Chapter 6

The Balance of Payments

1. MAIN DEVELOPMENTS

In 1991 the civilian import surplus increased by $ 1.6 billion, and amounted to $ 5.2 billion (9 percent of GNP), most of the increase showing as a current account deficit of $ 900 million (compared with a surplus of $ 600 million in 1990). Unilateral transfers rose by $ 500 million as a result of special Gulf War grants and continued support from world Jewry for immigrant absorption, even though half the civilian aid from the United States was postponed.

Immigration helped to expand civilian imports by pushing up direct and indirect demand for the second consecutive year. The increased civilian import surplus was due mainly to the 13 percent rise in the volume of civilian imports (excluding capital services). Imports of capital goods, consumer goods, and intermediates rose by 37, 21, and 12 percent respectively.

The world recession and the Gulf War contributed to the 1 percent decline in Israel's exports (excluding capital services). The slowdown in exports was accompanied by real appreciation (the persistent decline in prices of exports relative to those of domestic resource uses).

The private sector financed its current-account deficit by making foreign exchange purchases from the Bank of Israel in the amount of $ 2.2 billion and by capital imports of $ 600 million. The breakdown by source of private-sector capital imports is problematic, however, because unreported capital movements (errors and omissions) amounted to $ 2 billion, while reported capital movements indicate that capital exports were $ 1.4 billion.

The increase in unreported capital movements is apparently explained by incomplete reporting of credit from abroad—among other things as a result of the liberalization of the capital market and the deregulation of foreign exchange—as well as by the conversion of foreign-currency assets held by Israelis and recorded only upon conversion. The errors and omissions item often expands when foreign exchange is deregulated, as happened in Israel in 1977 when far-reaching liberalization measures were introduced.

The net external debt fell in 1991 despite the current account deficit, but this was due solely to the fact that only reported capital movements are included in the debt calculation. The decline reflected a further reduction of the debt/GNP ratio, from 31 percent in 1990 to 27 percent in 1991.

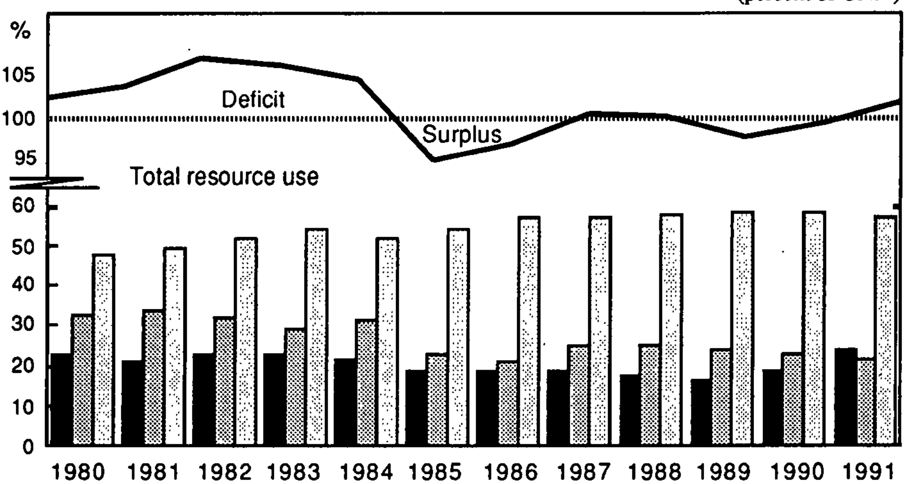
Table 6.1
Selected Balance-of-Payments Indicators, 1978–91

	1978–82	1983–86	1987	1988	1989	1990	1991
Billions of current $							
Total current account	-1.0	-0.1	-0.8	-0.5	1.2	0.6	-0.9
Adjusted current account[a]	-1.1	-0.4	-0.1	-0.0	1.0	0.4	-1.0
Import surplus							
Total	3.8	4.3	5.8	5.1	3.7	5.1	7.0
Civilian[b]	2.1	2.9	3.3	3.1	2.5	3.6	5.2
Civilian, excl. capital services	1.5	1.4	1.8	1.4	1.1	2.3	4.4
Net unilateral transfers							
To public sector	1.6	3.2	3.2	3.2	3.1	3.8	4.2
To private sector	1.2	0.9	1.6	1.5	1.8	1.8	2.0
Implied private capital imports[c]			0.9	-1.7	0.7	0.7	0.6
External debt							
Net	11.6	18.3	18.3	18.6	16.4	15.9	15.5
Gross	21.4	29.7	31.9	31.4	31.3	32.7	32.7
Foreign reserves	3.5	3.9	6.0	4.8	6.2	6.9	6.9
Annual change, percent (volume)							
Exports[d]	6.3	5.3	8.7	-3.1	6.2	5.8	1.7
Civilian imports[d]	11.2	2.7	11.9	-1.2	1.3	10.3	17.4
World trade	2.4	5.0	5.6	9.0	7.1	5.2	3.3
Selected indicators							
Exchange rate							
Against the dollar	0.0090	0.75	1.59	1.60	1.92	2.02	2.28
Against the 5-currency basket	0.0091	0.71	1.68	1.72	2.00	2.21	2.48
Net external debt as percent of							
GNP	59.8	70.9	53.0	43.8	37.6	31.4	26.7
Exports	128.1	168.6	130.0	119.7	97.2	85.8	82.7
Relative prices (1980 = 100)							
Imports/domestic resource use[e]	98	85	76	72	72	70	65
Exports/domestic resource use[e]	100	88	77	73	75	71	70
Terms of trade[f]	97	110	110	116	114	111	115

[a] Corrected for advances on defense imports. See note 1 in the text.
[b] Excluding direct defense imports.
[c] See Table 6.8
[d] Excluding diamonds and capital services.
[e] Implicit price index of exports (imports) ÷ by implicit price index of domestic use of resources (from the national accounts). Excluding direct defense imports and diamonds.
[f] Excluding capital services, diamonds, and direct defense imports.
SOURCE: Based on Central Bureau of Statistics data.

Despite the general trend of capital imports, speculative foreign-exchange purchases increased in September. Devaluation expectations died down once the Arrangement bank shares had been purchased and as a result of the policy-makers' firmness in refusing to accommodate these expectations. The exchange-rate arrangement was modified in December 1991, and the horizontal band was replaced by a diagonal one, while remaining at ±5 percent of the midpoint rate. Since then, the midpoint rate has been

Figure 6.1
Domestic Use of Resources and the Adjusted Current Account, 1980–91
(percent of GNP[a])



Deficit or surplus in adjusted current account, at official exchange rate

— Total resource use—gross investment and consumption *less* unilateral transfers from rest of world; adjusted for advances. The difference between domestic resource use and GNP is the surplus or deficit on current account.

Private consumption *less* net unilateral transfers to the private sector.

Public consumption *less* net unilateral foreign transfers to the general government, adjusted for advances

Gross investment

[a] At official exchange rate.
SOURCE: Based on Central Bureau of Statistics data.

adjusted on a daily basis (at an annual rate of 9 percent). The actual devaluation rate for 1991 was 11 percent, similar to the annual average since 1989.

The gradual relaxation of foreign-exchange controls continued in 1991, the principal object being to ease the foreign-exchange transactions of the business sector. Thus, the offsetting of export against import payments was permitted even if different nonresidents were involved in each transaction. Permits for futures transactions were extended to cover securities traded abroad. The ceiling on direct investment abroad was extended from 20 to 40 percent of the investing company's equity, and the process for investment in Israel by nonresidents was simplified.

