CHAPTER VII

BALANCE OF PAYMENTS

1. MAIN DEVELOPMENTS

The import surplus grew by some $500 million in 1981, from $3.9 billion to $4.4 billion. All the increase was in defense imports, whereas the civilian import surplus[1] remained unchanged.

Unilateral transfers by the private and public sectors were, at $2.9 billion, not significantly different from the previous year's figure. The current account deficit[2] thus rose to $1.5 billion, after standing at roughly $1 billion in 1980, when it shrank by about $200 million. The lion's share of the deficit was financed by approximately $1 billion in long- and medium-term capital imports and the utilization of some $400 million of U.S. government military aid advances (received in the two preceding years for financing defense imports). Net short-term capital imports by the private sector (financial and nonfinancial) made it possible to finance the deficit and even to augment the country's international reserves (held by the central monetary institutions) by $290 million.

These developments increased the economy's foreign debt[3] by 9 percent in nominal terms[4] (compared with 8 percent in 1980), as well as its net current liabilities to the foreign sector.[5] In real terms,[6] the net debt rose 10.6 percent. This reflected the strengthening of the dollar against European currencies and the large weight of the economy's dollar liabilities in the total external debt, in comparison with the market composition of exports.

Defense imports display sharp year-to-year fluctuations, which do not always reflect domestic economic developments. For the most part such

[1] The total import surplus less direct defense imports.

[2] The import surplus excluding unilateral transfers roughly reflects the growth of the economy's net indebtedness to foreigners.

[3] Foreign currency liabilities, less liquid assets in the Bank of Israel and other financial institutions and credit granted by exporters to foreigners (see Table VII-24).

[4] Foreign military aid advances received in previous years for defense items actually imported in 1981 were not recorded as foreign currency assets (see Table VII-24); adjusting for this brings up the rate of growth of liabilities to foreigners in 1981.

[5] See Table VII-24, line 5.

[6] Deflated by the rise in commodity export prices (excluding diamonds) during the year.

imports are usually financed by U.S. military aid funds, and so their expansion does not create a short-term financing burden. This was the situation in 1981. It should be stressed, however, that financing noncivilian procurements through long-term loans does create such a burden in the long run.

The civilian import surplus, as stated, did not change in 1981, after it had contracted appreciably the year before. One of the factors contributing to the stability of the surplus in 1981 was the approximately $100 million drop in net capital service imports after their steady growth in 1977-80.[7] One possible explanation of this development is the disparate effect the rise in world interest rates has on interest income on the one hand and on interest payments on the other: the bulk of the economy's international reserves are invested for short and medium terms, and it has therefore been possible to benefit from the increase in interest rates, whereas the economy's external debt consists largely of long- and medium-term loans received in the past at lower interest rates.

The civilian import surplus exclusive of net capital service imports rose nominally in 1981 and even more in quantitative terms, but was still well below its level in 1979. The large quantitative increase[8] can be mainly attributed to the appreciable 9 percent expansion of the business sector's domestic uses[9] (relative to the growth of product), following a 5 percent drop in 1980. The more buoyant domestic demands this year can also be ascribed to the government's policy, under which indirect and direct taxes were sharply pruned and subsidies hiked, thereby increasing individuals' real disposable income by 6.5 percent more than can be attributed to the expansion of economic activity (i.e. GNP). In other words, the growth of imports this year was due partly to the government's economic policy, and to some extent it was also a compensatory response to the overreaction in 1980, when both domestic demands and imports fell off.

By contrast, a number of factors combined to moderate the uptrend in the civilian import surplus (excluding capital services) in the year reviewed:

(a) An improvement in the country's terms of trade and a decline in the price of the import surplus (in dollar terms)—the opposite of what happened in 1980 (see Table VII-4).

(b) The continued running down of stocks, to an even greater extent than in 1980 (see Table VII-7). In the case of diamonds this was due primarily to the depression in this industry and the smaller volume of subsidized credit granted

[7] Part of the measured 1981 decline in net capital service imports may be due to a statistical deficiency (see note 19).

[8] Calculated from the quantitative changes in imports and exports.

[9] Defined as domestic uses, less direct defense imports, imports of ships and aircraft, the product originating in public and nonprofit institution services, imputed housing services, and inventory investment.

Table VII-1

GOODS AND SERVICES ACCOUNT, UNILATERAL TRANSFERS, AND CAPITAL ACCOUNT, 1975-81[a]

($ million, at current prices)

	1975	1976	1977	1978	1979	1980	1981
1. Net goods and services	-4,016	-3,200	-2,535	-3,283	-3,943	-3,927	-4,430
Private sector	-1,938	-1,366	-1,117	-1,255	-2,471	-1,845	-1,903
Public sector [b]	-2,078	-1,834	-1,418	-2,028	-1,472	-2,082	-2,527
2. Net unilateral transfers	2,101	2,446	2,071	2,246	2,793	2,967	2,885
Private sector	730	697	844	919	1,091	1,133	1,085
Public sector	1,371	1,749	1,227	1,327	1,702	1,834	1,800
3. Net current account (1+2)	-1,915	-754	-464	-1,037	-1,150	-960	-1,545
Private sector	-1,208	-669	-273	-336	-1,380	-712	-818
Public sector	-707	-85	-191	-701	230	-248	-727
4. Net medium- and long-term capital movements	1,013	1,247	1,033	1,074	1,221	1,234	1,046
Private sector [c]	132	174	105	211	70	-188	-38
Public sector [d]	881	1,073	928	863	1,151	1,422	1,084
5. Net basic balance of payments (3+4)	-902	493	569	37	71	274	-499
Private sector	-1,076	-495	-168	-125	-1,310	-900	-856
Public sector	174	988	737	162	1,381	1,174	357
6. Changes in net short-term assets and liabilities [e]	544	-671	-567	82	232	590	920
Private nonfinancial sector	206	-272	-268	92	493	811	525
Public sector [f]	338	-399	-299	-10	-261	-221	395
7. Capital movements of the financial sector (excl. Bank of Israel)	494	129	-50	448	740	114	778
8. Errors and omissions	-69	173	286	298	-624	-549	-618
9. Surplus or deficit (-) in net capital movements for financing current account [g] (5+6+7+8)	67	124	238	865	419	429	581

10. Increase (-) or decrease (+) in foreign exchange reserves of Bank of Israel and liquid assets in other financial institutions							
a. Less currency valuation adjustments in relation to the dollar (b-c)	-67	-124	-238	-865	-419	-429	-581
b. Total actual change	-31	-190	-307	-1,013	-452	-291	-287
c. Effect on reserves of currency valuation adjustments in relation to the dollar (increase -, decrease +)	36	-66	-69	-148	-33	138	294

NOTE: In capital movements an increase in liabilities is a positive magnitude, while an increase in assets appears with a minus sign.

[a] Data for previous years have been revised because of corrections and changes in the Central Bureau of Statistics' method of measurement.

[b] The public sector deficit on goods and services account is defined as follows: direct defense imports, government imports n.e.s., and net interest payments abroad, less port services surplus (excl. fuel) and communication services surplus. Another direct public sector import has not been included here.

[c] Net long- and medium-term loans (Table VII-20) and investments from abroad, less Israeli investments abroad, excluding banks (Table VII-21, line 3).

[d] Includes allocations of IMF Special Drawing Rights—$27 million in both 1979 and 1980.

[e] This item breaks down as follows:

	1975	1976	1977	1978	1979	1980	1981
Changes in net short-term assets and liabilities	544	-671	-567	82	232	590	920
Private nonfinancial sector	206	-272	-268	92	493	811	525
Loans	9	12	19	163	132	76	-79
Commercial credit	24	-147	-127	-200	164	17	110
Other assets and liabilities	173	-137	-160	129	197	718	494
Public sector [f]	338	-399	-299	-10	-261	-221	395

See also note 26 in this chapter.

[f] Includes the Bank of Israel and defense import advances.

[g] Equal to the change in foreign exchange reserves, but with the opposite sign; therefore lines 9 and 10 sum to zero.

SOURCE: Based on Central Bureau of Statistics data.

Table VII-2
GOODS AND SERVICES ACCOUNT, 1977-81 [a]
($ million, at current prices)

						Percent annual increase							
						Quantity				Price [b]			
	1977	1978	1979	1980	1981	1978	1979	1980	1981	1978	1979	1980	1981
1. Imports													
a. Goods, excl. oil and diamonds	2,934	3,616	4,918	4,479	5,110	10.1	17.7	-20.3	18.7	11.9	15.5	14.3	-3.9
b. Oil	738	775	1,406	2,116	2,049	5.6	11.9	4.1	-5.6	-0.5	62.1	44.6	2.5
c. Diamonds	981	1,130	920	1,120	529	-29.5	-25.5	11.3	-46.8	63.3	9.3	9.3	-11.1
d. Services, excl. capital services	1,533	1,852	2,216	2,487	2,849	17.9	9.2	-2.3	19.0	2.5	9.6	14.9	-3.7
e. From administered areas	347	356	435	508	604	15.0	0.3	1.6	17.3	-10.8	21.8	14.9	1.3
f. Total imports of goods and services, excl. direct defense imports and capital services	6,533	7,730	9,895	10,707	11,141	5.8	8.0	-8.9	7.1	11.9	18.6	18.8	-2.8
g. Capital services	782	994	1,380	1,899	2,216								
h. Direct defense imports	1,099	1,623	1,233	1,725	2,226								
i. Total imports of goods and services	**8,414**	**10,347**	**12,508**	**14,331**	**15,583**								
2. Exports													
a. Goods, excl. fuel and diamonds	1,875	2,299	2,920	3,693	4,043	8.7	11.7	9.9	12.0	12.9	13.7	15.1	-2.2
b. Fuel	60	69	126	113	139	5.0	-29.0	-11.1	21.0	9.5	157.1	0.9	1.4
c. Diamonds	1,003	1,318	1,224	1,409	1,067	-16.6	-12.1	9.1	-20.4	57.6	5.7	5.5	-4.9

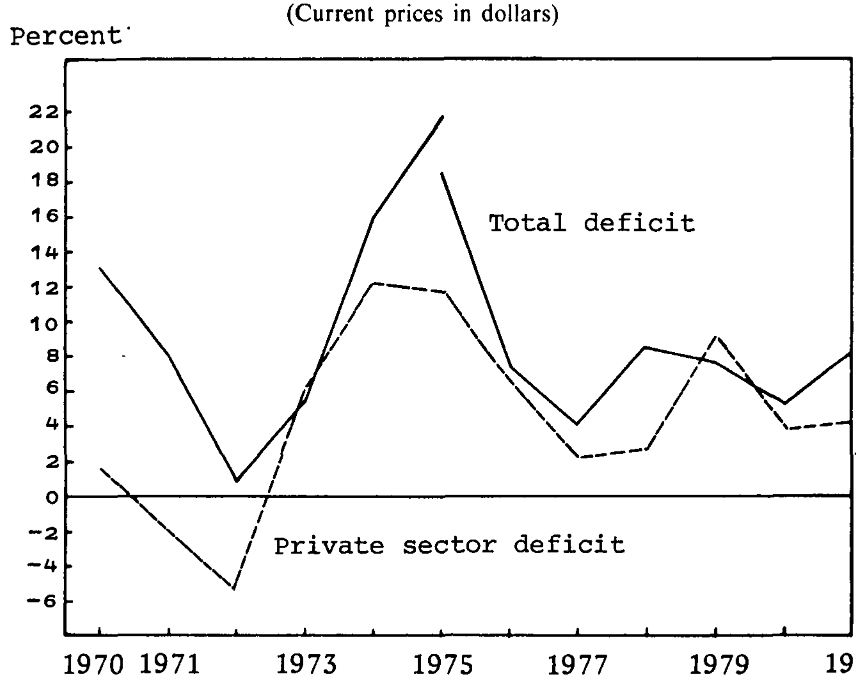
d. Services, excl. capital services	2,025	2,417	2,943	3,441	3,635	19.7	6.8	1.3	4.1	-0.3	14.0	15.4	1.5
e. To administered areas	550	468	549	702	801	-7.1	-3.8	9.8	14.1	-8.4	22.0	16.4	0.0
f. Total exports, excl. capital services	5,513	6,571	7,762	9,358	9,685	6.5	3.6	6.2	4.5	11.9	14.0	13.5	-0.9
g. Capital services	370	494	808	1,052	1,474								
h. Total exports of goods and services	**5,883**	**7,065**	**8,570**	**10,410**	**11,159**								
3. Trade deficit, excl. administered areas													
a. Excl. oil and diamonds (1a-2a)	1,059	1,317	1,998	786	1,067	12.9	28.3	-64.5	50.6	10.1	18.2	10.7	-9.9
b. Net oil imports (1b-2b)	678	706	1,280	2,003	1,910								
c. Current surplus on diamonds (2c-1c)	22	188	304	289	538								
Total trade deficit, excl. administered areas	**1,715**	**1,835**	**2,974**	**2,500**	**2,439**	**3.1**	**19.5**	**-41.2**	**0.8**	**3.8**	**35.7**	**42.9**	**-3.2**
4. Civilian import surplus, excl. capital services (1f-2f)	1,020	1,159	2,133	1,349	1,456	1.9	32.8	-63.9	25.4	11.5	38.6	75.0	-13.9
5. Net capital imports	412	500	572	847	742								
6. Civilian import surplus (4+5)	**1,432**	**1,659**	**2,705**	**2,196**	**2,198**								
7. Total import surplus (6+1h)[c]	**2,531**	**3,282**	**3,938**	**3,921**	**4,424**								

[a] Based on a c.i.f. valuation of commodity imports and f.o.b. valuation of commodity exports.
[b] The difference between the rate of change in import surplus prices and that in import prices reflects the change in the terms of trade; a proportionately greater change in import surplus prices indicates a deterioration, and vice versa.
[c] The discrepancies between these figures and those in Table VII-1 are due to rounding here. The exact figures appear in Table VII-1.
SOURCE: Based on Central Bureau of Statistics data.

Figure VII-1

CURRENT ACCOUNT DEFICIT AS A PERCENT OF GNP, 1970-81

(Current prices in dollars)



NOTE: Defense-related intergovernmental transfers were revised for the years 1975-81 following the receipt of new data. Since these data exist only for 1975 onward, it was not possible to revise the series for earlier years, which was calculated by a different method. Consequently, there is a break in the series on intergovernmental transfers and in all the other series which include such transfers.

