

Chapter 6

The Balance of Payments

1. MAIN DEVELOPMENTS

The civilian import surplus increased by \$1 billion in 1990 with the recovery of economic activity (Table 6.1). Transfers from abroad also rose, moderating the effect of the rise in the import surplus on the current account, which showed a surplus of \$700 million, as against \$1.1 billion the year before. The net external debt thus continued to shrink, and the debt/GNP ratio fell from 38 percent in 1989 to 31 percent. The contraction of the debt and expansion of GNP accounted for 3 of the 7 percentage point decline, with domestic price developments and changes in cross rates explaining the other 4 points.

This year's massive immigration left its mark on these developments: its contribution to economic recovery widened the import surplus, while the increment in unilateral transfers from world Jewry to aid the initial absorption of new immigrants offset \$450 million of the current-account deterioration. The sharp drop in the debt/GNP ratio in recent years enhances the country's capacity to repay the loans that will be needed for financing the continued absorption of new immigrants.

The growth of the civilian import surplus (excluding capital services) reflected mainly the widening of the gap between the volume of imports and exports: excluding trade in diamonds, which sagged in 1990, civilian imports rose by 9 percent and exports by only 5 percent.

This year's more buoyant domestic demand goes a long way to explain the growth of imports, but it does not adequately account for the slacker growth of exports at a time of continuing unemployment and after the restructuring of industry. The uptrend in world trade slowed from 7.1 percent in 1989 to 3.9 percent, but this figure somewhat overstates the incremental world demand for Israeli exports. The Gulf crisis was responsible for a major setback in tourism to this country and for the higher freight charges and dearer fuel imports in the second half of the year. It also curtailed orders for Israeli goods, but this will be felt mainly in 1991. The weakening of world demand for arms in recent years continued to depress the overseas sales of the defense sector, which is endeavoring to shift to civilian products. The profitability of export production apparently did not change much in the year reviewed despite a further productivity gain in the business sector. Profitability improved in 1988–89 as industry became more efficient. However, it has not yet reached the profitability level that fuelled the formidable export advance in the late 1970s.

The midpoint exchange rate (see below) was adjusted twice in 1990: in March it was

Table 6.1
Selected Balance-of-Payments Indicators, 1977-90

	1977-81	1982-85	1986	1987	1988	1989	1990
<i>Billions of current \$</i>							
Total current account	-0.6	-1.0	1.7	-0.9	-0.7	1.1	0.7
Adjusted current account ^a	-0.7	-1.1	1.0	-0.1	-0.2	0.9	0.5
Import surplus							
Total	3.3	4.4	3.8	5.8	5.2	3.8	5.1
Civilian ^b	1.8	3.0	2.6	3.3	3.1	2.5	3.6
Civilian, excl. capital services	1.2	1.7	1.0	1.8	1.4	1.2	2.4
Net unilateral transfers							
To public sector	1.6	2.5	4.2	3.2	3.1	3.0	4.0
To private sector	1.1	0.8	1.2	1.6	1.4	1.8	1.8
Implied private capital imports ^c	0.3	0.9	-1.6	0.7	0.7
External debt							
Net	10.2	17.5	18.2	18.2	18.5	16.2	15.6
Gross	18.5	28.8	30.6	31.8	31.3	31.2	32.5
Foreign reserves	3.0	3.8	4.9	6.0	4.8	6.2	7.0
<i>Annual change, percent (volume)</i>							
Exports ^d	9.0	5.0	1.4	8.7	-4.6	6.3	5.1
Civilian imports ^d	5.8	2.2	12.5	11.9	-1.2	1.8	9.4
World trade	3.6	3.2	4.1	6.5	9.3	7.1	3.9
Selected indicators							
Exchange rate							
Against the dollar	0.0044	0.39	1.49	1.59	1.60	1.92	2.02
Against the 5-currency basket	0.0046	0.35	1.47	1.68	1.72	2.00	2.21
Net external debt as percent of							
GNP	58.7	70.9	63.2	53.1	43.8	37.8	31.1
Exports	128.4	165.4	152.7	129.3	119.0	96.3	84.1
Relative prices (1980 = 100)							
Exports/domestic resource use ^e	100	88	80	79	72	70	69
Imports/domestic resource use ^e	102	93	82	79	75	74	71
Exports/business-sector product ^f		105	100	99	91	94	94
Terms of trade ^g	105	109	114	111	118	116	113

^a Corrected for advances on defense imports. See note 1 in the text.

^b Excluding direct defense imports.

^c See Table 6.12.

^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). Excludes direct defense imports and diamonds.

^f At factor cost; 1986 = 100.

^g Excluding capital services, diamonds, and direct defense imports.

SOURCE: Based on Central Bureau of Statistics data.

raised by 6 percent and in September by another 10 percent. The actual exchange rate rose by 11 percent against the currency basket and by only 5 percent against the dollar (see Figure 6.5 below).

The movement of the exchange rate within a specified band has proved to be a useful instrument for moderating capital movements during the year; nevertheless, after the September devaluation capital continued to flow into the economy, and the exchange rate hovered around the lower limit of the band until the end of the first quarter of 1991, when the midpoint rate was raised 6 percent. Some of the fourth-quarter capital inflow was not of a speculative nature, reflecting the operation of other factors.

The external debt indicators improved this year: the net debt/GNP ratio was pruned by 7 percentage points, and by 9 points in relation to exports. Other characteristics of the economy as a net borrower were stable; these include the maturity structure of the debt, its breakdown by lending sector, and the interest rate on new loans received. The current debt, however, rose in 1990.

Along with the improvement in the external debt position, the gradual liberalization of foreign-currency control continued. Among the reliefs granted were the shortening of the minimum period for direct credit from abroad under the General Permit from 30 months (until the beginning of 1989) to six months at the end of 1990, cancellation of the restriction on the maximum interest rate on foreign loans, and easing of criteria for approval of Israeli firms' foreign investments. The directed credit funds were abolished this year, after the subsidy element in this type of financing vanished with the deregulation of the money markets.

Exchange-rate unification continued at a modest pace this year as well. The premium under the exchange-rate insurance scheme was raised, customs duties and import taxes on services were cut, and the levy on purchases of foreign exchange was eliminated. These measures are estimated to have narrowed the spread between the effective and official exchange rates by 1 percentage point (annual average) on both the export and import sides. Nevertheless, administrative restrictions were not curtailed despite their adverse effect on efficiency, domestic price stability, and export profitability (discussed in the section on imports). A program of gradual exposure to imports from countries with which Israel has no free trade agreement (third countries) was decided on at the beginning of 1991. Its principal provision is the replacing of administrative restrictions with a tariff to be progressively scaled down at a specified rate. Exposure will assume added importance if the immigration forecast materializes and investment is substantially stepped up. It is essential to ensure that the new investments are made in the production of goods able to compete in the domestic and overseas markets without massive protection. This is a precondition for Israel's capacity to repay the loans to be taken to fund these investments. Moreover, exposure will improve Israel's terms of trade, since some imports will be diverted to cheaper sources. The key to the success of the program lies in its credibility once it is launched. This is important if it is to have an immediate impact on investment plans and to enable producers to adapt existing plant to the new conditions.

2. THE CURRENT ACCOUNT

In 1990 the current account was in surplus by \$700 million (Table 6.2). After adjusting for advance payments on defense imports,¹ the surplus was \$400 million less than in the previous year (Table 6.1). This was a net result of the steep \$1.2 billion increase in the civilian import surplus (excluding interest paid) and a \$900 increase in unilateral transfers to the public sector; defense imports were up \$300 million (cash basis), while net interest outlay abroad was reduced by \$200 million.

Table 6.2
The Balance of Payments, 1985-90^a

	(\$ million)					
	1985	1986	1987	1988	1989	1990
1. Net goods and services account	-3,882	-3,729	-5,627	-5,173	-3,768	-5,086
2. Net unilateral transfers	4,997	5,382	4,769	4,513	4,863	5,790
Private sector	757	1,198	1,585	1,364	1,828	1,820
Public sector	4,240	4,184	3,184	3,149	3,035	3,970
3. Net current account (1 + 2)	1,115	1,653	-858	-660	1,095	704
4. Net medium & long term capital movements	94	538	532	-585	88	-207
Private sector	91	192	485	-752	39	-181
Public sector	3	346	47	167	49	-26
5. Net basic balance of payments (3 + 4)	1,209	2,191	-326	-1,245	1,183	497
6. Net short-term capital movements	-126	-677	839	430	-477	-336
Private sector	-4	-34	107	-159	-256	-163
Public sector	-122	-642	732	589	-221	-172
7. Capital movements of banking system	-4	-118	0	-521	-631	-79
8. Errors and omissions	-687	-402	148	173	1,321	477
9. Increase (-) or decrease (+) in foreign reserves held in central institutions ^b	-392	-992	-661	1,163	-1,397	-560

^a Figures may not add owing to rounding.

^b Adjusted for changes in cross rates.

SOURCE: Central Bureau of Statistics.

The ratio of civilian import surplus to GNP rose from 6 percent in 1989 to 7.6 percent, bringing it back to its 1988 level. This is the fifth consecutive year in which a current-account surplus has made it possible to prune the net external debt.

The substantially larger civilian import surplus (excluding interest paid) in the year reviewed can be chiefly attributed to a 6 percent increase in the volume of imports. The volume of exports was up by only 2 percent, while the terms of trade worsened by 2

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 6.3
Goods and Services Account, 1987-90^a

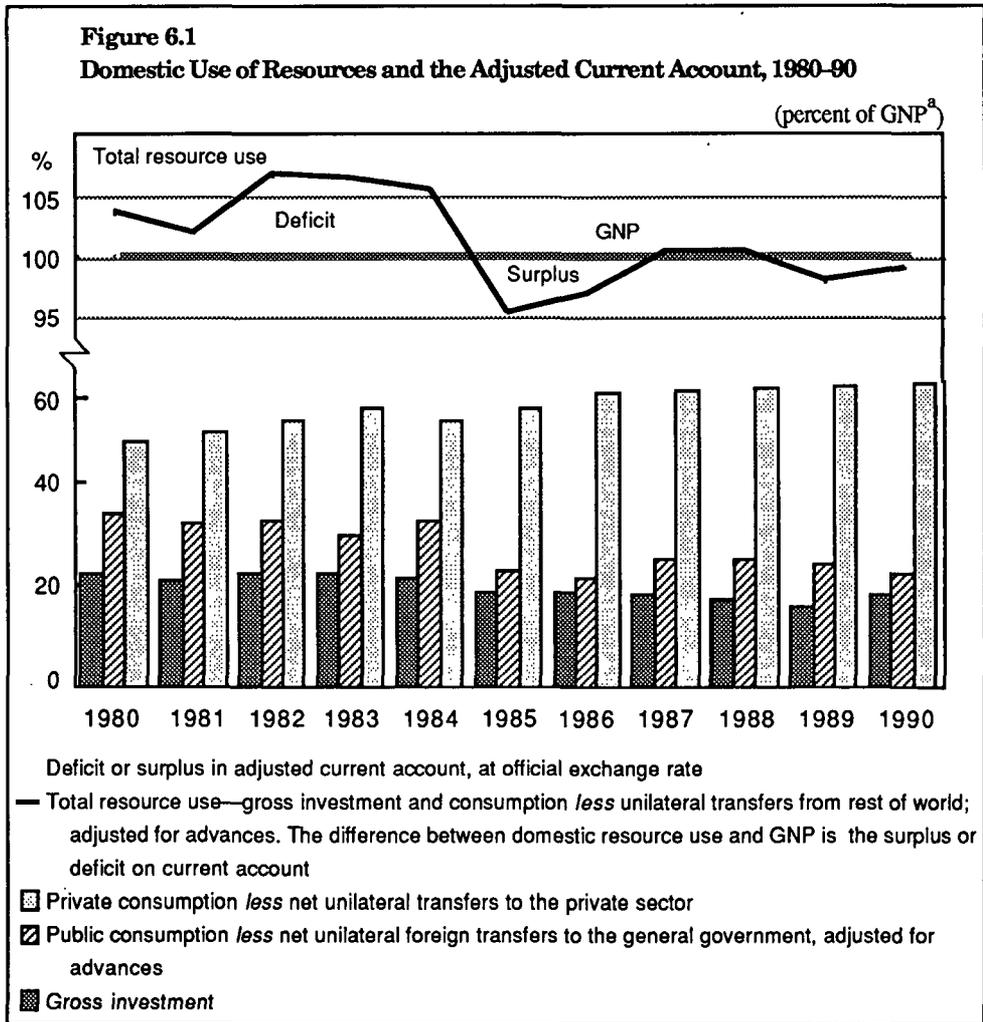
	\$ million				Annual change, percent					
					Price			Quantity		
	1987	1988	1989	1990	1988	1989	1990	1988	1989	1990
Imports										
Goods excl. fuel and diamonds	7,992	8,354	8,438	10,152	9.5	1.0	3.6	-4.4	0.0	16.1
Fuel	1,148	1,062	1,247	1,536	-20.3	22.2	22.6	16.1	-3.9	0.4
Diamonds	1,901	2,613	2,869	2,895	8.8	36.1	13.6	17.5	-19.4	-11.1
Services, excl. capital services	3,172	3,556	3,913	4,357	1.9	2.0	16.0	9.8	7.9	-4.1
From Judea-Samaria and Gaza	973	805	775	961	24.4	-3.8	4.3	-31.6	0.1	18.9
Subtotal	15,185	16,389	17,242	19,900	5.8	6.9	8.9	1.1	-1.6	6.0
Capital services	2,438	2,633	2,661	2,735						
Direct defense imports	2,472	2,106	1,225	1,500						
Total imports	20,095	21,129	21,128	24,135						
Exports										
Goods, excl. diamonds	6,078	6,912	7,625	8,496	10.3	1.2	5.3	1.7	9.0	5.8
Diamonds	2,059	2,746	3,027	3,054	21.0	19.0	13.8	2.3	-7.4	-11.3
Services, excl. capital services	4,141	4,467	4,692	5,006	9.0	-0.2	5.3	-1.3	5.2	1.3
To Judea-Samaria and Gaza	1,148	826	743	966	16.7	0.8	7.3	-35.1	-10.7	21.0
Subtotal	13,426	14,951	16,088	17,522	13.4	3.7	6.8	-3.5	3.8	2.0
Capital services	861	1,004	1,273	1,527						
Total exports	14,288	15,955	17,361	19,049						
Surplus on services account^b	969	911	779	648						
Import surplus										
Civilian, excl. capital services	1,759	1,439	1,154	2,379						
Civilian import surplus	3,335	3,067	2,542	3,586						
Total import surplus	5,807	5,174	3,767	5,086						