As a result of the free trade agreements with the United States and the EC, purchase tax on 400 items was reduced. Exposure to imports from countries with which Israel has no free trade agreement began in September, and at the first stage administrative restrictions were curtailed. The eventual aim is to bring the maximum tariff down to 8–12 percent within the next seven years. Strict adherence to the program is essential to encourage the substitution of imports from cheaper sources for those from expensive ones, rationalize resource allocation, and bring consumer prices down.

2. THE CURRENT ACCOUNT

In 1991 the adjusted current account[1] was in deficit by $ 1 billion, after showing a surplus of some $ 400 million in 1990. The civilian import surplus net of interest payments rose by $ 2.1 billion.

After two years of slack economic activity, there was rapid expansion in 1990 as a result of the influx of immigrants and the general recovery. Immigration pushed demand up, both directly and by generating expectations of increased demand. Increased imports in 1991 reflect the sustained expansion of domestic demand, particularly of import-intensive commodities, such as producer durables, for most of which there is no close domestic substitute. For example, about 60 percent of purchased machinery and equipment is imported. After remaining unchanged in 1988 and 1989, demand for machinery and equipment rose by 23 percent in 1990 and by 30 percent in 1991, the total increase over 1990 accounting for a $ 500 million rise in imports.

In construction, where the sharp increase in activity is not permanent, the inability of the economy to satisfy demand immediately was evident. The temporary nature of some of the demand and the considerable cost of adjusting economic activity—current expansion and future contraction—also detracted from the profitability of expanding domestic production, making imports more attractive. The government's incentives to speed up construction also appear to have contributed to increasing the import component of construction, and the government has added to this directly by importing mobile homes.

Increased demand for imports has been stimulated by the persistent decline in the relative price of imports with the improvement in the terms of trade (Table 6.1).

As stated, in addition to soaring imports, the reduction of exports also contributed to the civilian import surplus. After expanding at an annual rate of 4 percent in 1989–90, the volume of exports (excluding capital services) declined by 1 percent in 1991. The

[1] The adjusted current account records defense flows on a cash basis, since defense imports are subject to sharp annual fluctuations while the payments for them are much more regular, as is the military aid which finances them.

Table 6.2
Goods and Services Account, 1988–91[a]

	$ million				Annual change, percent					
					Price			Quantity		
	1988	1989	1990	1991	1989	1990	1991	1989	1990	1991
Imports										
Goods excl. fuel and diamonds	8,354	8,438	10,155	12,086	1.0	3.7	-3.3	0.0	16.1	23.1
Fuel	1,062	1,247	1,536	1,474	22.3	22.5	-23.3	-3.9	0.5	25.2
Diamonds	2,415	2,869	2,895	2,558	24.0	13.5	-0.5	-4.2	-11.1	-11.2
Services[b]	3,552	3,844	4,417	5,086	2.0	16.1	7.9	6.1	-1.0	6.7
From Judea-Samaria and Gaza	805	775	961	901	-3.8	4.3	0.6	0.1	18.9	-6.8
Subtotal	**16,187**	**17,173**	**19,963**	**22,106**	**5.6**	**8.9**	**-2.3**	**0.5**	**6.7**	**13.3**
Capital services	2,633	2,661	2,739	2,539						
Direct defense imports	2,082	1,204	1,490	1,773						
Total imports	**20,903**	**21,038**	**24,192**	**26,417**						
Exports										
Goods, excl. diamonds	6,912	7,625	8,523	8,476	1.2	5.2	-1.5	9.0	6.2	0.9
Diamonds	2,547	3,027	3,054	2,729	17.7	14.4	3.7	1.0	-11.8	-13.8
Services[b]	4,477	4,694	5,074	5,312	-0.2	5.3	6.7	5.1	2.6	-1.9
To Judea-Samaria and Gaza	826	743	966	1,227	0.8	7.3	3.4	-10.7	21.0	22.8
Subtotal	**14,762**	**16,090**	**17,617**	**17,744**	3.5	6.9	1.7	5.3	2.5	-1.0
Capital services	1,000	1,268	1,496	1,660						
Total exports	**15,762**	**17,359**	**19,113**	**19,404**						
Surplus on services account[b]	**924**	**850**	**657**	**225**						
Import surplus										
Civilian, excl. capital services	1,426	1,083	2,346	4,362						
Civilian import surplus	3,058	2,476	3,589	5,240						
Total import surplus	5,141	3,679	5,079	7,013						

[a] Imports c.i.f., exports f.o.b.
[b] Excluding capital services and Judea–Samaria and Gaza.
SOURCE: Based on Central Bureau of Statistics data.

growth rate of industrial exports (excluding diamonds) slowed from an annual average of 6 percent in 1989–90 to less than 1 percent in 1991 due to a number of factors associated with both domestic and world developments.

The Gulf crisis had an adverse effect on exports, starting in August 1990 and continuing in 1991, although the fighting had ended. Incoming tourism dropped steeply, and the number of tourists entries in the first half of 1991 was half that of the corresponding period in 1990. An estimated $ 430 million in tourist services was lost in 1991 due to the war (on the assumption that the number of tourist entries and income per tourist in the first half of 1991 would have been the same as in 1990). Firms reported that export orders had been cancelled as a result of the war.

The world recession held back the growth of world trade, hampering the expansion of Israel's exports. The rate of growth of world trade went down from 7 percent in 1989 to 5 percent in 1990 and 3 percent in 1991.

The 1991 slowdown in Israeli exports was also a result of persistent real appreciation. Real appreciation is typical of western economies, partly reflecting technological improvements in tradables. In Israel the process was also affected by the economic stabilization program of 1985 (ESP), and was reinforced in 1990–91 by the composition of demand generated by the influx of immigrants. The export/domestic resource uses ratio declined by 2 percent in 1991, after falling by 5 percent in 1990. The decline of this index in the last decade is 30 percent (Table 6.1).

Although the contribution of real depreciation to the profitability of exports is important, it should not be inferred that a policy of accelerated devaluation would help to increase exports on a lasting basis, because of the effect devaluation has on inflationary expectations and actual inflation. The real exchange rate is essentially determined by supply of output and demand, and experience has shown that changes in the nominal rate do not result in lasting shifts in the real rate. The effect of nominal changes on economic activity depends, among other things, on the development of wages.

Merchandise exports

Overseas sales amounted to $ 12 billion in 1991, or 63 percent of the country's total exports. Industrial goods account for the bulk of Israel's exports, the leading industries being metals, machinery, and electronics (about $ 3.2 billion), diamonds (about $ 2.5 billion, although value added is relatively low), and chemicals (about $ 1.8 billion). Agricultural exports yielded $ 670 million, and exports to the administered areas $ 980 million.

Industrial exports (excluding diamonds)

While there was a decline of 3 percent in metals, machinery, and electronics, textiles exports rose by an impressive 15 percent in 1991, after expanding by 4 percent in 1990. Food exports dropped considerably (by 8 percent).