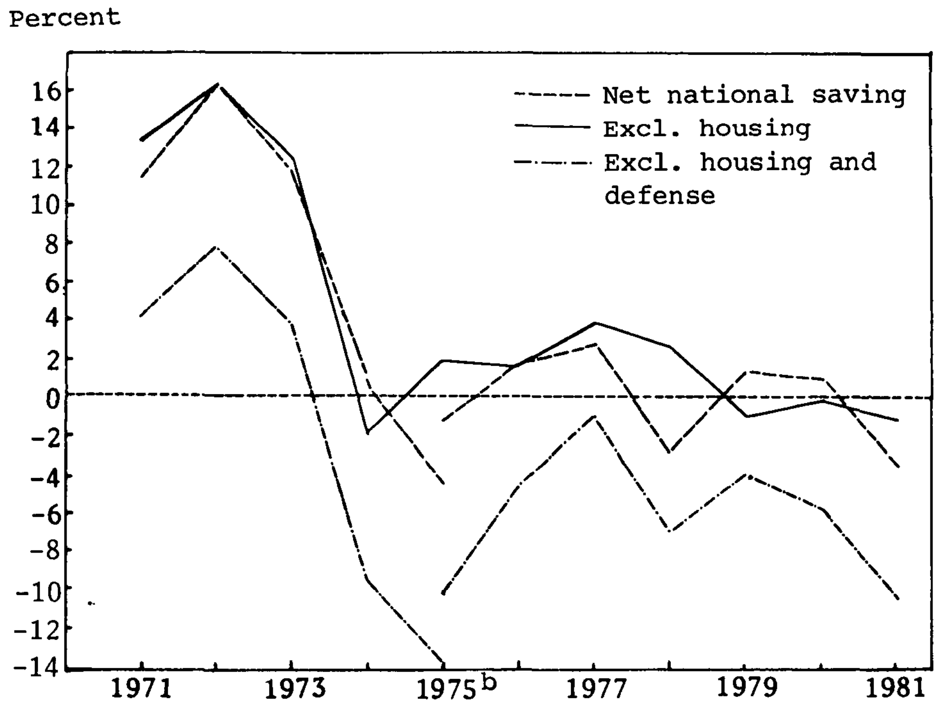
it, while in the case of raw materials (excluding oil and diamonds) the main factor was the continued rise in the real interest rate on nondirected (free market) credit.

The steep quantitative increase in the civilian import surplus (excluding net capital services) was caused by imports expanding faster than exports—7 vs. 4.5 percent. This year's import growth slightly exceeded the average for 1976-79 (5.5 percent), after it had declined in 1980 by 9 percent. The export gain, on the other hand, fell a little short of the average for 1978-80 (5.5 percent—see Table VII-2), mainly because of the slump in the diamond industry.

Much of this year's sizable increase in domestic demands was met by imports (owing partly to the decline in their relative price) and by drawing down stocks, and so it did not impede the continued vigorous advance of exports (excluding diamonds). The latter moved ahead 9 percent this year[10]

[10] Calculated from Table VII-2; the export data in Table VII-6 have been calculated according to the national accounts.

Figure VII-2
RATE OF NATIONAL SAVING FROM ALL SOURCES, 1971-81[a]
(Current prices in sheqalim)



[a] Net national saving is calculated as 1 minus the quotient of private and public consumption, divided by the net national product plus unilateral receipts minus net public sector interest payments to foreigners.
Net national saving excluding housing is calculated as 1 minus the quotient of private consumption (excluding the imputed net rental value of owner-occupied dwellings) plus public consumption plus net investment in housing, divided by the net national product (excluding the imputed net rental value of owner-occupied dwellings) plus unilateral transfers minus net public sector interest payments to foreigners.

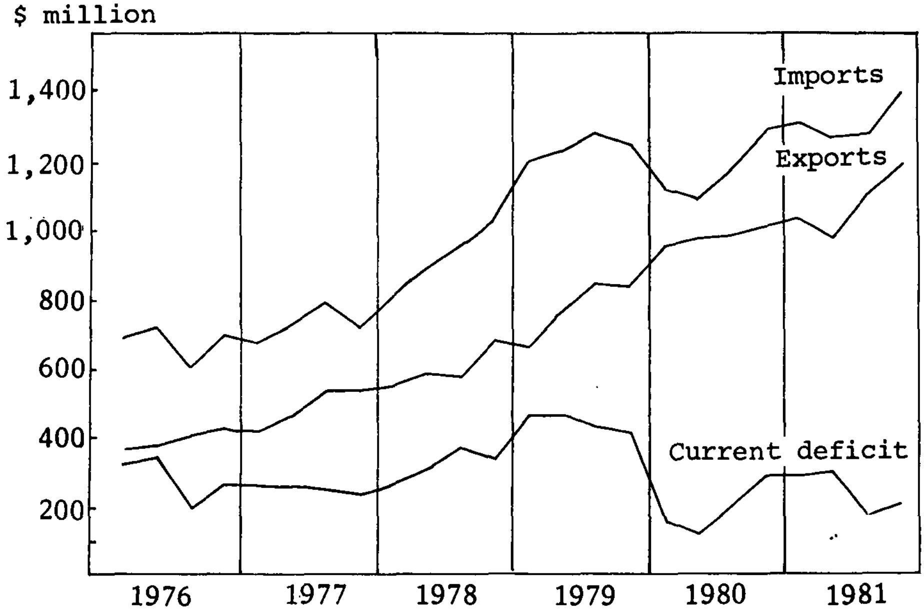
[b] See the note to Figure VII-1.

(similar to the 1978-80 average), despite the diminished profitability of several of Israel's foreign markets in 1981 and the depressed state of international commerce in general (see Table VII-6). One of the factors in this year's respectable export performance was the much larger sale of noncivilian items.

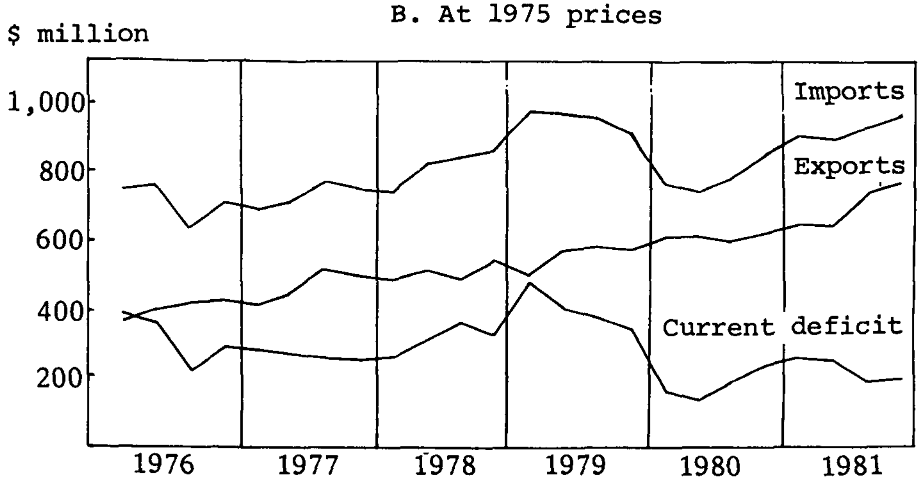
In 1981 the annual average rise of import and export prices in Israeli currency terms (at the effective rates of exchange) trailed behind the domestic inflation rate (see Tables VII-6 and VII-11). This problem was aggravated by the gradual strengthening of the dollar against European currencies from

Figure VII-3
EXPORTS, IMPOORTS, AND THE TRADE DEFICIT, EXCL. DIAMONDS AND OIL, 1976-81[a]
($ million, seasonally adjusted quartely data)

A. At current prices



B. At 1975 prices



[a] Excludes ships and aircraft; exports include refined petroleum products.

Table VII-3

THE TRADE BALANCE, QUARTERLY, 1980-81

($ million at current prices, seasonally adjusted)

	1980				1981			
	I	II	III	IV	I	II	III	IV
1. Commodity imports [a]	1,106.5	1,081.1	1,163.8	1,276.4	1,298.6	1,254.6	1,262.8	1,385.2
2. Commodity exports [b]	946.2	967.1	973.1	996.4	1,018.3	964.3	1,093.7	1,185.2
3. Trade deficit (1-2)	160.3	113.0	190.7	280.0	280.3	290.3	169.1	200.0
	Percent quarter-to-quarter quantitative increase [c]							
1. Commodity imports [a]	-16.0	-3.0	5.3	9.7	5.1	-1.1	3.6	4.8
2. Commodity exports [b]	6.7	0.3	-2.2	3.9	3.9	-0.7	14.4	4.5
3. Trade deficit (1-2)	-54.5	-15.9	41.0	28.6	8.1	-2.3	-24.5	6.0

[a] Excludes ships and aircraft, oil, and diamonds.
[b] Excludes ships and aircraft and diamonds.
[c] At 1975 prices.
SOURCE: Based on Central Buréau of Statistics data.

the middle of 1980. These developments affected the profitability of Israel's sales to Europe, but not to the U.S., since the two trends offset each other. To prevent a possible impairment of export profitability because of the real appreciation of the sheqel in relation to the basket of currencies, foreign exchange rate insurance was introduced in the middle of 1981 (this covers commodity but not service exports). This scheme is designed to protect exporters against the erosion of their foreign currency proceeds due to the lagged devaluation of the sheqel in relation to the basket of currencies. Under this arrangement, which is based on the real exchange rate in force in December 1980, some $60 million in compensation was paid in the second half of 1981 (this amounted to about 1.5 percent of total agricultural and industrial exports other than diamonds). Exchange rate and price developments abroad also made Israel's imports less expensive relative to domestic production.

As stated, special factors were at work this year to stabilize the civilian import surplus (including net capital services) at last year's level, after it had shrunk in 1980. The question arises if this reflected a basic long-run trend. A long-term improvement in the balance of payments necessitates the restraining of the expansion of private and public consumption and residential construction relative to that of the product, and basing economic growth on an accelerated expansion of exports and import substitutes—in short, an increase in national saving.

Realization of this goal depends mainly on the reduction of the public sector's domestic demand surplus,[11] which constitutes national dissaving, in addition to a consistent policy for making the production of export goods and import substitutes more profitable. Encouraging private saving is a complementary and vital ingredient in stepping up national saving, but the ability to change the public's saving habits is relatively limited. The alternative—cutting back investment as a means of trimming the deficit—is undesirable since it impedes economic growth.

2. IMPORTS[12]

(a) General Survey

In 1981 imports (excluding direct defense imports and capital services) rose 7 percent, which slightly exceeded the average annual rate for 1976-79 (5.5

[11] Excluding nondwelling investment by the public sector.

[12] According to balance of payments definitions and based on a c.i.f. valuation of commodity imports and f.o.b. valuation of commodity exports. Diamond imports are discussed together with diamond exports. The data on imports and exports, including rates of change, are in quantitative terms unless otherwise stated.

Table VII-4

CIVILIAN IMPORT SURPLUS (EXCL. NET CAPITAL SERVICES) AND TERMS OF TRADE IMPACT, 1978-81

($ million)

					Percent annual increase		
	1978	1979	1980	1981	1979	1980	1981
1. Import surplus, at current prices (2+3+4)	1,159	2,133	1,349	1,456	84.0	-36.8	7.9
2. Quantity, at 1978 prices	1,159	1,525	360	575	31.5	-76.4[a]	59.7[a]
Imports	7,730	8,335	7,590	8,130	7.8	-8.9	7.1
Exports	6,571	6,810	7,230	7,555	3.6	6.2	4.5
3. Deterioration in terms of trade[b]	—	395	884	715	22.7	135.9	-31.8
Thereof: Oil	—	350	890	885			
4. Price, excl. change in terms of trade[b]	—	213	105	165	14.0	13.5	-0.9

[a] The difference between the percent quantity change here and in Table VII-2 stems from the fact that here it was calculated at 1978 prices and in Table VII-2 it was calculated at the previous year's prices.

[b] Compared with 1978.

SOURCE: Based on Central Bureau of Statistics data.

Table VII-5

COMMODITY TERMS OF TRADE, 1973-81

(Indexes: [a] 1972=100)

	1973	1974	1975	1976	1977	1978	1979	1980	1981
Total	96	83	83	87	93	100	94	87	87
Total, excl. diamonds	92	84	87	89	88	92	87	82	82
Total, excl. diamonds and oil	93	94	95	99	98	100	99	100	102
Export prices[b] relative to oil prices	84	27	31	30	29	33	23	19	18

[a] The export price index divided by the import price index. A decrease in the index implies a deterioration in the terms of trade.

[b] Prices of exports, excl. diamonds and refined petroleum products.

SOURCE: Based on Central Bureau of Statistics data.

Table VII-6

FACTORS AFFECTING EXPORTS, EXCL. DIAMONDS, 1975-81

(Percent annual increase)

	Exports of goods and services [a]		Factors affecting exports	
	Total	Excl. diamonds	World trade [b]	Relative price [c]
1961-70 (average)	12.6	12.9	8.1	3.3
1971-80 (average)	9.6	9.6	5.5	1.1
1975	2.0	2.5	-4.7	2.5
1976	16.2	15.4	12.3	2.2
1977	11.7	13.1	5.5	5.9
1978	5.2	8.6	5.6	0.4
1979	3.3	5.2	5.9	3.3
1980	6.3	6.0	0.3	-1.2
1981	3.9	8.5	-1.0	-4.6

[a] As defined in the national accounts, i.e. excludes factor receipts from abroad and public sector interest receipts from abroad.

[b] Source: IMF, *International Financial Statistics* for the relevant years.

[c] The ratio of export prices (excluding diamonds) to the price of domestic business sector uses (at factor cost). Domestic business sector uses are defined as private consumption, public consumption, and fixed investment, less direct defense imports, ships and aircraft, the product originating in public and nonprofit institution services, imputed housing services, and net taxes on domestic production.

SOURCE: Based on Central Bureau of Statistics data.

percent). All items contributed to the growth with the exception of diamonds and oil, which declined this year.

This increase, which came on the heels of a 9 percent drop in 1980, can be largely attributed to the substantial 9 percent expansion of the business sector's domestic uses[13] (excluding inventories), following a 5 percent contraction in 1980.

