

Chapter 6

The Balance of Payments

The balance of payments current account improved significantly in 1998, despite the slowdown in world trade. The improvement reflected the greater deceleration of domestic demand than of GDP supply, as well as the continued improvement in the terms of trade and the change in the trend of appreciation of the real exchange rate. The expansion of exports (excluding diamonds) remained at a high level, despite the slowdown in world trade. In the capital account, there was a sharp decline in capital inflow, against the background of the global financial crisis, while direct investment increased. The decline in capital inflow was greater than the improvement in the current account, and was one of the basic causes of depreciation of the NIS. Global trends in 1998 raised the issue of the economy's vulnerability to external shocks, and highlighted the need to pay very close attention to changes in capital flows and to take policy measures to buttress the improvement in the current account.

1. MAIN DEVELOPMENTS¹

In 1998 there was a significant improvement in the current-account deficit, which went down to \$ 2.3 billion (using the new definition), from \$ 4.9 billion in 1997. According to the old definition, which includes capital transfers, the figures were \$ 0.5 billion and \$ 2.7 billion respectively. The change in the current account in 1998 was an extension of the positive trend which had started in 1997. This followed the peak deficit of \$ 6.6 billion in 1996, in the wake of which a tight macroeconomic policy was adopted, which acted to reduce the deficit and prevent a crisis from developing. The main causes of the reduction of the deficit in 1998 was the faster deceleration of domestic demand than of the supply of GDP, and the fall of world prices against the background of the global crisis, alongside the continued improvement in the terms of trade and the reversal of the trend of appreciation of the real exchange rate (export prices relative to the GDP deflator actually depreciated). The slowdown in world trade related to the global crisis acted in the opposite direction. An analysis of

In 1998, the current account improved by \$ 2.6 billion, following an improvement in 1997, too.

¹ The data in the chapter are in accordance with the new definition of the balance of payments—in line with the recommendations of the IMF—adopted by the Central Bureau of Statistics.

the degree to which the factors affecting the current-account deficit are likely to persist suggests that not all of the improvement in 1998 is of a permanent nature.

Capital inflow plummeted in 1998.

Capital inflow in 1998 (excluding capital transfers) totaled \$ 3.0 billion, 65 percent lower than in 1997. The reduction reflects a fall in foreign financial investment, a rise in direct investment, and a significant reduction in residents' import of capital (via the banking system). The first of these three, i.e., the fall in nonresidents' financial investment, derived from the global financial crisis which started in 1997 and continued throughout 1998, and from misgivings that the crisis would spill over into other emerging markets. The contraction of the spread between interest on local currency and that on foreign currency, the difficulty of raising capital abroad, reflected by a rise in the risk premium, and concern that the NIS would depreciate were the main reasons for the decline in residents' import of capital. This decline (together with capital transfers), which was greater than the improvement in the current-account deficit, was one of the factors causing the depreciation of the NIS in the second half of the year.

The question of Israel's vulnerability became more acute in 1998, emphasizing the need to consolidate the improvement in the current account.

Global developments in 1998 bring to the forefront the issue of Israel's vulnerability and the risk of contagion, an issue which is related to the possibility that the global crisis may become a crisis in Israel's economy, too. Global developments affected real economic trends in Israel through their effect on the slowdown in world trade, which although it adversely affected Israel's exports, was offset by other factors such as the improvement in the terms of trade. On the financial side, Israel felt the negative effect of the sudden reversal of the direction of capital flows, and to a lesser extent, that of residents' currency exposure. Israel's financial vulnerability clearly depends to a great degree on the country's basic economic trends, emphasizing the need for a policy which aims at economic stability. One of the main economic indicators in this regard is the current-account deficit. Depending on the extent to which it will become a permanent feature, the improvement in the current account in 1998 brings the economy closer to achieving the target of reduced vulnerability, hence the importance of consolidating the improvement. This can be achieved by consolidating the real depreciation while defending the inflation target, by adopting measures to expand the supply side and by encouraging saving (see Chapter 1 and below for detailed discussion). In addition, it is reasonable to assume that the depreciation of the NIS in the second half of the year encouraged the internalization of exchange-rate risk, and it may lead to lower private-sector exposure in the future, and hence reduce the economy's vulnerability.

2. THE CURRENT ACCOUNT

General review

In 1998, the current-account deficit fell to \$ 2.3 billion.

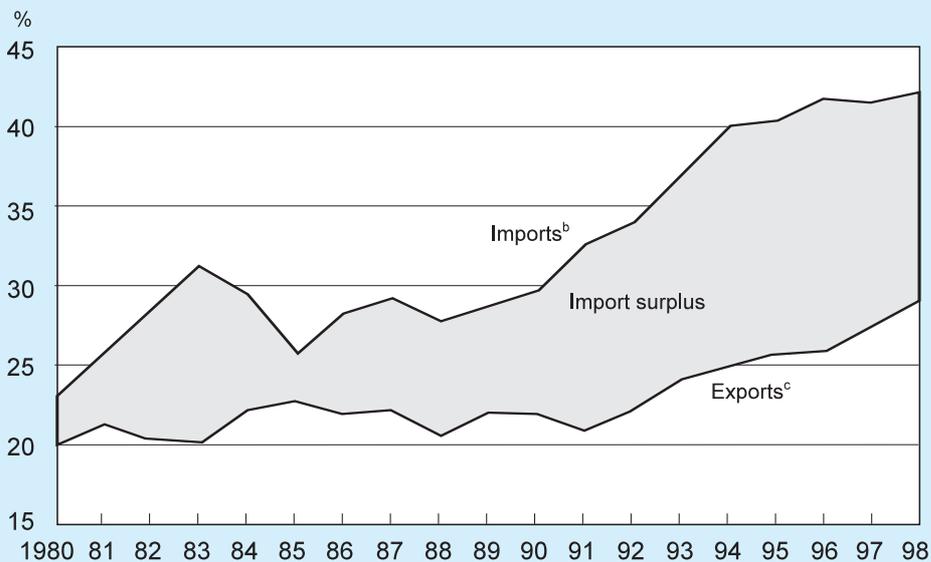
In 1998 the balance-of-payments current account improved considerably. The deficit (according to the new definition—the import surplus *minus* current transfers) went down to \$ 2.3 billion, from \$ 4.9 billion in 1997. The deficit fell to 2.3 percent of GDP. The improvement was a continuation of the trend which started in 1997, following a

Table 6.1
The Current Account and its Financing, 1992–98

	Average 1992–95	1996	1997	1998
Current account	–3.7	–6.6	–4.9	–2.3
Current account (old definition) ^a	–2.1	–4.6	–2.7	–0.5
Total import surplus	9.2	12.7	10.9	8.2
Civilian import surplus	7.6	11.0	9.2	6.3
Exports	24.2	31.2	33.1	35.0
Civilian imports	31.8	42.2	42.3	41.3
Current transfers	5.5	6.1	6.0	5.9
<i>Financing</i>				
Capital transfers	1.6	2.1	2.2	1.8
Long- and medium-term loans	1.7	3.1	2.6	1.2
Net private investment	0.3	2.3	3.1	1.8
Short-term capital flows	–0.2	1.6	0.9	0.0
Capital flows of banking system	–0.4	–0.5	3.9	–0.3
Errors and omissions	0.9	1.4	1.4	–0.1
Rise (–) in foreign-exchange reserves	–0.3	–3.4	–9.3	–1.7

^a Current account *plus* capital transfers.

Figure 6.1
Imports, Exports, and the Import Surplus,^a 1980–1998



^a As a percentage of GDP, at 1995 prices.

^b Imports, excluding taxes, not including diamonds, defense imports, fuel, ships, and planes.

^c Exports excluding subsidies, not including diamonds.

peak deficit of \$ 6.6 billion in 1996 which led to the adoption of the policy in which the reduction of the deficit was considered an important target. The current level of the deficit is still high, however, relative to both its past level and most industrialized countries.

The improvement in the current account as a percentage of GDP mainly reflects the decline in investment.

The improvement in the current account in 1998 derived from a reduction in the import surplus, with current transfers remaining stable (Table 6.1 and Figure 6.1). Most of the reduction in the import surplus was in the goods account, while the services account and the account of payments for factor inputs showed more moderate improvements.² The reduction in the deficit on the goods account despite the deceleration in export growth was made possible by the decline in the overall level of goods imports.

Both the price component and the volume component contributed to the reduction in the dollar import surplus (Tables 6.2 and 6.3). The former, reflecting the direct effect of prices only (excluding the volume effect), was due mainly to the continued improvement in the terms of trade, and in part to the reduction of world prices. World

Table 6.2
Background Conditions, 1992–98

	(rate of change, percent)			
	Average 1992–95	1996	1997	1998
World trade^a				
Volume expansion				
Goods and services	6.8	7.0	9.9	3.3
Goods	7.3	6.8	10.5	3.5
Prices (\$)—goods and services	2.4	-1.2	-5.6	-4.5
Relative prices and exchange rates				
Import prices/GDP deflator ^b	-1.6	-6.7	-5.4	-3.1
Export prices/GDP deflator ^c	-3.0	-4.0	-2.8	0.3
Prices of tradables/prices of nontradables	-3.9	-3.2	-2.9	-1.4
\$/NIS	7.3	5.9	8.2	10.2
Currency basket/NIS	8.7	3.5	4.3	9.6
\$/currency basket ^d	-3.1	5.4	10.0	1.6
Terms of trade	-2.0	3.0	3.5	2.0
Export prices (\$) ^e	0.1	0.8	-1.5	-3.3
Import prices (\$) ^e	2.2	-2.2	-4.8	-5.1

^a Source: IMF, *World Economic Outlook*, October 1998, and update received December 1998.