^a Imports c.i.f., exports f.o.b. A new classification was introduced in 1988; the rates of change for 1988 are based on the old classification.

^b Excluding capital services and Judea-Samaria and Gaza.

SOURCE: Based on Central Bureau of Statistics data.

percent (Table 6.3). The latter development is explained primarily by the soaring prices of imported fuel and services in the wake of the Gulf crisis. Excluding trade in diamonds, which fluctuates widely but maintains a stable, relatively small export surplus, the volume of imports rose by 9 percent and exports by only 5 percent.



^a At official exchange rate.

SOURCE: Based on Central Bureau of Statistics data.

The contraction of the current-account surplus and the steep increase in the civilian import surplus reflected mainly the economic recovery of 1990, which gathered momentum in the course of the year as the number of immigrants soared. The Gulf crisis in the second half of the year affected both exports and imports. Its impact was most striking in the steep jump in imported fuel prices, the steep drop in incoming tourism,

and the halt in the rising trend of outgoing tourism, in contrast to the development of other components of private consumption. But the military threat presumably had other repercussions: the unclear situation may have caused the postponement of investment, especially of foreign capital; trade relations may also have been damaged because of the high transport prices and reluctance to trade with the region. The prewar atmosphere in the region probably hit exporters more than it did importers, who also reported difficulties in obtaining suppliers' credit. The crisis certainly damped down Israel's foreign trade, but there is not enough direct evidence to quantify its overall effect on the import surplus, or even to determine its direction with certainty. A partial calculation for certain items (tourism, fuel, and transport) indicates that it tended to increase the import surplus, but this conclusion must be accepted with caution.

The dominant influence on the import surplus was apparently the cyclical upturn, which became more pronounced during the year as immigration stepped up. The rise in the import surplus is consistent with this picture, as well as with the much larger volume of unilateral transfers from abroad. About half the incremental transfers (\$450 million) went to the Jewish Agency for financing the initial absorption of immigrants.

The narrowing of the current-account surplus in 1990 reflected the widening of the gap between domestic use of resources and GNP, since the ratio of unilateral transfers to GNP remained constant. As a percentage of GNP, investment rose by 2 percentage points, private consumption from domestic sources (i.e. *less* personal remittances from abroad) was up by 1 point, and public consumption from domestic sources was down by 2 points. The current-account surplus thus fell by 1 point. About half the rise in the investment/GNP ratio was financed by cutting back consumption, while the rest resulted in balance-of-payments deterioration.

An increase in the import surplus is compatible with real appreciation—a decline in the ratio of tradables prices (exports, imports, and import substitutes) to nontradables prices, or of foreign trade prices to the implicit price index of domestic use of resources. The indicators presented in Table 6.1 point to real appreciation in 1990.

This analysis holds in a full-employment economy, where the available factors of production are fully utilized and GNP expands at an adequate rate. In these conditions year-to-year variations in the balance of payments reflect primarily changes in domestic resource use. In the last three years, however, unemployment has risen, reaching 9.6 percent in 1990. In such a situation the expansion of domestic resource use will not necessarily halt any further advance in exports or balance-of-payments improvement and real appreciation loses its significance. In the year surveyed it reflected mainly the rise in housing and construction prices relative to tradables prices. Under full employment the construction industry would have had to compete with other sectors for manpower and other factors of production. The pressure would have arrested the growth of exports and increased imports. When there is considerable unemployment, this is not an accurate description of reality. Nevertheless, one typical feature of high unemployment was missing from the local scene: the softening of real wages, which would have permitted the absorption of idle manpower in production for the overseas and home markets and

dampened the growth of the import surplus in spite of brisker domestic demand. The nominal rise in business-sector wages slowed down (15 percent as against 18 percent the year before), and trailed behind the rise in the CPI. Business-sector output prices, however, went up still more slowly—by only 10 percent—so that while employees' real wages eroded, employers' real labor costs rose. The big improvement in labor productivity kept the profitability of production from eroding, but the rising trend of the two preceding years was checked. Business-sector product was up by 6 percent, and by 11 percent (annual rate) in the second half of the year. If real wages had been more elastic and allowed profitability to increase, the business-sector's product gain would have been more impressive, and the increase in the import surplus more modest. The downward rigidity of wages is most striking in large unionized plants and public sector enterprises, which market a larger share of their output abroad than do other firms.

Table 6.4
Decomposition of the Change in the Volume of Exports, 1976-90

	1976-80	1981-84	1985	1986	1987	1988	1989	1990
<i>Annual change, percent</i>								
Total	8.5	3.8	7.6	4.9	10.7	-3.5	3.8	2.0
Diamonds	0.1	-3.5	26.9	26.8	22.0	2.3	-7.4	-11.3
Other	10.4	5.0	5.3	1.8	8.7	-4.6	6.3	5.1
<i>Decomposition of nondiamond exports^a</i>								
Industrial	5.3	3.4	3.6	2.8	4.6	1.9	4.9	3.1
Agricultural	0.3	0.5	-0.5	0.7	-0.4	-1.0	0.2	0.5
Tourism	1.4	0.1	1.1	-2.9	1.9	-1.5	1.2	-1.0
Other services	3.1	1.0	0.6	0.0	1.9	-0.5	0.7	1.3
Administered areas	0.3	0.0	0.5	1.2	0.7	-3.5	-0.7	1.2
Total	10.4	5.0	5.3	1.8	8.7	-4.6	6.3	5.1

^a The rate of change in each export category weighted by exports in the preceding year.

SOURCE: Based on Central Bureau of Statistics data.

World demand did not contribute to a more robust export gain this year: world trade expanded by 3.9 percent, a mild rate compared with previous years, but the market for Israeli exports expanded less because of the Gulf crisis. This was felt most severely in tourism, which slumped 9 percent, but other exports undoubtedly also fared worse this year. The shrinking world demand for military goods in recent years also affected Israel, and by more than is indicated by world trade data.

The contribution of the different industries to Israel's export growth is presented in Table 6.4, which shows where the problems were concentrated in 1990. The diamond industry was depressed for the second consecutive year; it strongly influences the overall growth of exports (and imports), but the diamond export surplus is small and

Table 6.5
Merchandise Exports (f.o.b.), 1987-90^a

	\$ million				Annual change, percent					
					Price			Quantity		
	1987	1988	1989	1990	1988	1989	1990	1988	1989	1990
Agricultural exports	609	567	527	655	14.6	-11.5	10.2	-17.9	5.1	12.8
Citrus	201	176	132	181	12.4	-4.7	2.0	-21.6	-21.7	34.3
Other	409	390	395	474	14.5	-13.6	13.4	-15.3	17.1	5.8
Industrial exports ^b	5,534	6,336	7,068	7,868	9.9	1.9	5.2	3.9	9.5	5.8
Metals, machinery, electronics	2,413	2,834	3,229	3,338	5.6	1.3	2.7	10.4	12.4	0.6
Chemicals, rubber, plastics	1,260	1,390	1,579	1,817	6.9	4.2	7.3	3.5	9.1	7.2
Other	1,861	2,112	2,259	2,713	18.6	1.0	7.1	-4.4	5.9	12.2
Diamonds (net)	2,059	2,746	3,027	3,054	21.0	19.0	13.8	2.3	-7.4	-11.3
Ships and aircraft	10	12	75	22						
less Returned exports	10	16	27	24						
<i>subtotal: FTS definition</i>	8,201	9,644	10,669	11,576	12.9	5.9	7.6	1.9	4.5	0.8
Balance-of-payments adjustments	-64	14	-17	-26						
To Judea-Samaria and Gaza	928	596	516	709	17.1	1.0	6.0	-40.2	-14.3	29.8
Total	9,065	10,254	11,168	12,259	13.1	5.6	7.5	-2.4	3.1	2.1
Total excl. diamonds and exports to Judea-Samaria and Gaza	6,078	6,912	7,625	8,496	10.3	0.7	5.6	1.7	9.6	5.5

^a New classification introduced in 1988. The rates of change for 1988 are based on the old classification.

^b Excluding diamonds, ships and aircraft, and Judea-Samaria and Gaza.

SOURCE: Based on Central Bureau of Statistics data.

stable, evidence of especially low valued added. The tourist industry was hard hit by the Gulf crisis, while exports to the administered areas picked up in spite of the *intifada*. The contribution of manufactures was smaller than in previous years and in the decade preceding the 1985 Economic Stabilization Program (ESP). However, if transport equipment, which fluctuates sharply, is excluded overseas industrial sales accelerated in 1990—a rise of 8 percent as against 6.5 percent in 1988 and 1989, with military industrial exports declining and civilian exports expanding faster. The contraction of world demand for arms makes it imperative for the export enterprises specializing in military goods to diversify their production. This is a protracted process that is still in train.

The question arises whether, in the face of the prevailing unemployment, exports could have been stepped up more this year if there had been greater devaluation. In the short run this might have marginally improved profitability, with a consequent increase in exports of existing production lines. This could have been achieved without further devaluation if wages had responded more flexibly to unemployment and the growing supply of immigrant labor. In the longer term, however, sustained headway depends on the development of new products and the penetration of new markets, and must be based on high profit margins which are not sensitive to relatively small devaluations. But a policy of higher devaluation drives the wage-price spiral upward, thereby nullifying its effects. Returning to a rapid long-term growth path requires entrepreneurship and time. The last few years' restructuring of industry resulted in an appreciable productivity gain in 1990, but the process is not yet complete, especially in the defense sector, which is still adjusting to changing conditions. In this sense it can be said that industry has not yet overcome all the supply-side problems, some of which stem from the shifting composition of world demand.

Merchandise exports

Overseas commodity sales amounted to \$12.3 billion in 1990, or 65 percent of the country's total exports (Table 6.5). Leading the advance were industrial goods, with polished diamonds accounting for \$3 billion and other products for \$7.9 billion; agricultural produce yielded \$650 million, and sales to the administered areas came to \$700 million.

Industrial exports (excluding diamonds)

The volume of industrial exports rose more sluggishly in 1990, by 5.8 percent as against 9.5 percent the year before. This was a low rate compared with the average for the 1980s (7.5 percent).

The metals and electronics industry was mainly responsible for the slowdown (Table 6.5). After a vigorous 11.4 percent average annual increase in 1988–89, it hardly rose in 1990. The chemicals and plastics industry slowed down somewhat this year, while export growth of other industries accelerated.