The relative price of commodity imports[14] turned down, and this too apparently stimulated demand for foreign goods. The relative price decline resulted from a drop in import prices in dollar terms (owing to the strengthening of the dollar against European currencies), as well as from the trimming of import taxes. The tax cuts actually applied mainly to durable goods, imports of which shot up by a daunting 80 percent—see below).

The growth of imports (including diamonds and oil) was sluggish compared with the upsurge in domestic demands, the futher headway made by exports, and the drop in the relative price of imports. A number of special factors operated in 1981 to restrain the expansion of imports:

(1) The world depression in the diamond industry. This was reflected in the year surveyed by a sharply lower export of polished stones and an even bigger decrease in imports of rough diamonds. The latter is explained by a heavy depletion of stocks (by about $230 million), owing *inter alia* to the smaller amount of directed foreign currency credit provided to the industry by the Bank of Israel.

(2) The nonexpansion of oil stocks, after their buildup in 1979 and 1980.

(3) The high real cost of nondirected (free market) credit. After reaching a high level in 1980, the rate of interest continued upward in the year reviewed, and this led to a further drawing down of inventories (excluding oil and diamonds), though to a smaller extent than in 1980.

In 1976-79 actual input imports (including oil and diamonds) exceeded the volume of imports derived from changes in final uses by $590 million at current prices; in 1980 and 1981, however, actual imports fell short of derived imports by $70 million and $470 million respectively (see Table VII-7). Although it includes errors and omissions, the difference between the actual and derived data is an indicator of changes in inventories.[15]

Commodity imports (excluding oil and diamonds) expanded 9 percent

[13] Domestic uses less direct defense imports, ship and aircraft imports, the product originating in public and nonprofit institution services, and imputed housing services.

[14] The prices of consumer goods, capital goods, and raw materials (excluding oil and diamonds) relative to the prices of private consumption excluding household fuel and light.

[15] Since errors and omissions imparted a systematic upward bias in derived imports, it is conceivable that the extent of stocking in 1976-79 was greater and destocking in 1980 and 1981 smaller than indicated here. Hence it should not be concluded from the data that inventory depletion in the past two years exceeded the buildup in 1976-79.

Table VII-7

DISTRIBUTION OF IMPORTS BY USES, 1975-81 [a]

($ million, at current prices)

	1975	1976	1977	1978	1979	1980	1981	Increase from 1980 to 1981
A. Uses								
1. Private consumption	**1,695**	**1,749**	**1,983**	**2,281**	**3,000**	**3,375**	**3,900**	**525**
Food, beverages, and tobacco	738	702	774	800	1,040	1,158	1,294	136
Other current consumption	317	341	369	405	490	544	681	137
Durables	181	189	196	257	366	329	454	125
Nonprofit institution purchases	48	49	62	67	89	111	116	5
Other services	411	468	581	752	1,015	1,233	1,355	125
2. Public consumption	**578**	**566**	**572**	**669**	**783**	**969**	**1,005**	**36**
Civilian	146	174	171	213	212	246	221	-25
Domestic noncivilian	432	392	401	456	571	723	784	61
3. Domestic investment	**1,157**	**1,056**	**1,053**	**1,268**	**1,038**	**1,707**	**1,741**	**34**
Residential construction	247	207	170	180	299	372	360	-12
Nonresidential construction	202	171	170	193	245	258	240	-18
Equipment	665	625	617	820	1,139	1,065	1,075	10
Ships and aircraft	43	53	95	75	155	12	66	54
4. Inventory investment [b]	**-34**	**-75**	**131**	**207**	**327**	**-68**	**-469**	**-401**
5. Exports	**1,713**	**1,911**	**2,381**	**2,876**	**3,326**	**4,135**	**4,103**	**-32**
Diamonds	474	582	705	957	917	1,011	765	-246
Other industrial goods	457	579	730	877	1,172	1,658	1,813	155

Agricultural products	64	74	91	93	126	148	166	18
Services	554	508	659	772	883	920	1,048	128
To administered areas	164	168	196	177	228	298	311	13
B. Imports								
6. Total civilian imports distributed	**5,109**	**5,207**	**6,120**	**7,301**	**9,274**	**10,118**	**10,280**	**162**
Excl. imports for stockbuilding	5,143	5,282	5,989	7,094	8,947	10,186	10,749	563
7. Direct defense imports[c]	1,862	1,498	1,027	1,567	1,193	1,698	2,207	509
8. Imports not classifiable by a specific use	**1,067**	**1,238**	**1,267**	**1.479**	**2.041**	**2,515**	**3,096**	**581**
Capital services	718	743	782	994	1,380	1,899	2,216	317
Other[d]	349	495	485	485	661	616	880	264
9. Total imports, balance of payments definition	**8,038**	**7,943**	**8,414**	**10,347**	**12,508**	**14,331**	**15,583**	**1,252**

[a] Civilian imports, including imports from the administered areas. Indirect imports were distributed using the input-output table for 1975/76.

[b] Estimated as the difference between actual input imports (including diamonds and oil) and input imports derived from changes in final uses calculated with the help of the input-output table for 1975/76. Such an analysis assumes constant import coefficients, and therefore the data on inventory changes should be treated with reservation and regarded as merely an indicator of the changes. Moreover, the data probably include errors and omissions since, as stated, they were derived as the difference between two series based on different sources.

[c] Direct defense imports here differ from the data in other tables due to various adjustments to input-output definitions.

[d] Consists mainly of factor payments.

Table

COMMODITY IMPORTS BY

($

	1977	1978	1979	1980
1. Consumer goods	323.5	391.2	626.2	543.2
Food	150.1	152.9	274.2	251.7
Other current consumption	72.4	94.2	119.0	103.0
Durables	101.0	144.1	233.0	188.5
2. Capital goods	626.0	781.1	1,194.6	968.9
Plant and equipment	467.1	604.2	854.6	774.1
Land transport equipment	64.2	102.4	185.0	182.6
Ships and aircraft	94.7	74.5	155.0	12.2
3. Production inputs, excl. oil and diamonds	2,085.4	2,555.7	3,258.1	3,193.2
Raw materials for agriculture	174.0	179.7	220.5	228.9
Raw materials for food industry	332.2	332.4	402.7	421.3
Textile yarn and thread	89.2	118.4	153.1	160.4
Iron, steel, and products thereof	225.5	300.5	400.2	338.1
Spare parts and accessories	385.1	484.4	643.5	622.0
Chemical and plastic products		411.4	545.5	485.2
Paper, wood, and products thereof	879.6	204.5	260.6	243.0
Miscellaneous		524.4	633.0	694.2
4. Oil	737.6	774.9	1,406.0	2,116.4
5. Rough and polished diamonds (net)	981.1	1,130.0	920.4	1,119.7
6. Goods n.e.s., less imports returned	6.3	-1.9	-8.8	-66.3
7. Total net commodity imports, foreign trade definition	**4,759.9**	**5,631.0**	**7,396.5**	**7,875.1**
8. Balance of payments adjustments	-107.0	-109.8	-152.2	-159.8
9. Commodity imports from administered areas	154.3	165.2	163.5	224.3
10. Total net commodity imports, balance of payments definition (c.i.f.) (7+8+9)	**4,807.2**	**5,686.4**	**7,407.8**	**7,939.6**
Thereof: Excl. oil, diamonds and imports from administered areas	2,934.2	3,616.3	4,917.9	4,479.2

[a] Based on a c.i.f. valuation of imports.
SOURCE: Central Bureau of Statistics.

VII-8

ECONOMIC DESTINATION, 1977-81 [a]

million)

	Percent annual increase							
	Price				Quantity			
1981	1978	1979	1980	1981	1978	1979	1980	1981
756.4	13.7	18.0	18.5	-7.4	6.4	35.7	-26.8	50.4
313.4	7.4	25.2	38.5		-5.2	43.2	-33.7	
137.9	16.6	10.9	11.3		11.6	13.9	-22.2	
305.1	19.0	12.1	4.0		19.2	44.2	-22.2	
1,033.2	18.7	11.0	7.3	-1.8	5.1	37.8	-24.4	8.6
810.0	18.0	11.3	7.9		9.3	27.1	-16.1	
157.4	20.6	9.2	5.7		32.3	65.4	-6.6	
65.8	..	..	..		..	..	..	
3,538.6	8.1	16.8	15.8	-3.7	13.4	9.1	-15.4	15.1
272.2	..	..	..	..	..	..	..	
446.6	..	..	..	..	..	..	..	
182.9	..	..	..	..	..	..	..	
344.5	..	..	..	..	..	..	..	
659.7	..	..	..	..	..	..	..	
545.5	..	..	..	..	..	..	..	
271.9	..	..	..	..	..	..	..	
815.3	..	..	..	..	..	..	..	
2,048.3	-0.5	62.1	44.6	2.5	5.6	11.9	4.1	-5.6
529.1	63.3	9.3	9.3	-11.1	-29.5	-25.5	11.3	-46.8
-59.9	..	..	..	..	..	..	..	
7,845.7	**17.3**	**21.4**	**20.4**	**-2.7**	**0.9**	**8.2**	**11.6**	**2.4**
-157.8	..	..	..	..	..	..	..	
289.2	-12.5	16.2	21.1	-4.8	22.4	-14.8	13.3	**35.4**
7,977.1	**16.5**	**21.3**	**20.4**	**-2.8**	**1.5**	**7.4**	**-11.0**	**3.3**
5,110.5	11.9	15.5	14.3	-3.9	10.1	17.7	-20.3	18.7

during the year, but only in the last quarter were they higher than at the end of 1979.

(b) Consumer Goods

Imports of consumer goods expanded by a daunting 50 percent, after shrinking 27 percent in 1980.[16] Taking 1980 and 1981 together, the level rose by an average of 5 percent, compared with a 7 percent average increase in 1970-79 (total private consumption went up 3.3 and 5.5 percent respectively). These figures are consistent with the change in disposable income, viz. a 6 percent annual average growth in each of the two periods. The much larger import of consumer goods in 1981 can be partly attributed to the precipitate rise in disposable income, after it had fallen in real terms in 1980. Signs of a change of trend could already be discerned in the previous year, when the level turned up in the third quarter and accelerated strongly in the final quarter. To some extent this was a compensatory response to the overcontraction at the end of 1979 and during the first half of 1980; it was therefore to be expected that such imports would subsequently tail off to a level consonant with that of disposable income. During 1981 imports continued to expand: the growth rate reached 16 percent, which brought the end-1981 level above its 1979 peak. This development was consistent with both the appreciable increase in disposable income in 1981 and the lowering of indirect taxes on a number of products, most of which are imported.

In February 1981 the Treasury adopted a policy of scaling down the purchase tax on goods subject to high imposts, the bulk of which are imported. This measure had an immediate effect, stimulating the purchase of foreign consumer goods. Over the year as a whole it seems that the pruning of taxes mainly induced a shift from other consumer goods to durables, and only to a minor degree led to the advancing of purchases. This is borne out by the imported consumer goods mix in 1980-81: in 1980 the quantitative drop in the main components (food, other current consumption items, and durables) fluctuated around the average, while in 1981 durables rose well above the average.

(c) Capital Goods

Imports of capital goods were up 8.5 percent in the year surveyed, after a 24 percent decline in 1980 and an average 21 percent growth in 1978 and 1979. There was a significant increase in ships and aircraft. Excluding this item, the

[16] In the past decade a similar drop was registered only in 1975, when the level plummeted 22 percent. Subsequently it picked up slowly, and only in 1978 were such imports back to their 1974 level.

increment was 3 percent, which reflected a low level of investment in the first half of the year followed by an upturn in the second half.

The heavier capital spending in the second half of 1981 illustrates the connection between the level of investment and the rebounding of domestic demands and economic activity. Investment responds slowly to a change in economic activity, because at the onset of recovery there exists excess production capacity, and also because investors want to be certain that the perking up of activity signifies a basic change of trend and is not a temporary phenomenon. In addition, the reactivation of investment plans takes much longer than stepping up current imports; the high domestic real interest rates also seem to have a moderating effect on investment.

A breakdown of imported capital goods shows an increase in machinery and equipment and the ships and aircraft item and a decline in land transport

Table VII-9
SERVICE IMPORTS, 1977-81 [a]
($ million)

						Percent annual increase			
	1977	1978	1979	1980	1981	1978	1979	1980	1981
1. Transportation	645	787	948	1,040	1,092	22	20	10	5
Passenger fares	58	86	120	142	160	48	40	18	13
Charter hire	111	187	180	147	149	68	-4	-18	1
Port services	279	340	430	504	534	22	26	17	6
Miscellaneous	197	174	218	247	249	-12	25	13	1
2. Tourism	241	342	454	525	600	42	33	16	14
3. Insurance	278	287	385	439	477	3	34	14	9
4. Government n.e.s.	114	150	131	148	118	32	-13	13	-20
5. Other services	255	286	298	335	562	12	4	12	68
Agents' fees	82	123	114	119	130	50	-7	4	9
Miscellaneous	173	163	184	216	432	-6	13	17	100
6. Total services, excl. capital services and administered areas (1 to 5)	**1,533**	**1,852**	**2,216**	**2,487**	**2,849**	**21**	**20**	**12**	**15**
7. Capital services	782	994	1,380	1,899	2,216	27	39	38	17
8. Services from administered areas	193	191	271	284	315	-1	42	5	11
Thereof: Wages	180	180	256	265	296	0	42	4	12
9. Total service imports (6+7+8)	**2,508**	**3,037**	**3,867**	**4,670**	**5,380**	**21**	**27**	**21**	**15**

[a] Based on a c.i.f. valuation of commodity imports; imports of shipping services and import cargo insurance are included in commodity imports.
SOURCE: Central Bureau of Statistics.