^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.

² The new definition of the balance of payments divides the import surplus into three accounts: the goods account, the services account, and the account of payments for factor inputs (the last two of which were both previously included together in the services account).

Table 6.3
Direct Contributions to the Increase in the Import Surplus,^a 1992-98

	Average 1992-95	1996	1997	1998
Total prices effect	0.6	-0.8	-1.5	-0.8
World prices	0.1	0.0	-0.2	-0.1
Terms of trade	0.5	-0.8	-1.3	-0.7
Volume change	0.5	0.6	-0.6	-1.6
Total change in civilian imports excluding factor inputs	1.1	-0.2	-2.1	-2.4

^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).

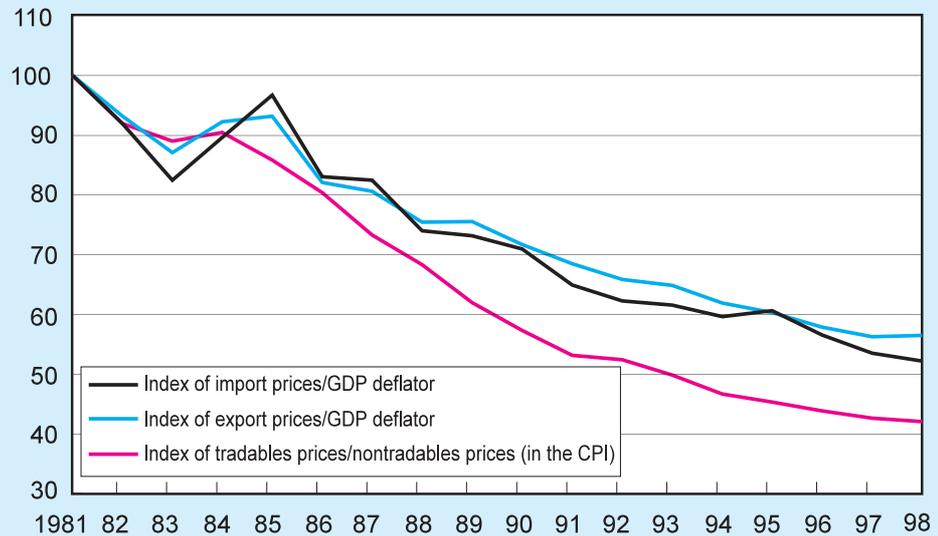
SOURCE: Based on Central Bureau of Statistics data.

prices fell as a result of the global crisis; and in a situation of an import surplus, if import prices and export prices fall at the same rate, the import surplus will decline. The persistent improvement in the terms of trade, for the third successive year, reflected mainly the steep fall in prices of imported raw materials. The volume element in the decline of the import surplus expressed, *inter alia*, the greater deceleration in the expansion of domestic demand than in the supply of GDP. The investment component moderated markedly in 1998, with a significant decline in demand for investment; most of the latter is explained by the ending of that part of it associated with the influx of immigrants, the considerable accumulation of capital in the last few years, the decline of the return on capital, the rise in the cost of raising capital, the high tax rate, and geopolitical developments in the region. The development of world prices, with the continued improvement in the terms of trade and the reversal of the trend of appreciation of the real exchange rate (Figure 6.2), served to reduce the volume component of the import surplus. Acting in the opposite direction, the slowdown of world trade served to increase the volume component of the deficit. (The different forces affecting exports and imports are analyzed below.)

The way to assess whether the improvement in the current account is permanent is to examine the degree to which the main factors which affected the current account in 1998 are expected to persist. Data on the investment/savings balance show that the improvement in the current account in 1998 in terms of percent of GDP mainly expresses a reduction in investment, while national savings increased more slowly than the decline in investment. The reduction in investment was a continuation of the process of adjustment of capital stock, which had expanded significantly in the 1990s as part of the process of immigrant absorption, and which provided the backcloth to the large balance-of-payments deficits in those years. The investment/GDP ratio indicates that in a long-term perspective investment is still at a high level. It would seem, therefore, that the fall in investment which led to the improvement in the balance of payments does have an element of permanence. Technological developments taking place in the

Figure 6.2
Indices of Relative Prices of Tradable and Nontradable Goods, 1981-98

(1981 annual average = 100)



economy may require a higher level of investment than in the past, however, thus limiting the possibility of further improvement in the balance of payments via a decline in investment.

Furthermore, the improvement in the deficit in 1998 was achieved with considerable help from the development of world prices—both in the form of the fall of world prices which resulted from the global crisis, and in the form of the improved terms of trade for Israel. These factors cannot be expected to continue acting in the same direction in the future; on the contrary, the ending of the global crisis may be expected to change this trend.³ World trade, which slowed markedly and had an adverse effect on Israel's exports, was another factor affected by global developments which acted in opposition to the contraction of the balance-of-payments deficit. At this point in time it seems that the current moderate level of world trade is likely to persist in 1999, but at the end of the crisis the moderating effect of this factor is also likely to disappear. The real exchange rate is another factor which must be taken into account; it did not play a significant role in reducing the deficit in 1998, but may well reduce the import surplus in the future if the conditions appropriate to the consolidation of the real depreciation which occurred at the end of 1998 are created.

It thus appears that the decline in investment, which was due mainly to the ending of the effect of the influx of immigration, contributes significantly to making the consolidation of the improvement in the current-account deficit which occurred in

³ Calculations based on IMF assessments of world prices in 1999 suggest that price changes are expected to increase the dollar import surplus, excluding factor inputs, by 7 percent (direct effect only).

In 1998, external factors greatly affected developments in the current account.

1998 a permanent one. The upward trend of the real exchange rate which started in 1998 is also likely to play a part in consolidating the improvement. Nevertheless, the external processes which had a marked effect on the development of the deficit in 1998 are temporary, and the trend changes in them (particularly the terms of trade) will make it difficult to maintain the improvement. Additional measures must therefore be taken to achieve this, measures which will promote savings, the rate of which, in relation to GDP, is lower in Israel than in other countries. It is difficult to point with certainty to a reform which will encourage savings in the long term, but reducing the public-sector debt would help, at least in the short and medium terms. An improvement on the supply side, accompanied by improved productivity, is also likely to raise the rate of saving. Such improvement can be achieved by creating conditions which allow real depreciation, lowering the tax rate, and reducing the public sector's share in the economy.

The improvement in the current account consists of a permanent component and a temporary one.

An important question related to the current-account deficit is the extent to which it is sustainable. There is no unequivocal response to this question, and it can be answered only by reference to different criteria. On the one hand, the present deficit on the current account is still high, as has been stated, by comparison with both past levels and most industrialized countries. This fact, with the concern described above that some of the reduction in the deficit is not of a permanent nature, emphasizes the need to adopt measures mentioned, which will consolidate the improvement. Nevertheless, the level of the deficit in 1998 was largely the result of the level of investment, which remained high despite the decline, and this fact supports the assessment that the deficit is sustainable. This is the case on the assumption that the investment is productive and will boost future supply of output, thereby helping to raise the rate of saving and improve the balance of payments.

Another criterion by which the sustainability of the deficit may be assessed is the external debt/GDP ratio. This has been considerably lower in the last few years than in the past. Nevertheless, the ratio can be maintained at its current level only if foreign investment in Israel remains high, to finance the current-account deficit without increasing the external debt. The high degree of volatility in foreign investment throughout the world makes it difficult to maintain the external debt/GDP ratio. Yet another criterion relating to the permanence of the deficit is the real exchange rate; this suggests that if the real depreciation which occurred at the end of 1998 is preserved, it will increase the probability that the deficit can be kept at this level.

The sustainability of the deficit depends to a great extent on the flow of foreign investment into the economy.

Exports

In 1998, total exports (excluding capital services) increased in volume terms by 6.4 percent, after rising by 6.7 percent in 1997 (Table 6.4), and were accompanied by a fall in prices. The 13.5 percent volume drop in diamond exports had a significant effect on the development of exports in total. Exports excluding capital services, diamonds, and exports to the Palestinian Authority rose by 10.9 percent in volume, after a 10.4 percent increase in 1997. These data reflect the acceleration of the quantity of services exports, and moderation of the growth of goods exports (excluding diamonds and export to the Palestinian Authority), from a 14.4 percent increase in 1997 to 10.6 percent in 1998.

The rate of volume growth of exports in 1998 (excluding diamonds) remained high, despite the deceleration in world trade.

Table 6.4
Exports (excluding capital services), 1992–98

(rate of change, percent)

	Volume change				Price change	
	Average				change	Distribution
	1992–95	1996	1997	1998	1998	1998
Total	12.2	7.1	6.7	6.4	–3.0	100.0
Total ^a	12.4	7.2	10.4	10.9	–3.3	80.5
Total (adjusted to balance-of-payments data) ^a	11.2	11.9	14.4	10.6	–3.6	52.6
Industrial ^a	11.9	7.5	13.9	11.5	–3.3	48.3
<i>of which</i> ^b Traditional industries	6.3	–4.9	–4.1	1.8	0.3	5.6
Mixed industries	10.0	6.4	3.7	3.3	–1.7	8.9
High-tech industries	14.3	10.7	20.8	16.0	–4.7	33.9
Agriculture	7.7	17.5	8.5	6.9	–5.8	2.5
Diamonds	12.4	4.0	–0.6	–13.5	–1.5	13.5
Total services exports and receipts from factor inputs ^c	14.7	–0.7	3.2	11.5	–2.7	27.9
Exports to Palestinian Autonomy	12.6	3.1	3.7	5.8	–5.3	6.0

^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.