Table 6.3
Merchandise Exports (f.o.b.), 1988–91

	$ million				Annual change, percent					
					Price			Quantity		
	1988	1989	1990	1991	1989	1990	1991	1989	1990	1991
Agricultural exports	567	527	656	666	−11.6	10.2	0.8	5.1	13.1	0.6
Citrus	*176*	*132*	*181*	*173*	−4.7	2.1	19.8	−21.7	34.2	−20.2
Other	*390*	*395*	*476*	*493*	−13.6	13.4	−3.6	17.1	6.2	7.6
Industrial exports[a]	6,534	7,068	7,894	7,863	1.9	5.2	−0.9	6.1	6.2	0.5
Metals, machinery, electronics	*2,834*	*3,229*	*3,357*	*3,240*	1.3	2.8	−0.6	12.5	1.2	−2.9
Chemicals, rubber, plastics	*1,390*	*1,579*	*1,818*	*1,834*	4.3	7.3	−2.4	9.0	7.3	3.3
Other	*2,311*	*2,259*	*2,719*	*2,789*	1.2	7.0	−0.4	−3.4	12.5	2.9
Polished diamonds (net)	2,547	2,704	2,783	2,470	17.3	13.8	4.0	−9.5	−9.6	−14.7
Unpolished diamonds (net)	0	323	271	259		20.9	0.8		−30.6	−5.2
Ships and aircraft	12	75	22	32						
less Returned exports	215	27	24	70						
subtotal: FTS definition	**9,445**	**10,669**	**11,603**	**11,219**	5.6	7.7	−0.1	7.0	0.9	−3.2
Balance-of-payments adjustments	14	−17	−26	−14						
To Judea-Samaria and Gaza	596	516	709	976	1.0	5.9	2.9	−14.3	29.8	33.8
Total	**10,055**	**11,168**	**12,287**	**12,181**	5.4	7.6	0.1	5.4	2.2	−1.0
Total excl. diamonds and exports to Judea-Samaria and Gaza	6,912	7,625	8,523	8,476	0.7	5.6	−0.8	9.5	5.9	0.2

[a] Excluding diamonds, ships, and aircraft.

SOURCE: Based on Central Bureau of Statistics data.

The export of metals, machinery, and electronics is affected by world demand for weapons. Indicators of defense exports and the decline in the international demand for arms led to the view that total defense exports would decline. This has not proved to be the case, however, and there has been no change. The decline in defense demand, both internally and externally, has led to the continued diversion of production from military to civilian purposes, especially in electronics.

Table 6.4
Decomposition of the Change in the Volume of Exports, 1981–91[a]

	1981–84	1985	1986	1987	1988	1989	1990	1991
Annual change, percent								
Total	3.9	7.6	4.9	10.7	–2.3	5.4	2.1	–2.0
Diamonds	–4.7	26.9	26.8	22.0	2.3	1.0	–11.8	–13.8
Other	5.1	5.2	1.8	8.8	–3.1	6.3	5.3	0.5
Decomposition of nondiamond exports								
Industrial[b]	3.4	3.6	2.8	4.5	1.9	4.9	3.4	0.3
Agricultural	0.5	–0.5	0.7	–0.4	–0.9	0.2	0.5	0.0
Tourism	0.2	1.1	–2.9	1.9	–1.5	1.2	–1.0	–1.2
Other services	0.8	1.1	–0.1	2.1	1.0	0.7	1.5	0.8
Administered areas	–0.0	0.5	1.1	0.6	–3.4	–0.7	1.2	0.7

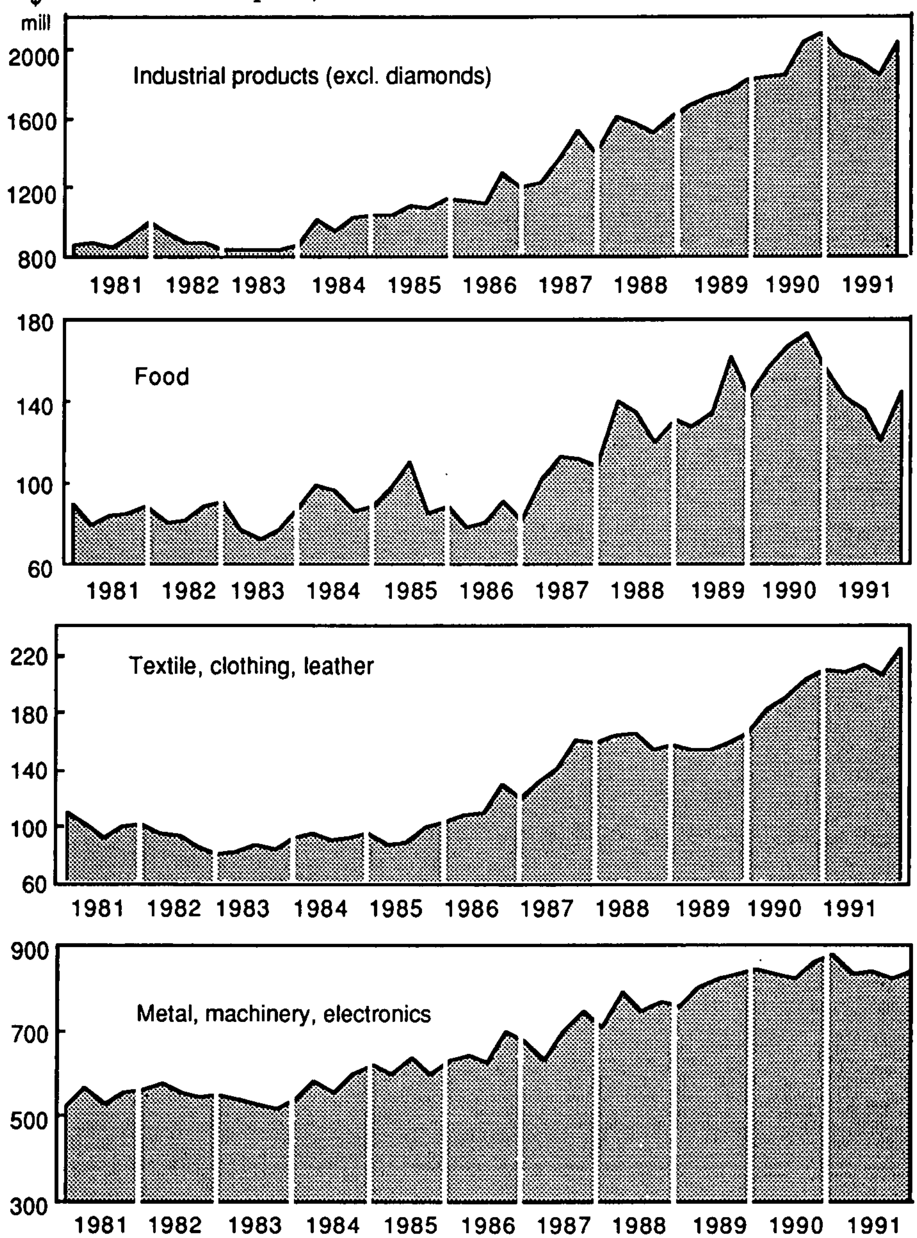
[a] Total exports, excluding capital services.
[b] Including ships and aircraft.
SOURCE: Based on Central Bureau of Statistics data.

Food exports rose by 11 percent in 1989 and 7 percent in 1990, but dropped by 8 percent in 1991. This is explained by the fact that fruit and vegetable preserves account for 70 percent of food exports, most of it in the form of concentrates, and world climatic conditions caused prices of concentrates to drop steeply.