Figure VII-4
COMMODITY IMPORTS, QUARTERLY, 1976-81
(Seasonally adjusted quantity indexes: 1975=100)

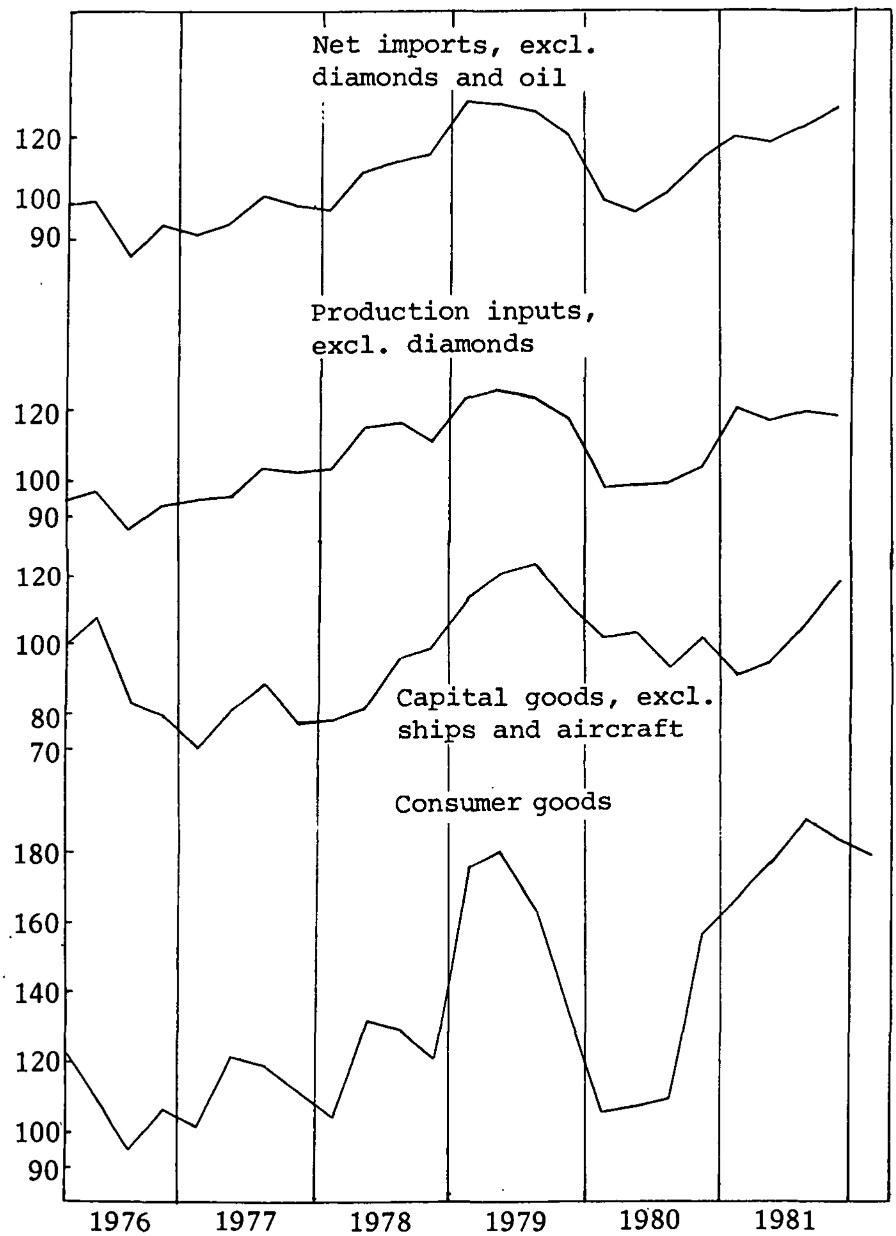


Table VII-10

ACTUAL INPUT IMPORTS AND IMPORTS DERIVED FROM USES OF DOMESTIC OUTPUT, 1977-81[a,b]

	Private consumption	Public consumption	Fixed investment	Total domestic uses	Exports	Total uses	Actual imports[c]	Actual less derived imports[d]
				$ million, at current prices				
1977	783	315	341	1,439	870	2,309	2,184	-125
1978	864	352	401	1,617	1,013	2,630	2,644	14
1979	1,005	410	504	1,919	1,285	3,204	3,335	131
1980	1,066	476	546	2,088	1,648	3,736	3,273	-463
1981	1,099	494	514	2,107	1,750	3,857	3,619	-238
				Percent annual increase, at 1975 prices				
1978	6.0	-1.0	4.9	4.3	5.4	4.7	11.2	
1979	1.2	-2.1	6.2	1.7	6.4	3.4	7.1	
1980	-6.4	1.1	-5.0	-4.6	12.4	1.8	-14.3	
1981	8.0	8.3	-1.7	5.7	10.1	7.6	15.3	

[a] Imports of inputs other than diamonds and oil; includes trade with the administered areas.
[b] Derived input imports were calculated using the 1975/76 input-output table.
[c] Actual input imports have been adjusted to the input-output definitions and therefore differ from the figures in Table VII-8. The data in this table include imports from the administered areas and adjustments for defense imports.
[d] See note [b] to Table VII-7. It should also be pointed out that actual imports in each of the years 1975-77 were lower than derived imports, which suggests a systematic upward bias in the derived imports of production inputs. For this reason too, the discrepancy between actual and derived imports should be regarded as a rough estimate of inventory change (and errors and omissions). This reservation loses some of its significance when viewing the multiyear trend in the discrepancy between the two series.

equipment. The latter is explained by the cutting back of bus imports from $103 million in 1980 to an estimated $23 million; other land transport imports were sharply higher this year.

(d) **Production Inputs**

Production inputs from abroad, excluding oil and diamonds, rose 15 percent, after falling off to roughly the same extent in 1980. An input-output analysis (see Table VII-10) shows that in 1981 as well the import of inputs derived from total uses exceeded the actual import; this probably signified a further inventory disinvestment,[17] though to a much smaller degree than in 1980. The continued destocking despite the rebounding of economic activity was apparently due to a further hiking of real interest rates, which were already quite high in 1980. The relatively sluggish expansion of imported production inputs in the year reviewed reinforces this assumption, for if the drawing down

Table VII-11

EFFECTIVE EXCHANGE RATE AND PRICES OF COMMODITY IMPORTS[a] COMPARED WITH PRICES OF DOMESTIC USES, 1977-81

	1977	1978	1979	1980	1981
	Sheqalim per dollar of import				
1. Representative exchange rate	1.06	1.75	2.55	5.17	11.42
2. Taxes per unit of import	0.41	0.44	0.67	1.16	2.58
3. Average effective exchange rate (1+2)	1.47	2.19	3.22	6.33	14.00
	Percent increase				
4. Import prices in the domestic market[b] (at the effective exchange rate)	40.0	66.5	66.8	123.5	109.2
5. Private consumption deflator, excl. household fuel and light	36.4	53.9	79.3	126.9	117.6
6. Deflator for domestic business sector uses[c] (at market prices)	37.6	57.5	73.9	136.9	117.5

[a] Excludes oil and diamonds.
[b] The import prices as calculated here reflect the change in the product mix and the differential tax component of the commodity imports.
[c] Includes direct expenditure on oil. In most years the rise in oil prices was close to the average trend, except in 1980, when they shot up about 200 percent.

[17] A similar picture emerges from a sectoral analysis of inventory changes as recorded in the national accounts.

of stocks represented a lagged adjustment, the upturn in input imports would have gathered momentum relative to the rate of increase in economic activity.

Examination of the primary destinations of imported inputs reveals a very slow rise in iron and steel and their products (2 percent in nominal terms), after a marked contraction in 1980 (15 percent). Imports for the chemical and plastic industries were at their 1979 level in nominal terms. Imports for these destinations were apparently still lower in 1981 than in 1979, while the output of these industries was higher than in 1979, a development suggesting a further reduction of stocks.[18]

(e) **Oil**

The country's net oil import bill was fractionally lower in 1981, after swelling in the previous two years. This can be attributed to the smaller quantity of crude obtained abroad and the stabilization of the price (yearly average). In 1979-80 part of the imported crude was intended for stockpiling, whereas in the year reviewed purchases were limited to current consumption and production requirements, with the result that the quantity imported fell 5.5 percent.

The hefty increase in the oil import bill in the two preceding years was of course due to the steep jump in world prices. In 1981 the trend was reversed: oil prices began to soften as a result of ebbing global demand (in the wake of the economic recession and a smaller consumption, which shrank even more than warranted by the recession, owing to the relatively high price of this commodity). The non-OPEC oil exporting nations and the Rotterdam spot market reacted quickly to the flagging demand by lowering prices (from $39 per barrel at the beginning of 1981 to $35 in the second half). Israel, which obtains crude from these sources, benefited from this development: the price paid by this country actually dipped 12 percent on an annual average.

From the table on p. 194 it will be seen that whereas in 1979-80 Israel paid more on average for crude than did the OECD members, in 1981 it paid less than the latter.

(f) **Services**

Service imports rose nominally by 15 percent, which was slightly below the 18 percent average for 1976-80; the decrease was due to the slacker growth of the capital services item.

Excluding capital services, the level moved up 19 percent in real terms, compared with a 2 percent decline in 1980 and an average yearly 9 percent increase in 1976-79 (see Table VII-2). The strengthening of the dollar against

[18] Assuming that in 1979 actual imports did not deviate greatly from derived imports.

AVERAGE PRICE OF OIL, 1978-81

($ per barrel)

	Refined products (spot market) (1)	Crude oil		
		Export price (2)	Import price	
			OECD (3)	Israel (4)
1978	14.65	12.95	14	13.3
1979	31.20	19.00	19.3	21.8
1980	33.72	31.43	32.8	33.8
1981	33[a]	35[b]	36.5	33.9

[a] January-November, at annual rate.

[b] Estimate based on data for January-August and assumption of a $30 per barrel price in the last quarter.

SOURCE: Columns 1 to 3—OECD, *Economic Outlook*, Nos. 28 and 30; col. 4—calculated by dividing the total expenditure on imported crude by the total number of barrels imported (the original physical data in tonnage terms were converted into barrels at the rate of 7.2 barrels per ton).

European currencies affected the price of service imports in dollar terms: in 1981 it fell 4 percent, following a 15 percent rise in the previous year. There was an inordinately big measured increase in other service imports, but this was probably due primarily to a statistical deficiency.[19]

Tourist services and passenger fares continued to climb. The number of Israelis traveling abroad also increased in comparison with 1980—19.6 vs. 4.6 percent. In the wake of the economic recovery there was a larger import of services from the administered areas, mainly in the form of wage payments. The rising trend in the employment of workers from the areas reasserted itself, after the level had sagged in 1980; real wages also turned up after contracting the year before.

[19] This deficiency arises from the recording of bank charges in "other service imports" after they had been included in "capital service imports" in previous years. On the other hand, the "miscellaneous" component of other service exports is also surprising.

3. EXPORTS[20]

(a) General Survey

Exports continued to move ahead in 1981 in quantitative terms, but not as vigorously as in previous years, owing to the slump in diamonds. Excluding this item, the gain came to 9 percent, which more or less matched the increase in recent years and eclipsed the 1980 figure (6 percent). Nondiamond commodities accounted for most of the increment, with services rising only fractionally. This creditable export performance was achieved despite two major inhibiting developments:

(1) From the second half of 1980 to August 1981 European currencies weakened steadily against the dollar, reducing the profitability of sales to Europe.

(2) The economic recession in the Western countries did not create favorable conditions for stepping up foreign sales and led to a crisis in some branches.

Notwithstanding these adverse external conditions, Israel's exports, as stated, continued to fare well, notably manufactures, which expanded 11 percent in quantitative terms. Agricultural exports also scored an impressive gain, even though they were hit harder by the foreign exchange developments, since Europe is their principal market.

The 1981 export advance can apparently be credited to several factors:

(1) Noncivilian sales expanded strongly, pacing the growth of industrial exports. Civilian exports rose at a relatively sluggish rate.

(2) The slackening of domestic demands in 1980 prompted producers to turn to foreign markets, a development which has a long-term effect on exports. The requisite productive factors continued to be available in 1981, and were augmented by the long-term investment maturation trend.

(3) During the year various arrangements were made to compensate exporters for the exchange rate-induced dent in their profitability.

(4) Israel's interest in maintaining long-term relations with its trading partners limits the ability of the export sector to respond to short-term changes. Israel enjoys most-favored-nation status in several foreign markets, and some exporters have multiyear contracts with overseas importers. In addition, there is a long-run investment maturation trend in the economy. All these factors suggest that the falloff in profitability was not fully reflected in the 1981 civilian export performance.

The long-term trend of export-led economic growth is bound up with the development of new export industries and changes in the production mix of existing industries. The sustained headway made by the electronics, metal,

[20] According to balance of payments definitions and based on an f.o.b. valuation of commodity exports and c.i.f. valuation of commodity imports.

Table

COMMODITY EXPORTS BY

($ million,

	1977	1978	1979
1. Agricultural exports	384.9	455.2	555.6
a. Citrus	189.4	202.7	254.6
b. Other	195.5	252.5	301.0
2. Industrial exports, excl. diamonds	1,574.9	1,956.8	2,538.6
a. Basic metals and metal products	321.5	417.8	433.2
b. Electrical and electronic equipment	130.7	137.2	170.8
c. Transport equipment	162.6	240.1	364.1
d. Chemicals	288.7	368.7	530.0
e. Mining and quarrying	76.5	78.5	102.0
f. Food	182.7	215.0	256.0
g. Textiles, clothing, leather	222.3	254.7	349.2
h. Other light industries	189.9	244.8	333.3
Industrial exports, excl. diamonds, fuel, and defense exports [b]	—	—	—
3. Diamonds, net	1,002.7	1,317.5	1,224.0
4. Other exports	23.2	31.9	33.3
5. Returned exports	22.6	45.3	38.1
6. Net commodity exports, foreign trade data (1+2+3+4-5)	**2,963.1**	**3,716.1**	**4,313.4**
7. Balance of payments adjustments	26.0	31.0	43.2
8. Commodity exports to administered areas	466.0	389.5	446.1
9. Total net commodity exports, adjusted to balance of payments definitions (6-7+8)	**3,403.1**	**4,074.6**	**4,716.1**
10. Thereof: Net commodity exports, excl. diamonds and fuel and exports to the administered areas	1,874.6	2,298.8	2,920.3

[a] Based on f.o.b. valuation of exports.
[b] Bank of Israel calculation.
SOURCE: Central Bureau of Statistics and Bank of Israel calculations.