Table 6.6
Industrial Exports (Excluding Diamonds) and Related Indicators, 1983-90

	1983	1984	1985	1986	1987	1988	1989	1990	1988-90	1983-90
<i>Exports (annual change, percent)</i>										
Total	-0.6	19.6	7.7	5.7	9.3	3.9	9.5	5.8	6.4	7.5
Transport equipment	-32.7	6.5	40.3	31.7	-6.8	-21.6	47.6	-15.9		
Other	3.9	20.8	5.1	3.0	11.5	6.7	6.5	8.1	7.1	8.1
<i>Unit labor cost (index, 1986 = 100)</i>										
According to Industry Surveys ^a	101.7	92.8	89.4	100.0	98.1	95.9	93.7	93.8	94.5	95.7
According to industry indexes	89.9	87.1	89.5	100.0	98.7	100.1	98.2	98.3	98.9	95.2
Rate of return on capital (percent)	9.6	13.2	12.7	9.0	9.9	11.1	11.3	11.3	11.2	11.0
Relative prices ^b (index, 1986 = 100)	101.1	101.7	109.1	100.0	97.2	93.0	92.7	92.6	92.8	98.4
World merchandise trade ^c (annual change, percent)	2.9	10.0	4.4	3.0	5.1	8.9	6.6	5.4	7.0	5.8
<i>Interest rate on short-term bank credit (percent p.a.)^d</i>										
Export funds			10.3	8.7	9.0	9.8	11.1	10.2		
Average, industrial firms			15.3	19.3	22.1	22.0	9.1	12.3		
Difference			4.5	9.7	12.0	11.1	-1.8	1.9		

^a Interpolated between survey years (1983/84, 1985/86, 1987, and 1988) by index of industrial production.

^b NIS price to exporter relative to producer prices of industrial output.

^c Exports of industrial countries.

^d In dollar terms.

SOURCE: Central Bureau of Statistics, IMF, and Bank of Israel.

The slowdown occurred mostly in the first half of the year (Table 6.A3), when metal and electronics exports retreated 4 percent, chemicals and plastics slackened noticeably, and only textiles and clothing performed better than in 1989. In the second half of 1990 most exports expanded more rapidly, apart from textiles and clothing. Total exports were flat in the first half of the year, but in the second half they forged ahead at a 14 percent annual rate.

Table 6.A2 shows marked disparity in the annual export growth rates between industries in the same year and within industries from year to year. This variability is much greater than that in the production series, even in industries that sell a large part of their output abroad. In metals and electronics the disparity reflects, among other things, the lengthy production process and the effect of single large transactions on the annual figures; the divergence between the export and production series finds expression in sizable changes in the goods-in-process inventory. A striking example—although not the only one—is transport equipment. This is a rather highly concentrated industry, which is characterized by large transactions and supply contracts, often for more than one year. This results in a considerable difference between the production and the export data, even though (according to the Industry Survey for 1988) 80 percent of the output is sold abroad. The effect of the industry's volatile exports on total industrial exports can be seen in Table 6.6. Despite its small share of total industrial exports—only 7 percent in 1988—it influences the sector's annual growth path. Industrial exports moved up more rapidly in 1989 and slowed in 1990. Excluding transport equipment, they rose at a similar rate in 1988 and 1989 and accelerated somewhat in 1990. The effect of transport equipment on the exports of the metals and electronics industry is, of course, even more striking, even though this component does not account for more than 16 percent of the total. The picture of marked deceleration in 1990 after comparatively large gains in the two preceding years changes if transport equipment is excluded. In this case a formidable expansion in 1988 was followed by relatively small advances in the next two years. This volatility is exhibited by other industries as well, and so it would be useful to analyse the growth of exports—and especially its industrial composition—over a period of several years instead of by a year-to-year comparison. Taking the three years 1988–90 together, there was a 6.5 percent average annual rise, which was 1 percentage point lower than in the 1980s. It should be recalled that in the second half of the 1970s industrial exports went up at a steep 16 percent average annual rate.

Determinants of industrial exports (excluding diamonds)

World demand conditions for Israeli manufactures did not improve this year: the growth of merchandise trade by the industrial countries slowed from 7 percent in 1989 to 6 percent. The developing countries, whose exports have a higher raw-materials component, experienced a greater slowdown, from 7.7 percent in 1989 to 3.4 percent. The share of raw materials in exports is low; however, they include mining and quarrying products, nonmetallic minerals, and the products of several chemical sub-industries. As stated, demand for Israeli exports was apparently weaker this year: the tension in the

Table 6.7
Relative Wholesale Prices, Israel and Trading Partners, 1983-91:I

(1986 = 100)

	Relative prices ^a at							
	Official exchange rate (NIS)		Official exchange rate			Effective exchange rate (exports)	Unit labor cost ^c	Real daily wage ^d
	Against dollar	5-currency basket (basket 5)	U.S. + Israel	Basket 4 ^b countries + Israel	Basket 5 countries + Israel			
1983	0.056	0.051	96.6	79.7	94.82	102.91	95.52	
1984	0.293	0.245	103.7	78.4	94.61	97.71	93.33	
1985	1.179	1.000	118.2	89.6	106.30	85.83	84.45	
1986	1.488	1.446	100.0	100.0	100.00	100.00	100.00	
1987	1.595	1.678	91.5	104.1	96.60	103.91	108.95	
1988	1.599	1.719	81.3	95.9	87.46	111.70 ^e	119.24	
1989	1.916	1.995	85.9	92.8	87.88	108.06	120.08	
1990	2.016	2.207	84.9	102.2	89.86	109.24	130.43	
1990								
I	1.967	2.104	84.8	97.2	88.36	109.89	126.67	
II	2.028	2.172	84.5	98.7	88.50	109.42	131.37	
III	2.048	2.260	86.0	105.8	91.88	107.28	130.05	
IV	2.021	2.293	84.3	106.9	90.70	110.38	133.62	
1991								
I	2.067	2.323	82.6	104.1				

^a The NIS exchange rate *multiplied* by the index of foreign wholesale prices *divided* by the index of wholesale prices of manufacturing output for the domestic market (excluding food).

^b The 5-currency basket excluding the \$, that is, DM, £, FFr, and ¥.

^c Unit labor cost = $W/(P_x EY)$, where W is the nominal daily wage, P_x is the dollar price exports, Y is daily output (all for industry excluding diamonds); and E is the effective exchange rate for industrial exports excluding diamonds.

^d Daily wage = $W/(P_x E)$.

^e This indicator shows a sharp fall in export profitability in 1988, whereas the Industry Survey shows a 6 percent increase for this year. The series must therefore be treated with caution.

SOURCE: Exchange rates—Bank of Israel; other Israeli data, CBS; foreign prices, *IFS*.

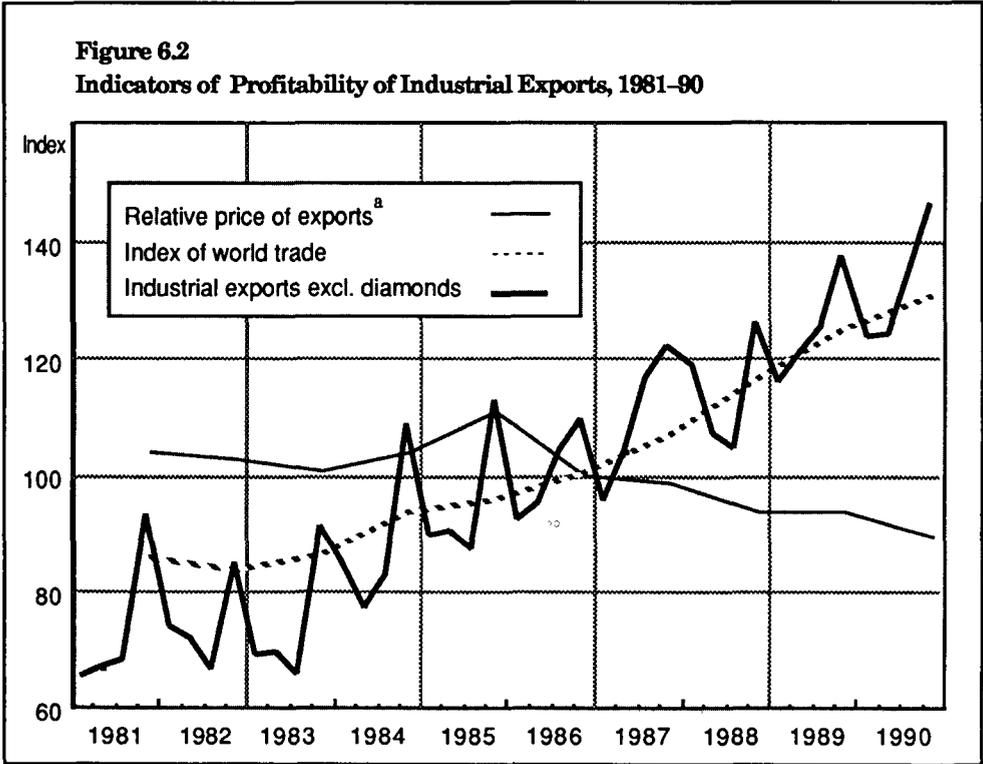
region in the second half of 1990 due to the Gulf crisis had a dampening effect on export orders and perhaps on current exports too. However, the effect of the crisis will probably make itself felt primarily in 1991. As mentioned, Israel's defense exports were especially hard hit.

Domestic demand for Israeli manufactures rose with the mounting influx of new immigrants, but this had only a limited moderating effect on the country's exports because of the existence of excess capacity. In addition, domestic defense procurements did not increase in 1990 either; in other goods substitutability between the domestic and foreign markets is not great and in industries where it is important there is still idle capacity. In sum, demand conditions in the year reviewed were not favorable for the country's exports, although these conditions worsened in the second half of the year, precisely when exports picked up.

Supply-side factors were largely responsible for the crisis that overtook industry in the wake of the ESP. The crisis was particularly severe in export-oriented enterprises;² in the initial period unit labor costs shot up above their 1984–85 level (Table 6.6). In addition, output prices went up more slowly in exports than in the domestic market. Other factors contributing to the profitability crisis were the effective tax rates, high interest, and the need to restructure industry following the steep disinflation. Because of wage rigidity, firms made an effort to boost efficiency with a view to stepping up labor productivity. Industrial survey data for 1987–88 show that the improvement was greatest in export industries: between 1987 and 1988, nominal wages went up to a similar extent in industry as a whole and the export industries—by 20 percent—but unit labor costs fell by 6 percent in the export branches and by only 3 percent in industry as a whole. The improvement in efficiency was accompanied by large-scale lay-offs: the export industries cut their labor input by 6 percent while expanding exports by 4 percent. The absence of devaluation in 1988 was partly compensated for by an exceptional 10 percent rise in the dollar prices of industrial exports. In 1989 unit labor costs in industry declined on average, along with a rise in productivity. The currency was devalued by an average of 16 percent vis-à-vis the currency basket in order to compensate for the absence of devaluation in 1988. But at the same time the wholesale price index of industrial production for the domestic market went up, so that there was no improvement in the relative price of exports. In 1990 nominal hourly wages in industry rose by 18 percent (in local-currency terms). The increase in the effective exchange rate exceeded that of the two preceding years by 1 percentage point, but the rising trend of world prices tapered off this year, contributing to the marked deceleration of industrial output prices, which went up only 8 percent. The substantial productivity gain held down the increase in unit wage

² Indicators of industrial export profitability are presented in Table 6.7. In the 1989 *Annual Report* the reader was warned that these indicators do not explain the country's exports very well. The Industry Survey for 1988 was published this year, and it shows a strong profitability gain in 1988—a decline of 6 percent in unit labor costs. Our indicator, on the other hand, points to a deterioration to the same extent. Industrial exports are therefore analysed here with the help of data on total industry and indicators of the performance of exports relative to that of industrial output as a whole.

costs to less than 1 percent. Nevertheless, because of increased utilization of the capital stock, profitability was apparently not affected. The rate of growth of industrial exports (excluding transport equipment) outstripped that of total world trade in industrial goods, so that Israel increased its share of this market by 2 percent, following a 1 percent decline the year before.



^a Relative to implicit price of business-sector gross product.

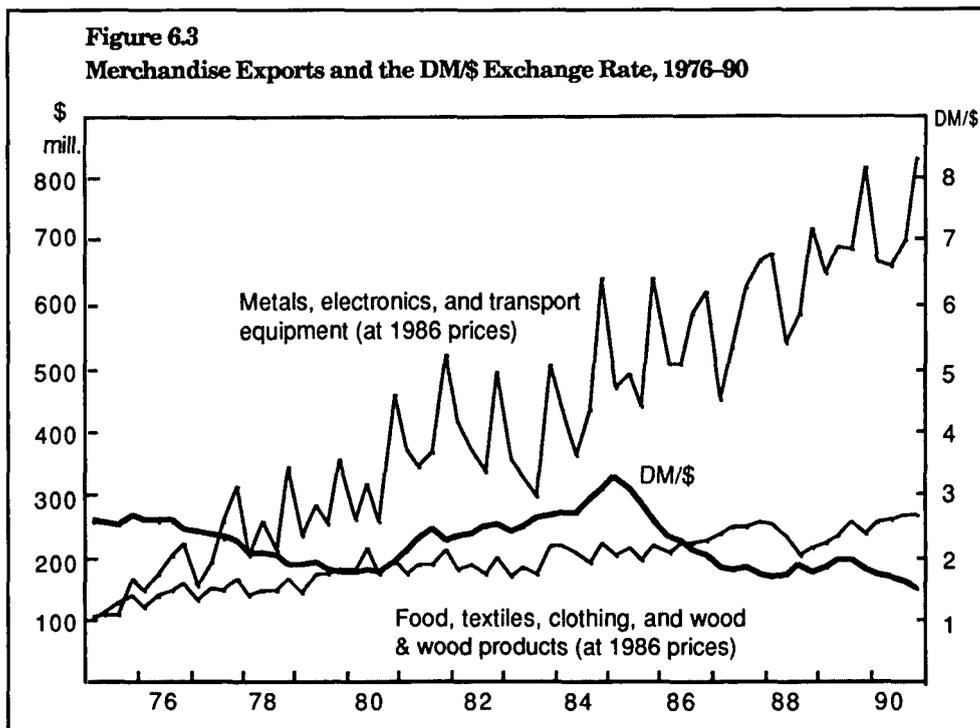
SOURCE: Based on Central Bureau of Statistics data.