Box 6.1: The Contribution of Exports to Economic Growth in Israel

Economic theory affords great importance to exports as a major factor in the rate of growth, especially in small, open economies such as Israel's. The theory, known as the Export Led Growth Hypothesis, considers exports as the machine creating rapid future growth—beyond its immediate effect—by improving productivity. The mechanism by which this takes place can be divided into two parts:

- Exports have a direct effect on production, enabling the economy to produce greater quantities and to extend its range of products. This allows economies of scale for all production (for exports and for domestic demand) to be exploited, which would not be the case if only domestic demand were being met.¹ In Israel this is reflected mainly in the production of high-tech products, the demand for which in Israel itself is limited. Thus, the human capital available in Israel can be utilized.

¹ Helpman, E and P. Krugman (1985). *Market Structure and Foreign Trade*, Cambridge: MIT Press.

- Exports also have an effect via the advantages which derive from openness. The openness of the economy, which is also related to the level of its exports, exposes domestic companies to competition with foreign companies, thereby prompting a process of streamlining in the domestic firms.² Openness also exposes domestic companies to advanced technology abroad.³

Many attempts have been made in economic literature to find empirical backing for this theory, by studying the link between export growth and GDP growth in several countries. The relation was studied by means of causality tests which examine the correlation between variables with a lag and current variables. Results were mixed. The most recent tests, however, using advanced econometric tools, found (Granger) causality between export growth and GDP growth in many cases. A similar result was obtained recently by Xu,⁴ in an investigation covering a number of countries, including Israel. In a study carried out by the Bank of Israel Research Department, based on annual data relating to Israel for the years from 1950 to 1995, yielded the results that:

There is positive Granger causality between the rate of growth of exports and that of GDP (from exports to GDP). The rate of growth of GDP was highly correlated with the rates of growth of exports in the three preceding years.

Causality in the opposite direction was also found, but at a lower level of significance (in a three-lag period).

No such causality exists between any of the other uses and the rate of growth of GDP. A study of total domestic uses and GDP did not reveal a significant causal relation either. The explanation for the difference between exports and other uses in this matter apparently lies in the strong exogenous component inherent in the variables which determine exports.

The results of the Bank of Israel analysis highlight the great importance of exports and their contribution to Israel's economic growth. According to the study, an increase in current exports is correlated with accelerated GDP growth in the future. The fact that exports are the only use found to show this causality with GDP is evidence of their importance. The contribution of exports is specially prominent in years of recession deriving from the demand side, because at those times exports are the only use which does not encounter the moderate domestic demand, and are thus likely to act as the key to renewed growth.

² Balassa, B. (1978). 'Export and Economic Growth: Further Evidence,' *Journal of Development Economics* 5, 181–189.

³ Grossman, G.M. and E. Helpman (1991). *Innovation and Growth in the Global Economy*, Cambridge: MIT Press.

⁴ Xu, (1996). 'On the Causality between Export Growth and GDP Growth: An Empirical Reinvestigation,' *Review of International Economics* 4(2), 172–184.

The rapid expansion of exports continued in 1998 despite the sharp deceleration in world trade, which grew by only 3.3 percent in 1998, after a rise of 9.9 percent in 1997, according to IMF data (Table 6.2). The pronounced effect of world trade on Israel's exports, as assessed in empirical studies (which found an elasticity of between 0.7 and 1.86), suggested that Israel's exports would suffer severely from the developments in world trade in 1998. (Using the minimum figure of elasticity, the effect on exports was expected to be a deceleration of 4.5 percentage points.) It emerges from this that the volume increase of Israel's exports in 1998 exceeded expectations in the light of world trade developments. Israel's exports may also have been affected by the high rates of growth of world trade in the last few years, rates which were not fully reflected by Israel's export performance. In addition to the above, several other background factors were also relevant to the development of exports in 1998.

The first is the development of the real exchange rate. In 1998 there was depreciation relative to the long-term trend of the real exchange rate (measured as the ratio of export prices to the GDP deflator), and at the end of the year there was actual real depreciation. Thus, during the year the real exchange rate made a positive contribution to the rate of export growth compared to the rate in 1997. The cumulative effect of the real appreciation in the last few years, however, continued to be felt in 1998, adversely affecting the profitability of exports—but only to a moderate extent—since part of the real appreciation was due to productivity differentials, which exist in most countries, between the tradables and the nontradables sectors.⁴ At the end of the year the trend reversed, and there was significant real depreciation, which, provided it is maintained, will contribute considerably to exports. The improvement in the terms of trade, largely reflecting the fall in the import prices of raw materials, which constitute a higher share of production for export than for the domestic market, also helped to increase Israel's exports. Nevertheless, this is the third year in succession that the terms of trade have improved, and the improvement in 1998 was less than that in 1997, so that it should have had a weaker effect on exports. The changes in the real exchange rate and in the terms of trade are reflected in the various indicators of profitability obtained from the industrial sector, the main exporting sector. Most indicators suggest a halt in the downward trend of profitability (see the section on the principal industries in Chapter 2).

The effects of the background variables mentioned, and the rise in factor inputs expressed in various export equations estimated for Israel's market, indicate that overall the volume rise in exports was greater than expected. This apparently reflects the moderation of domestic demand during the year, and explains the 'surplus' (i.e., higher than expected) export growth. It seems that many Israeli companies, faced with moderating domestic demand, diverted their output to export markets. An analysis of the rise of exports by industry supports this argument, as exports of several industries which are not generally export oriented surged in 1998. It is also reasonable to assume that the moderation of demand for the second successive year led to attempts to divert

Development of the real exchange rate and of the terms of trade in 1998 supported the expansion of exports.

The moderation of domestic demand may also have contributed to export growth.

⁴ See A. Zussman, (1998). 'The Real Exchange Rate in Israel: 1980–1997,' Discussion Paper Series 98.05.

output, attempts which had not been undertaken in 1997. In the short term, however, the possibility of diverting product from the domestic market to exports is limited, and was particularly problematic in 1998 because of the global crisis which restricted potential target markets.

The effect of the global crisis on Israel's exports can be seen not only via the world trade data, but also via its effects on the various export markets. Thus, Israel's exports to countries in South East Asia, the center of the crisis, were severely affected, with implications for total exports. From 1994 to 1996 exports to that region surged at an average nominal rate of 27 percent per year, spearheading the whole of Israel's exports, and contributing between 2 and 2.5 percentage points per year to their growth. In 1997, when the crisis erupted, Israel's exports to the region began to slow, and in 1998 declined by 17 percent, a direct negative contribution of 1.8 percentage points to the growth of exports (Table 6.5 and Figure 6.3).

In a situation of regional shocks, one would expect exports to be diverted from the crisis area to others regions. Nevertheless, in the global circumstances prevailing in 1998 the possibilities of such diversion were limited, due to the negative effect on world trade resulting also from reduced imports by industrialized countries, which, although they were unaffected by severe crises, suffered via lower growth rates. The possibility of diverting exports was also affected by lower level of exports from industrialized countries which prompted them to seek alternative markets to which to divert their exports, making the competition which Israeli exporters face even more keen (Table 6.6). Furthermore, the currencies of the crisis countries depreciated steeply, improving their ability to compete in export markets (mainly in the markets for traditional products), also against Israel.

Despite all the above, an analysis of Israel's exports by destination suggests that there may have been diversion between export markets. Thus, the rate of growth of exports to the US was unaffected, despite the fact that total US imports declined considerably. The rate of growth of exports to the EU rose significantly, in spite of the weakness of European currencies against the dollar, annual average, suggesting a

Exports to South East Asia were severely affected in 1998.

Exports may have been diverted from South East Asia to Europe and the US.

Table 6.5
Goods Exports (Nominal) (excluding diamonds),
by Geographical Destination, 1994–98

	(rate of change, percent)					
	Rate of export growth			Contribution to total export growth		
	Average 1994–96	1997	1998	Average 1994–96	1997	1998
US	8.8	9.5	11.8	2.3	2.4	3.0
EU	12.6	4.9	11.2	4.1	1.7	3.7
South East Asia	26.6	7.4	–17.0	2.2	0.8	–1.8
Rest of world	8.0	15.6	4.0	2.5	4.6	1.2
Total exports	11.2	9.5	6.1	11.2	9.5	6.1

SOURCE: Based on Central Bureau of Statistics data.