VII-12

BRANCH, 1977-81[a]

at current prices)

		Percent annual increase							
		Quantity				Price			
1980	1981	1978	1979	1980	1981	1978	1979	1980	1981
555.7	599.4	9.1	13.7	18.2	-2.4	8.4	7.3	-15.4	10.5
231.1	246.7	11.5	20.0	12.0		-4.8	4.7	-18.0	
324.6	352.7	7.2	8.9	22.8		20.5	9.5	-12.2	
3,340.4	3,644.3	13.8	18.7	15.0	-2.0	9.4	9.3	14.4	11.3
566.1	678.4	14.8	11.0	10.5	2.0	13.2	-6.5	18.3	17.5
287.1	387.1	17.0	10.7	16.5	-6.6	-10.3	12.5	44.3	44.4
398.0	473.0	17.1	9.7	10.1	-1.2	26.1	38.2	-0.7	20.3
722.6	735.7	7.0	37.2	11.9	-2.6	19.3	4.8	21.8	4.5
158.4	194.4	7.2	27.5	51.3	5.2	-4.2	1.9	2.6	16.7
298.1	339.2	16.3	12.1	11.2	1.5	1.2	6.2	4.7	12.1
473.4	395.1	12.9	17.1	5.9	-9.2	1.5	17.1	28.0	-8.1
436.7	441.4	21.2	17.4	20.8	-3.1	6.3	16.0	8.5	4.3
—	—	—	—	—	—	5.2	16.6	17.5	7.3
1,409.1	1,067.2	57.6	5.7	5.5	-4.9	-16.6	-12.1	9.1	-20.4
26.3	29.1								
39.6	11.3								
5,291.9	**5,328.7**	**27.3**	**13.3**	**10.2**	**-2.7**	**-1.5**	**2.4**	**11.4**	**3.5**
76.7	79.8								
581.3	679.9	-8.4	22.0	16.4	0.0	-8.8	-6.1	11.9	17.0
5,796.5	**5,928.8**	**22.7**	**14.0**	**10.7**	**-2.4**	**-2.4**	**1.5**	**11.1**	**4.8**
3,693.1	4,043.1	12.9	13.7	15.1	-2.2	8.7	11.7	9.9	12.0

and machinery industries can be attributed not only to the growth of noncivilian exports, but also to the expansion of high-technology industries in which the share of local research and development is relatively large. The impressive progress made by these industries in 1981 apparently signalled a change in the structure of the economy: an increasing emphasis on export industries whose competitiveness in the world markets is based on advanced technology and high quality, at the expense of exports based on cheap labor. This trend is assuming more and more importance with the growing competition of exporters from developing nations, whose comparative advantage lies in the availability of cheap labor.

From the middle of 1980 to the third quarter of 1981 the dollar strengthened steadily against European currencies. This was due chiefly to the flow of foreign capital to the U.S. under the stimulus of the high real interest rates in that country. The dollar rose far faster than the shifts among the various European currencies themselves, moving up, for example, by 30 percent against the German mark (between July 1980 and September 1981). The rise of prices in Europe was not enough to offset this trend, so that the dollar appreciated in real terms against these currencies.

The strengthening of the dollar has influenced Israel's terms of trade: because the increase in the price of imports from Europe has lagged behind the nominal exchange rate changes, Israel's foreign trade prices have been on the decline since the middle of 1980 in dollar terms. In addition, the exchange rate developments have created difficulties for Israel's foreign sales. If these could be readily diverted to the U.S., the diminishing profitability of the European market would cease to present a problem; however, long-established marketing links and long-term trade and tariff agreements do not permit such flexibility. And even if there was some diversion of trade, it was not on a significant scale.

(b) Agricultural Exports

The foreign exchange rate shifts in mid-1980 hit Israel's farm exports very hard, since by far the greater part goes to Europe. Even if the real exchange rate of the sheqel in relation to the basket of currencies were constant, the weakening of European currencies against the dollar could lead to the appreciation of the sheqel against these currencies.

Because of the strengthening of the dollar, the proceeds per unit of export in dollar terms fell off in many branches; added to this was the worsening of the sector's terms of trade caused by input prices running ahead of export prices. Nevertheless, farm exports rose from $556 million in 1980 to around $600 million; the quantitative growth rate was even faster, since prices dropped in dollar terms. That such exports were able to fare well in the face of these adverse conditions is explained by several factors:

(1) Overseas farm sales are of a seasonal nature, and so an analysis based on calendar years somewhat obscures the true picture, which becomes clearer when the agrarian year is used. Thus, for example, the cumulative effect of the weakening of European currencies was felt primarily in the winter season (end of 1981 and beginning of 1982) and less so in the preceding season, while an analysis of the 1981 calendar year includes part of the exports in the preceding season, as well as the season beginning in the last quarter of 1981.

(2) A change in profitability due to exchange rate fluctuations does not affect the quantities sold abroad in the short run because of the existence of long-term contracts and long-established marketing links. It must be remembered that Israel's farm exports depend entirely on the European market, and alternative outlets, whether in this country or elsewhere, cannot be found very quickly. This limits the flexibility of such exports in the face of shifting relative prices.

(3) This year the government compensated farmers for declining profitability through both branchwide arrangements (notably in citrus and cotton) and those applicable to the sector as a whole.

Export gains were scored by both citrus (from $231 million in 1980 to $247 million) and other agricultural produce. After a very poor season in 1980 due to unfavorable weather conditions, growers enjoyed a good year and the long-term advancing trend reasserted itself.

Cotton growers boosted their overseas sales in 1981, but because of the weakening of world demand for this product due to the slump in the textile industry, they received a much lower price this year.

Flower cultivation continued to be plagued with difficulties. Since the doubling of exports in 1978, the branch has suffered from surpluses, which have created marketing problems and depressed profits. The unusually cold weather in Europe in 1981 also affected sales. The risk element in agricultural exports is relatively large because of their high concentration (three or four branches account for most of the total) and their almost total confinement to a single market (Europe). Such exports are thus strongly influenced by economic developments in Europe and by most-favored-nation agreements; they also depend on weather conditions and competition from other Mediterranean countries, and are vulnerable to variations in fuel prices because of the intensive use of energy for certain crops. The risk could be reduced by a greater diversification of markets and crops.

(c) **Industrial Exports, Excluding Diamonds**

Foreign sales of nondiamond industrial goods continued to expand rapidly in 1981 (by 11 percent in quantitative terms), despite the slackening of world demand and the diminished profitability of such sales. This was achieved thanks mainly to a vigorous growth of noncivilian items, the maturing of

Table VII-13

SERVICE EXPORTS, 1977-81[a]

($ million, at current prices)

	1977	1978	1979	1980	1981	Percent annual increase 1978	1979	1980	1981
1. Transportation	920	1,051	1,147	1,360	1,412	14	8	19	4
Passenger fares	178	169	195	203	203	-5	15	4	0
Charter hire	56	65	54	89	95	16	-17	65	7
Port services	46	57	70	105	100	24	23	50	-5
Miscellaneous	34	40	53	75	85	18	33	42	13
Export cargo	102	117	158	182	184	15	35	15	1
Import cargo	193	210	261	273	298	9	24	5	9
Shipments between foreign ports	311	393	356	433	447	26	-11	22	3
Total transp., excl. import cargo	727	841	886	1,087	1,114	16	4	23	2
2. Tourism	563	685	789	896	949	22	15	14	6
3. Insurance, incl. import cargo	272	301	411	457	486	11	37	11	6
4. Government n.e.s.	22	20	19	15	14	-9	-5	-21	-7
5. Other services	248	360	577	713	774	45	60	24	9
Agents' fees	119	196	333	462	266	65	70	39	-42
Miscellaneous	129	167	251	251	508	29	50	0	102
6. Total service exports, excl. capital services and admin. areas	**2,025**	**2,417**	**2,943**	**3,441**	**3,635**	**19**	**21**	**17**	**6**
7. Capital services	370	494	808	1,052	1,474	34	64	30	40
8. Exports to administered areas	85	79	103	120	121	-7	30	17	1
9. Total service exports	**2,480**	**2,990**	**3,854**	**4,613**	**5,230**	**21**	**29**	**20**	**13**

[a] Based on a c.i.f. valuation of commodity imports and an f.o.b. valuation of commodity exports.

SOURCE: Central Bureau of Statistics.

investments in export industries, and institutional arrangements intended to cushion the blow to export profitability.

The hefty gains posted by a few industries more than offset the downswing in others, so that on balance there was an appreciable advance.[21] While military items were the major factor in this year's favorable export performance, civilian sales of the electronic, metal, machinery, and transport equipment industries also did well. Military exports now account for a substantial percentage of total overseas industrial sales and are continuing to move ahead. However, they are characterized by large individual transactions, and any change in their volume can alter the entire industrial export picture.

The mounting weight of military goods is likely to have a long-range effect on the country's export growth. Such exports possess several notable advantages: a high growth capacity, eclipsing that of civilian industry; the sophisticated nature of these products, in which local inventiveness and development are an important element; and the positive impact they have on Israeli manufacturing in general and on industries supplying intermediates in particular, which gives a fillip to their expansion and development. In addition, these exports are presumably less vulnerable to short-term changes in export profitability and to competition from countries with cheap labor, since their success derives from technological achievements and their ability to capture an increasing slice of the world market. At the same time they have some disadvantages: they are not of a stable nature, being largely based on one-shot deals, and are highly dependent on political developments in the world, which militate against the establishment of sound, enduring market ties.

Among the industries that expanded in 1981 were electronics, machinery, and transport equipment, where the growth of noncivilian exports was a major factor. At the same time they continued to step up their civilian exports, particularly electronic equipment and aircraft. Noteworthy gains were also posted in food products (canned fruits and vegetables), precision and optical instruments, and jewelry.

Among the industries that suffered reverses in 1981 were textiles and clothing, chemicals, wood and paper, rubber and plastics, and basic metals. Garment manufacture was hurt by the worldwide recession which began in 1980 and continued through 1981, and this of course affected the production of fabrics as well as cotton goods. The weakening of European currencies against the dollar also had a marked negative repercussion, since most of this industry's exports are destined for the European market. World demand for

[21] The metal, electronics, and transport equipment industries contributed some 95 percent to the incremental nondiamond industrial exports; this was more than double their share of total exports in 1980.

Table VII-14

DISTRIBUTION OF INDUSTRIAL EXPORTS AND EXPORT INCREMENT, EXCL. DIAMONDS, 1977-81

(Percentages)

	Distribution of exports, at current prices			Distribution of export increment							
				At current prices				At constant prices			
	Average 1977-79	1980	1981	1979	1980	1981	1978-81	1979	1980	1981	1978-81
Basic metals and metal products	19	17	19	3	17	37	17	-14	19	26	17
Electrical and electronic equipment	7	8	11	6	14	33	12	9	19	33	17
Transport equipment	13	12	13	22	4	25	15	46	-1	21	20
Chemicals	20	22	20	28	24	4	22	9	28	9	20
Mining and quarrying	4	5	5	4	7	12	6	1	1	7	1
Food	11	9	9	7	5	13	8	7	3	9	6
Textiles, clothing, leather	14	14	11	16	16	-26	8	22	24	-10	10
Other light industries	12	13	12	14	13	2	12	20	7	5	9
Total industrial exports, excl. diamonds	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

SOURCE: Based on Central Bureau of Statistics data.

Figure VII-5
FACTORS AFFECTING INDUSTRIAL EXPORTS (EXCL. DIAMONDS), 1976-81

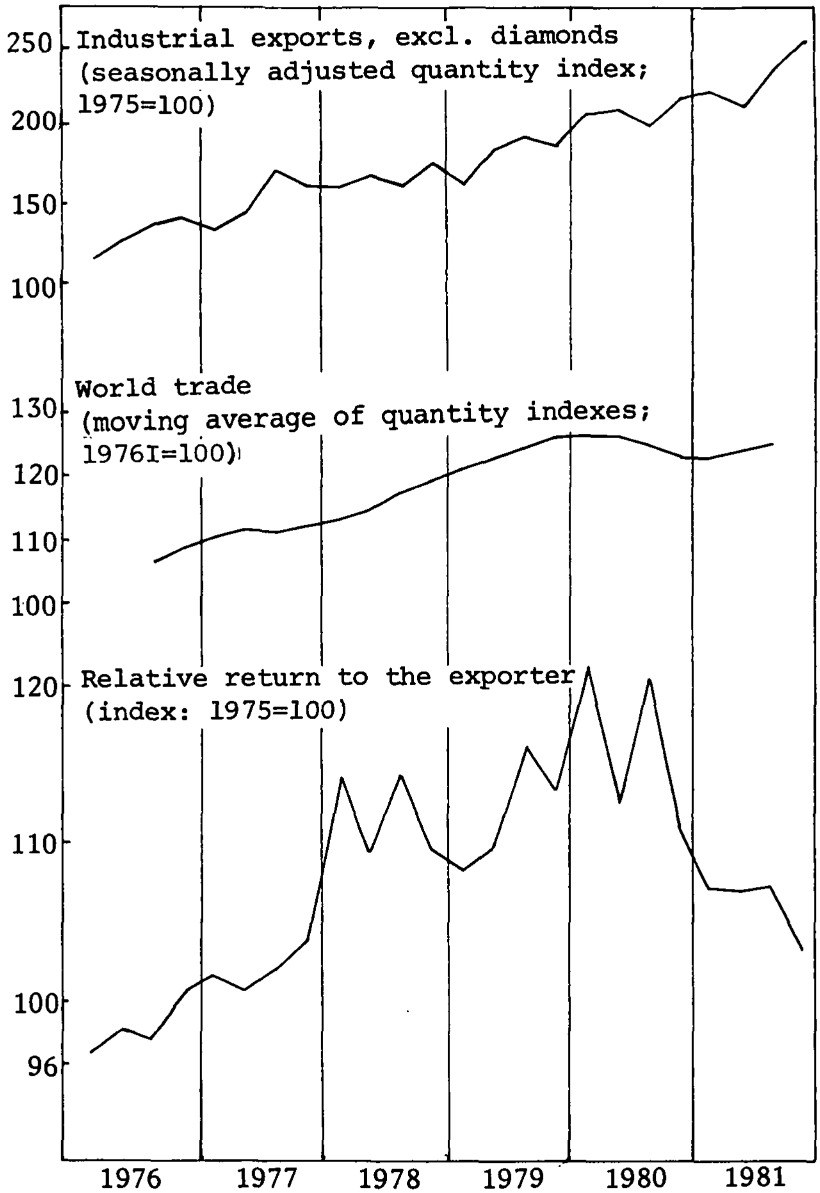
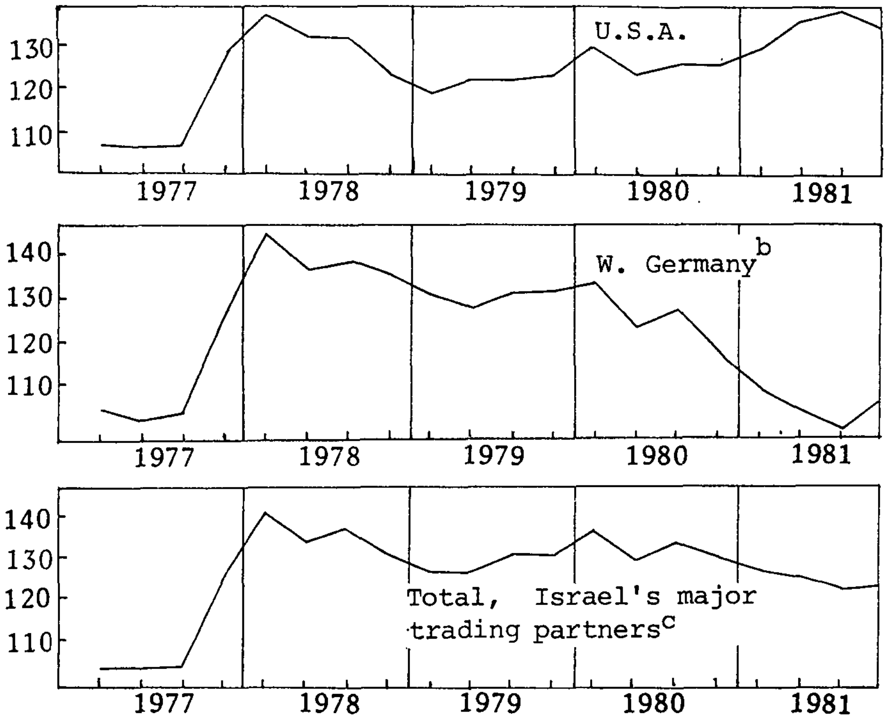


