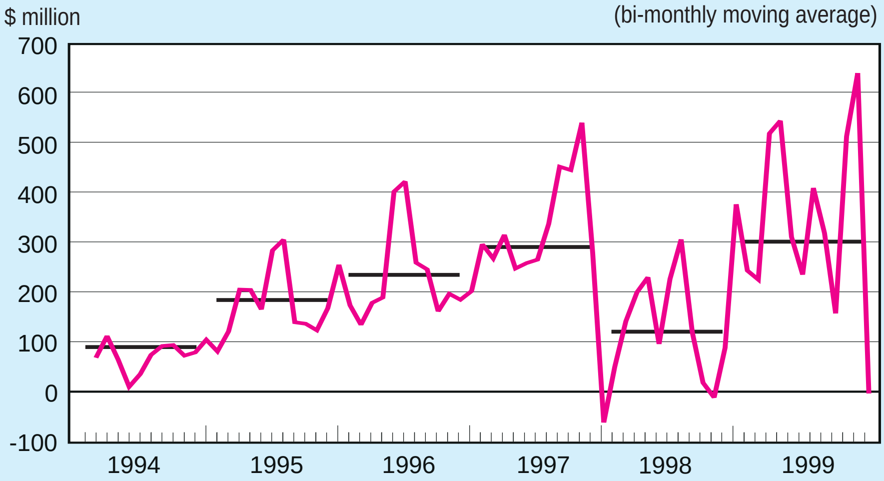
The severe risk of high-tech investments explains why it is difficult to finance them by means of loans.

The growth rate of high-tech industries in recent years suggests that there is much potential in investing in them. Indeed, many firms seem to have chosen to invest large sums in these fields. From the point of view of the entire economy, however, the severe centralization of this investment carries a great risk as well: if the expectations of growth—and, in turn, yields—in the computer, electronics, and communications industries prove to have been overstated, and if the shares of companies in these industries turn out to have been overpriced, some of the mammoth investment in them will be lost. The severe risk of high-tech investment explains why it is difficult to finance it by means of loans. Initial financing by means of venture-capital funds that have nonresident partners, followed at a later stage by issues of shares to nonresidents, makes it possible to apportion the risk among many investors and shift some of it to nonresidents.

Israel is unique in the extent to which it raises capital by issuing shares to nonresidents.

Israel is unique in its extent of capital raising by share issues to nonresidents. According to data that the International Monetary Fund published in *World Economic Outlook*, foreign capital raising by means of share issues in emerging markets came to less than 15 percent of total gross capital raising in these markets in the first eight months of 1999 (not including direct investment and interbank flows). In Israel, in contrast, some 30 percent of total capital raising this year occurred in issues of shares to nonresidents. Consequently, the share of nonresidents in risks related to the use of capital is greater in Israel than elsewhere.

Figure 6.3
Nonresidents' Direct Investment and Investment in Shares for Trading, 1994–99



SOURCE: Bank of Israel.

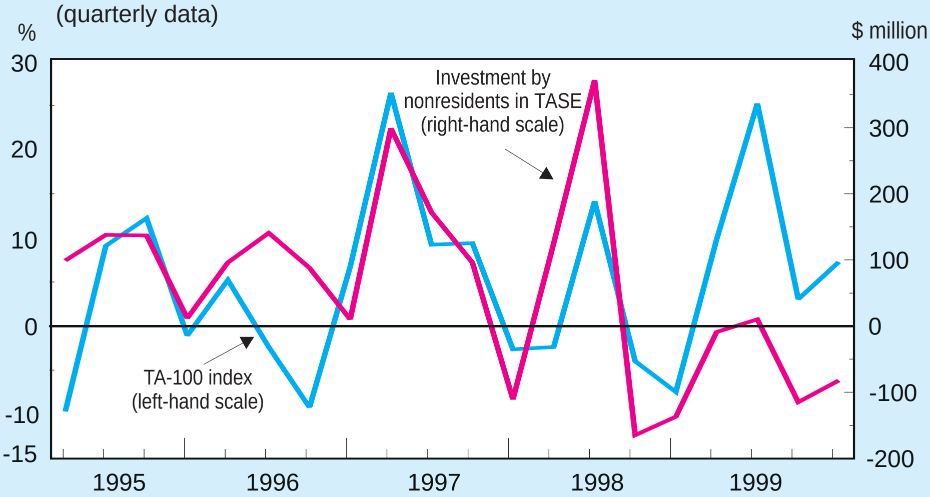
In 1999, nonresidents realized $70 million of investments on the Tel Aviv Stock Exchange. The realization of investment this year was exceptional, since nonresidents investment on the stock exchange in the preceding five years had ranged from $200 million to $450 million. In November and December 1997—when the global financial crisis began—nonresidents realized investments on the domestic stock exchange. In the second half of 1998, after the crisis in Russia erupted and concerns about a currency crisis in Israel developed, nonresidents resumed their realizations of stock-exchange investments, and this investment path did not recover until November 1999. It is possible that nonresidents, whose investment interests in recent years have focused on high-tech industries, preferred to invest in Israeli companies issued abroad (most of which are in high-tech) rather than companies traded in Tel Aviv.