The indicators of industrial unit labor costs reveal that in the last three years they were slightly above their average level in 1983-90. However, thanks to the increased utilization of capital, the rate of return did not decline in these three years (Table 6.6).

Credit available to exporters from the export funds became dearer in 1989-90 compared with credit for industry as a whole. The export funds were abolished in September 1990, but the subsidy element in this type of financing dried up even before then with the deregulation of the country's money markets, which brought the average interest on foreign-currency-linked credit closer to the going rates abroad. Evidence of this is found in the diminished utilization of the export fund quotas from 87 percent in 1986 to 49 percent in 1989.

Relative export/domestic market output prices were unchanged in the last three years,

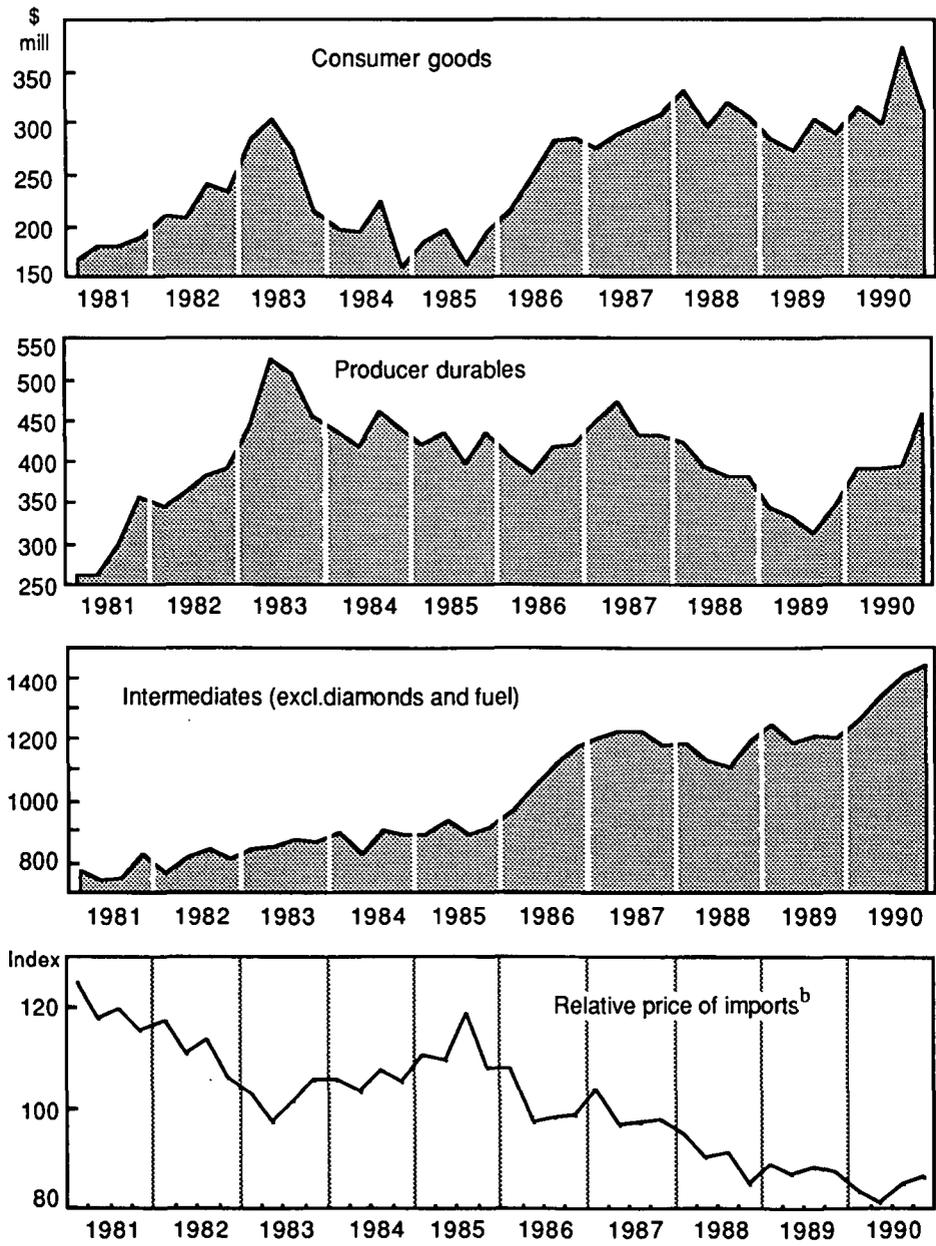
but they were lower than in 1983–86. The rise in wages in recent years induced exporters to shift to products offering advantages of specialization and those with high profit margins; these advantages are to be found only in exports because of Israel's small domestic market. The effect of expanding world trade on Israel's export growth can be seen in Figure 6.2. The development of export output prices relative to those of output marketed locally had a dampening effect on overseas sales; nevertheless, exports forged ahead steadily (see the discussion in *Annual Report 1989*).



SOURCE: Based on Central Bureau of Statistics data.

The failure of profitability to improve further in 1990 was apparently unforeseen, and so did not harm this year's exports. Industrial investment in 1990, including that in export branches, attested to producers' expectations of a further growth of exports in the future. The expansion of industrial production and exports began in the second half of the year reviewed with the absorption of new workers, and was disrupted by the Gulf crisis, which worsened in early 1991. In the last two years these industries (excluding transport equipment) reported only modest gains, with noncivilian exports losing ground and civilian exports making further headway. The improvement in profitability, mainly in the defense sector, has not yet run its course. This year's export growth was led by the traditional branches, which sell the bulk of their output to Europe. The principal factor here was the strengthening of European currencies against the dollar.

Figure 6.4
Merchandise Imports, 1981-90^a



^a Quarterly data, seasonally adjusted, at 1986 prices.

^b Relative to implicit price of domestic use of resources.

SOURCE: Based on Central Bureau of Statistics data.

Civilian merchandise imports

The cyclical swings of recent years are clearly reflected in the merchandise import data (Table 6.8). After rising at a 15 percent average rate in 1986–87, the volume of imports shrank over the next two years, but rose by 9 percent in 1990. If items subject to special factors (fuel, diamonds, and imports from Judea–Samaria and Gaza) are excluded, the fluctuations are more marked, with a 16 percent increase in 1990 following an average decline of 2 percent in the two preceding years.

Private consumption was 5 percent up on 1989, while imports of final consumer goods rose by 13 percent; nondwelling investment increased by 14 percent, and imports for this destination soared 28 percent. The increase in the proportion of final imports in consumption and investment was not supported by relative price developments: imported capital goods became much more expensive compared with those produced locally, and prices of consumer durables went up to the same extent for imports and domestic production. This suggests that substitutability between imported and locally-produced final goods is limited, notably for those items which expanded this year—producer and consumer durables.

The uptrend in imports of consumer goods became stronger during the year (Figure 6.4): in the first half the level rose 3 percent, and in the second half by 13 percent. The acceleration can be partly attributed to the massive immigration. Imports of investment goods shot up 19 percent in the first half of the year, and by another 11 percent in the second half. Long and short term interest rates continued to soften in the second half. The slackening of the uptrend in investment goods may have been due to growing uncertainty regarding the effects of the Gulf crisis and the government's investment encouragement policy.

This year's much larger imports of capital goods in general, and machinery and equipment in particular, compensated for their contraction in 1988–89, but investment still falls short of the required level. Achieving the level of employment and production needed for absorbing the immigrants—those who have already arrived and those yet to come—while keeping unemployment at a reasonable rate, entails a further big increase in imported investment goods. The proportion of intermediates in total merchandise imports has reached 77 percent, the rate of increase (excluding fuel and diamonds) accelerating from 4 percent in 1989 to 12 percent in 1990. This rapid increase relative to that in output is evidence of the build-up of imported goods inventories, which is typical of periods of rapidly mounting production. The price of intermediates declined relative to output prices, and this helped to spur the growth of imports, while the softening of short-term interest this year brought down the cost of maintaining inventories.

Imported fuel prices shot up 23 percent to reach their highest level since 1985. The volume of imports held steady, after drifting down the year before. Imports of rough diamonds shrank for the second year running, along with the slump in sales of polished stones.

At the beginning of 1990 another stage in the free trade agreements with the EC and

Table 6.8
Merchandise Imports (c.i.f.) by Economic Destination, 1987-90^a

	\$ million				Annual change, percent					
	1987	1988	1989	1990	Price			Quantity		
					1988	1989	1990	1988	1989	1990
Consumption	1,337	1,463	1,329	1,602	2.6	-0.9	6.4	12.9	-8.3	13.2
<i>of which</i> Durables	627	727	561	747	1.4	-4.1	4.1	15.5	-19.7	28.0
Investment	2,148	1,971	1,612	2,228	4.2	-3.1	7.7	-7.5	-15.6	28.3
<i>of which</i>										
Machinery and equipment	1,539	1,361	1,234	1,636	4.2	-1.9	8.3	-8.4	-7.5	22.5
Land transport equipment	486	511	327	421	3.6	0.3	2.5	-0.2	-36.2	2.5
Intermediates	8,216	9,310	10,130	11,319	9.6	9.6	6.7	-0.7	-0.7	4.7
Fuel	1,148	1,062	1,247	1,536	-20.3	22.2	22.6	16.1	-3.9	0.4
Diamonds (net)	1,901	2,613	2,869	2,895	8.8	36.1	13.6	17.5	-19.4	-11.1
Other	5,168	5,635	6,014	6,888	13.8	2.5	1.9	-7.4	4.1	12.4
Merchandise n.e.s. ^b	-246	-259	-44	-45						
<i>subtotal</i> : FTS definition	11,455	12,486	13,027	15,104	7.7	7.2	6.8	-0.4	-2.7	8.5
Balance-of-payments adjustments	-415	-457	-473	-521						
From Judea-Samaria & Gaza	304	148	107	177	8.5	-3.3	8.8	-48.4	-25.4	52.3
Total	11,344	12,177	12,661	14,760	7.7	7.1	6.8	-1.6	-3.0	9.1
Total excl. fuel, diamonds and imports from Judea-Samaria & Gaza	7,992	8,354	8,438	10,152	9.5	1.0	3.6	-4.4	0.0	16.1

^a New classification introduced in 1988. The rates of change for 1988 are based on the old classification.

^b Net of returned imports.

SOURCE: Based on Central Bureau of Statistics data.

the United States was implemented. Customs duties on imports from the United States (mainly textile products) were cut. Purchase tax was also trimmed under the long-term program for eliminating discriminatory taxation of domestic production and competing imports. In March 1990 the levy on purchases of foreign exchange was cancelled, but the 1 percentage point reduction in the average tax rate was smaller than in the two preceding years (2 points in 1988 and 3 points in 1989; Table 6.9). Tax cuts were especially steep on some categories of passenger cars, textile products, and furniture. The shift in the import mix toward highly taxed goods offset the cuts, so that the average tax on imports remained unchanged.

Table 6.9
Import Taxation, Selected Years, 1980-90^a

	(percent)				
	1980	1986	1988	1989	1990
Average tax rate					
Consumer nondurables	25	25	27	23	23
Consumer durables	120	97	98	75	71
Intermediates	3	7	6	4	5
Producer durables					
Machinery and equipment	9	11	11	10	9
Motor vehicles	43	83	73	64	48
Total imports	8	16	16	11	11
Coefficient of variation of effective exchange rate	20	21	23	17	17
Change^b					
In average tax rate, due to					
Tax rates		+3	-2	-3	-1
Composition of imports		+5	+2	-2	+1
In coefficient of variation of exchange rate, due to					
Tax rates		-4	-3	-2	-1
Composition of imports		+5	+5	-4	+1

^a Customs, purchase tax, and other imposts.

^b 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.

There was further exchange-rate unification in the year reviewed, although it proceeded more slowly, and this lowered the standard deviation by 1 percentage point. However, the shifting import mix counteracted the rate unification effect, and the disparity between effective exchange rates was unchanged after narrowing appreciably in the previous year.