Figure 6.3
Geographical Distribution of Exports
and Imports (excluding diamonds), 1998

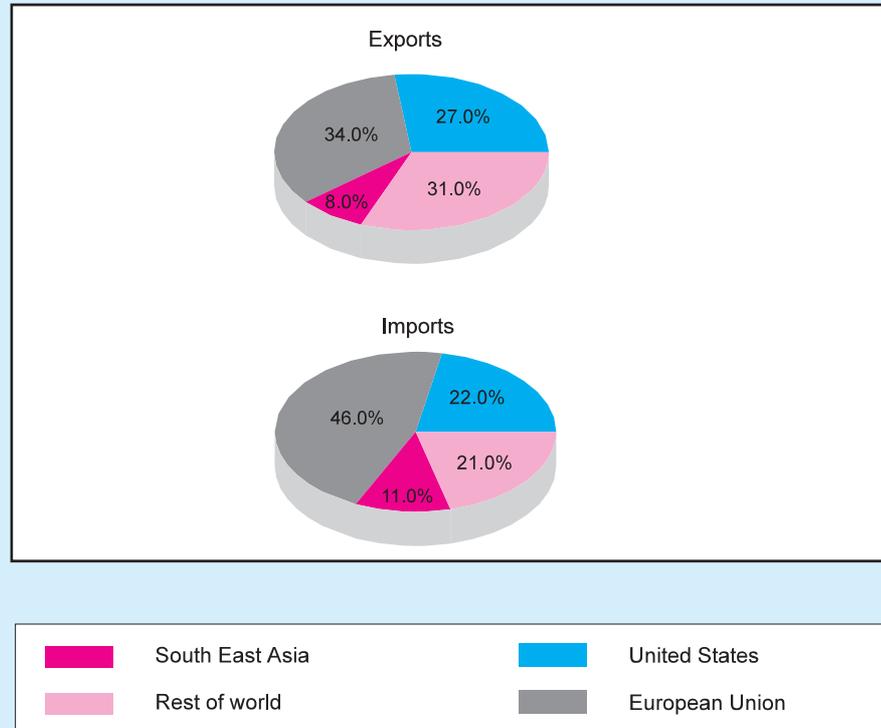


Table 6.6
Changes in Foreign Trade (Goods and Services)
of Industrialized Countries, 1994–98

(volume rate of change, percent)

	Imports			Exports		
	Average 1994–96	1997	1998	Average 1994–96	1997	1998
US	10.1	13.9	11.5	9.3	12.8	1.1
EU	6.5	8.8	7.5	7.4	9.6	6.1
<i>of which</i> Germany	5.9	8.1	7.4	6.5	11.1	7.2
France	4.9	7.9	7.8	5.8	12.2	6.1
Italy	5.2	8.7	11.8	7.2	6.3	6.0
Britain	6.0	5.2	9.2	8.0	8.0	8.0
Japan	11.5	-9.4	-0.2	4.5	10.8	-1.9
Canada	7.0	13.3	6.0	8.9	8.0	6.8

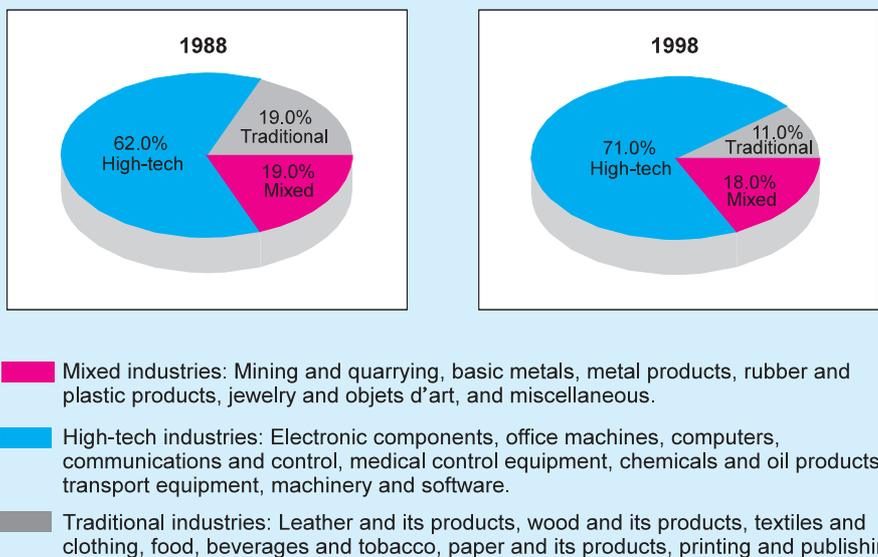
SOURCE: IMF *World Economic Outlook*, October 1998.

diversion of trade to those countries. The diversion of trade under moderating global conditions may have been possible due to buoyant world demand for high-tech products, in which Israel specializes.

The structural change within industrial exports continued, with the high-tech industries taking an ever more prominent position, at the expense of the traditional and mixed industries. This trend derives from the persistent difficulty which the traditional industries face in competing in world markets, and Israel's comparative advantage in human-capital-intensive industries (Figure 6.4). Despite the structural change, volume exports of the traditional industries increased in 1998 (in contrast with 1996–97), with a small rise in prices, indicating some change in the trend. Within the traditional industries, most of the change in 1998 occurred in exports of textiles, clothing and leather, which account for 60 percent of exports of the traditional industries, and which increased in volume terms, after declining for two years. Export prices of this industry also rose in 1998. This development may be explained by the change in the industry whereby its export products are becoming more advanced. Another prominent feature of the textile industry in 1998 was the continued transfer of production centers to Egypt and Jordan, in order to lower labor costs. This enabled textile producers to compete with traditional goods produced elsewhere, and may have contributed to the rise in the industry's profitability, also helping its exports recover. Another possible explanation may lie in the change in the trend of real appreciation in 1998, as the effect of real appreciation on traditional goods, which have low profit margins and small changes in productivity, is stronger than its effect on high-tech products.

In 1998, high-tech industries continued expanding their share of industrial exports.

Figure 6.4
Industrial and Software Exports, by Type of Industry, 1988 and 1998



Exports of tourist services continued to decline in 1998.

Among services exports, those of tourist services continued to fall, for the third year. This trend is a result of political-security uncertainty in the region. The tension in the Persian Gulf, which reached a new peak at the end of the year, may well exacerbate the decline in tourism. With the approach of the millennium, a large influx of Christian tourists is expected, which might help Israel's tourist industry to grow, but this possibility should be treated with caution, both because the extent to which the tourist infrastructure in Israel is capable of dealing with such an influx is uncertain, and because any security incident could significantly curtail the number of arrivals. The item Transport and Communications is another prominent one among services exports. This item rose in 1998, following a rise in 1997, too. The increase came from a marked rise in the export of transport services between foreign ports, in contrast to the global standstill in this sphere (see Chapter 2).

Imports

Imports went up again, albeit moderately, in 1998.

Total civilian imports (excluding capital services) rose by 1.8 percent in volume terms, after rising by 4.0 percent in 1997, with a marked fall in prices. The sharp swings in fuel and diamond imports had a notable effect on overall import figures. An analysis of imports excluding capital services, diamonds, fuel, and imports from the Palestinian Autonomy indicates that they rose by 3.5 percent, similar to the rise in 1997. An analysis of the data on goods imports (excluding fuel, diamonds and imports from the Palestinian Autonomy) points to a volume increase of 1.9 percent, compared with 1.4 percent in 1997. The rate of growth of services imports declined in volume terms in 1998 (Table 6.7).

The moderate level of economic activity in 1998 and the development of the real exchange rate were the main background factors affecting imports.

There were two main developments providing the background to the changes in imports in 1998. One was the continued moderate level of economic activity, which led to limited demand for imported goods. The other was continued real appreciation (using the ratio of import prices to the GDP deflator), which was affected by the fall in import prices, so that imported goods were preferred to domestic ones. These two factors are responsible, in almost equal part, to the rate of volume growth of imports in 1998. The process of exposing the economy to imports also persisted in 1998, although there were no major changes in the course of the year. The result of these background conditions was the continued moderate volume expansion of imports, which continued at a similar rate to that in 1997, despite the fact that those conditions acted more strongly to slow down imports in 1998 than they had in 1997. This fact may reflect the lagged effect of the real appreciation.⁵

The moderate level of activity in all components of imports was maintained in 1998, although a certain acceleration may be discerned compared with 1997, when the deceleration was more pronounced. The rate of increase in the volume of factor-input imports (excluding fuel and diamonds)—the main component of goods imports—

⁵ An attempt to explain the development of imports in 1998 by placing the background condition variables in the import equation yielded the result that the volume growth of imports was close to the expected (in contrast to 1997, when the actual was below the expected).

Table 6.7
Total Imports Excluding Capital Services, 1992–98

	(percent)					
	Volume change				Price Change 1998	Distribution 1998
	Average 1992–95	1996	1997	1998		
Total	10.7	9.3	4.2	2.2	–4.9	100.0
Total civilian imports	12.2	8.5	4.0	1.8	–4.9	95.2
Total civilian imports ^a	12.9	10.7	3.5	3.5	–3.5	78.4
Total civilian imports ^a (adjusted to balance-of- payments data)	12.3	7.8	1.4	1.9	–3.9	46.8
Consumer goods	15.3	12.4	2.8	3.6	–3.5	9.9
<i>of which</i> Durables	13.3	10.5	1.7	0.0	–4.3	4.4
Factor inputs	12.0	4.5	2.9	0.4	–7.5	48.2
<i>of which</i> Excluding fuel and diamonds	11.6	6.9	2.0	4.8	–4.7	33.0
Capital goods	11.4	10.4	–2.8	–3.5	–2.0	11.8
<i>of which</i> Machinery and equipment	12.4	11.2	–0.2	4.7	–1.7	9.3
Total services imports and payments for factor inputs ^b	13.7	15.8	6.7	5.8	–2.5	31.7

^a Excluding fuel, diamonds, and imports from the Palestinian Autonomy.

^b Excluding import from the Palestinian Autonomy.