In 1999, nonresidents realized $70 million of investment on the Tel Aviv Stock Exchange.

Another possibility is that the global crisis prompted investors to reassess the risk of investing in shares traded in Israel, as in emerging markets worldwide. This estimation is supported by the fact that the yield differentials between foreign-currency bonds of the Government of Israel (traded abroad) and those of the US government are still higher than the pre-crisis level. By comparison, the yield differential between the Emerging Markets Bond Index (EMBI)[8] and US government bonds has not returned to the July 1997 (pre-crisis) level.

[8]The EMBI, devised by the J.P. Morgan investment house, includes foreign-currency bonds of Argentina, Brazil, Bulgaria, Ecuador, Mexico, Panama, Peru, Poland, Russia, and Venezuela. The EMBI+ and the EMBI Global , which include additional countries and additional types of debt, were developed in similar ways.

Figure 6.4
Nonresidents' Investment in TASE, and Changes in the TA-100 Index, 1995–99
(quarterly data)



SOURCE: Based on TASE data.

Direct investment remained strong in 1999, at about the 1998 level, with some 75 percent in high-tech industries.

Direct investment remained strong in 1999, at approximately the 1998 level.[9] The flow of direct investment has been increasing in recent years, for reasons including mass immigration since the early 1990s, the peace process that began in 1993, and the uptrend in foreign investment in emerging markets generally since the early 1990s. The global financial crisis had an adverse effect on investment in shares but not on direct investment in Israel and other emerging markets. About 75 percent of direct investment focused on high-tech industries—communications and computer services and electric and electronic machinery and equipment. In the age of globalization, the acquisition of domestic firms by well-known multinational companies seems like a natural phenomenon. The "soft underbelly" of domestic firms that have developed quality products on an international scale is usually marketing; after the acquisition, the new availability of international marketing channels and the familiar brand name of the acquiring firm allow the domestic firm to make efficient use of its growth potential. From this standpoint, the acquisition helps both sides: the domestic firm, which, until its acquisition by nonresidents, could not efficiently sell its products to its primary (export) markets; and the acquiring firm, which gains from the acquisition of a quality product with a sales potential that can be fulfilled by the use of its marketing channels.

[9]About $800 million in direct investment was composed of bond acquisitions by nonresident principals from nonresident non-principals, i.e., direct investment by nonresidents and realization of financial investments by other nonresidents. In the past, there was no information about this activity.

Residents' investment and deposits abroad

The outflow of resident investment (direct and portfolio) was nearly $1 billion in 1999. Although far-reaching foreign-currency liberalization was proclaimed in May 1998, the annual investment outflow has not increased and, with the exception of slight annual fluctuations, has been almost constant for the past few years. Several factors evidently explain this: first, the current tax rules discriminate against foreign relative to domestic investment. Investments in foreign tradable securities are taxed at 35 percent; investments on the TASE are tax-exempt. Households that own a rental dwelling abroad are taxed on rent receipts; those who earn a similar income in Israel are tax-exempt (up to a certain limit). The high NIS interest and the sluggish pace of NIS depreciation against the dollar in recent years have made investment in foreign currency less viable than that in NIS. Although the currency depreciation in October 1998 changed this situation somewhat, the behavior of the exchange rate since then made investment in foreign currency less profitable than other investment opportunities in 1999. Additionally, the natural tendency of investors to invest in the domestic market—a phenomenon not confined to Israel—has evidently slowed the pace at which investors' portfolios are being adjusted to the new, post-liberalization situation.

Although very extensive foreign-currency liberalization was proclaimed in May 1998, the annual investment outflow has not increased.

At this point, it is worth bearing in mind that the Bank of Israel has not intervened in foreign-currency trading for two years.[10] Hence, the only foreign-currency sources available to residents for investment overseas are foreign-currency loans and nonresident investment,[11] offset by the current-account deficit, which the private sector must finance. Consequently, whenever a buildup of foreign-currency demand occurs (due to demand for investment abroad and the need to finance the current-account deficit) that exceeds foreign-currency supply (which originates in nonresident investment and foreign-currency loans), the pressure is reflected in depreciation of the NIS until supply and demand are brought into equilibrium. This means that some of the pressure for capital outflow (to finance investments abroad, for example) or capital inflow is absorbed by depreciation or appreciation of the NIS and is not reflected in the balance-of-payments data.