Figure VII-6
PRICES OF INDUSTRIAL GOODS ABROAD RELATIVE TO DOMESTIC PRICES, 1977-81[a]
(Quarterly indexes; 1975=100)



[a] The wholesale prices of industrial output abroad expressed in sheqalim, divided by the corresponding domestic prices in Israel.
[b] The movement of relative prices in W. Germany in the last two years is a close approximation of that in the major European countries.
[c] U.S.A., W. Germany, U.K., France, and the Netherlands. The index was weighted by the distribution of Israel's trade (imports and exports, excluding diamonds and oil) with these countries in 1980.
SOURCE: Wholesale prices abroad and exchange rate—IMF, *International Financial Statistics*; wholesale prices in Israel—Central Bureau of Statistics.

fertilizers also fell off this year, affecting potash and phosphate production. The ebbing of demand coincided with the enlargement of production capacity at the Dead Sea Works and led to an involuntary stock buildup. However, this industry enjoys a long-term rising trend. Demand for chemicals also dropped, especially in the case of pesticides and disinfectants.

Poorer export performances were also recorded in wood and paper products, rubber and plastic goods, and basic metals. A worldwide slump has overtaken the steel industry, resulting in growing surpluses and depressed prices. In Israel the industry was also affected in 1980 by the curtailing of construction, which reduced the consumption of iron products. The excess stocks were disposed of by selling them abroad at a loss, so that a bigger than usual increase was recorded for this item. The global slump carried over through 1981, and this accounted for the decline in metal exports. Jewelry sales, on the other hand, rose strongly in line with the trend of the last few years. Most of the jewelry goes to the U.S. market, where duty-free import quotas were raised for Israel in 1981.

(d) Diamonds (Exports and Imports)

The crisis that hit the diamond industry in 1977 deepened from year to year, and at the end of 1981 there was still no sign of a change for the better. The combination of a depressed world market, accumulation of a large stock of rough stones in Israel, rising interest rates in the U.S., and the Israeli

Table VII-15

THE DIAMOND INDUSTRY, 1975-81

	1975	1976	1977	1978	1979	1980	1981
			$ million, at current prices				
1. Diamond exports, net	549	712	1,003	1,318	1,224	1,409	1,067
2. Diamond imports, net	426	638	981	1,130	920	1,120	529
Thereof: Polished diamonds	14	22	44	77	75	125	43
3. Export surplus	123	74	22	188	304	289	538
			Carats (thousands)				
4. Diamond exports, net	2,701	3,304	3,356	2,570	2,153	2,349	2,165
5. Diamond imports, net	5,944	8,729	11,355	7,140	5,072	5,174	3,178
Thereof: Uncut	5,879	6,624	11,213	6,993	4,988	5,072	3,105
Polished	65	105	142	147	84	102	73
6. Ratio of uncut diamond imports to polished diamond export surplus	2.23	2.70	3.49	2.89	2.41	2.26	1.48
			Indexes: 1975 = 100				
7. Export quantity index	100	121	126	105	92	100	80
8. Import quantity index	100	148	197	139	104	115	61
9. Export price index	100	107	145	229	242	256	243
10. Import price index	100	101	117	191	209	228	203
11. Terms of trade index	100	106	124	120	116	112	120
			$ million, at current prices				
12. Derived diamond imports	470	577	699	952	912	1,004	760
13. Export value added (1-12)	79	135	304	366	312	406	307
14. Inventory investment (2-12)	-44	61	282	178	8	116	-231

SOURCE: Foreign trade—Central Bureau of Statistics and Bank of Israel calculations.

Figure VII-7
ISRAEL'S DIAMOND INDUSTRY, 1975-81

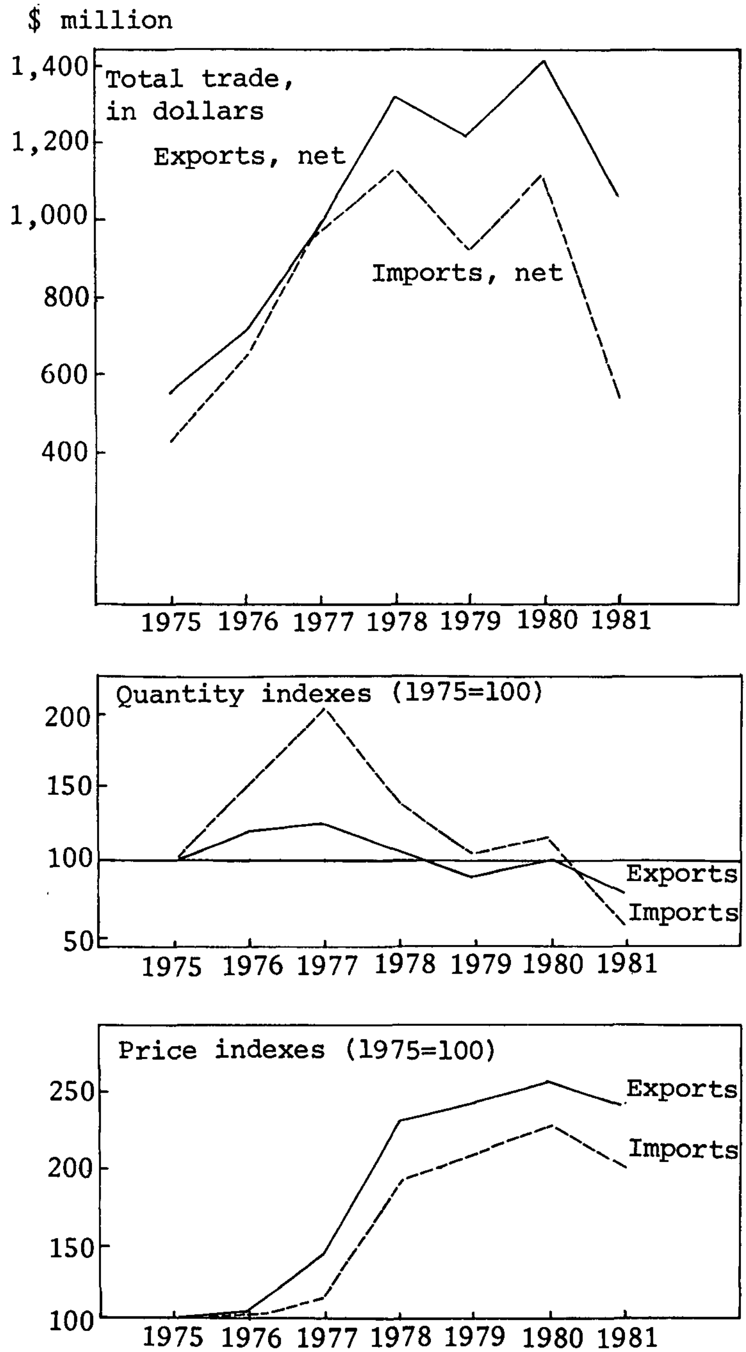


Table VII-16

ISRAEL'S TRADE BALANCE BY GEOGRAPHICAL AREA, 1979-81 [a]

	Percentage distribution						$ million		
							1981		
	Imports			Exports					
	1979	1980	1981	1979	1980	1981	Imports	Exports	Import surplus [b]
1. Common Market	45	45	47	43	45	38	2,501	1,624	877
Italy	7	7	7	5	7	5	393	200	193
Belgium and Luxembourg	3	3	3	2	1	1	131	49	82
W. Germany	15	16	16	11	12	9	841	362	479
Netherlands	3	3	5	5	5	4	246	182	64
United Kingdom	9	9	9	11	11	10	484	434	50
France	7	6	6	6	6	7	341	302	39
Other Common Market countries	1	1	1	3	3	2	65	95	-30
2. Free Trade Area (EFTA)	10	10	9	7	7	7	460	299	161
3. Other European countries	3	2	3	5	4	2	157	98	59
4. North America	29	31	31	14	13	18	1,690	740	950
U.S.A.	28	30	30	13	12	17	1,600	715	885
Canada	1	1	1	1	1	1	90	25	65
5. Other countries	9	7	7	4	6	5	391	227	164
Thereof: Japan	3	3	2	1	1	1	128	35	93
South Africa	3	2	2	2	2	2	103	97	6
6. Unclassified countries	4	5	3	27	25	30	180	1,285	-1,105
7. Grand total	**100**	**100**	**100**	**100**	**100**	**100**	**5,379**	**4,273**	**1,106**

[a] Imports and exports exclude diamonds, oil, and trade with the administered areas.
[b] A minus sign indicates an export surplus.
SOURCE: Central Bureau of Statistics.

Table

EFFECT OF CHANGES IN INTERNATIONAL EXCHANGE

(Percent increase over

	1978	1979	1980
1. Export prices [a]			
Prices adjusted for exchange rate fluctuations	1.0	7.5	18.8
Effect of exchange rate fluctuations [b]	11.7	6.6	-2.1
Change in composition [c]	0.1	-0.8	-1.0
Total price change	12.9	13.7	15.1
2. Import prices [d]			
Prices adjusted for exchange rate fluctuations	2.1	10.5	16.0
Effect of exchange rate fluctuations [b]	9.8	5.9	0.2
Change in composition [c]	-0.2	-1.3	-1.6
Total price change	11.9	15.5	14.3
3. Terms of trade (1/2)			
Prices adjusted for exchange rate fluctuations	-1.1	-2.7	2.4
Effect of exchange rate fluctuations	1.7	0.7	-2.3
Change in composition [c]	0.3	0.5	0.6
Total price change	0.9	-1.6	0.7

[a] Excludes diamonds and refined petroleum products.

[b] The effect of fluctuations in exchange rates on foreign trade prices is estimated as the change in the value of the currency basket against the U.S. dollar. The import and export currency baskets reflect the distribution of Israel's foreign trade by country. The baskets consist of 14 currencies, including the U.S. dollar. In practice, trade in some of the commodities is not transacted in terms of the national currency, and therefore the quantitative calculation presented in the table should be regarded as indicative of the general trend only. Moreover,

VII-17

RATES ON ISRAEL'S FOREIGN TRADE PRICES, 1978-81

previous period)

	1980				1981			
1981	I	II	III	IV	I	II	III	IV
14.2	6.1	3.1	0.1	5.3	3.9	4.0	7.2	-1.3
-13.7	0.1	-0.9	2.1	-4.2	-6.0	-7.7	-5.9	5.1
-0.8	0.2	-0.4	0.8	-2.3	1.7	-0.6	-0.6	0.0
-2.2	6.4	1.8	3.0	-1.4	-0.6	-4.6	0.3	3.7
10.6	6.0	2.8	0.0	4.4	4.1	3.7	1.0	0.1
-11.6	-0.2	-0.7	1.9	-3.6	-5.3	-6.2	-4.5	4.6
-1.7	0.3	-1.5	0.4	-0.6	-1.8	0.5	0.7	0.0
-3.9	6.1	0.6	2.3	0.0	-3.2	-2.2	-2.8	4.7
3.3	0.1	0.3	0.1	-0.9	-0.2	0.3	6.1	-1.4
-2.4	0.3	-0.2	0.2	-0.6	-0.7	-1.6	-1.5	0.5
0.9	-0.1	1.1	0.4	-1.3	3.6	-1.1	-1.3	0.0
1.8	0.3	1.2	0.7	-1.4	2.7	-2.5	3.2	-1.0

the table does not reflect any possible lag between exchange rate fluctuations and their effect on commodity prices.

[c] The table analyzes the change in foreign trade prices according to the Paasche index. The change in composition is calculated as the difference between the Laspeyres index, which measures "pure" changes in prices, assuming a fixed basket, and the Paasche index, which uses current weights and hence includes period-to-period changes in composition.

[d] Excludes diamonds and oil.

government's policy of curbing directed credit resulted in a heavy depletion of stocks this year accompanied by an unprecedented skidding of prices.

The availability of cheap credit in 1977 led to a rapid buildup of stocks of uncut diamonds for speculative purposes. But the world market weakened, leaving the local industry saddled with swollen inventories. Imports were shaved in 1978 and 1979 in line with sagging exports, but the data show that stocks were not reduced. The shrinkage of exports depressed production and led to the layoff of workers in recent years.

In 1980 the world crisis worsened and prices softened further. To keep plants running, the local industry continued to process stones, with the result that inventory buildup shifted to polished diamonds—a situation unheard of for many years.

The crisis reached its peak in 1981. The economic recession in the West dampened demand for another year, especially for the type of stones in which Israel specializes. At the same time India emerged as a serious competitor.