The year reviewed did not see much progress in the liberalization of foreign trade, and administrative restrictions on the imports of goods are still extensive. The effect of the

restrictions is hard to quantify, and some of them are justified on grounds of consumer protection. Comparison with the incidence of these restrictions in the 1980s (1980–88) reveals a 60 percent increase in the number of items in the customs classification subject to restrictions. During the same period industrial output prices went up 30 percent relative to commodity import prices. To some extent this is attributable to the extension of the restrictions, since customs and purchase tax did not change much.

The need to absorb a growing number of workers in industry is sometimes given as the main reason for deferring the exposure of the domestic market to imports, but Israel's experience during the 1960s and 1970s, together with that of other countries, shows that exposure does not harm employment or economic growth. Successful liberalization programs have two important elements in common: they concentrate on the abolition of nontariff barriers and they are carried through consistently, the latter being a precondition of credibility (these conclusions emerge from a comprehensive study of 39 liberalization efforts in 19 countries, including Israel, which was published recently by the World Bank³). Absorbing the massive immigration requires, as stated, further large-scale investments and efficient utilization of the available factors of production. In the present situation, some of the new investments may be diverted to the production of goods that are profitable only because of the existing protective umbrella, which keeps out competing imports or makes them more expensive. This structural distortion will impair the economy's competitiveness and result in a balance of payments deficit and difficulties in foreign debt repayment. The expansion of production must therefore be based on long-term economic considerations, that is, the production of goods able to compete in both the expanding domestic market and abroad without massive protection must be stepped up. This is the principal reason for the urgency of the import exposure program.

Another reason lies in the structure of protection. Israel is relatively exposed to imports from Europe and the United States, owing to the free trade agreements. The existing tariff and nontariff barriers are for the most part directed at imports from other countries (third countries), where many products can be purchased at lower prices. As a result there has been a shift from cheaper to expensive countries, thereby increasing the import bill. To illustrate, in 1990 Israel's trade deficit (excluding diamonds, fuel, and trade with the administered areas) was entirely accounted for by the relatively expensive countries with which Israel has trade agreements. Of the \$2.2 billion deficit, \$2 billion was in trade with the EC, \$300 million with the United States, and \$700 million with EFTA. In trade with other countries there was an \$800 million surplus. The protection of Israeli products therefore constitutes a tax on consumers, by making the consumption basket dearer, and on exporters, by detracting from their ability to compete in world markets. This tax subsidizes employment, sometimes of a comparatively small number of workers, in the sheltered enterprises. By reducing the cost of the consumption basket,

³ Demetrios Papageorgiou, Armeane M. Choksi, and Michael Michaely (1990), *Liberalizing Foreign Trade in Developing Countries* (The World Bank, Washington, D.C.).

exposure would make it possible to pay a smaller dollar wage without depressing the standard of living, while reduction of the exporting firms' labor costs would make the economy more competitive.

Too rapid exposure, however, is liable to lead to the closure of existing enterprises and the dismissal of workers—an immediate and real danger which must be taken into account. For this reason the solution must be sought in the gradual exposure of Israel's products. The two essential ingredients of such a plan are:

1. A clear and credible signal with an immediate impact on investment plans.
2. A transition period allowing existing enterprises to adapt gradually to the new situation. This is needed to prevent large-scale lay-offs and the closure of enterprises.

The government has recently adopted an exposure program, one of whose main provisions is the abolition of the import licenses at present required for many products, and their replacement by a tariff to be progressively scaled down at a predetermined rate. The program is scheduled to go into effect on September 1, 1991.

3. THE CAPITAL ACCOUNT AND EXTERNAL DEBT

Private sector capital movements

The data on capital movements in 1990 point to relative calm in this area. The cyclical swings characteristic of previous years—an outflow when devaluation is expected followed by a return flow after it occurs—subsided in 1990. Purchases of foreign exchange by the private sector amounted to only \$550 million, compared with its \$1,270 million current-account deficit.

Exchange-rate policy influences the formation of devaluation expectations, which generate the cyclical capital movements. In January 1989 a strategy was adopted of managing the exchange rate in relation to a five-currency basket, with the daily rate allowed to move within a range of 3 percent in either direction of the midpoint in response to short-term speculative movements; in March 1990 the band was widened to ± 5 percent. Thus, when devaluation expectations spark a rush on foreign exchange, the price of the currency basket is driven up, additional purchases of foreign exchange become dearer, 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.

The exchange rate crept up in the first three quarters of 1990, but was steady from September until March 1991. The capital inflow during this period generated an excess supply of foreign exchange, and so the rate hovered around the lower limit of the band. In 1990 the actual exchange rate rose by 11 percent against the basket. This was similar to the average of the four preceding years, and reflected the maintenance of the exchange rate as an anchor for the domestic price level.

Table 6.10
The Exchange Rate, 1985-90^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	0.6				
1.8.86-12.1.87	1.50	0.4				
13.1.87-30.10.87	1.68	0.2			1.40	0.30
1.12.87-25.12.88	1.72	0.2			1.06	0.24
3.1.89-22.6.89	1.92	1.1	1.95	±3.0	1.00	0.20
23.6.89-28.2.90	2.07	0.7	2.07	±3.0	0.94	0.17
1.3.90-10.9.90	2.20	2.4	2.19	±5.0	1.03	0.06
11.9.90-10.3.91	2.29	0.4	2.41	±5.0	0.99	0.02
11.3.91 ^f	2.43	0.0	2.55	±5.0	..	

^a November 1987 and the week starting 26.12.1989, during which devaluation occurred, are omitted. Dollar rate until 31.7.86 (first line); thereafter the rate quoted is against the 5-currency basket.

^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.

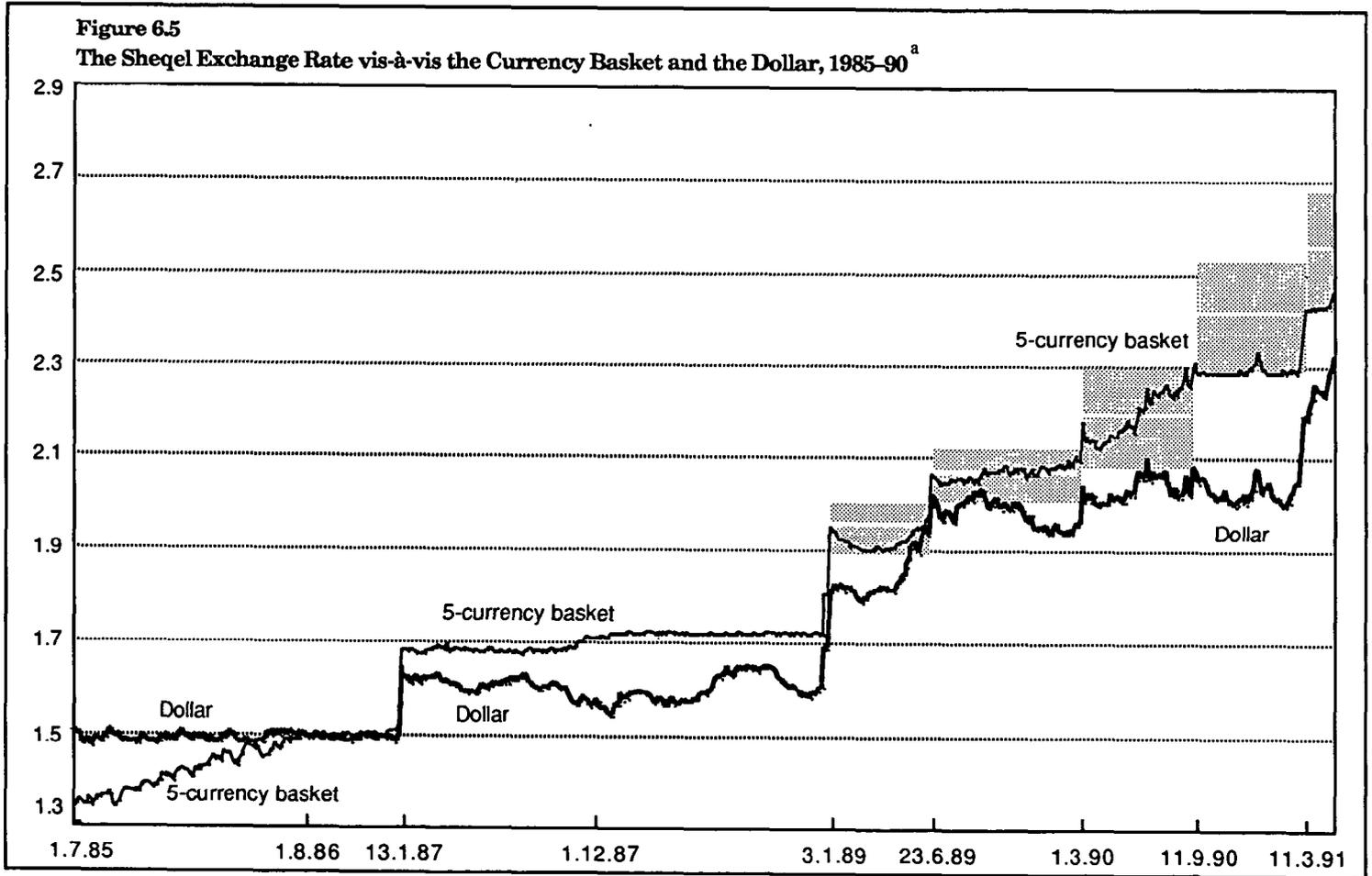
^f Calculated from data for 11.3.91-30.4.91.

SOURCE: Bank of Israel.

To keep the competitiveness of Israel's exports from being excessively harmed, given the existence of idle capacity and the mounting wave of immigration, the midpoint rate was raised by 6 percent in March 1991. This was the first time that the midpoint rate was adjusted upwards without the actual exchange rate rising above the lower limit of the previous band. The adjustment of the midpoint rate reflected the conceptual distinction of the exchange-rate regime between the movement of the exchange rate within a band, which is intended to moderate speculative capital movements, and the fixing of the midpoint rate in response to macro-economic policy considerations.

Exchange-rate policy, as stated, influences speculative capital movements directly. Before institution of the band, the capital account reflected mainly speculative flows induced by devaluation expectations. These speculative cycles were characterized by the purchase of foreign exchange in anticipation of devaluation and its sale after devaluation. The intensity of devaluation expectations is a function of the exchange-rate regime.

Speculative capital flows can be described in terms of the correlation between devaluation expectations, as reflected in the changes in the premium on the black market dollar, and capital movements, as measured by the implied private capital imports. The latter are defined as the difference between private purchases of foreign exchange from the Bank of Israel and the private sector's current-account deficit. Despite the importance of this measure, caution must be exercised in analysing it, both because the conceptual



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

and statistical distinction between private and public sector transactions is not clear-cut, and because the private sector's implied capital imports include nonspeculative foreign exchange purchases from the Bank of Israel.

An especially strong devaluation expectations-induced speculative cycle occurred at the end of 1988. The speculative capital movements associated with the June 1989 and September 1990 exchange-rate adjustments were short-lived and less intensive. The toning down of these cycles indicates that movement of the exchange rate within a specified band is an effective instrument for damping down capital movements over the year.