Textiles exports rose by 15 percent in 1991 in spite of the recession in the United States and Europe. This increase was the outcome of rationalization by firms and the transition to the manufacture of new, non-standard items. The reduction of import tariffs by the United States as part of its free trade agreement with Israel also enhanced the competitiveness of Israeli products there.

It is difficult to base an assessment of the profitability of exports on an analysis of the labor market for two reasons. First, the index of unit labor costs, which measures the distributive share of labor, reflects changes in profitability only if assumptions are made about certain elements, among them capital stock, taxes, and subsidies. Second, since we do not have data on output, wages, and productivity regarding exports, unit labor costs of exports can be derived only by making assumptions about them. These lead to the conclusion that labor costs declined by less for exports than for the business sector as a whole.

Figure 6.2
Merchandise Exports, 1981-91[a]



[a] Quarterly data, seasonally adjusted, at 1988 prices.
SOURCE: Based on Central Bureau of Statistics data.

The exchange-rate insurance premium for exporters was reduced by 1 percentage point in March 1991 as part of exchange-rate unification. Since the object is to improve the allocation of resources, a program was begun of exposing the economy to imports from countries with which Israel has no free trade agreement. The continued implementation of the program will help reduce the price of intermediates and improve the profitability of exports.

Civilian merchandise imports

Increased local demand and its composition were reflected in an appreciable rise in imports for the second consecutive year, whose volume of imported merchandise grew by 9 percent in 1990, accelerating to 17 percent in 1991. Excluding diamonds, fuel, and imports from the administered territories, the volume of merchandise imports rose by 16 and 23 percent in 1990 and 1991 respectively. The upswing in demand for imported goods once the Gulf War was over compensated for the slowdown in these imports before and during the war.

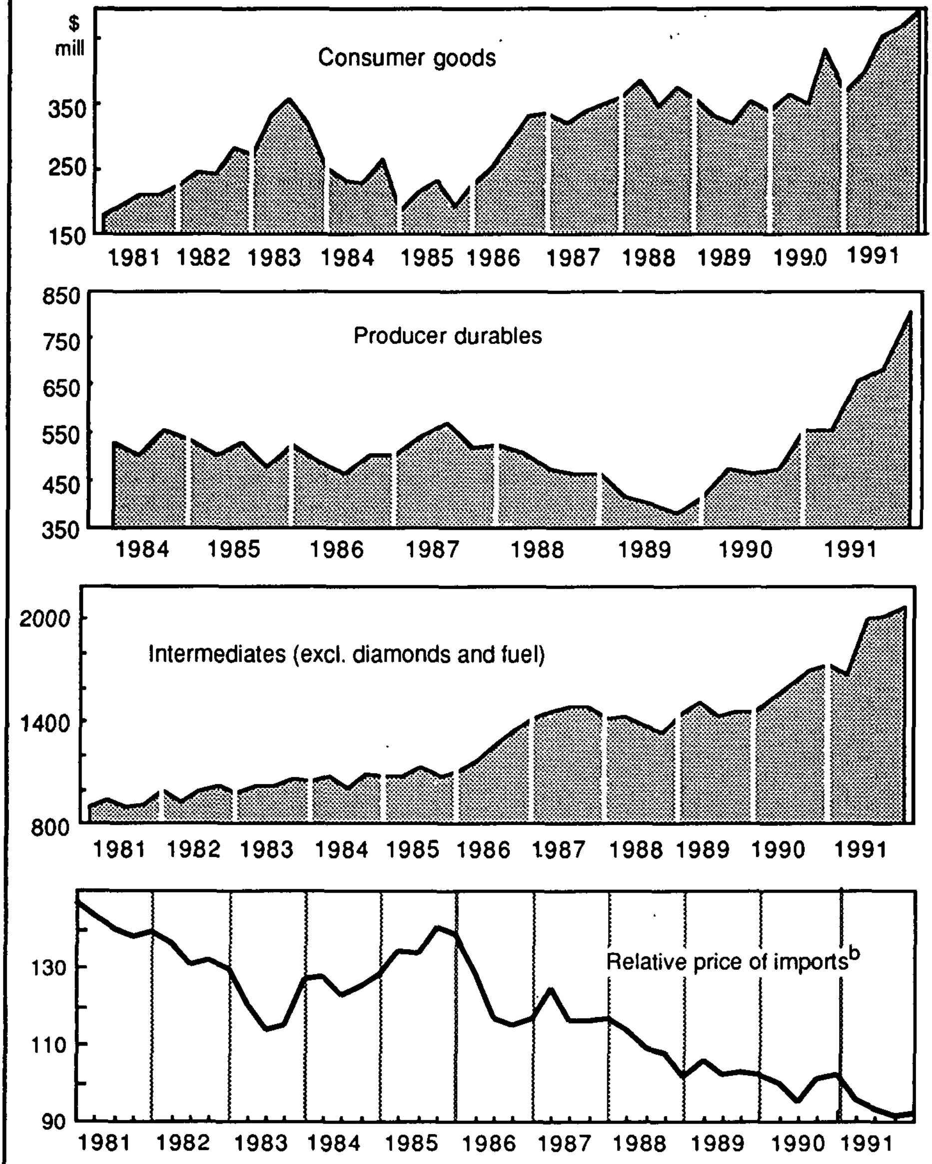
Although all types of merchandise imports shared in the rise, this was particularly prominent in producer durables, which increased by a massive 37 percent after climbing by 28 percent in 1990. The impressive growth in imported intermediates (excluding diamonds and fuel) continued, and they went up by 12 and 15 percent in 1990 and 1991 respectively. Consumer goods, which rose by 13 percent in 1990, went up by 21 percent in 1991.

The liberalization of foreign trade

Israel signed free trade agreements with the EC in 1975 and the U.S. in 1985, in order to facilitate access to those markets and eliminate the distortions in both production and consumption created by protection. The existence of multiple effective exchange rates induces investment in products whose profitability is relatively low and impairs the economy's capacity for growth. As a result, the range of consumer goods is limited and prices are high.

The principal tariffs still in place relate to imports from countries with which Israel has no free trade agreement in south east Asia, Latin America, and eastern Europe. Since these countries' share of world trade is growing, the government has adopted a policy of gradual exposure to their imports. This will enable goods to be imported cheaply from those countries rather than from Israel's more expensive traditional trading partners, thereby bringing about a considerable saving in foreign exchange. The first stage of the program was implemented in September 1991, when quantitative restrictions on imports from such countries were replaced by protective tariffs to be scaled down at a predetermined rate. Although data is not yet available on the effect on the domestic market

Figure 6.3
Merchandise Imports, 1981–1991[a]



[a] Quarterly data, seasonally adjusted, at 1986 prices.
[b] Relative to domestic use of resources.
SOURCE: Based on Central Bureau of Statistics data.