Loans

General government

Gross capital raising abroad by general government was $2 billion this year as against more than $2.5 billion in each of the preceding six years.[12] The decrease in capital raising after the large issues in previous years lowered the net capital raising of general government to $300 million in 1999[13] as against more than $1 billion per year since 1993.[14]

[10]Since February 1996, it has confined its intervention to defense of the limits of the exchange-rate band.

[11]Not including investment in government bonds abroad.

[12]Including increases in principal originating in accrued interest on zero coupon bonds.

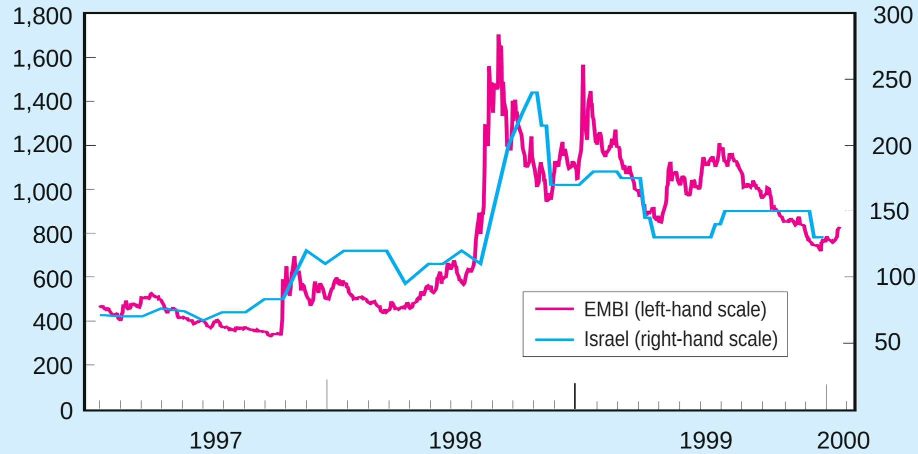
[13]The figure pertains both to credit and to bond issues.

[14]Except in 1995, when the government raised only $900 million because some issues planned for that year were moved up to late 1994.

The reserves of $22 billion are ample to give the government flexibility in raising capital.

Nevertheless, general government contributed about $800 million to the increase in foreign reserves, for reasons including American aid (which helps create a surplus in the government's current account). The reserves of about $22 billion are ample to afford the government flexibility in raising capital, so that the timing of issues abroad is determined not by a "credit crunch" that may occur when government debt is short term, but by conditions in international markets and the background conditions of the domestic economy. In late 1999, Moody's upgraded Israel's risk outlook, indicating that an improvement in the country rating may be in the offing.

Figure 6.5
Spread on Yield on Israel Government Long-Term Dollar Bonds Traded in US to US T-Bonds, vis-à-vis EMBI Spread,[a,b] 1997–99
(basis points)



[a] The EMBI (Emerging Markets Bond Index) is an index of the cost of the debt in emerging markets, calculated by JP Morgan (see note 4). In 1999 the EMBI spread excludes Russia.
[b] The frequency of the data for Israel is not fixed, and ranges from two weeks to one month. The EMBI spread is taken daily.
SOURCE: JP Morgan and Lehman Bros.

The cost of government issues was lower in 1999 than in the second half of 1998 but remained higher than prior to the late 1997 global financial crisis.

In 1999, the government raised nearly $600 million in two "autonomous" issues[15] that were meant to replace the issues guaranteed by the United States government, which were made for immigrant-absorption purposes and were completed by the end of 1998. The cost of government issues (expressed as the difference between the yield the government must pay on its bonds and the yield on corresponding US government or other AAA-rated government bonds) declined in 1999 relative to the second half of 1998 but remained higher than the level preceding the late 1997 global financial crisis (Figure 6.7). Thus, the financial crisis seems to have caused a shock and raised Israel's country risk, as expressed in terms of the cost of raising capital—a change that affected not only Israel but also other economies that are characterized as having relatively high country risks.

[15]Bond issues not backed by US government guarantees.

The private sector

Direct long-term borrowing by the private sector from abroad (credit and bond issues) totaled more than $1 billion in 1999 as against only $600 million in 1998. Direct borrowing is highly concentrated, its net level affected by the activity of several large companies. The most conspicuous transactions in 1999 were two bond issues by the Israel Electric Corporation, at a total of $1.1 billion. Net of these issues, the business sector reduced its indebtedness on account of foreign loans—evidently in response to an increase in Israel's country risk premium, as reflected in a rise in the interest charged by institutions abroad for loans to Israelis.