Table 6.11
Capital Imports and the Gap Between Domestic and World Interest Rates, 1989-90

	1989			1990			
	I-II	III	IV	I	II	III	IV
Implied private capital imports (\$ million)	1,466	-64	-691	-128	387	-6	463
Premium on black dollar (%)	0.8	5.1	10.1	8.1	2.4	5.4	5.3
<i>Quarterly rates</i>							
Interest							
CDs	2.9	2.3	3.0	3.5	3.0	3.0	3.0
Overdraft facilities	8.4	6.9	7.6	6.8	6.8	6.5	6.4
Interest-rate gap^a							
Loan rate	6.0	4.7	5.5	4.8	4.7	4.5	4.4
Deposit rate	0.5	0.1	0.9	1.5	0.9	1.0	1.0

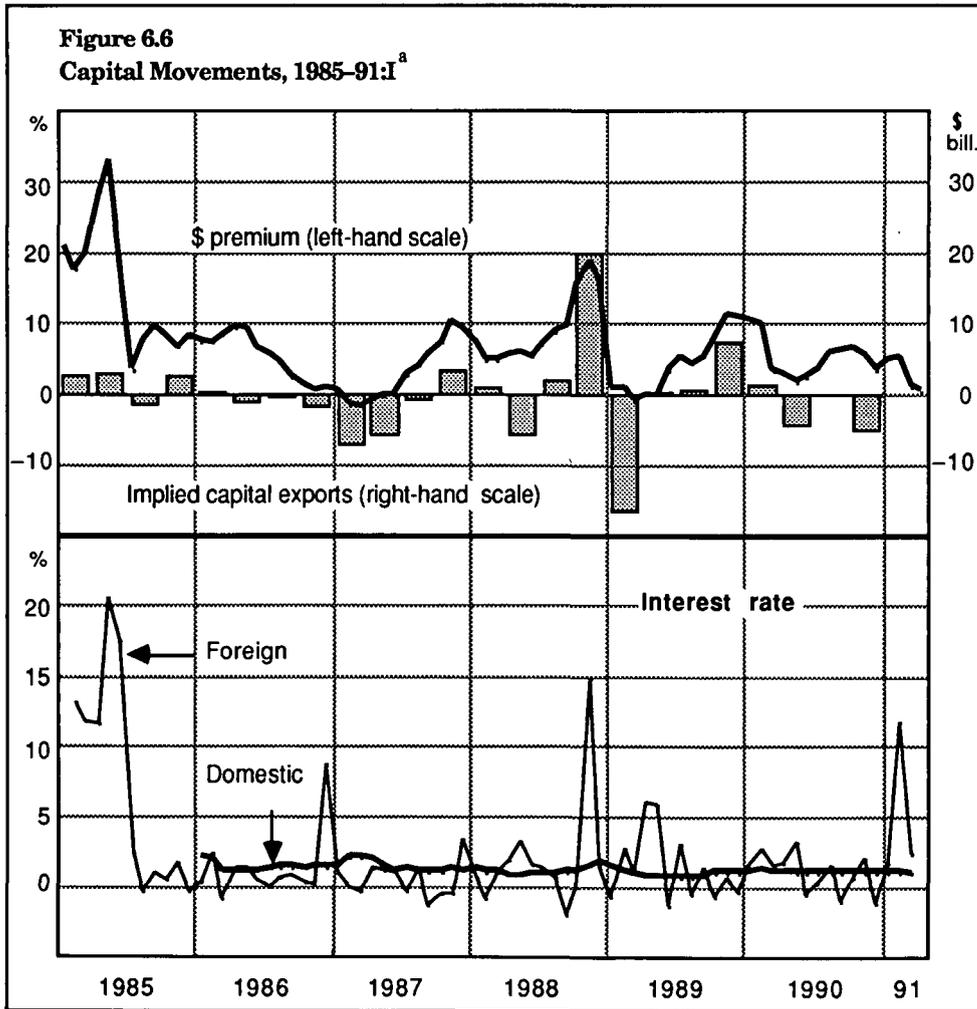
^a The difference between the domestic rate and the 3-month Eurodollar rate.

In the fourth quarter of 1990 private sector transactions drew down the foreign reserves by only \$140 million, despite a \$600 million deficit in the sector's current account. Since no implied capital outflow was recorded on the emergence of devaluation expectations before the September exchange-rate adjustment, while subsequently there was a \$460 million implied import, the capital inflow in 1990 is only partly explained by devaluation expectations.

In addition to the cyclical devaluation-expectations effect, capital movements are determined by shifts in the domestic-foreign interest-rate differential. Monetary policy creates incentives for capital movements when domestic interest rates do not move in step with those abroad.

In the year reviewed monetary policy strove to keep the average nominal interest rate at roughly its end-1989 level. Compared with the years before 1989, the lending rate dipped appreciably, while the deposit rate changed only slightly. These developments, along with the softening of interest abroad, widened the domestic-foreign interest-rate differential in the case of assets and reduced it in the case of credit. This change in the interest rate differential can be quantified (at a given level of devaluation expectations) by

comparing various time spans in 1990 with those in 1989 with a similar level of devaluation expectations⁴ (Table 6.11). This shows that in 1990 it paid to take domestic instead of foreign credit and to invest in local instead of foreign financial assets. Presumably the private sector's 1990 capital import in excess of its deficit financing requirement was partly a response to the increased profitability of selling foreign exchange for investing at home. The narrowing of the lending-rate differential stimulated the resort to domestic credit, but its effect was offset by the easing of controls on foreign credit and by the expansion of suppliers' credit, which rose along with imports.



^a Black dollar market premium on the representative rate. For implied capital exports, see note e to Table 6.12. Interest rates: foreign, 3-month Eurodollar rate calculated in NIS on a monthly basis; domestic effective interest on overdraft facilities, in monthly terms.

⁴ Measured by the premium on the black-market dollar.

The exchange-rate regime instituted in 1989 has permitted a more stable lowering of domestic interest: whereas under the fixed exchange-rate regime speculative capital flows destabilized domestic interest rates, the present policy has eased the pressure on interest by permitting the exchange rate to fluctuate (Table 6.10). Even though the capital movements associated with the March 1990 devaluation helped to reduce the economy's liquidity because of weakening demand for local-currency assets and mounting demand for local-currency credit, the temporary 2.3 percentage point increase in the lending rate was much smaller than previous increases (e.g. the steep 6.8 point jump in the wake of the huge end-1988 capital outflow). In other words, movement of the exchange rate within a specified band has diminished uncertainty in the financial markets.

The magnitude of capital movements is influenced by the whole range of choices open to the public for hedging its assets and liabilities against exchange-rate changes. In November 1989 the Bank of Israel offered a new instrument—foreign-currency options. Previously, when the public expected devaluation it purchased foreign exchange in order to sell it after the devaluation. To some extent the options substitute for cyclical capital movements by providing a hedge against devaluation. The year reviewed saw increasing resort to these options: their balance fell to their lowest level in May—\$120 million—peaking in November and December at \$440 million (Table 6.A15). On the other hand, the Bank of Israel made it less worthwhile to buy resident deposits (foreign-currency denominated) as a hedge by reducing the interest on the fixed-term deposits.

We cannot fully explain the implied capital imports of the fourth quarter. Besides the fading of devaluation expectations, the widening of the domestic-foreign deposit rate differential, the introduction of foreign-exchange options, and further relaxation of foreign-currency control (see below), the growing influx of immigrants may have been a contributory factor in the latter part of the year.

Because of the foreign-currency controls, a substantial part of the capital movements are not reported, and some of them are diverted from the more restricted to less restricted channels. Along with the gradual reform of the capital market, foreign-currency controls were reduced and new channels for short-term foreign-currency movements opened. In April 1989 the minimum period for borrowing directly from abroad was lowered from 30 to 18 months; at the end of 1990, after two further reductions, the minimum period was only six months. In addition, the interest ceiling on foreign credit was abolished in May 1990. In 1990 the quantitative restriction of capital imports through the banking system was lifted. In September, as part of the effort to reduce the government's intervention in the allocation of capital, most of the directed credit funds were eliminated.

The control of capital movements inhibits the ability of firms to conduct their overseas transactions efficiently, thereby adding to the cost of borrowing abroad and depressing the return on assets held outside Israel. In addition to the reliefs granted on the procurement of direct foreign credit in 1990, firms were given special permits to make direct investments abroad; as a result, the private sector's net foreign nonfinancial investment soared from \$62 million in 1989 to \$252 million (Table 6.A11).

Table 6.12
Balance of Payments, by Sector, 1988-90^a

	(\$ million)						
	1988	1989	1990	1989		1990	
				First half	Second half	First half	Second half
Public sector							
Current account ^b	581	915	1,804	-123	1,038	233	1,572
Medium and long term capital movements ^c	-633	49	-26	-75	124	-176	151
Basic account	-52	964	1,779	-198	1,162	56	1,722
Short-term capital movements	108	-47	-5	23	-70	-57	52
Capital movements via banking system	590	-554	149	-215	-339	-135	284
Errors and omissions	548	318	-812	184	134	-109	-703
Effect on foreign reserves ^d	-1,194	-680	-1,111	206	-886	245	-1,356
Private sector							
Current account ^b	-760	6	-1,268	142	-136	-104	-1,164
Medium and long term capital movements ^c	48	39	-181	110	-71	17	-199
Basic account	-712	45	-1,449	252	-207	-87	-1,363
Short-term capital movements	-159	-256	-163	27	-284	-79	-84
Capital movements via banking system	-1,111	-77	-228	574	-651	21	-249
Errors and omissions	-375	1,004	1,289	753	250	300	989
Effect on foreign reserves ^d	2,357	-717	552	-1,608	891	-156	707
Implied private capital imports ^e	-1,597	711	716	1,466	-755	260	457

^a Figures may not add owing 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 the public sector's capital movements.

^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.

Together with the expansion of Israeli residents' overseas investment, foreign residents' investment in Israel declined from \$150 million to \$110 million. These developments resulted in a \$140 million net capital outflow in 1990. The contraction of investments reflected the downturn in foreign residents' gross investments, which began in the second quarter of the year. This was, however, of limited significance, since this item usually consists of a small number of transactions. Including a \$40 million net loan repayment, there was a \$180 million outflow of private long and medium term capital in the year reviewed. However, this outflow contrasts with a net inflow of capital through unreported channels, and, as stated, was affected by the transactions of isolated firms and the lag in the recording of loans.

The external debt and reserves

The net external debt was reduced by \$680 million in 1990 to stand at \$15.6 billion (Table 6.13). Together with the expansion of output and real appreciation against the dollar, this reduction depressed the net debt/GNP ratio from 38.4 percent in 1989 to 31.3 percent (Figure 6.7). The gross debt went up by \$1,240 million, along with increases of

Table 6.13
Assets and Liabilities in Foreign Currency, 1986-90^a

	(million \$)				
	1986	1987	1988	1989	1990
1. Net liabilities (2 - 3 - 4) ^b	18,212	18,214	18,515	16,244	15,560
2. Liabilities	24,062	25,339	24,537	23,797	24,055
Government	16,187	16,544	16,598	16,571	16,736
Nonfinancial private sector	3,991	4,805	4,574	4,519	4,591
Banking system, net	3,883	3,990	3,366	2,707	2,728
3. Foreign reserves	4,924	6,027	4,829	6,208	7,000
4. Exporters' credit to foreigners	925	1,097	1,192	1,345	1,495
5. Current liabilities	3,980	4,397	4,193	4,336	6,633
Banking system (short term)	1,197	1,190	1,138	1,204	2,573
Nonfinancial private sector (short term)	1,131	1,425	1,387	1,423	1,660
Direct government debt (short term)	25	0	100	0	0
Medium and long term debt repayable within a year	1,627	1,782	1,568	1,709	2,400
6. Net current liabilities (5 - 3 - 4)	-1,869	-2,728	-1,828	-3,216	-1,861
7. Current debt as percent of net debt	-10	-15	-10	-20	-12
8. Gross liabilities	30,637	31,786	31,312	31,224	32,464

^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.

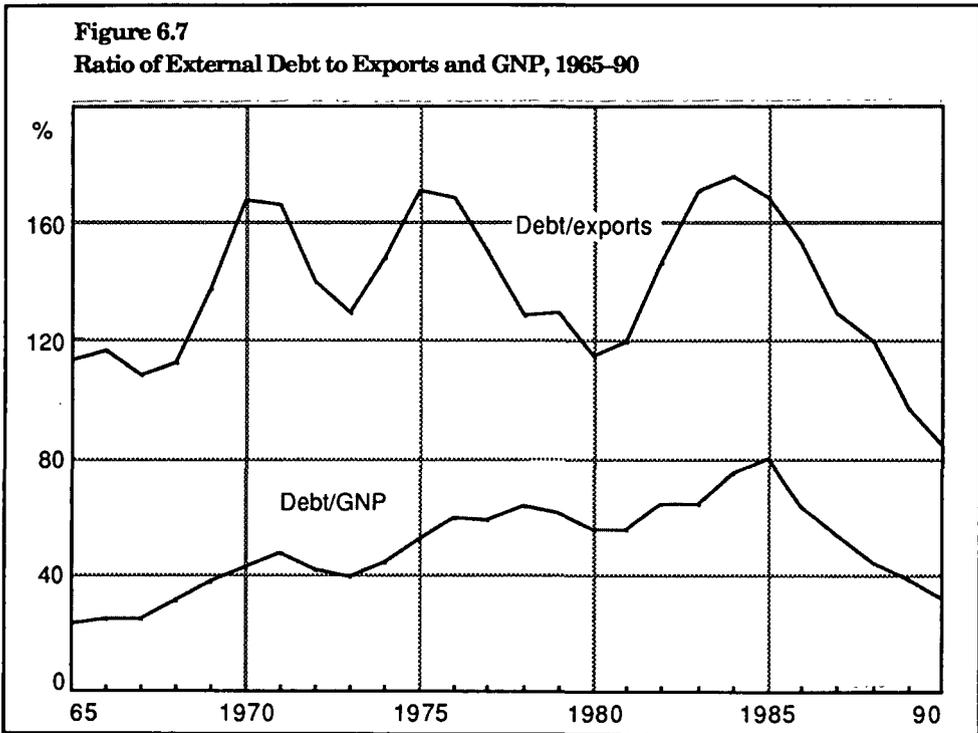
SOURCE: Based on Central Bureau of Statistics data.

\$790 million in reserves, \$980 million in commercial bank assets, and \$150 million in exporters' credit to foreign customers.