Table 6.5
Merchandise Imports (c.i.f.) by Economic Destination, 1988–91

	$ million				Annual change, percent					
					Price			Quantity		
	1988	1989	1990	1991	1989	1990	1991	1989	1990	1991
Consumption	1,463	1,329	1,602	1,875	–1.0	6.6	–3.2	–8.2	13.1	21.0
of which Durables	727	561	747	915	–4.1	4.2	–5.5	–19.6	27.9	29.6
Investment	1,971	1,612	2,228	3,046	–3.1	7.7	–0.2	–15.6	28.3	36.9
of which										
Machinery and equipment	1,361	1,234	1,636	2,126	–2.0	8.4	1.3	–7.5	22.4	28.2
Land transport equipment	511	327	421	690						
Intermediates	9,112	10,130	11,319	11,817	9.6	6.7	–6.7	1.4	4.8	11.9
Fuel	1,062	1,247	1,536	1,474	22.3	22.5	–23.3	–3.9	0.5	25.2
Diamonds (net)	2,415	2,869	2,895	2,558	24.0	13.5	–0.5	–4.2	–11.1	–11.2
Caravans			12	208						
Other	5,635	6,014	6,876	7,577	2.5	2.0	–4.5	4.1	12.2	15.4
Merchandise n.e.s.[a]	–259	–44	–42	–50						
subtotal: FTS definition	**12,287**	**13,027**	**15,107**	16,688	7.0	6.8	–5.3	–0.9	8.5	16.6
Balance-of-payments adjustments	–457	–473	–521	–570						
From Judea-Samaria & Gaza	148	107	177	190	–3.2	8.8	–2.2	–25.5	52.4	9.7
Total	**11,978**	**12,661**	**14,763**	16,308	6.9	6.9	–5.2	–1.1	9.1	16.6
Total excl. fuel, diamonds, and imports from Judea–Samaria & Gaza	8,354	8,438	10,155	12,086	1.0	3.7	–3.3	0.0	16.1	23.1

[a] Net of returned imports.

SOURCE: Based on Central Bureau of Statistics data.

of the liberalization of imports from these countries, the transition from adminstrative restrictions to tariffs has led to an increase in tax receipts and a reduction in importers' economic rent.

For the first three years of the program, until September 1994, licenses will be required for such imports as textiles, clothing, footwear, plywood, and fertilizers, although they will be issued automatically. In addition to the initial tariffs (of 20–75 percent), special tariffs have been imposed, drastically pushing up the effective tariff on these imports. The tariff on some wood and textile products, for example, is in the region of 350 percent.

Table 6.6
Import Taxation, Selected Years, 1980–91[a]

(percent)

	1980	1986	1988	1989	1990	1991
Average tax rate						
Consumer nondurables	20	25	24	23	22	22
Consumer durables	110	96	99	74	69	67
Intermediates	5	7	5	4	4	4
Producer durables						
Machinery and equipment	11	11	10	10	8	7
Motor vehicles	39	83	73	64	65	54
Total imports	9	16	16	11	11	11
Change in average tax rate on total imports, due to						
Tax rates		1.7	-4.4	-4.0	-0.8	-1.5
Composition of imports		5.3	4.4	-1.0	0.8	1.5
Average effective exchange rate of all imports		1.72	1.86	2.13	2.24	2.55
Coefficient of variation of exchange rate		0.24	0.26	0.20	0.21	0.33

[a] Customs, purchase tax, and other tariffs. The calculations are based on the 28-commodity breakdown of Table 8.10 of CBS, *Statistical Abstract of Israel.*

SOURCE: Based on Central Bureau of Statistics data.

All these tariffs will be gradually reduced to 8–12 percent (according to the category of the product) over the next seven years, and the special tariffs will be abolished. The program will be introduced gradually to soften the impact on firms exposed to competition from countries with which Israel has no free trade agreement. Firms which suffer as a result of the program will benefit from government participation in investment, state guarantees, and information and advisory services to help them rationalize and adapt to the new conditions.

In 1991 the effect of the program was limited because it got under way only gradually and in the second half of the year. Success inevitably depends on the way it is carried out. Since it does not have a legislative basis and is subject to individual decisions regarding special levies, it is of the utmost importance to keep to a predetermined path and refrain from issuing exceptional permits. Credibility is essential for enabling domestic production to adapt to the new structure of incentives and for preventing the diversion of resources from actual production to lobbying.

3. THE CAPITAL ACCOUNT AND THE EXTERNAL DEBT

Private-sector capital movements

The salient feature of capital movements in 1991 was the fact that the $600 million capital inflow can be inferred only indirectly from the steep rise in the E&O item. Although this balancing item rose from $1.3 billion in 1990 to $2 billion in 1991, it is difficult to pinpoint the components of the capital inflow in the balance of payments.

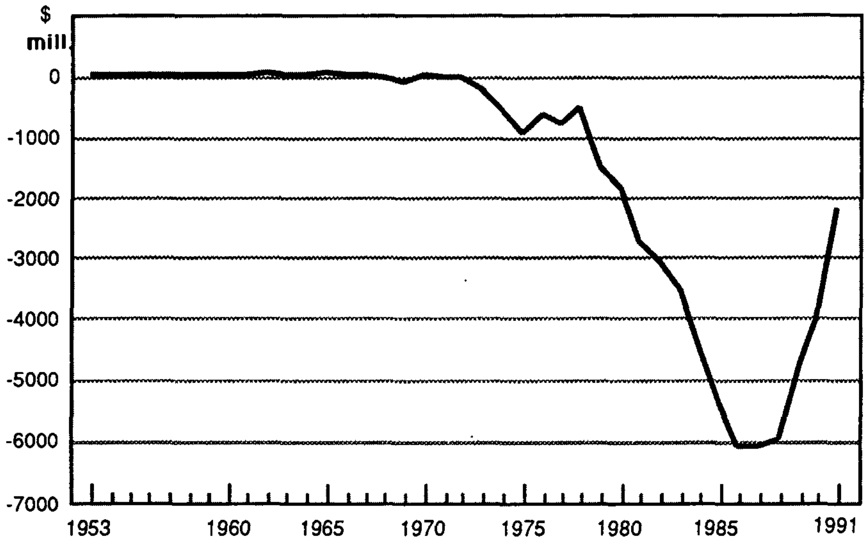
The E&O item measures the difference between trade flows and reported capital movements, on the one hand, and the change in the reserves, on the other. This item is problematic because while errors and omissions are not classified as part of either the current or the capital account, they presumably reflect unidentified capital movements. The latter probably derive chiefly from inaccurate or delayed reporting of credit from abroad and residents' foreign-currency assets which are recorded only upon conversion.

An increase in E&O is typical of countries which have liberalized the capital market and deregulated foreign exchange (as was the case in Israel in 1977). It seems likely that the extent of unreported capital movements rose as a result of the gradual deregulation of foreign exchange in the last few years. Although some record of foreign-exchange transactions is still required, reporting requirements have been relaxed in several respects. For example, it is highly unlikely that the recorded suppliers' debt to the nonfinancial private sector can have declined from 7 percent of total imports at end-1988 to 4 percent at end-1991.

Much of the E&O item can also be assumed to reflect residents' foreign-exchange assets which are recorded upon conversion. In countries where foreign-exchange transactions have been closely controlled for many years, the public learns to bypass official channels in order to increase the expected yield on their foreign-exchange assets. Because devaluation against the currency basket has lagged behind Israel's inflation rate since the ESP of 1985, the relative profitability of keeping local-currency assets has increased, and the public may be converting foreign-exchange assets acquired illicitly in the last twenty years. Figure 6.4 shows that the cumulative value of errors and omissions is sufficiently high to indicate that even in 1991 unreported capital imports might reflect the conversion of assets accumulated abroad in the past two decades.

Changes in E&O parallel speculative cycles. When devaluation expectations spark a rush on foreign exchange E&O plunges, even showing a negative balance, as was the case in 1991:IV. The increase in E&O is partly explained by delays in reporting capital movements, because credit is recorded only when foreign exchange is purchased to re-

Figure 6.4
Errors and Omissions, Cumulative Data, 1953–91[a]



[a] At rate of interest on U.S. bonds.
SOURCE: IMF and Central Bureau of Statistics.

pay it. When imports and credit go up, the reporting delay will be expressed as an increase in unclassified capital movements.