SOURCE: Based on Central Bureau of Statistics data.

accelerated, against the background of continued price reductions resulting mainly from the crisis in South East Asia. Imports of capital goods continued declining in 1998, in volume terms, mainly as a result of a sharp fall in imports of vehicles, in particular heavy vehicles; this development is not surprising in the light of the volatility of this industry and the rapid stock-building of recent years, although the recession in the domestic market also played a role. In 1998, there was some recovery in the imports of other capital goods, in volume terms, in contrast with the decline in their domestic production, in the light of the continued fall in prices of these imports. The volume of imports of goods for private consumption rose again, moderately, in 1998, reflecting the sharp fall in vehicle imports and the recovery from 1997 in other items (current consumption goods and other consumer durables, which became cheaper).

The deceleration in imports from the US and Europe persisted in 1998 (Figure 6.4). In contrast, imports from South East Asia (except Japan) surged. It seems that as imports from South East Asia became cheaper, due to the financial crisis and the depreciations of those countries' currencies, they replaced imports from the industrialized countries (the US and the EU). The trend followed by the yen during the year did not justify an increase in imports from Japan, and the decline in demand for vehicles in Israel greatly reduced imports from there.

The moderate level of imports persisted in all its components, but some acceleration was discernible, compared with 1997.

3. CAPITAL FLOWS

General review

Capital inflow to the economy plunged by 65 percent from 1997 to 1998, down to \$ 3 billion.

The global financial crisis was a major factor in the decline of capital inflow.

The rise in the yield spread between US T-bonds and other bonds served to reduce direct credit from abroad.

Capital inflow in 1998 totaled \$ 3 billion, a decline of 65 percent from its level in 1997. The reduction reflected a decline in nonresidents' capital imports, with a rise in their direct investment, and a significant fall in residents' capital imports. The global financial crisis which started in July 1997 and persisted in 1998 had a major effect on the capital flows to the economy. The reduction of nonresidents' investment derived both from fears that the crisis would cause the NIS to depreciate and adversely affect the dollar value of investment in Israel, and from foreign investors' liquidity difficulties arising from the fall in the value of their investment in emerging markets which obliged them to repatriate their investments throughout the world. Residents had already reduced their capital imports (most of which takes the form of borrowing in foreign currency and converting to NIS) in the second half of 1997. From August/September 1998 there was marked export of capital via the banking system by residents who increased foreign-currency deposits and repaid foreign-currency credit; the banking system tried to offset these capital flows while the NIS depreciated. Capital exports by residents in the last part of the year, following several years of large-scale imports by residents,⁶ is explained by fears of a sharp depreciation of the NIS following the crisis in Russia and shocks in major financial markets, against the background of the differential between interest on NIS and that on foreign currency, which reached its lowest level since the end of 1994.

The development of the global crisis led to a sharp rise in the yield spread required by investors between US T-bonds and other, higher risk, bonds. A rise in the yield spread makes it more difficult for both Israel's private sector and its public sector to raise capital on international markets. And indeed, direct long-term credit from abroad fell from \$ 1.4 billion in 1997, to \$ 0.5 billion in 1998, reverting to its level before Israel was given an international credit rating. Clearly, other factors were acting to reduce borrowing from abroad,⁷ but it is reasonable to assume that the rise in the yield spread was also a cause of the decline in credit from abroad. The public sector, on the other hand, has to date not needed to raise significant quantities of capital abroad outside the US government guarantees framework, so that in 1998 the effect on the public sector of the rise in the yield spread was minor.

In 1998 the Bank of Israel continued its policy of nonintervention in the foreign-exchange market, except to protect the limits of the exchange-rate band to which it is committed. As a result, the Bank did not intervene in trading throughout 1998 (except for six days around the end of 1997 when it purchased about \$ 0.5 billion to prevent appreciation of the NIS taking the exchange rate out of the band). Due to the Bank's

⁶ Except for certain short periods. Sometimes residents' capital export was an activity which in effect offset nonresidents' investments.

⁷ Similar to the factors acting to reduce foreign-currency credit from Israel's banking system (for details, see the Bank of Israel Annual Report, 1997, pages 155–57).

Table 6.8
Capital Inflow,^a 1994-98

	(\$ billion)											
	1994		1995		1996		1997		1998		1998	
	Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec
Capital inflow	1.5	4.1	4.9	8.5	3.0	7.0	1.6	2.4	0.6			
Public sector	2.1	-0.3	2.7	1.2	1.0	0.9	0.4	1.1	-0.2			
Long- and medium-term loans	2.1	0.9	1.8	1.3	1.0	0.9	0.4	1.2	-0.1			
Short-term capital flows	0.0	-1.2	0.8	0.0	-0.1	0.0	0.0	0.0	0.0			
Nonbanking private sector	0.7	3.3	2.6	3.3	2.5	0.9	2.3	1.7	0.8			
Nonresidents' investments in Israel	0.9	2.3	2.8	3.6	2.5	1.6	2.0	1.6	0.9			
Residents' investments abroad	0.5	0.7	0.8	1.0	0.6	0.6	0.5	0.2	0.4			
Medium- and long-term loans	0.5	0.3	1.3	1.4	0.5	0.3	1.1	0.2	0.3			
Short-term capital flows	-0.2	1.4	-0.8	-0.7	0.1	-0.4	-0.3	0.2	0.0			
Capital flows of the banking system	-1.3	1.1	-0.4	4.1	-0.5	5.2	-1.1	-0.5	0.0			

^a Figures may not add due to rounding. A positive sign signifies capital inflow, except for the item 'Residents investments abroad.'

nonintervention, activities in the private sector's (including nonresidents) balance of payments (current account *plus* capital account) must be balanced, so that the private sector as a whole cannot import or export capital beyond the requirement for financing the current-account deficit.⁸ In 1998, the government issued about \$ 1 billion, net, of foreign-currency-indexed bonds. Although this is not directly connected to the balance of payments, in economic terms it is equivalent to the sale of foreign currency by the central bank, particularly in its effect on the exchange rate. The issue of bonds did not satisfy the entire surplus demand for foreign exchange at the given exchange rate (a surplus which began in August), but constituted an additional supply. In view of the central bank's nonintervention in the foreign-exchange market, and the issue by the government of dollar-indexed bonds, caution must be used in analyzing capital flows to determine how the different sectors acted, because part of the pressure to export capital was reflected in the exchange rate (by depreciation), and part was absorbed by the public sector via the dollar-indexed bonds, and in any event this pressure is not expressed in the balance of payments.

The global currency crises, the rise in exchange-rate volatility in Israel, with NIS depreciation and nonintervention in the foreign-exchange market by the Bank of Israel, all these apparently led to heightened awareness of exchange-rate risk and to attempts by individuals and companies to reduce their exposure to the risk. Changes in residents' overall exposure are only possible if there are changes in the exposure of other sectors—the banking system, nonresidents, or the public sector.⁹ The issue of dollar-indexed bonds by the government enabled the private sector to purchase foreign-currency-indexed assets, thereby reducing its exposure to depreciation, but it is difficult to assess the share of individuals and companies exposed to depreciation within the total of those who recently purchased assets denominated in or indexed to foreign currency.

Investment

Nonresidents

In 1998 nonresidents' capital inflow to Israel fell by more than 40 percent from its 1997 level. This reflects a decline of about 80 percent in financial investment, a rise of 30 percent in direct investment, and an increase in nonresidents' use of NIS sources for investment in Israel.¹⁰ The decline in total investment followed three years of increases of more than 20 percent a year in nonresidents' investment in Israel, from less than \$ 1 billion in 1994 to about \$ 3.6 billion in 1997 (Table 6.9). The rise in investment in previous years came in the wake of the influx of immigrants, structural changes in the economy (including reforms and liberalization), geopolitical development in the region,

⁸ Errors and omissions excepted, and excluding foreign-currency activities of the public sector vis-à-vis the private sector, for example foreign-currency proceeds from privatization.

⁹ Within a sector, exposure of an individual may change against a change in that of another individual.

¹⁰ A rise in credit and a reduction in NIS deposits in Israel's banking system.

In 1998, foreign financial investment plummeted by 80 percent, while foreign direct investment rose by 30 percent.

and as part of the general increase of foreign investment in emerging economies since the beginning of the 1990s. The decline of investment, deriving, as stated, from the reduction in the flow of financial investment, was related to the financial crisis which struck the global economy in the second half of 1997 and which erupted again in the third quarter of 1998. The decline in nonresidents' capital inflow started after the outbreak of the crisis in Korea in the fourth quarter of 1997. In the first half of 1998 this inflow was about 40 percent below the level in the equivalent period in 1997. The crisis in Russia which broke out in August 1998 prevented any recovery, and even exacerbated the decline in nonresidents' financial investment, particularly in August, September, and October, although direct investments in the economy continued rising.

In 1998, for the first time since activities in NIS by nonresidents were permitted, the local-currency flow of credit and deposits amounted to more than \$ 0.5 billion (credit rose, and deposits fell). In previous years, nonresidents' activity in NIS was relatively insignificant, but in 1998, when their investment in Israel amounted to about \$ 2.5 billion, this activity created a gap between their capital inflow to Israel and their investment in the economy. The use of local-currency credit and deposits to finance investment in Israel reduces the currency risk confronting nonresidents who undertake the investment, because its yield generally includes a high local-currency component, so that in the event of NIS depreciation, part of the loss of return in foreign-currency terms is offset by the fall in the balance of the local-currency credit in foreign-currency terms.