The cyclical upturn of 1990 was fuelled by the initial absorption of the huge immigration. Increasing importance therefore attaches to the country's ability to raise foreign capital and to entrepreneurs' readiness to utilize it. An inflow of foreign capital during a period of immigrant absorption contributes to a rapid and smooth shift to a higher GNP level. Capital imports make it possible, of course, to step up investment by more than can be achieved from domestic sources alone. The expansion of investment assumes added importance in view of the need to absorb immigrants in the labor market while building the infrastructure for their housing.

As stated, the net debt/GNP ratio declined by 6.9 percentage points compared with the previous year. This was an outcome of the aforementioned changes in the debt burden and the expansion of GNP. But it was also influenced by exchange-rate shifts, notably of the sheqel against the dollar. The contraction of the debt and GNP growth accounted for 3.4 percentage points of the downturn and real appreciation against the dollar for 3.5 points; real appreciation against the currency basket was responsible for 1.4 points, and appreciation of the basket against the dollar for the remaining 2.1 points.

The weakening of the dollar strongly affects the debt/GNP ratio, since 88 percent of the country's total foreign-currency liabilities are in dollars. However, as mentioned, real



SOURCE: Based on Central Bureau of Statistics data.

appreciation against the dollar chiefly reflects its weakening against the currency basket when exchange-rate management is based on this basket. The dollar began to retreat as far back as 1985, and the magnitude of the trend was not foreseen when the loans were given. Since currency markets are characterized by sharp exchange-rate fluctuations, there is considerable uncertainty about prospective developments in this area.

Table 6.14
Interest on New Loans, 1986-90

	(percent p.a.)		
	Long and medium term		Short term
	Government	Private sector	Non-financial private sector
1986	7.3	8.9	7.9
1987	7.3	8.6	8.2
1988	9.3	9.1	9.0
1989	8.3	10.4	10.5
1990	7.3	9.0	9.4

The debt/exports ratio (Figure 6.7) dipped from 97 to 88 percent during the year reviewed. This measure is freer of price effects than the debt/GNP ratio, and so its downturn more clearly mirrors the easing of the debt burden following the decrease in the debt and expansion of economic activity.

The current debt, which consists of the economy's short-term indebtedness and liabilities falling due in the coming year, was \$2.3 billion up on 1989. Of this sum, \$1.4 billion was short-term commercial bank debt (Table 6.13), but because of the increase in the banks' assets, the bulk of which are also liquid, their net debt was stable.

This year 84 percent of the banks' foreign liabilities consisted of nonresident deposits of Israelis. Despite the possibility of utilizing these deposits for financing domestic activity, 64 percent of the total amount was redeposited in overseas banks. Such redeposits increase the economy's gross indebtedness but do not affect its net indebtedness.

Israel's commercial banks are a net lender to the world banking system. The surplus of its assets over its liabilities to overseas banks rose from \$3.8 billion in 1989 to \$4.3 billion.

The comparative stability of the other characteristics of the debt, such as its distribution by maturity, lender, and currency, did not affect the easing of the debt burden as measured by the debt/GNP and debt/exports ratios.

The economy'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. In 1990 the proportion of short and medium term liabilities held steady at 27 percent, so that the share of long-term liabilities remained at 73 percent.

Table 6.15
The External Debt Burden, 1986-90^a

	1986	1987	1988	1989	1990
<i>\$ million</i>					
Interest payments	2,370	2,286	2,504	2,502	2,573
Interest receipts	830	817	970	1,237	1,484
Net interest payments	1,540	1,469	1,534	1,265	1,088
Other capital services					
Debit	132	152	129	159	162
Credit	26	40	34	36	43
Repayment of principal	1,498	1,627	6,560	2,291	1,709
Total net debt servicing ^b	3,144	3,209	3,411	2,956	2,916
<i>Percent</i>					
Net interest/net external debt ^c					
Nominal	8	8	9	7	7
Real ^d	5	5	5	3	2
Interest/income at disposal of economy ^e	5	4	3	3	2
Net interest/exports ^f	14	11	11	8	6
Net debt servicing/exports ^f	28	24	23	19	17
Net debt servicing/(exports ^f + transfers ^g)	19	18	18	14	13
Net debt servicing/GNP	11	9	8	7	6

^a Figures may not add owing 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.

The sources of the external debt are remarkably stable, as they are largely associated with Israel's special relations with the United States and world Jewry. About 60 percent of the liabilities are government debt, which originated in three sources: (1) direct debt to the U.S. government (18 percent); (2) debts converted into fully guaranteed Israel government bonds tradable in the American capital market—90 percent guaranteed by the U.S. government, and 10 percent secured by the purchase of U.S. treasury bills, which were deposited in American banks as collateral (22 percent); (3) State of Israel Bonds and certificates (20 percent).

The softening of dollar interest rates abroad reduced the cost of raising capital for Israel: in 1990 the interest on short and medium term dollar loans of the government sector edged down 1 percentage point, and on those of the nonfinancial private sector by 1.5 points. The price of short-term credit also fell. The average interest on the nonfinan-

cial private sector's short-term borrowing moved down from 10.5 percent in 1989 to 9.4 percent. Since dollar interest rates abroad dropped to a similar extent, the domestic-foreign interest-rate differential did not change much.

The increase in the economy's foreign-currency assets, and especially the central monetary authorities' reserves, helped to trim the net debt despite the growth of the gross debt. Foreign exchange reserves are held by the central monetary authorities in order to meet the demand for foreign exchange. In 1990 they were augmented by \$800 million, but measured by the number of import months, the level held steady at 3.6 months (Table 6.A13). The desired level of reserves is affected by several interrelated factors: the cost of holding the reserves, the central bank's commitment to exchange-rate stability, demand for foreign exchange, and provision for contingencies. These factors did not produce any change this year in the level of reserves (as measured here), so that they remained at about their average level since 1986.

Table 6.A1
The Balance of Payments, 1985-90^a

	(\$ million)					
	1985	1986	1987	1988	1989	1990
1. Net goods and services account	-3,882	-3,729	-5,627	-5,173	-3,768	-5,086
Private sector	-677	-1,253	-1,863	-1,754	-1,478	-2,700
Public sector ^b	-3,205	-2,476	-3,764	-3,419	-2,290	-2,386
2. Net unilateral transfer ^c	4,997	5,382	4,769	4,513	4,863	5,790
Private sector	757	1,198	1,585	1,364	1,828	1,820
Public sector	4,240	4,184	3,184	3,149	3,035	3,970
3. Net current account (1 + 2)	1,115	1,653	-858	-660	1,095	704
Private sector	80	-55	-278	-390	350	-880
Public sector	1,035	1,708	-580	-270	745	1,584
4. Net medium and long term capital ^d	94	538	532	-585	88	-207
Private sector	91	192	485	-752	39	-181
Public sector	3	346	47	167	49	-26
5. Net basic balance of payments (3 + 4)	1,209	2,191	-326	-1,245	1,183	497
Private sector	171	137	207	-1,142	389	-1,061
Public sector	1,038	2,054	-533	-103	794	1,558
6. Net short-term capital movement	-126	-677	839	430	-477	-336
Private sector	-4	-34	107	-159	-256	-163
Public sector	-122	-642	732	589	-221	-172
7. Capital movements of banking system	-4	-118	0	-521	-631	-79
8. Errors and omissions	-687	-402	148	173	1,321	477
9. Increase (+) or decrease (-) in foreign reserves held in central institutions ^e	-392	-992	-661	1,163	-1,397	-560

^a Figures may not add owing to rounding.

^b The public sector deficit on goods and services account is defined as direct defense imports, government n.e.s., and net interest paid to rest of world *less* surplus on port services (excl. fuel) *plus* other imports financed by the government.

^c For details, see Table 6.A15.

^d Public sector from Table 6.A10; private sector, 'nonfinancial private sector' in Table 6.A10 *plus* line 7 of Table 6.A11.

^e Adjusted for changes in cross rates.

SOURCE: Based on Central Bureau of Statistics data.

Table 6.A2
Industrial Exports (f.o.b.) by Industry, 1987-90^a

	\$ million				Annual change, percent					
					Price			Quantity		
	1987	1988	1989	1990	1988	1989	1990	1988	1989	1990
Mining and quarrying	235	252	288	270	16.6	14.3	-2.3	-10.9	-0.0	-4.2
Food, beverages, and tobacco	436	527	567	652	30.5	-2.6	7.9	-8.3	10.7	6.5
Textiles	185	215	207	232	14.1	1.7	7.8	1.7	-5.2	3.8
Clothing and made-up textiles	400	416	419	545	23.0	-4.5	9.8	-15.4	5.6	18.4
Leather and leather products	7	10	8	10						
Wood and wood products	47	45	47	60	11.4	-1.8	12.1	-12.2	5.7	13.3
Paper and paper products	19	26	26	26	4.3	1.3	5.8	26.0	-1.7	-5.8
Printing and publishing	23	22	22	28	4.3	1.3	5.8	-5.4	-1.3	20.1
Rubber and plastic products	221	275	312	369	5.6	4.9	5.0	-5.0	8.1	12.6
Chemicals and petroleum products	1,039	1,115	1,268	1,448	7.2	4.0	7.9	5.3	9.3	5.9
Nonmetallic mineral products	17	23	23	25	13.2	-3.3	4.3	15.6	5.7	3.0
Basic metals	74	93	111	115	-6.8	5.1	-1.4	47.9	13.9	5.1
Metal products	503	591	660	691	7.7	4.1	0.7	23.2	7.2	4.0
Machinery	212	285	287	317	8.1	3.2	8.2	-14.7	-2.6	2.4
Electrical and electronic equipment	1,085	1,403	1,495	1,634	5.3	-0.0	3.6	23.5	6.6	5.5
Transport equipment	540	462	677	581	3.5	-0.8	2.0	-21.6	47.6	-15.9
Miscellaneous	446	535	617	821	7.3	3.0	7.7	12.4	11.9	23.6
Subtotal ^b	5,534	6,336	7,068	7,868	9.9	1.9	5.2	3.9	9.5	5.8
Diamonds, net	2,059	2,746	3,027	3,054	21.0	18.8	13.7	2.3	-7.2	-11.2
Total ^b	7,592	9,082	10,095	10,923	13.2	7.0	8.1	3.1	3.9	0.1

^a New classification introduced in 1988. The rates of change for 1988 are based on the old classification.

^b Includes other merchandise of up to \$50 million.

SOURCE: Based on Central Bureau of Statistics data.

Table 6.A3
Industrial Exports, 1988-90^a

(real annual change, percent)

	Total	Metals and electronics	Chemicals and plastics	Textiles and clothing	Food
Weights	100	45	22	10	18
1988					
Second half	-4.5	-4.3	-2	-14.2	-14.1
1989					
First half	8.5	11.4	6.5	8.4	11.1
Second half	5.4	5.0	7.2	2.5	15.5
1990					
First half	0.0	-4.2	1.6	12.1	-3.2
Second half	6.6	6.5	3.9	0.2	5.3

^a Seasonally adjusted. Excludes diamonds.

SOURCE: Based Central Bureau of Statistics data.

Table 6A4
Merchandise Trade by Origin and Destination, 1985-90^a

(percent of total)

	1985	1986	1987	1988	1989	1990
Imports, by origin ^b						
Europe ^c	59	63	64	55	54	54
North America	30	25	22	21	22	22
Other	11	12	14	24	24	24
Total	100	100	100	100	100	100
Exports, by destination ^d						
Europe ^c	40	40	44	44	42	45
North America	29	29	28	27	27	28
Other	31	31	29	29	31	27
Total	100	100	100	100	100	100

^a Calculated from current price figures (in dollars).

^b Excludes diamonds and direct defense imports.

^c EC and EFTA.

^d Excludes diamond exports.

SOURCE: Central Bureau of Statistics.

Table 6.A5
Services Account, 1987-90^a

	1987	1988	1989	1990	Annual percent change		
					1988 ^b	1989	1990
Imports							
Transport	1,078	1,216	1,291	1,370	15.6	6.2	6.1
Travel	1,041	1,161	1,327	1,485	8.5	14.4	11.9
Insurance	110	85	104	115			
Capital services	2,438	2,633	2,661	2,735	8.2	1.1	2.8
Government services n.e.s.	107	111	125	136			
Other services	1,505	1,640	1,733	2,036	7.9	5.7	17.4
Total	6,279	6,846	7,242	7,876	9.0	5.8	8.7
<i>of which</i> From J-S&G	669	657	668	784	-1.8	1.7	17.3
Total excl. capital services & J-S&G	3,172	3,556	3,913	4,357	11.9	10.0	11.3
Exports							
Transport	1,595	1,708	1,779	1,989	8.7	4.1	11.8
<i>of which</i> Freight on imports ^c	423	446	441	504	5.3	-1.1	14.4
Travel	1,347	1,346	1,468	1,382	-0.3	9.0	-5.9
Insurance	35	48	20	19			
Capital services	861	1,004	1,273	1,527	12.4	26.8	20.0
Government services n.e.s.	28	35	47	48			
Other services	1,355	1,559	1,606	1,824	11.8	3.0	13.6
Total	5,223	5,701	6,193	6,970	8.0	8.6	9.6
<i>of which</i> To J-S&G	220	230	228	257	-0.5	-0.8	12.7
Total excl. capital services & J-S&G	4,141	4,467	4,692	5,006	7.6	5.0	6.7
Total deficit	1,056	1,144	1,050	1,086	13.9	-8.3	3.5
Capital services, deficit	1,576	1,629	1,388	1,207	5.9	-14.8	-13.0
Excl. capital services and Judea-Samaria & Gaza, surplus	969	911	779	648	-6.7	-14.5	-16.7

^a Adjusted for c.i.f. valuation of merchandise imports.