Given the reporting lag, it can be assumed that some substitution of long-term for short-term credit contributed to the increase in unreported capital movements as well as to reported medium- and long-term capital exports. The greater world decline in short-term than in long-term interest explains this substitution. While serving as an indicator of identified capital movements, the E&O item probably also reflects the supply and demand for black-market dollars, for example through tourism and immigrants' currency transfers, which should be included in the current account. An implied capital inflow of $ 600 million was recorded in 1991, even though reported capital movements indicate a capital outflow—both medium- and long-term—of $ 1.1 billion, and of $ 320 million in the short run via the banking system.

The exchange-rate regime and private-sector capital movements

Exchange-rate policy influences both the inflationary process (see Chapter 3) and monetary policy (see Chapter 7), giving rise to speculative capital movements (discussed here). To overcome the latter, a new exchange-rate management strategy was adopted in January 1989, and a five-currency basket was introduced. In response to short-term speculative movements, the exchange rate was allowed to move on a daily basis within a

3 percent band around the midpoint; in March 1990 the band was widened to ±5 percent. Thus, when devaluation expectations induce foreign-exchange purchases, the price of the currency basket is driven up and the expected devaluation gain shrinks. Moreover, the movement of the exchange rate within the band permits the actual rate to decline after adjustment of the midpoint rate, when the return flow of capital expands the supply of foreign exchange, with a consequent reduction in the realizable gain.

Table 6.7
The Exchange Rate, 1985–92[a]

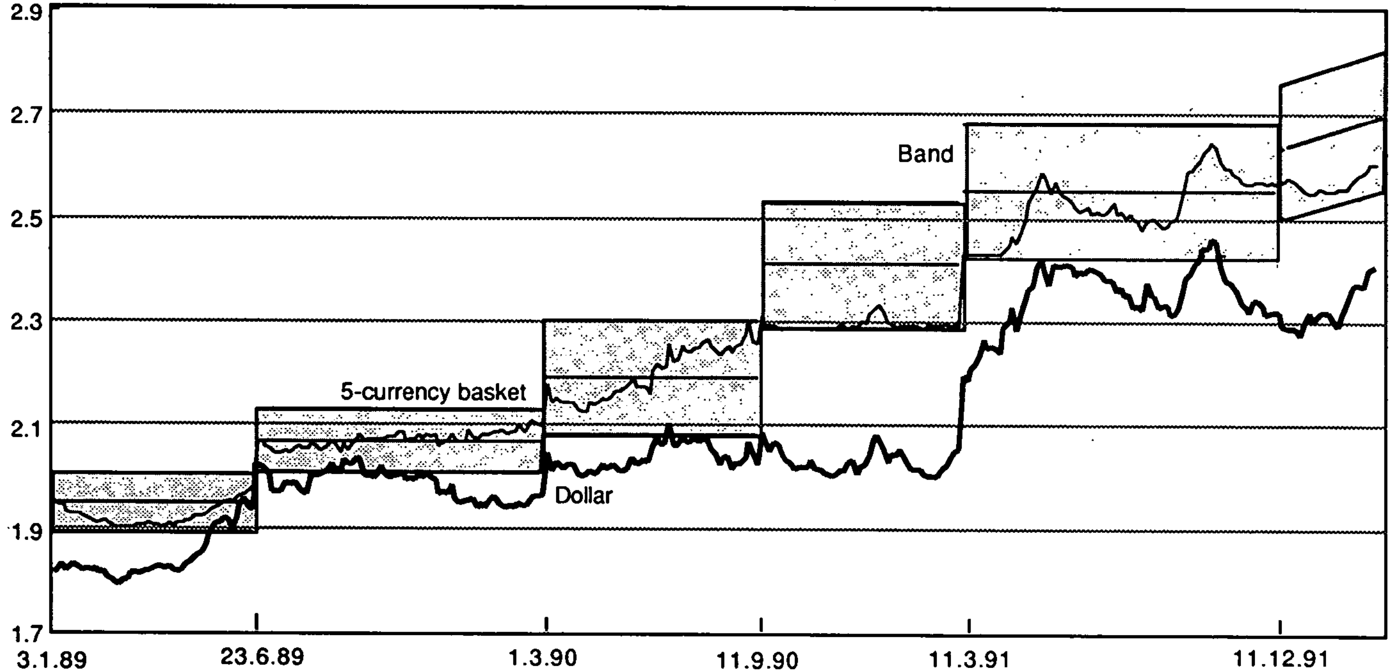
	Average exchange rate	Coefficient of variation[b] (percent)	Midpoint rate[c]	Band (percent)	Interest on CDs	
					Rate[d]	Coefficient of variation[e]
1.7.85–31.7.86	1.49	0.60				
1.8.86–12.1.87	1.49	0.10				
13.1.87–30.10.87	1.68	0.15			1.41	29.7
1.12.87–25.12.88	1.72	0.14			1.00	16.7
3.1.89–22.6.89	1.91	0.67	1.95	±3.0	1.00	19.9
23.6.89–28.2.90	2.07	0.62	2.07	±3.0	0.94	16.7
1.3.90–10.9.90	2.19	2.13	2.19	±5.0	1.03	5.9
11.9.90–10.3.91	2.29	0.20	2.41	±5.0	0.99	2.5
11.3.91–17.12.91	2.53	1.99	2.55	±5.0	1.02	18.3
18.12.91–31.3.92	2.57	0.89	2.63–2.69[f]	±5.0	0.99	6.90

[a] The months in which devaluation occurred are omitted.
[b] Calculated from daily data.
[c] The band was announced on 13.1.89.
[d] Monthly rate.
[e] The series is shown from 1987, that is, since the downward trend of the interest rate levelled off.
[f] In mid-December 1991 the Bank of Israel altered the exchange-rate regime, so that the midpoint is adjusted by 0.236 percent on a daily basis.
SOURCE: Bank of Israel.

The midpoint rate was raised about twice a year until December 1991, since when it has been adjusted on a daily basis in accordance with a preset path (Figure 6.5). The rate of realignment of the midpoint rate along the path is 9 percent on an annual basis, while the band remains unchanged at ±5 percent. The object of this change was to reduce the recurrence of large-scale capital swings and minimize uncertainty about the annual devaluation rate.

The exchange-rate regime was modified partly as a result of developments in the course of the year. Although the sheqel depreciated against the currency basket by 11.5 percent in 1991, similar to the average 1989–91 rate, the actual exchange-rate fluctuations have been more variable. In the past the midpoint rate was realigned when the actual exchange rate reached the upper limit of the band. When the midpoint rate was adjusted in 1990 there was overlap with the previous band, preventing sharp fluctuations

Figure 6.5
The Sheqel Exchange Rate Against the Currency Basket and the Dollar, 1989-91[a]



[a] Weekly data (Mondays), in NIS per $ or NIS per currency-basket unit.

of the actual exchange-rate and trimming expected speculative gains. In March 1991, for the first time since the band was introduced in 1989, the midpoint rate was raised even though the actual exchange-rate was near the lower limit of the band. This signalled that the exchange-rate regime did not rule out an increase in the actual exchange rate when the midpoint rate was raised. Uncertainty regarding the annual devaluation rate increased, moreover, since the exchange-rate realignment occurred within three months (March–May 1991) after a long period (September 1990–March 1991) in which the actual exchange rate remained unchanged.