Nonresidents' financial investment in Israel were greatly affected by the global financial crisis. In November and December 1997, following the collapse of the Korean Won and the falls in world stock markets, nonresidents repatriated about \$ 200 million

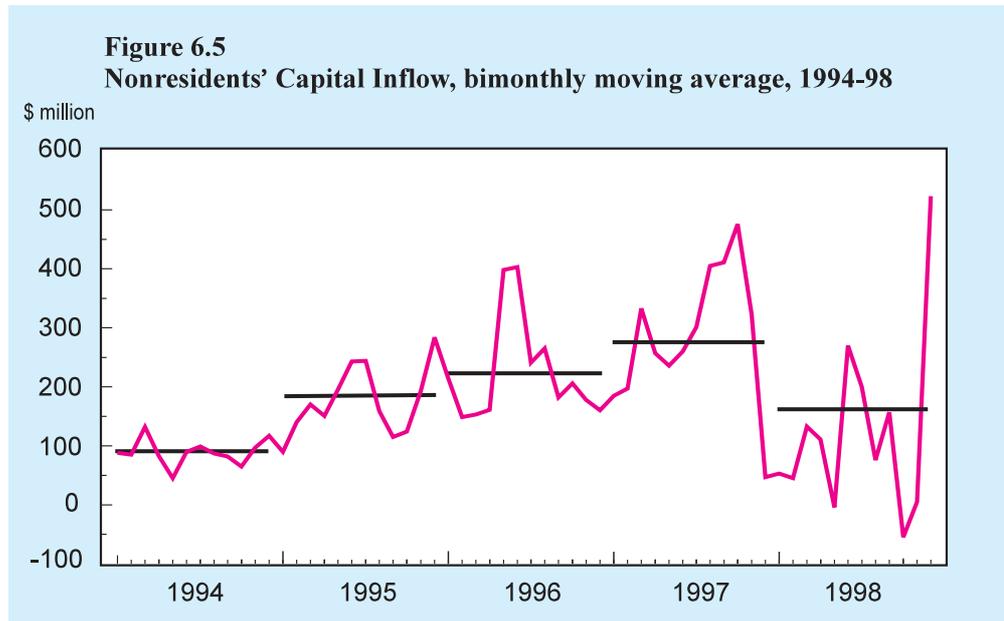
Nonresidents' use of local-currency credit and deposits for investment in the economy totaled about \$ 0.5 billion.

Table 6.9
Foreign Investment in Israel and Residents' Investment Abroad,
1994–98

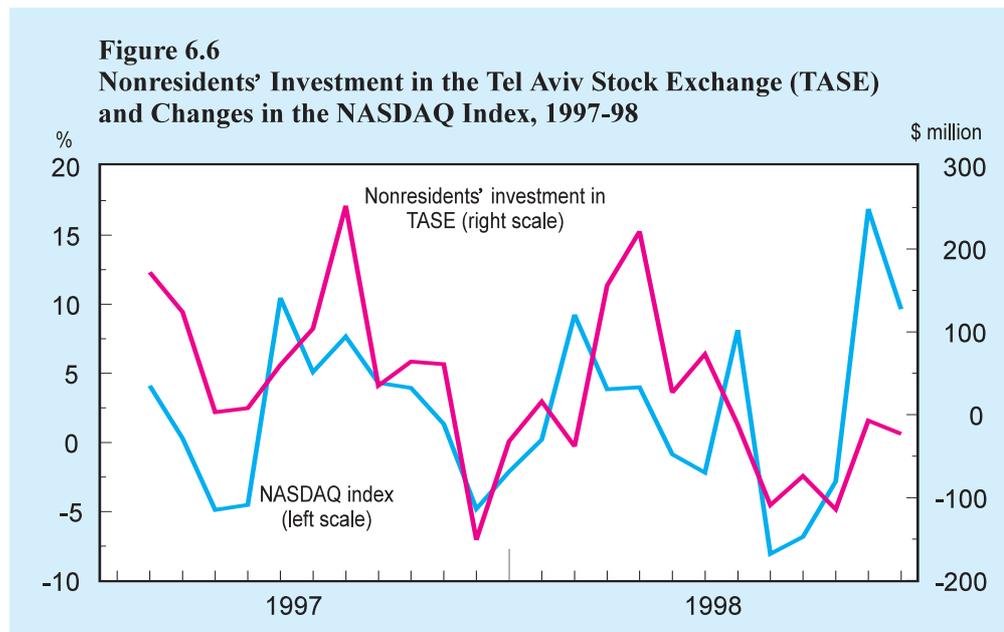
	(\$ billion) ^a						
	1994	1995	1996	1997	1998	1998	
						Jan–Jun	Jul–Dec
A. Foreign investment in Israel	0.9	2.3	2.8	3.6	2.5	1.6	0.9
Direct investment	0.4	1.3	1.4	1.6	2.1	0.9	1.2
Financial investment	0.5	1.0	1.4	2.0	0.4	0.7	–0.2
Investment in TASE	0.2	0.4	0.3	1.0	0.1	0.5	–0.3
Issues abroad and investment in the secondary market abroad	0.3	0.6	1.1	1.3	0.3	0.2	0.1
B. Residents' investment abroad	0.5	0.7	0.8	1.0	0.6	0.2	0.4
Direct	0.7	0.7	0.8	0.7	0.9	0.5	0.4
Financial	–0.2	0.0	0.0	0.3	–0.2	–0.2	0.0
Individuals' investment (A–B)	0.4	1.6	2.0	2.6	1.9	1.4	0.5

^a Figures may not add, due to rounding.

SOURCE: Based on Central Bureau of Statistics data.



of their investment in the Tel Aviv Stock Exchange (TASE), a high figure related to their level of activity in the years before the crisis. In the first half of 1998, when world stock markets began to recover, nonresidents again invested in the TASE, but this lasted for only a short period. In the second half of the year, in view of the crisis in Russia and fears of a crisis in Brazil and of rapid depreciation of the NIS, the trend of repatriation of assets was renewed; this was very marked in August, September, and October, when average repatriation per month on the TASE was about \$ 100 million.



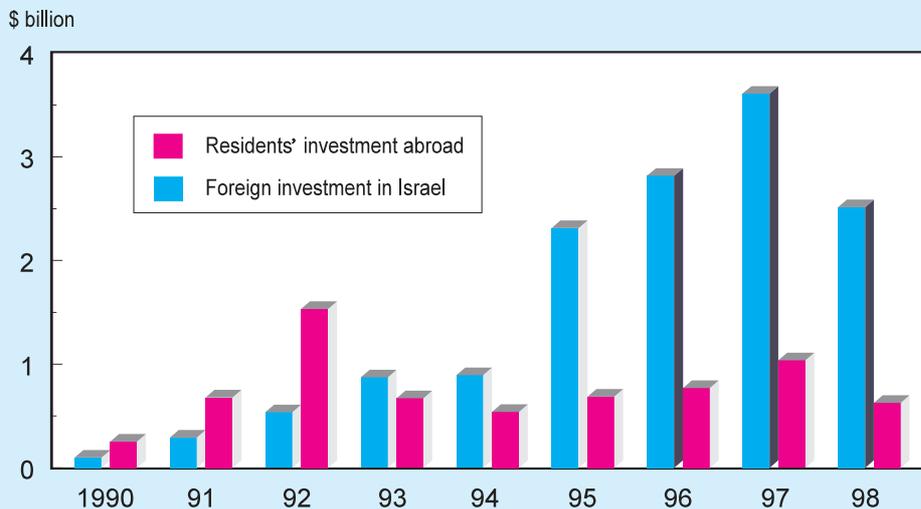
The global financial crisis also affected issues by Israeli companies in overseas stock exchanges. In 1997 issues abroad reached a peak level of more than \$ 1 billion, but since November 1997, when it became apparent that the crisis was not confined to the countries of South East Asia, issues of Israeli companies abroad fell steeply, against the background of a contraction of issues of small companies in the US stock market, and totaled less than \$ 300 million in 1998. In the secondary market, there were no net purchases of Israeli securities by nonresidents in 1998, while from 1994 to 1997 these had averaged some \$ 300 million per year.¹¹

Residents

Residents' investment abroad remained low in 1998. Direct investment totaled some \$ 850 million, about \$ 100 million more than in previous years. On the other hand, residents chose to repatriate some \$ 250 million of financial investments in foreign securities.

Foreign-currency liberalization measures introduced in 1998 increased residents' potential outflow of capital, as they permitted individuals to make direct investments abroad (previously only companies could do so). The repatriation of financial investments and the lack of growth of direct investment abroad in the first half of the year were apparently due to two main factors: first, taxation of households' financial

Figure 6.7
Residents' Investment Abroad and Foreign Investment in Israel,^a 1989-98



^a Since 1994, purchases abroad of Israeli securities by residents from nonresidents have been recorded as repatriation of investments by nonresidents in Israel. Until 1994 they were recorded as residents' investments abroad.
SOURCE: Based on Central Bureau of Statistics data.

¹¹ 1994 is the first year for which these data are available.

investments abroad, which discriminates against them in comparison with financial investments in Israel; secondly, the slow rate of depreciation of the NIS against the currency basket in the last few years compared with the CPI, and the expectation that this would persist. The NIS did depreciate faster in the second half of the year, and it seemed that investment in foreign currency may be attractive (despite the discriminatory taxation, which remained in force). Nevertheless, because of the reduction in capital inflow of nonresidents, nonintervention of the Bank of Israel in foreign-currency trading, and the low level of foreign-currency-indexed bonds relative to demand, part of the pressure for capital outflow was expressed as depreciation, reducing the motivation to purchase foreign currency to invest abroad.