High interest rates and the strengthening of the dollar increased the cost of maintaining inventories and created more attractive alternative investments. The decline of prices has shown that, contrary to expectations, diamonds are not a sure hedge against inflation.

The crisis in the diamond industry led to several important developments:

(1) Imports of uncut stones were reduced drastically in an effort to slim excess stocks; this mainly affected purchases from the Diamond Syndicate (with its agreement). Net imports tumbled from $1,120 million in 1980 to $529 million.

(2) Net exports of polished diamonds shrank from $1,409 million in 1980 to $1,067 million. This was accompanied by a structural change, notably a shift to smaller stones, whose price fell less than that of the traditional stones Israel specializes in. This change was also evident in the composition of imports and in the value-added component of the industry's output.

(3) The reduction of imports by proportionately much more than exports caused a marked contraction of inventories. It is hard to estimate by how much, but the figure was probably in the region of $200 million. Most of the destocking was in rough diamonds, so that there was a continued shift in inventories from unpolished to polished stones.

As a result of this drawing down of stocks, the industry was able to show a larger net export than in previous years ($538 million as opposed to $289 million in 1980). Because of the aforementioned inventory changes, value added dropped along with the decline in exports.

The year reviewed saw an increase in returned merchandise on both the export and import sides; in terms of carats, the figure doubled compared with 1980. On the import side there may have been some export of uncut diamonds, but no explicit data are available on such transactions.

Table VII-18
EXCHANGE RATE VARIATIONS, 1977-81
(Percent increase over previous period)

	1977	1978	1979	1980	1981	1980				1981			
						I	II	III	IV	I	II	III	IV
1. Selected currencies against the dollar													
Deutsche mark	8.5	15.7	9.5	0.9	-19.4	-0.4	-2.1	1.9	-6.9	-8.4	-8.5	-6.4	8.2
Pound sterling	-3.2	10.0	10.4	9.7	-12.9	4.3	1.3	4.3	0.2	-3.2	-10.0	-11.6	2.4
Dutch guilder	7.7	13.6	7.7	1.0	-20.1	0.3	-1.8	2.7	-6.4	-9.2	-9.8	-6.4	9.4
French franc	-2.8	9.2	5.8	0.8	-22.0	-0.2	-1.5	2.2	-6.6	-9.0	-10.3	-6.8	2.7
2. Selected currencies against the sheqel													
U.S. dollar	32.1	66.5	45.6	101.5	123.1	20.2	17.8	20.1	24.3	24.2	22.8	22.1	15.8
Deutsche mark	43.3	92.6	59.4	103.3	79.8	19.7	14.3	23.3	15.[illegible]	14.1	12.3	14.6	25.3
Pound sterling	27.9	83.1	60.7	121.0	94.3	23.5	19.5	25.7	23[illegible]	20.2	10.5	7.9	18.8
Dutch guilder	42.3	89.1	56.8	103.5	78.2	20.6	16.9	21.8	1[illegible]	13.0	10.6	14.6	26.6
French franc	28.4	81.8	54.0	103.1	74.0	19.8	16.1	22.5	15.7	13.2	9.9	14.3	18.8
Average currency basket [a]	36.3	84.4	54.8	105.9	93.6	21.2	17.2	22.2	20.3	18.5	14.7	15.3	19.8
3. Price of industrial output for the domestic market[b]	33.4	53.7	77.7	125.2	130.2	20.7	26.6	20.2	26.2	26.0	20.6	21.5	20.1

[a] Average of the representative rates of the five currencies, weighted by the composition of Israel's foreign trade.
[b] Wholesale prices of industrial output for domestic uses, weighted by the composition of exports.

Table

UNILATERAL

($

	1978	1979	1980	1981
Private sector				
1. Personal restitution from				
West Germany	406.5	439.7	467.9	435.1
2. Personal transfers in cash	459.3	571.5	599.6	545.3
Immigrants	280.9	211.4	257.4	278.4
Others	178.4	350.1	342.2	266.9
3. Personal transfers in kind	17.7	26.1	27.0	21.7
4. Transfers of nonprofit institutions	109.8	137.7	109.0	184.6
5. Personal transfers abroad	75.0	90.0	74.0	104.0
Total (1+2+3+4-5)	**918.3**	**1,085.0**	**1,129.5**	**1,082.7**
Public sector				
6. Transfers of the National				
Institutions	311.0	309.0	337.5	435.9
7. Institutional transfers in kind	3.4	5.8	3.2	0.0
8. Intergovernmental transfers	1,017.0	1,393.0	1,496.0	1,364.0
Total (6+7+8)	**1,331.4**	**1,707.8**	**1,836.7**	**1,799.9**
Grand total	**2,249.7**	**2,792.8**	**2,966.2**	**2,882.6**

[a] The discrepancies between the data in this table and those in Table VII-1 are due to rounding.

SOURCE: Central Bureau of Statistics.

VII-19

TRANSFERS, 1978-81[a]

million

1980				1981			
I	II	III	IV	I	II	III	IV
118.8	112.5	117.9	118.7	118.4	104.0	97.9	114.8
144.9	137.0	150.1	167.6	156.0	108.6	117.1	163.6
54.9	58.3	73.6	70.6	76.6	54.0	48.0	99.8
90.0	78.7	76.5	97.0	79.4	54.6	69.1	63.8
5.6	5.6	7.9	7.9	4.7	5.5	6.0	5.5
19.7	27.7	30.2	31.4	29.6	44.0	36.0	75.0
20.0	17.0	16.0	21.0	27.0	27.0	19.0	31.0
269.0	**265.8**	**290.1**	**304.6**	**281.7**	**235.1**	**238.0**	**327.9**
91.9	39.0	59.6	147.0	163.4	37.9	56.0	178.6
0.3	0.9	1.1	0.9	0.0	0.0	0.0	0.0
324.0	222.0	215.0	735.0	424.0	240.0	228.0	472.0
416.2	**261.9**	**275.7**	**882.9**	**587.4**	**277.9**	**284.0**	**650.6**
685.2	**527.7**	**565.8**	**1,187.5**	**869.1**	**513.0**	**522.0**	**978.5**

(e) Export of Services

Service exports expanded more sluggishly this year. This was due primarily to the slower rise of prices in dollar terms following the strengthening of that currency, and also to the slackening of the quantitative growth rate (excluding capital services) to a mere 4 percent. The slowdown cut across the entire service sector. Transport services rose fractionally, with no quantitative change; excluding import cargo conveyance, however, there was a drop in quantity.

Growth fell off in exports of insurance services, as well as in "other services" following an accelerated expansion in previous years. Tourist services also rose at a laggard pace, with the quantitative level remaining flat. Prices went up in dollar terms, notably in the hotel trade, and this made a trip to Israel much more expensive for Europeans. Service exports to the administered areas also tapered off, after two years of rapid growth.

4. UNILATERAL TRANSFERS

Unilateral transfers were, at $2.9 billion, roughly the same as in 1979 and 1980; the average for the last three years thus stayed some 30 percent above its level in 1975-78. The transfers covered 65 percent of the import surplus, compared with 76 percent in 1980 and an average of 72 percent in 1978-80. The drop in the import surplus financing rate below its long-run average was mainly due to a 13 percent nominal and 15.5 percent real growth of the import surplus.[22]

Private sector transfers were down 4 percent, with all categories showing lower figures except nonprofit institutions, which received $76 million more this year (see Table VII-19). The volume of German restitution payments was apparently affected by the weakening of the mark in relation to the dollar. The slowdown in immigration, coupled with a relatively large emigration, probably goes some way to explain the contraction of the inflow of personal transfers in cash and the increased outflow of such transfers. The proportion of the private sector import surplus covered by unilateral transfers thus tailed off from 61 percent in 1980 to 57 percent in 1981.

Public sector transfer receipts remained virtually flat. Those to the National Institutions continued to expand, as in previous years. On the other hand, intergovernmental transfers fell off, mainly because of the 45 percent cut in U.S. military grants. Such aid (including that related to the military

[22] Since average export and import prices fell moderately in 1981, the real and nominal changes were similar, and we shall therefore present nominal changes in the following discussion. The drop in export prices (excluding diamonds) came to 2.3 percent on an annual average.

redeployment in the Negev) financed less than a third of Israel's defense imports in 1981, compared with roughly half in each of the two preceding years.

The reduction of unilateral transfers, mainly in the public sector, contributed to the 61 percent growth of the overall current account deficit. The erosion was particularly striking in this sector, where the deficit swelled by $479 million, or 193 percent.

5. NET LONG- AND MEDIUM-TERM CAPITAL IMPORTS[23]

Net long- and medium-term capital imports were down 15 percent from the 1979-80 average, and for the first time in many years they failed to cover the current deficit. In accordance with the Bank of Israel's policy of restricting private sector borrowing from abroad, there continued to be a net repayment of long- and short-term loans. The private nonfinancial sector cannot obtain foreign currency loans without a special permit, which is given for certain specified purposes, such as to aviation and shipping companies, for financing oil and feed imports, direct investment in Israeli companies, etc.

(a) **Public Sector Loans**

Each year the U.S. government makes available to Israel long-term loans to finance part of its defense imports, which in 1981 reached a record $2.2 billion. Net capital imports (adjusted for advances) covered 59 percent of the public sector's import surplus, compared with 63 percent the year before. As a result, the government's basic surplus dropped to about a third of the previous year's level, and this was the principal reason for the deficit in the overall basic account.

In view of the sharp rise in world interest rates, particularly in the U.S. in the last two years, the U.S. government raised the interest on its long-term loans to Israel to a fixed nominal rate of around 12 percent for 30 years. While this is well below the 1981 Eurodollar market rate, the latter is a floating rate that is adjusted every three to six months. The average rate of inflation in the U.S. over the next 30 years is hardly likely to exceed 12 percent, so that the real interest Israel has to pay on these loans will not be negative as in the past.

(b) **Long- and Short-Term Private Nonfinancial Sector Loans**

In 1981 this sector obtained $332 million in loans, which was $116 million more than in 1980 but close to the average for the four preceding years. At the

[23] Long- and medium-term loans and net investment from abroad.

Table

LONG- AND MEDIUM-TERM

($

	1977	1978	1979
1. Loans received			
a. Public sector	1,430	1,448	1,729
Thereof: Independence and Development Loans	355	430	414
U.S. government loans	966	887	1,142
b. Private nonfinancial sector	234	449	367
Total (a+b)	**1,664**	**1,897**	**2,096**
2. Loans repaid			
a. Public sector	502	585	605
Thereof: Independence and Development Loans	181	244	334
U.S. government loans	230	197	204
b. Private nonfinancial sector	224	281	234
Total (a+b)	**726**	**866**	**839**
3. Net loans received			
a. Public sector	928	863	1,124
Thereof: Independence and Development Loans	174	186	80
U.S. government loans	736	690	938
b. Private nonfinancial sector	10	168	133
Total (1-2)	**938**	**1,031**	**1,257**

SOURCE: Central Bureau of Statistics.

VII-20

FOREIGN LOANS, 1977-81

million)

1980	1981	1980 I	1980 II	1980 III	1980 IV	1981 I	1981 II	1981 III	1981 IV
1,999	1,761	705	414	370	510	367	402	357	635
450	477	116	115	93	126	129	108	96	144
1,368	934	546	241	228	353	189	181	150	414
216	332	81	39	48	48	59	66	112	95
2,215	**2,093**	**786**	**453**	**418**	**558**	**426**	**468**	**469**	**730**
604	704	150	165	153	136	152	180	156	216
298	384	73	82	79	64	75	96	81	132
215	205	59	50	60	46	59	50	52	44
353	367	163	62	50	78	54	104	116	93
957	**1,071**	**313**	**227**	**203**	**214**	**206**	**284**	**272**	**309**
1,395	1,057	555	249	217	374	215	222	201	419
152	93	43	33	14	62	54	12	15	12
1,153	729	487	191	168	307	130	131	98	370
-137	-35	-82	-23	-2	-30	5	-38	-4	2
1,258	**1,022**	**473**	**226**	**215**	**344**	**220**	**184**	**197**	**421**

Table

FOREIGN INVESTMENT IN ISRAEL AND

($

	1978	1979	1980	1981
1. Foreign investment in Israel				
In foreign currency				
Investments	105.1	84.6	149.9	133.7
Investments repatriated	-29.2	-73.0	-201.7	-90.4
Net investments	75.9	11.6	-51.8	43.3
In Independence and Development Bonds	13.0	16.1	17.1	9.4
In kind	17.6	17.3	24.3	23.5
Subtotal	106.5	45.0	-10.4	76.2
Reinvestment of profits	7.7	8.7	9.3	9.2
Total	**114.2**	**53.7**	**-1.1**	**85.4**
2. Israeli investments abroad				
Direct[a]	6.3	1.2	-7.4	75.6
Portfolio investment—private individuals	64.3	67.9	57.7	12.4
Total	**70.6**	**69.1**	**50.3**	**88.0**
3. Total net private investment (1-2)	**43.6**	**-15.4**	**-51.4**	**-2.6**
4. Portfolio investment abroad[b]—Israeli				
banks, net	42.0	80.7	97.4	90.0
Total net foreign investment in				
Israel (3-4)	**1.6**	**-96.1**	**-148.8**	**-92.6**

[a] Includes investment in foreign shares by Israeli banks.
[b] Bonds only.
SOURCE: Central Bureau of Statistics.