^b A new classification was introduced in 1988. The rates of change for 1988 are based on the old classification.

^c Israeli carriers.

SOURCE: Central Bureau of Statistics.

Table 6.A6
Current Balance of Payments with Judea–Samaria and Gaza, 1987–90^a

	\$ million				Annual change, percent ^a					
	1987	1988	1989	1990	Price			Quantity		
					1988	1989	1990	1988	1989	1990
Imports										
Merchandise	304	148	107	177	8.5	-3.3	8.8	-48.4	-25.4	52.3
Services	669	657	668	784	28.6	-3.9	3.4	-23.6	5.9	13.5
<i>of which Wages</i>	643	644	659	774						
Total	973	805	775	961	24.4	-3.8	4.3	-31.6	0.1	18.9
Exports										
Merchandise	928	596	516	709	17.1	1.0	6.0	-40.2	-14.3	29.8
Services	220	230	228	257	15.9	0.3	11.3	-14.2	-1.2	1.2
Total	1,148	826	743	966	16.7	0.8	7.3	-35.1	-10.7	21.0
Export surplus										
Merchandise	624	448	409	532						
Services	449	427	440	527						
Total	175	21	-31	5						

^a New classification introduced in 1988. The rates of change for 1988 are based on the old classification.

SOURCE: Based on Central Bureau of Statistics data.

Table 6.A7
World Exchange Rates, 1988-90

	(annual change, percent)				
	1988	1989	1990	1989 ^a	1990 ^a
<i>Against the dollar, nominal</i>					
Deutschmark	-2.3	7.2	-14.1	-0.7	-14.2
Sterling	-8.2	8.9	-7.9	14.6	-17.2
Yen	-11.4	7.8	4.9	16.3	-7.0
French franc	-1.0	7.3	-14.7	-0.7	-14.7
<i>Against the dollar, real^b</i>					
Deutschmark	-0.0	9.0	-12.5	0.3	-11.1
Sterling	-8.9	8.6	-9.8	13.1	-17.2
Yen	-7.2	10.2	6.5	16.3	-3.7
French franc	-0.1	8.7	-14.4	-0.3	-13.0
<i>Sheqel exchange rate against</i>					
U.S. dollar	0.3	20.0	5.1	22.2	3.7
Deutschmark	2.7	11.8	22.5	23.0	20.8
Sterling	9.0	10.1	14.7	6.6	25.2
Yen	13.0	11.3	0.6	5.0	11.5
French franc	1.3	11.8	23.4	23.0	21.6
Currency basket ^c	2.4	16.1	10.5	19.7	11.1
Wholesale price index ^d	17.4	17.6	8.5	14.1	15.7

^a End of year.

^b Deflated by the index of wholesale prices in the respective countries.

^c Average of representative exchange rates of the five currencies, weighted by the composition of Israel's foreign trade.

^d Wholesale prices of industrial output for domestic market, excluding food, quarrying and mining.

SOURCE: Exchange rate and price indexes abroad—*IFS*; wholesale prices—Central Bureau of Statistics.

Table 6.A8
Unilateral Transfers, 1986-90^a

	(\$ million)				
	1986	1987	1988	1989	1990
Private sector					
Restitutions from Germany	424	531	557	584	619
Personal transfers	630	826	583	754	591
By immigrants	354	500	348	623	545
Others	277	328	235	130	45
Transfers in kind	21	24	25	23	37
Private nonprofit institutions	186	290	290	535	674
Personal transfers to rest of world	-65	-86	-90	-75	-100
Total	1,198	1,585	1,364	1,828	1,820
General government					
National Institutions	411	314	337	333	782
Intergovernmental transfers ^b	3,772	2,869	2,813	2,702	3,187
Total	4,183	3,183	3,150	3,035	3,969
Total unilateral transfers	5,382	4,769	4,513	4,863	5,790

^a Figures may not add owing to rounding.

^b Includes U.S. Government aid.

SOURCE: Based on Central Bureau of Statistics data.

Table 6.A9
U.S. Government Aid, 1986-90^a

	(\$ million)				
	1986	1987	1988	1989	1990
1. Grants	3,817	2,981	2,907	2,769	3,253
a. Military	1,867	1,781	1,707	1,569	2,076
b. Civilian ^b	1,950	1,200	1,200	1,200	1,177
2. Medium and long term loans	405	270	156	0	0
3. Repayment of medium and long term loans	1,081	1,129	5,943	1,826	1,088
a. Principal ^c	135	165	4,867	987	231
b. Interest	946	964	1,076	839	857
4. Total gross aid (1 + 2)	4,222	3,251	3,063	2,769	3,253
5. Total net aid (4 - 3)	3,141	2,122	-2,880	943	2,165
Net receipts from loans (2 - 3a)	270	105	-4,711	-987	-231
Grants less interest payments (1 - 3b)	2,871	2,017	1,831	1,930	2,396

^a Figures may not add owing to rounding.

^b Includes the emergency grant of \$750 million in each of 1985 and 1986.

^c Includes the redemption of \$4,704 million in 1988 (under the conversion agreement with the U.S. government) and \$723 million in 1989.

SOURCE: Based on Central Bureau of Statistics data.

Table 6.A10
Long and Medium Term Loans, 1985-90^a

	(\$ million)					
	1985	1986	1987	1988	1989	1990
Receipts						
Public sector	739	1,236	1,086	5,868	1,701	1,001
<i>of which</i>						
State of Israel Bonds	525	618	620	713	825	734
Bonds guaranteed by U.S. government	0	0	0	4,778	723	0
U.S. government loans	0	405	270	156	0	0
Nonfinancial private sector	485	671	916	739	592	641
Total receipts	1,224	1,908	2,001	6,607	2,293	1,642
Repayment						
Public sector	736	891	1,039	5,701	1,652	1,027
<i>of which</i>						
State of Israel Bonds	312	375	475	510	404	573
U.S. government loans	109	135	165	4,867	987	231
Nonfinancial private sector	493	607	588	859	639	682
Total repayment	1,229	1,498	1,627	6,560	2,291	1,709
Net receipts						
Public sector	3	346	47	167	49	-26
<i>of which</i>						
State of Israel Bonds	213	243	145	203	421	161
Bonds guaranteed by U.S. government	0	0	0	4,778	723	0
U.S. government loans	-109	270	105	-4,711	-987	-231
Nonfinancial private sector	-8	64	327	-120	-47	-41
Total net receipts	-5	410	374	46	2	-67

^a Excluding loans of the banking system. Figures may not add owing to rounding.

SOURCE: Based on Central Bureau of Statistics data.

Table 6.A11**Foreign Investment in Israel and Israeli Investment Abroad, 1985–90^a**

(\$ million)

	1985	1986	1987	1988	1989	1990
1. Investment by foreign residents	218	316	423	438	421	326
Quoted securities ^b	51	83	118	84	102	45
Direct investment	134	193	286	333	294	255
State of Israel Bonds ^c	10	8	4	2	3	2
In goods	5	14	-6	0	0	2
Reinvestment of profits	17	18	21	17	22	22
2. Repatriation of investments by foreign residents	129	133	213	994	272	213
<i>of which</i> Quoted securities ^d	61	66	163	855	121	63
3. Net investment of foreign residents	89	183	210	-556	148	112
4. Investment abroad by Israelis	81	138	127	111	166	446
Securities	30	12	39	23	54	164
Direct	51	126	88	88	112	282
5. Repatriation of investment by Israelis	91	83	75	35	103	194
6. Net investment abroad by Israelis	-10	55	52	75	62	252
7. Net private foreign investment (3 – 6)	99	128	158	-632	86	-140
8. Foreign securities held by banks ^e	-57	-64	-36	44	99	361
9. Total net foreign investment (7 – 8)	156	192	194	-675	-13	-501

^a Figures may not add owing to rounding.

^b In 1983, includes investment in bank shares by associated companies of Israeli banks.

^c Bonds redeemed for reinvestment.

^d In 1988, includes \$800 million redemption of bank shares.

^e Includes investment in foreign stocks by the banking system.

SOURCE: Bank of Israel and Central Bureau of Statistics.

Table 6.A12
Balance of Payments of the Private Sector, 1989-90^a

	(\$ million)			
	I	II	III	IV
1989				
Current account ^b	265	-123	-96	-40
Medium and long term capital movements ^c	77	34	11	-82
Basic account	342	-89	-85	-122
Short-term capital movements	17	10	-80	-204
Capital movements via banking system	909	-335	-210	-442
Errors and omissions	513	240	214	36
Effect on foreign reserves ^d	-1,782	173	160	731
Implied capital imports ^e	1,517	-50	-64	-691
1990				
Current account ^b	28	-132	-563	-601
Medium and long term capital movements ^c	-1	18	60	-258
Basic account	27	-114	-503	-859
Short-term capital movements	-143	64	-25	-59
Capital movements via banking system	100	-79	-506	257
Errors and omissions	-84	384	466	523
Effect on foreign reserves ^d	100	-255	569	138
Implied capital imports ^e	-128	387	-6	463

^a Figures may not add owing 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 the capital sector's capital movements.

^d Increase (+), decrease (-). Includes purchases of foreign exchange from the Bank of Israel.

^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.

Table 6.A13**Reserves Held by Central Monetary Institutions, 1981-90**

(\$ million)

	Central monetary institutions	Bank of Israel		Import months covered ^b
		Total	Net ^a	
1981	3,814	3,542	2,847	3.1
1982	4,312	3,836	2,993	3.5
1983	3,843	3,694	2,873	3.1
1984	3,318	3,098	2,601	2.6
1985	3,850	3,719	3,190	3.1
1986	4,924	4,703	4,153	3.8
1987	6,027	5,924	5,329	3.7
1988	4,829	4,091	3,432	2.8
1989	6,208	5,330	4,430	3.6
1990	7,000	6,316	5,161	3.6
1987				
I	5,364	4,838	4,290	3.9
II	5,420	5,159	4,600	3.7
III	5,271	5,115	4,532	3.4
IV	6,027	5,924	5,329	3.7
1988				
I	6,131	5,841	5,210	3.6
II	5,952	5,781	5,199	3.5
III	5,174	4,789	4,194	3.0
IV	4,829	4,091	3,432	2.8
1989				
I	6,589	5,887	5,246	3.9
II	5,985	5,309	4,633	3.4
III	5,894	5,117	4,411	3.4
IV	6,208	5,330	4,430	3.6
1990				
I	6,262	5,502	4,440	3.6
II	6,156	5,444	4,305	3.5
III	6,110	5,397	4,157	3.3
IV	7,000	6,316	5,161	3.6

^a Total *less* reserve deposits on foreign residents' accounts.^b First column *divided by* average monthly imports.

SOURCE: Based on data of the Central Bureau of Statistics and the Bank of Israel.

Table 6.A14
The Structure of the Net Foreign Debt, 1986-90^a

	(percent, end-of-year)				
	1986	1987	1988	1989	1990
Total net debt	100	100	100	100	100
By borrower					
Public sector ^b	62	58	64	64	63
Private sector	38	42	36	36	37
Private nonfinancial sector	17	20	18	20	20
Banking system	21	22	18	17	18
By lender					
Foreign public sector ^c	64	66	38	38	39
Foreign private nonfinancial sector ^d	59	64	93	116	127
Banking system abroad ^e	-23	-31	-34	-55	-68
By term^f					
Long and medium	119	125	118	130	127
<i>of which</i> Payable within 1 year	9	10	8	7	15
Short	-19	-25	-18	-30	-27

^a Figures may not add owing to rounding.

^b Government and the Bank of Israel.

^c Foreign governments and international institutions.

^d Consists mainly of foreign deposits and State of Israel Bonds; from 1988 also includes bonds guaranteed by U.S. government.

^e Includes the country's foreign reserves and loans from foreign banks and overseas offices of Israeli banks.

^f Short-term loans are for less than 1 year.

SOURCE: Based on Central Bureau of Statistics data.

Table 6.A15
Balance of Foreign-Exchange Options, 1991

	(\$ million, end of month)
January	135
February	147
March	138
April	126
May	117
June	142
July	194
August	267
September	366
October	425
November	444
December	443