Loans

The nonfinancial private sector

Most residents' capital inflow in the last few years was in the form of foreign-currency credit. There are two main ways in which the nonfinancial private sector borrows in foreign currency, one is via Israel's banking system,¹² and the other is directly from abroad. Borrowing directly from abroad entails the cost of getting to know the foreign lender, so that it is normally only worthwhile to large borrowers.

The flow of foreign-currency credit from Israel's banking system started again in the first half of the year, at a relatively slow rate compared with that at the beginning of 1997, after coming to a complete standstill in the second half of 1997. In September–October, when the NIS started to depreciate significantly and there were fears of further depreciation, there was relatively large-scale repayment of credit. Average net monthly repayment of foreign-currency credit in September–October was about \$ 200 million, compared with average net monthly new credit of about \$ 300 million in the first half of the year, and \$ 700 million in the first half of 1997.¹³ Uncertainty regarding the path which the exchange rate was likely to follow at that time was reflected by a rise in its standard deviation and in the prices of exchange-rate options. Surplus private-sector demand for foreign currency and nonintervention in trading by the Bank of Israel created depreciation which led to equilibrium of market demand and supply. This meant that if no sellers of foreign currency were found in the private sector (e.g., foreign investors), those who had taken foreign-currency credit were unable to repay it, and their demand (or that of others) resulted in depreciation. At one time the government increased its issues of foreign-currency-indexed bonds, thereby enabling the private sector to reduce its surplus foreign-currency liabilities to some extent. Under the new conditions (following the depreciation) there certainly were some borrowers for whom it was no

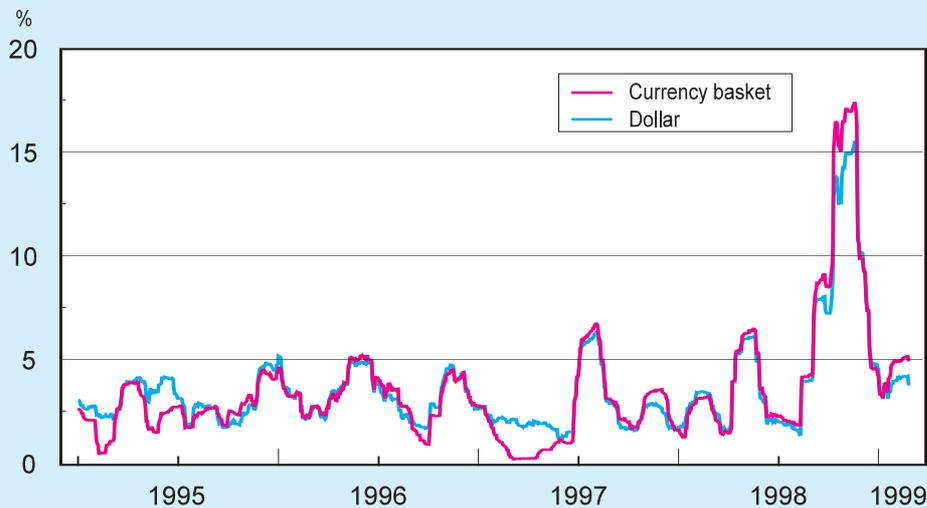
In September and October, with the start of significant depreciation of the NIS, there was relatively large-scale repayment of foreign-currency credit.

Surplus private-sector demand for foreign currency led to depreciation, as the Bank of Israel refrained from intervening in the foreign-currency market.

¹² These loans are not recorded directly in the balance of payments, because loans from domestic banks are considered an activity between Israelis. The activity is reflected in various categories in the balance of payments according to the source of the banking system's foreign currency from which it extends the credit.

¹³ These figures do not include foreign-currency-indexed credit, which also showed net repayments in September–October.

Figure 6.8
Daily Standard Deviation of the Change in the Exchange Rates of the Dollar and the Currency Basket in the Latest Thirty Trading Days 1995-98



longer worthwhile to repay credit and/or to exchange it for local-currency credit. In December, against the background of the rise of 4 percentage points in the Bank of Israel's key interest rate, and after the exchange rate against the currency basket was again close to the midpoint of the band and the variance of the exchange rate had fallen, the nonfinancial private sector reverted to taking foreign-currency credit.

The global financial crisis strengthened misgivings regarding borrowers' inability to repay their debts, so that the differential between interest required from borrowers with a risk of defaulting on repayments and interest from those whose debt repayment was guaranteed—e.g., the US Treasury—increased. The difficulty which Israeli companies faced in trying to raise foreign currency abroad can be seen very clearly from the reduction in the private sector's net credit from abroad. In 1997, direct (long-term) credit amounted to \$ 1.4 billion, whereas in 1998 it was down to only \$ 0.5 billion. Clearly there are also other reasons for the decline in direct credit—e.g., concern that the NIS would depreciate in the wake of the crises abroad, the rise in the volatility of the exchange rate, the contraction of the differential between interest on local currency and that on foreign currency (until October), and the share of foreign-currency credit in total credit—but there is no doubt that the difficulty in obtaining credit abroad contributed to the decline of direct credit.

The public sector

In 1998, the public sector raised a net \$ 1 billion abroad. In January 1998, it borrowed \$ 1.4 billion within the framework of the US government guarantees, this loan signifying the end of a five-year period in which it borrowed about \$ 10 billion in that framework. Since the end of 1995 Israel's government has been preparing for a period when the US government guarantees will no longer be available, and it has borrowed small

Table 6.10
Implied Capital Imports, 1994–98

	(\$ billion)						
	1994	1995	1996	1997	1998		
					Jan–Jun	Jul–Dec	
Private-sector capital imports ^a	3.6	9.4	8.7	13.3	3.9	1.3	2.7
Capital imports of the nonfinancial private sector ^b	5.3	13.7	10.0	13.0	5.0	3.0	2.0
Contribution of private investment to capital imports	0.4	1.6	2.0	2.6	1.9	1.4	0.5
Contribution of credit from authorized dealer to capital imports	1.5	5.8	2.2	4.5	2.3	1.9	0.4
Interest on							
3-month local-currency credit	15.1	17.1	17.6	16.3	14.6	15.3	13.9
3-month foreign-currency credit	6.3	6.8	6.0	6.2	6.2	6.3	6.2
Yield to maturity on 3-month Treasury bills	12.2	14.4	15.5	13.6	11.9	12.5	11.5
Libor currency-basket interest	4.6	5.3	4.6	4.9	4.9	5.0	4.8
Slope of lower limit of band	6.0	6.0	6.0	5.0	4.0	4.0	2.2
Rate of NIS/currency-basket depreciation ^c	5.4	5.8	3.0	3.7	20.6	3.1	17.1

^a Including capital transfers.

^b Including capital imports via the banking system for the nonfinancial private sector.

^c During the period, in annual terms.

SOURCE: Based on Central Bureau of Statistics data.

The government issued \$ 250 million of bonds at 225 basis points above the return on similar US T–bonds.

amounts of \$ 250 million on international markets without these guarantees. These loans are intended to gain Israel access to new markets before it has to borrow larger amounts. In 1998, as a result of the global financial crisis, the differentials between interest required on Israel government bonds and that on more secure bonds, such as those of the US Treasury, increased. The fall in dollar interest offset some of the rise in the interest required to raise capital, but because the foreign-currency reserves in the Bank of Israel at the end of the year amounted to more than \$ 22 billion, and in practice money raised abroad is deposited in the Bank and invested abroad, the rise in the differentials increases the cost of borrowing capital and of holding the reserves.¹⁴ Nevertheless, at the end of the year the government issued \$ 250 million of bonds in New York, as part of the policy mentioned above to gain access to new markets.

The bonds were issued for a 30-year period, and at 7.25 percent interest, 225 basis points above similar US T–bonds. Previous issues by the government were at differentials of between about 50 and 75 basis points. The rise in the differentials reflects mainly the difficulty confronting emerging markets, including Israel, in obtaining credit

¹⁴ This does not take into account capital gains or losses which may occur as a result of discrepancies between the time scales of government liabilities and the Bank of Israel's assets. Such discrepancies arise from the fact that considerations regarding holding reserves relate *inter alia* to liquidity.

abroad, and to a small extent—about 50 basis points—the fact that in 1998 these bonds were issued for a 30-year period. Another important channel through which the government borrows is via State of Israel Bonds, through which it raises almost \$ 1 billion a year, the greatest part of which is used to repay old bonds reaching maturity.

Israel's long-term foreign-currency debt rating was ratified by Moody's in February, and by S&P in November. Since 1995 Israel has been rated by these two agencies A3 and A- respectively. In 1998, they also graded Israel on its local-currency debt, granting it a higher rating than on its foreign-currency debt, i.e., A2 and AA- respectively.¹⁵

Part of the government's foreign-currency borrowing abroad is used to finance its domestic deficit, by converting into NIS at the Bank of Israel according to the representative exchange rate on the day of conversion. The government is unaware of the true cost to the economy of raising this money, as it is unaware of the cost of sterilizing its injection, performed by the Bank of Israel, and its effect on the exchange rate and the rate of interest. This results in a distortion of the relation between the amount of capital inflow by the government and the price of foreign currency, and has an adverse effect on the efficiency of the use of foreign capital.