Changes in the spread between foreign and domestic interest rates and yields on assets affect capital movements beyond generating devaluation expectations. Thus, when such expectations are stable and domestic and world interest rates do not move together, monetary policy provides incentives for capital movements by influencing interest rates.

Table 6.8

Balance of Payments, by Sector, 1987–91[a]

($ million)

	1987	1988	1989	1990	1991
Public sector					
Current account[b]	621	623	962	1,668	1,751
Medium- and long-term capital movements[c]	45	–617	71	–60	684
Basic account	666	6	1,033	1,608	2,435
Short-term capital movements	–12	35	–33	–13	–7
Capital movements via banking system	–123	590	–554	149	196
Errors and omissions	–48	556	235	–677	–506
Effect on foreign reserves[d]	–483	–1,187	–681	–1,067	–2,118
Private sector					
Current account[b]	–702	–662	61	–1,260	–2,758
Medium- and long-term capital movements[c]	593	–36	91	61	–1,093
Basic account	–108	–698	152	–1,199	–3,851
Short–term capital movements	28	–173	–376	–452	176
Capital movements via banking system	183	–1,112	–84	–185	–492
Errors and omissions	77	–374	1,024	1,284	2,011
Effect on foreign reserves[d]	–178	2,357	–717	552	2,157
Implied private capital imports[e]	880	–1,695	656	708	602

[a] Figures may not add due to rounding.

[b] The current account is adjusted for intersectoral transactions and therefore differs from that given in Table 6.A1. Another difference is that the figures in this table are adjusted for advances on defense imports.

[c] Redemption of the Arrangement bank shares held by foreign residents was deducted from the private sector's capital movements and added to those of the public sector.

[d] Increase (+), decrease (–).

[e] Defined as the difference between the private sector's purchases of foreign exchange and its current account.

SOURCE: Based on Central Bureau of Statistics data.

In the second half of 1990 the profitability of investments (relative to foreign exchange) went up, and the implied capital inflow was $450 million. Annual average interest abroad fell in 1991, while domestic interest changed very little. The larger gap between foreign and domestic interest rates increased the relative profitability of domestic financial investment and foreign credit. The implied private capital inflow was $600 million in 1991, and was partly a response to the larger interest-rate spread. The increase of the spread during the year can be estimated (at a given level of expectations of a change in the exchange rate) by comparing devaluation expectations as measured by the premium on the black-market dollar. Thus, the appreciable capital inflow of 1991:I, despite the war, is explained by the reduced devaluation expectations and the increase in the interest-rate spread.

Table 6.9
Capital Imports and the Gap Between Domestic and World Interest Rates, 1990–91

	1990				1991			
	I	II	III	IV	I	II	III	IV
Implied private capital imports ($ million)	–118	376	–58	508	987	212	41	–638
Premium on black dollar (%)	8.1	2.5	5.4	5.3	3.9	2.3	4.9	5.5
Quarterly rates	14.7	12.7	12.8	12.6	12.0	11.3	11.8	16.6
Interest								
CDs	31.3	30.0	28.6	28.4	28.7	28.2	28.2	34.7
Overdraft facilities	8.2	8.2	8.0	7.9	6.6	5.8	5.6	4.9
Interest-rate gap[a]								
Loan rate	23.1	21.8	20.6	20.5	22.1	22.4	22.6	29.8
Deposit rate	6.5	4.5	4.8	4.7	5.4	5.5	6.2	11.7

[a] The difference between the domestic rate and the 3-month Eurodollar rate.
SOURCE: Central Bureau of Statistics and Bank of Israel.

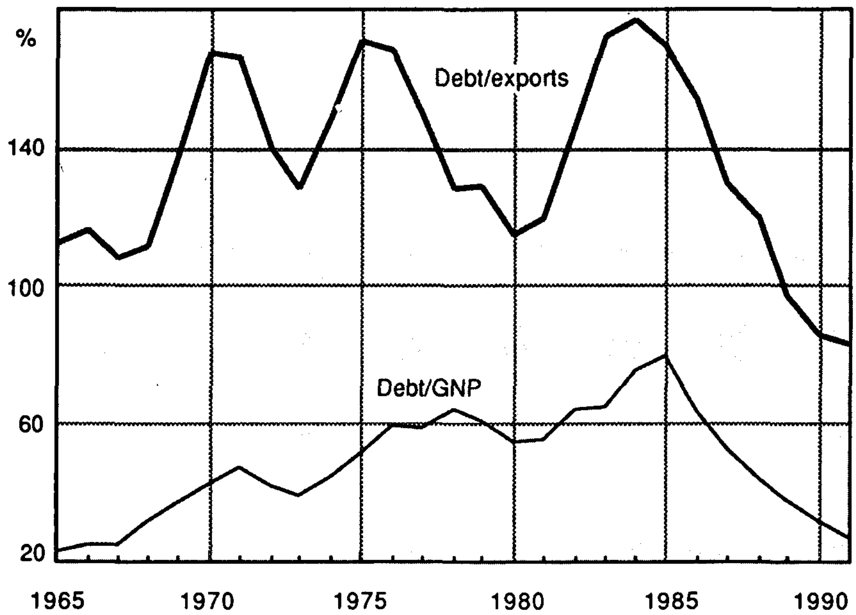
Capital movements are also affected by the opportunities for hedging against exchange-rate changes. Since November 1989 the Bank of Israel has offered 3- and 12-month dollar options at a discriminatory auction. The supply of options is to some extent a substitute for cyclical capital movements.

The reform of foreign-exchange control begun in 1987 continued in 1991, the object being to offer a wider and more accessible range of foreign-exchange transactions, thus strengthening the ties between foreign and domestic financial markets. In addition, opportunities for direct investment abroad by residents are being opened up, and direct investment in Israel by nonresidents encouraged. The liberalization of capital movements reduces the cost of borrowing abroad and increases the yield on foreign assets.

Short-term capital movements have been deregulated. In 1989 and 1990 the minimum term for direct foreign credit was reduced from 30 to 6 months, and abolished in 1991, when premature repayment was permitted. In April 1991 forward transactions as a hedge for foreign-exchange assets and liabilities were extended to include securities traded abroad. Direct investment abroad by Israeli companies was expanded, and in 1991 the permitted ratio for direct investment abroad was increased from 20 to 40 percent of equity.

As a result of the liberalization, investment abroad by residents grew appreciably—from $ 200 million in 1990 to $ 800 million in 1991—securities rising from $ 170 million in 1990 to $ 1.1 billion in 1991. Net investment in Israel by nonresidents went up by $ 140 million in 1991 to $ 280 million, due to increased investment and the relative stability of payment. Net investment in Israel by nonresidents is not a large component

Figure 6.6
Ratio of External Debt to Exports and GNP, 1965-91



SOURCE: Based on Central Bureau of Statistics data.

of capital inflows, presumably because of geopolitical risk. Net investment from abroad fell, with a capital outflow of $ 540 million in 1991, compared with $ 80 million in 1990 (Table 6.A9). Together with the repayment of long- and medium-term loans by the nonfinancial private sector (Table 6.A8), long- and medium-term private capital outflows came to $1.1 billion in 1991. As stated, because of the liberalization and delays in reporting credit from abroad, these capital movements do not conform with unreported capital inflows.