Table 6.11
Capital Raised by the Israel Electric Corporation Through Bonds Issued in the US in Recent Years

	Amount ($ million)	Term (years)	Spread at issue[a] (basis points)	Amount ($ million)	Term (years)	Spread at issue[a] (basis points)
December 1996	350	10	91	125	30	125
December 1997	125	10	130	300	30	170
July 1998[b]	275	7	161	125	20	202
March 1999	500	10	248			
October 1999	600	10	230			

[a] Yield spread at issue between Electric Corporation bonds and equivalent (re: residual maturity) US T-bond.

[b] The yield spread depends on the residual maturity of the bonds; the longer this is, the greater will be the yield spread demanded by investors. Consequently, the spread at issue for 7-year bonds is biased downward relative to 10-year bonds, and the spread at issue for 20-year bonds is biased downward relative to 30-year bonds.

SOURCE: Bloomberg.

The yield differentials between risky and safe bonds narrowed somewhat in the course of 1999 but have not yet returned to the summer 1997 level shortly preceding the crisis in East Asia. In March and October, after the yield differentials contracted slightly, the Israel Electric Corporation raised $500 million and $600 million, respectively, in two ten-year bond issues at 248 and 230 basis points over US government bonds. These differentials are about 150 basis points higher (reflecting a yield of 1.5 percent per year) than those the Electric Corporation had to pay in a December 1996 issue (Table 6.11). Here again, as in the case of government bonds, the end of the global financial crisis—as reflected in an increase in stock prices on world exchanges and an upturn in world economic forecasts—did not (as of the end of 1999) portend a retreat of yield differentials between riskier and safer bonds to the pre-crisis level.

Table 6.12
Debt/GDP Ratio, 1989–99

(percent of GDP, annual average)

	1989	1990–92	1993–95	1996–97	1998	1999
Debt/GDP ratio (end-year, percent)	36.8	29.1	21.9	14.6	12.4	10.9
Change in ratio (annual average, percentage points[a])	-2.6	-2.4	-3.6	-2.2	-1.6	
Contribution of real change in GDP	-1.8	-1.3	-0.7	-0.3	-0.3	
Contribution of change in real exchange rate[b]	-0.4	-1.6	-0.5	0.7	-0.8	
Contribution of change in nominal net debt	0.5	0.6	-3.0	-3.3	-0.7	
Contribution of change in world prices[c]	-0.7	-0.2	0.1	0.4	0.1	

[a] The sum of the contributions to the change in the ratio does not add up exactly to the change in the ratio because the contributions were calculated by first-order approximation.
[b] The real exchange rate here is the ratio of export prices to GDP deflator.
[c] The contribution has two components; inflation abroad, which reduces the debt/GDP ratio (it reduces the real value of the nominal debt), and the change in cross rates.
SOURCE: Based on Central Bureau of Statistics data.

Box 6.2

Use of Nonresident Investment to Finance the Current-Account Deficit

In the past few years, a large portion of the current-account deficit has been financed by nonresident investment (that does not create debt). This investment, along with net borrowing by Israelis abroad, resident investment abroad, the change in foreign reserves held by the Bank of Israel, and capital transfers, are recorded on the capital-account and financial-account side of the balance of payments, finance the current-account deficit, and bring this account into balance.[1]

Nonresidents concentrate a large share of their total investment in Israel in high-tech industries; more than 60 percent of direct investment in 1996–99 were made in communications and computer services, and electric and electronic machinery and equipment. The proportion of nonresident investment in shares issued by software and communications companies, relative to total issues of Israeli firms abroad, was similar during that time. On average since 1996, nonresidents have invested about $1.5 billion per year in high-tech industries.

[1]According to the definition of the balance of payments, the difference between the current-account and the capital and financial account (including change in the Bank of Israel reserves) is recorded as statistical discrepancies.

The large nonresident investment in Israel's advanced industries in recent years, coupled with Israelis' investment in start-up companies and R&D at larger firms, raise the question whether the phenomenon of the sale of companies by Israelis to nonresidents is a temporary or long-lasting one. It is possible, in view of the nature of activity in this industry, that many Israelis form a company, sell it to a foreign firm, and then form a new company—creating an "assembly line" in which companies are formed and sold. This type of activity is reasonable if Israelis have a comparative advantage in initial fields of development in these industries and if multinational firms have a comparative advantage at more advanced phases, those pursuant to product development, chiefly the marketing phase.

If the formation and subsequent sale of high-tech companies in Israel is truly a trend in the domestic economy, then some of the current-account deficit is technical only, originating in the choice of domestic firms to develop innovative technologies rather than to manufacture tradable products. The sales of such companies, which may be regarded as export transactions in which the "goods" are corporations, are recorded in the capital account and finance imports of goods, which cause the current-account deficit to increase. Examples of activity of this type have not been lacking in recent years: entrepreneurs develop a new product and at a certain stage, when they believe they need a foreign player to fulfill its growth potential, they sell the company and move on to the next phase—the promotion of new start-up companies.