The banking system

In 1998, the banking system exported capital totaling about \$ 500 million.¹⁶ The Bank of Israel's departure from activity in the foreign-currency market turned the banking system into a market maker in that sphere. Until July, banks absorbed surplus foreign-currency supply from the nonfinancial private sector, concomitantly undertaking activities in the foreign-currency-indexed segment. In March–April, banks increased their surplus liabilities in the latter segment, following demand from the nonfinancial private sector, which had misgivings about depreciation with the introduction of liberalization measures. In September, banks began selling foreign currency to the nonfinancial private sector, as the NIS depreciated. The conclusion to be drawn from the behavior of the banking system in the foreign-currency market is that banks acted to offset capital flows of the nonfinancial private sector. The activities of the banking sector eased the pressure for appreciation of the NIS in the first few months of the year, thereby obviating the need for the Bank of Israel to protect the crawling band.¹⁷ In the latter part of the year, banking-sector activity reduced the pressure for depreciation.

In 1998, the banking system acted to offset capital flows of the nonfinancial private sector.

¹⁵ For details on Israel's credit-risk rating and the international rating agencies, see the 1998 Annual Report of the Bank of Israel Controller of Foreign Exchange.

¹⁶ Capital flows of the banking system do not fully reflect its foreign-currency activities, as those carried out vis-à-vis residents are not recorded directly in the balance of payments. Thus, for instance, when a resident takes credit in foreign currency and converts it into NIS via the banking system, it is not registered in the balance of payments as it is a transaction between residents. Such activities are sometimes considered as private-sector capital imports, and capital exports by the banking system.

¹⁷ Except for a period of six days around the beginning of the year.

It is hard to determine whether the considerations which led the banks to increase their surplus liabilities in and indexed to foreign currency while the NIS depreciated,¹⁸ at a time when the private sector increased its demand for foreign currency, derived from their expectations regarding the exchange rate and an attempt to profit from the depreciation, or whether they were acting to reduce the extent of depreciation out of concern that too severe depreciation would lead to bankruptcies and defaults on repayment of foreign-currency loans.

Liberalizing foreign-exchange control

In May 1998, almost total liberalization of foreign exchange was announced. The process had started at the end of the 1980s, and lasted for more than a decade, in the course of which restrictions on the current account (exports, imports, and unilateral transfers) and on capital flows (financial and direct investments, and loans) were gradually removed. In January 1998, restrictions on the purchase of foreign currency with NIS for opening a foreign-currency account in Israeli banks were abolished. In May, with the announcement of the new stage in the liberalization process, all foreign-currency activities—barring a few isolated ones which were listed as prohibited in the new General Permit—were permitted. The requirement to present documents simultaneously with performing foreign-exchange transactions was abolished, and households were permitted to invest unlimited amounts abroad, to open accounts abroad, and to manage their transactions via them. Even prior to the announcement, only a few restrictions related to foreign-currency control remained in force. Nevertheless, the removal of the bureaucratic procedures related to control, and the possibility of opening bank accounts abroad and of performing transactions without the intermediation of the domestic banks constituted a significant change regarding both opening the economy so that Israelis can invest abroad, and competition which will now confront the domestic banking system.

In May, with the announcement of the next stage of liberalization, all foreign-exchange activities were permitted, with the exception of a few which were specified as being prohibited.

The restrictions still in force affect institutional investors and NIS/foreign-currency derivative transactions with nonresidents. Pension funds and insurance companies may not make financial or direct investment abroad, and provident funds may invest only up to a maximum of 5 percent of their assets in financial investments abroad. Residents may not perform derivative transactions with nonresidents if one of the basis assets in the transaction is NIS, and if the transaction involves receipt or payment of foreign currency, unless it is a forward transaction for a period of not more than 30 days.

Discriminatory taxation still exists between households' financial investments in Israel (which are tax exempt) and their investments abroad. Financial investments in foreign securities are subject to 35 percent tax on the foreign-currency profits (including capital gains). In practice, a situation may exist in which an individual pays tax even though in real terms, i.e., in terms of the CPI, he has incurred a loss. A rate of tax similar to the above applies to interest on foreign-currency deposits (in Israel and

¹⁸ Data of the surplus liabilities in and indexed to foreign currency do not include NIS/foreign-currency options.

abroad). Taxation on housing rents is also discriminatory: rent income in Israel is tax exempt up to a ceiling of NIS 6,350 per month, while rent income abroad is taxable.

The external debt and the reserves

The current-account deficit may be financed in three ways: net borrowing from abroad via debt instruments such as bonds or loans; using the foreign-currency reserves, which also increases the economy's net foreign debt; and net investment in the economy by individuals (foreign investment in Israel *minus* residents' investment abroad). The advantage in using nonresidents' investment for financing the current-account deficit lies in the fact that it reduces the need to increase the external debt to finance the deficit. Nevertheless, this method of financing does mean financing by selling the economy's assets to nonresidents, and once they are sold, the economy no longer benefits from the income they yield (apart from the tax). Financing via the creation of debt differs from that via selling assets also in the extent of nonresidents' participation in changes occurring in the economy. Thus, for example, during a crisis prices of the assets fall, and no economic agent is obliged to repurchase them from the foreign investors who bought them (certainly not at the original purchase price). On the other hand, the economy's indebtedness abroad does not alter with the economic situation.

Israel's gross foreign debt totaled about \$ 55 billion in December 1998. Some 6 percent consisted of liabilities of the nonfinancial private sector and of the public sector repayable within a year, and 59 percent were liabilities of those sectors over periods of more than a year. The banking system's foreign liabilities amounted to \$ 19 billion, mostly short term, but against these the banking system had assets of \$ 9.5 billion abroad.

The net-external-debt/GDP ratio has been falling since 1984. Factors contributing to the decline were changes in the net nominal debt; in the real exchange rate; in real GDP; and in world prices. From 1995 to 1998, the decline in the nominal debt made the most prominent contribution. This could take place as a result of the significant increase in the flow of nonresidents' investments in Israel during the period, despite the high deficit on the current account, especially from 1995 to 1997. In 1998 the net-external-debt/GDP ratio rose by 0.6 percentage points, mainly due to depreciation of the NIS towards the end of the year. The decline in export prices in 1998, which means an increase in the debt in real terms, also contributed to the rise in the ratio.

The foreign reserves reached \$ 22.7 billion in 1998. These serve the economy's liquidity requirement and ensure local-currency stability. The greater the reserves, the smaller the chances of uncontrolled depreciation as a result of external shocks and private-sector activities against local currency, and the greater the stability which the economy conveys regarding its loan repayment ability. On the other hand, as the direct cost of holding reserves is the differential between interest paid on the external debt and that received on the reserves,¹⁹ the greater the reserves, the higher the cost of holding them.

¹⁹ This does not take into account capital gains or losses which may occur as a result of discrepancies between the time scales of foreign liabilities and foreign assets.

Table 6.11
Foreign-Currency Reserves/GDP Ratio and M2/Reserves Ratio in Several Countries, 1996–97

	Israel	Argentina	Brazil	Slovakia	Spain	Chile	Thailand
				December 1996			
GDP (\$ billion)	96	297	775	18.8	581	69	185
Foreign reserves (\$ billion)	11.9	18.1	58.3	3.4	55.9	14.8	37.7
M2/reserves ratio	2.8	2.1	2.8	3.9	8.2	1.7	3.9
Reserves/GDP ratio	0.12	0.06	0.08	0.18	0.10	0.21	0.20
				December 1997			
GDP (\$ billion)	99	324	804	19.5	531	77	154
Foreign reserves (\$ billion)	20.8	22.3	50.8	3.2	66.0	17.3	26.2
M2/reserves ratio	2.0	2.1	3.7	4.1	6.1	1.8	5.3
Reserves/GDP ratio	0.21	0.07	0.06	0.16	0.12	0.22	0.17
Exchange-rate policy/regime	Crawling band relating to the currency basket, with a $\pm 15\%$ width.	Currency board. 1 peso = \$1	Until January 1999, a narrow crawling band. In practice, the currency depreciated by 7% a year against the dollar.	Crawling band against a currency basket, with a $\pm 7\%$ width.	Member of EMU	Crawling band against currency basket. At end-December 1996 the width was $\pm 10\%$. At end-December 1998, a floating rate. $\pm 5\%$.	Until July 1997— a fixed exchange rate against a currency basket. From July 1997, a floating rate.

SOURCE: IFS and central banks' data.

Table 6.12
Debt/GDP Ratio, 1986–98

	(percent of GDP, annual average)						
	1986	1987–89	1990–92	1993–95	1996	1997	1998
Debt/GDP ratio (end-year, percent)	55.5	35.1	26.9	22.4	18.6	14.9	15.5
Change in ratio (annual average, percentage points ^a)		–6.8	–2.8	–1.5	–3.8	–3.7	0.6
Contribution of real change in GDP		–1.7	–1.9	–1.4	–0.9	–0.4	–0.3
Contribution of change in real exchange rate ^b		–0.4	–0.3	–1.2	–0.7	–0.1	1.0
Contribution of change in nominal net debt		–1.3	0.3	1.3	–1.9	–3.3	–0.5
Contribution of change in world prices ^c		–3.7	–0.9	–0.2	–0.2	0.1	0.4

^a The sum of the contributions to the change in the ratio do 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.