The external debt and reserves

In 1991 the net external debt declined by $ 420 million, to stand at $ 15.5 billion, so that the net debt/GNP ratio went down from 31 to 27 percent. The gross debt went up by $ 80 million, in addition to a fall of $ 60 million in reserves, an increase of $ 550 million in commercial bank assets, and stability in exporters' credit to foreign customers (Table 6.10).

Table 6.10
Assets and Liabilities in Foreign Currency, 1987–91[a]

($ million)

	1987	1988	1989	1990	1991
Net liabilities[b]	18,312	18,640	16,391	15,922	15,506
Liabilities	25,403	24,621	23,904	24,350	23,879
Government	16,483	16,559	16,556	16,686	17,329
Nonfinancial private sector	4,587	4,353	4,306	4,452	3,698
Banking system, net	4,334	3,709	3,043	3,212	2,852
Foreign reserves	5,994	4,789	6,168	6,916	6,855
Exporters' credit to foreigners	1,097	1,192	1,345	1,512	1,518
Current liabilities	4,382	4,188	4,390	5,939	5,001
Banking system (short term)	1,190	1,138	1,204	2,573	1,972
Nonfinancial private sector (short term)	1,311	1,385	1,416	1,553	1,364
Direct government debt (short term)	0	101	0	0	0
Medium and long-term debt repayable within a year	1,882	1,564	1,770	1,813	1,665
Banking system assets	6,447	6,775	7,427	8,317	8,868
Net current liabilities	−2,709	−1,793	−3,123	−2,489	−3,372
Gross liabilities	31,850	31,396	31,331	32,667	32,747

[a] Differences in totals are due to rounding.

[b] The debt figures in this table are consistent with those published by the Central Bureau of Statistics. The data published by the Controller of Foreign Exchange are slightly different because they were revised on different dates.

SOURCE: Based on Central Bureau of Statistics data.

An inflow of capital in a period of immigrant absorption helps to achieve a smooth and rapid transition to a higher level of output, something which cannot be done on the basis of domestic resources alone. Because of the investment needs created by the absorption of immigrants, Israel must be able to borrow abroad and use the funds efficiently. The question to be asked in the context of the external debt is to what extent do changes in accepted debt indicators affect Israel's ability to borrow abroad.

The decline in Israel's net external debt does not reflect the change in the balance-of-payments situation. The net external debt declined despite a large current account deficit of $ 1 billion in 1991. This is explained by the appreciable increase in the E&O item. As stated, that item in the balance of payments represents unreported capital inflows, and since the external debt is calculated on the basis of reported capital movements, the current account deficit did not appear in the debt figures.

Table 6.11
The External Debt Burden, 1986–91[a]

	1986	1987	1988	1989	1990	1991
$ million						
Interest payments	2,370	2,286	2,504	2,502	2,577	2,399
Interest receipts	828	811	968	1,235	1,470	1,615
Net interest payments	1,541	1,474	1,536	1,268	1,107	784
Other capital services						
Debit	132	152	129	159	162	139
Credit	24	35	32	34	26	45
Repayment of principal	1,791	1,755	6,660	2,287	1,170	2,213
Total net debt servicing[b]	**3,440**	**3,348**	**3,514**	**2,957**	**3,013**	**2,691**
Percent						
Net interest/net external debt[c]						
Nominal	8	8	9	7	7	5
Real[d]	5	5	5	3	2	1
Interest/income at disposal of economy[e]	4	4	3	3	2	1
Net interest/exports[f]	14	11	11	8	6	5
Net debt servicing/exports[f]	31	25	24	19	18	16
Net debt servicing/(exports[f] + transfers[g])	21	19	18	14	13	12
Net debt servicing/GNP	12	10	8	7	6	5

[a] Figures may not add due to rounding.
[b] The 1988–89 totals are net of conversion of the debt to the U.S. government.
[c] The denominator is the debt lagged six months.
[d] The nominal figure (preceding line) deflated by the rate of inflation in industrialized countries (5-year average), as an indicator of long-run inflationary expectations.
[e] GNP (in dollars) + net unilateral transfers.
[f] Exports f.o.b. excluding capital services.
[g] Net unilateral transfers.
SOURCE: Based on Central Bureau of Statistics data.

When the increase in E&O is added to the debt data, there is an increase of $ 1.5 billion in the net debt rather than the recorded decline of $ 420 million. Thus, accepted debt indicators should be treated more cautiously this year. Even if it is assumed that the E&O item for 1991 reflects solely unreported loans, however, the debt/GNP ratio has gone down (to 29 percent), because of real appreciation and the expansion of output . On the other hand, if the E&O item reflected unreported capital movements in the past too, the recorded net debt is biased upwards.

Even if there is no change in E&O, the link between the net external debt and the current account is only partial because the measured debt includes revaluation differentials arising from exchange-rate adjustments between the currencies comprising the debt, and these are deducted from the balance of payments. In addition, foreign investments affect the debt through their influence on the reserves, and these investments are not included in the current account.

The debt/GNP ratio fell by 4.7 percentage points in 1991 due to changes in the debt and in GNP as well as to exchange-rate shifts. The contraction of the debt and GNP growth accounted for 2.7 percentage points of the downturn, and real appreciation of the sheqel against the dollar for 2 points. The dollar/currency basket exchange-rate strongly affects the debt/GNP ratio, since 89 percent of the country's total foreign-currency liabilities are in dollars. Since, however, the dollar/currency basket exchange rate was almost the same at end-1991 as in 1990, the change in exchange rates reflects mainly real appreciation of the sheqel. The debt/exports ratio is freer of price effects than the debt/GNP ratio, but does not reflect total domestic resource growth. This measure fell by 3 percentage points from 86 to 83 percent.

Table 6.12
Average Interest on New Dollar Loans, 1987–91

(percent p.a.)

	1987	1988	1989	1990	1991
Government					
Medium term	8.0	9.0	9.7	9.1	8.2
Long term	7.0	9.3	8.6	7.8	7.6
Private sector					
Short term	8.2	8.9	10.3	8.8	6.8
Medium term	8.3	8.8	9.7	9.1	7.3
Long term	8.2	8.8	9.3	8.0	7.8

The country's liabilities to the rest of the world are conceptually equal to the difference between the gross external debt and the commercial banks' foreign asset holdings. The sources of the external debt remained stable in 1991, about two thirds of it originating in one of the following categories: (1) direct debt to the U.S. government (17 percent); (2) debts converted into fully-guaranteed Israel government bonds tradable in the American capital market (23 percent); (3) State of Israel Bonds and certificates (23 percent).

The softening of interest rates abroad reduced the cost of net borrowing for the second year in succession, and interest on loans to the private sector was reduced by more than interest on loans to the government. The reduction in interest rates on loans taken in 1991 is the result of the decline in world interest rates. Since the decline in dollar interest rates corresponded with that on credit to Israel, there was no change in the interest-rate spread. The relative stability in the reserves and the net external debt, as well as in the interest-rate spread, indicates that there was no change in Israel's risk standing.

In 1991 the average level of the foreign reserves rose slightly and, measured in terms of import months, grew from 3.4 in 1990 to 3.6. The reduction in the deposit rate abroad against the yield on investments in Israel operated to draw down the reserves, making them less profitable. The central bank increased its estimate of the demand for foreign exchange, primarily as a result of the repercussions of the influx of immigrants on foreign-exchange income and expenditure flows.