VII-21

ISRAELI INVESTMENT ABROAD, 1978-81

million)

1980				1981			
I	II	III	IV	I	II	III	IV
12.1	18.6	86.8	32.4	61.8	56.9	0.0	15.0
-42.4	-37.8	-43.8	-77.7	-39.3	-6.1	-30.9	-14.1
-30.3	-19.2	43.0	-45.3	22.5	50.8	-30.9	0.9
4.0	6.4	2.3	4.4	2.2	4.1	1.7	1.4
5.6	4.7	5.9	8.1	8.6	3.0	4.9	7.0
-20.7	-8.1	51.2	-32.8	33.3	57.9	-24.3	9.3
2.5	2.4	2.2	2.2	2.3	2.3	2.3	2.3
-18.2	**-5.7**	**53.4**	**-30.6**	**35.6**	**60.2**	**-22.0**	**11.6**
-4.8	9.4	-9.0	-3.0	-10.4	39.4	24.9	21.7
-27.6	32.8	10.9	41.6	6.9	1.9	10.2	-6.6
-32.4	**42.2**	**1.9**	**38.6**	**-3.5**	**41.3**	**35.1**	**15.1**
14.2	**-47.9**	**51.5**	**-69.2**	**39.1**	**18.9**	**-57.1**	**-3.5**
8.5	27.0	27.2	34.7	-1.9	27.9	34.3	29.7
5.7	**-74.9**	**24.3**	**-103.9**	**41.0**	**-9.0**	**-91.4**	**-33.2**

Table VII-22

U.S. GOVERNMENT AID AND DEFENSE IMPORTS, 1975-81

($ million)

			Loans repaid		Total aid			
	Grants (1)	Loans received[a] (2)	Principal (3)	Interest (4)	Gross (1+2) (5)	Net (5-3-4) (6)	Net, less advances (7)	Direct defense imports (8)
1975	973	839	148	86	1,812	1,578	1,758	1,846
1976	1,344	954	215	99	2,298	1,984	1,560	1,555
1977	966	988	253	155	1,954	1,546	1,248	1,084
1978	1,045	925	226	200	1,970	1,544	1,758	1,623
1979	1,453	1,201	231	268	2,654	2,155	1,727	1,234
1980	1,556	1,370	217	363	2,926	2,346	2,233	1,725
1981	1,424	934	206	476	2,358	1,676	2,065	2,226

[a] Long- and medium-term loans to the public sector (as listed in Table VII-21) and the private sector (mainly through foreign government banks for promoting exports). In some years the government paid advances on account of defense imports scheduled for delivery in the following year.

SOURCE: Central Bureau of Statistics.

same time repayments continued to grow, with the result that for the past two years there was a net repayment (see Table VII-20, line 3b).

In the absence of a significant free long-term loan market in Israel and taking into account the difficulty of predicting long-term exchange rate expectations, no attempt has been made to examine the sensitivity of (net) capital movements to their anticipated relative cost. A comparison between long- and medium-term capital movements on the one hand and short-term movements on the other shows conflicting trends.

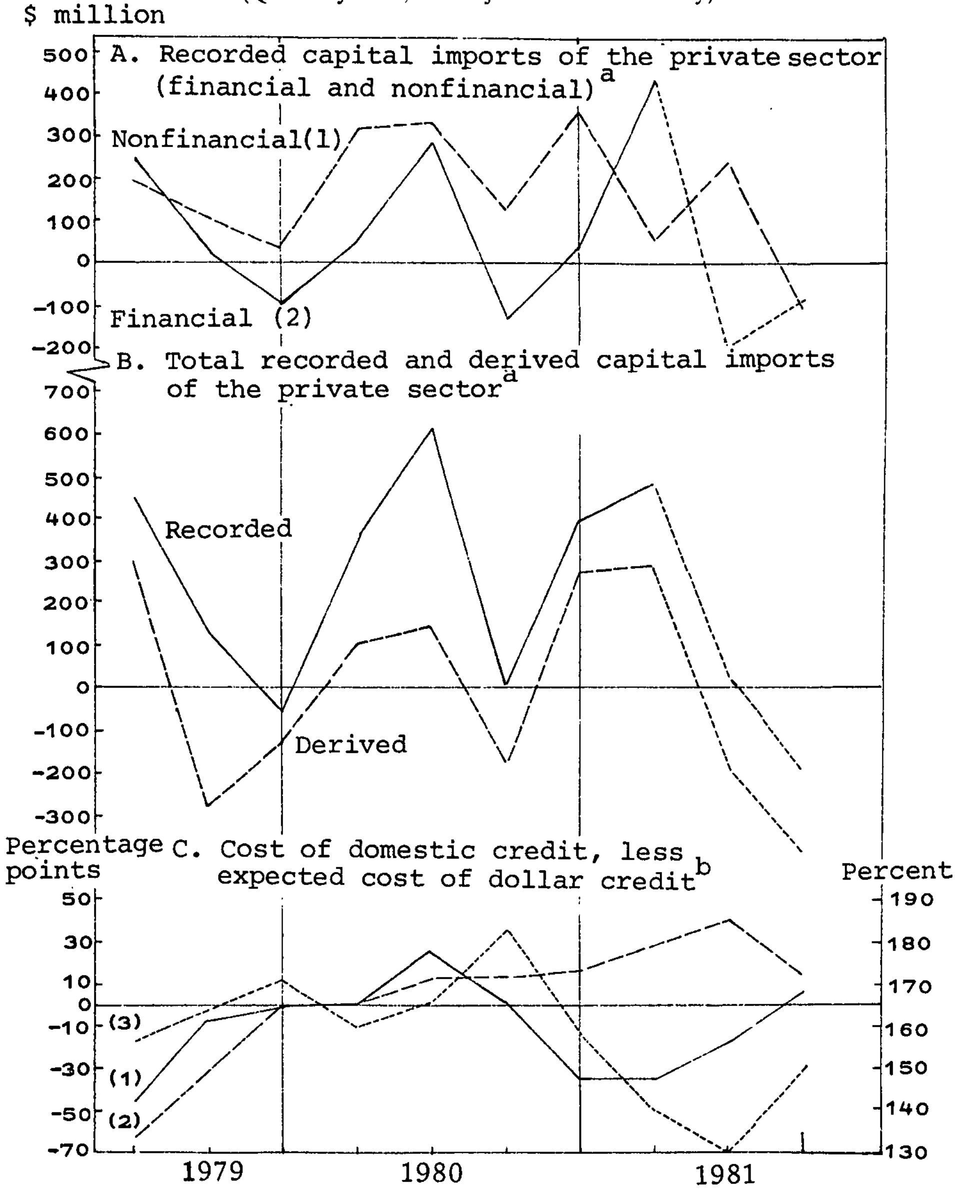
NET CAPITAL MOVEMENTS OF THE PRIVATE NONFINANCIAL SECTOR, 1978-81[a]

	1978	1979	1980	1981
Long- and medium-term	211	70	-188	-38
Short-term	92	493	811	525

[a] These data are from Table VII-1, lines 4a and 6a.

This indicates that the public, which is a net borrower from abroad, has shortened its net capital import horizon. This change in the repayment

Figure VII-8
NET CAPITAL MOVEMENTS OF THE PRIVATE SECTOR AND THEIR COST, 1979-81
(Quarterly data, not adjusted for seasonality)



[a] In parts A and B capital imports have been adjusted for repayments to the export credit funds.

[b] The calculation has been made under two different assumptions:
(1) The public expected the dollar to strengthen against the Deutsche mark.
(2) The public did not expect the dollar to strengthen against the mark.
The expected cost in Israeli currency of dollar credits (3) has been estimated according to the second assumption and is shown on the right-hand axis.

schedule of the public's liabilities to foreigners[24] may be due to the uncertainty about the future movement of interest rates at a time when they are high in comparison with inflation abroad. This uncertainty has been reflected in the volatility of interest rates, especially since the change in U.S. monetary policy at the end of 1979.

(c) Net Private Sector Investment

Net Israeli investments abroad (including those by banks) amounted to $93 million, which was $56 million less than in 1980 (see Table VII-21). After declining for three consecutive years (from $76 million to -$52 million in 1980), net cash investments in Israel by foreigners climbed back to $43 million, matching the average level for 1978-79.

Israeli residents invested $76 million abroad in 1981, mainly in shares, where the figure was close to zero in 1978-80.[25] The banks placed $90 million in foreign bonds, which was about the same as in the two previous years, while the public invested some $50 million less than the 1979-80 average.

6. NET SHORT-TERM CAPITAL ACCOUNT OF THE PRIVATE SECTOR AND CAPITAL MOVEMENTS OF THE BANKING SYSTEM

(a) Banking System (Excluding the Bank of Israel)

Net capital imports by the commercial banking system in 1981 were, at $778 million, higher than in the previous year, owing mainly to the revision of the Bank of Israel's financing arrangements in the export funds. Most of the capital import came in the second quarter and to a lesser extent in the third. Part of the inflow in the first half of the year is apparently explained by the banks' desire to ensure the success of stock issues (which totaled $270 million in 1981). The diamond industry was the net recipient of $181 million, most of which (around $100 million) was repaid in the second half of the year. From the top panel of Figure VII-8 it can be seen that the capital movements of the banks and the private nonfinancial sector traced a similar path from the second half of 1979 to the end of 1980.

[24] This change is not reflected in the data on the external debt in Table VII-24, since for the most part it occurred in "other assets and liabilities" (see line 6a in Table VII-1 and note 26), which are not included in the definition of the external debt.

[25] The Central Bureau of Statistics includes under this head investment in foreign shares by banks. In 1981 the Bank of Israel revised its reporting requirements in connection with commercial banks' investment in the shares of subsidiaries and affiliates (changing from the cost to the equity method of accounting), and this may account for part of the increase in this item.

(b) Private Nonfinancial Sector

This sector raised some $110 million in commercial credit and paid back $79 million in short-term loans; this reflected the Bank of Israel's policy of freezing foreign credit. In addition, Central Bureau of Statistics estimates show a $494 million contraction of foreign asset holdings abroad.[26] The sector's capital imports therefore amounted to $525 million in the year reviewed (see Table VII-1). Such assets have been on the decline since the liberalization of foreign currency control at the end of 1977, with the downturn becoming sharper in the past two years. The intensification of this trend in 1980-81 may have reflected the public's response to the credit freeze policy.

As part of the changes introduced in the management of export funds, the Bank of Israel cut the volume and raised the price of directed credit to the diamond industry. To meet its debts, the latter reduced inventories by about $200 million[27] and raised some $75 million (net) through the banks (see above).[28]

(c) Derived Private Sector Capital Movements

The recording of the private nonfinancial sector's capital movements is inherently problematic because of the deficient reporting of supplier credit in export transactions, early payments by importers in anticipation of a devaluation, and other unreported capital movements. It follows that actual capital imports are likely to differ from the recorded figure, and it is reasonable to assume that they will be lower.[29] They can be approximated by comparing the difference between the private sector's basic deficit and the sector's influence on foreign exchange reserves (see Table VII-23); this residual will be referred to here as "derived short-term private sector capital

[26] Since the liberalization of foreign exchange control there has been an increase in foreign inheritances, gifts, etc. reported to the Bank of Israel by the commercial banks. It is reasonable to assume that the growth of this item reflects an increase in not only unilateral transfers but also other items, including capital movements. The Central Bureau of Statistics has therefore made an alternative estimate of unilateral transfers. It includes the difference between the two estimates in "other assets and liabilities" in the private nonfinancial sector's capital movements (see Table VII-1, line 6a).

[27] Rough estimate.

[28] According to Bank of Israel data.

[29] The difference is connected with the estimate of the errors and omissions item in the balance of payments. Conceptually short-term capital movements should cover the basic deficit plus the change in reserves. During the past three years, however, the recorded capital movements far exceeded the basic deficit plus the change in reserves, and this was reflected in "errors and omissions" in the amount of about $600 million each year (Table VII-1). This suggests two possibilities: (a) unrecorded net capital movements abroad (e.g. on account of loan repayments); and (b) a larger current account deficit than shown in the balance of payments.

Table VII-23

PRIVATE SECTOR BALANCE OF PAYMENTS, 1978-81

($ million)

	Current account deficit[a] (1)	Effect of the private sector on gross reserves[b] (2)	Capital imports: Derived (1-2) (3)	Capital imports: Medium- and long-term[c] (4)	Capital imports: Short-term[d]: Derived (3-4) (5)	Capital imports: Short-term[d]: Recorded[e] (6)
Annual data						
1978	337	117	220	211	9	540
1979	1,380	781	599	70	482	1,233
1980	712	860	-148	-188	40	925
1981	818	288	530	-38	579	1,303
		(884)	(-66)		(-17)	(707)
Quarterly data						
1979 I	332	-92	424	-6	430	436
II	257	232	25	4	21	217
III	541	232	309	3	306	447
IV	251	409	-158	69	-274	133
1980 I	206	401	-195	-67	-128	-63
II	124	92	32	-71	103	366
III	449	152	297	50	147	619
IV	-67	215	-282	-100	-182	3
1981 I	129	-190	319	44	275	396
II	400	129	271	-20	291	485
III	369	198	171	-61	232	457
		(623)	(-254)		(-193)	(32)
IV	-79	151	-230	-1	-218	-35
		(322)	(-401)		(-389)	(-206)

NOTE: Figures in parentheses are after adjustment for the commercial banks' participation in the directed export funds.

[a] See Table VII-1 (differences are due to rounding).

[b] Private sector purchases of foreign currency, increase (+) or decrease (-) in foreign residents' deposits (Patach), and foreign bank deposits with the Bank of Israel.

[c] See Table VII-1, line 4a.

[d] Includes capital movements of the commercial banking system.

[e] See Table VII-1, lines 6a and 7.

SOURCE: Central Bureau of Statistics and Bank of Israel calculations.

imports."[30] Such a measurement shows virtually no net capital movement in either direction in 1981, an inflow in the first half of the year being offset by an outflow in the second half. It is interesting to note that from the third quarter of 1979 to the end of 1981 the derived flow behaved similarly to the capital imports item in the balance of payments (see the middle panel in Figure VII-8), though its level was systematically lower than the recorded figure, which strengthens the above assumption.[31]

Dollar credits turned out to be more expensive throughout the year than overdraft facilities, but in explaining capital movements it is more relevant to examine the difference between the cost of domestic credit (i.e. the average rate of interest on overdraft accounts) and the anticipated cost of foreign currency credit, most of which is in dollars. As will be seen below, the analysis largely depends on the assumptions about the formation of dollar devaluation expectations. Generally speaking, one can expect capital to be imported when the domestic cost is higher than the anticipated cost of dollar credits (a positive difference; see the bottom panel in Figure VII-8), and vice versa.[32] The fluctuations in capital movements closely corresponded to those in the expected cost differential between domestic and foreign credit in 1980,[33] but not in 1981 (see Figure VII-8, panels B and C, curve 1). If we assume that the public did not foresee the weakening of European currencies against the dollar, and even expected the sheqel to be devalued against the dollar to the same extent as against the basket of currencies,[34] then the anticipated cost will better explain the capital movements in 1981. The explanation will be even

[30] The difference between the recorded and the derived figure can of course stem from other causes, such as faulty recording of the basic deficit and changes in foreign currency reserves, or an incorrect distribution of the balance of payments items between the private and public sectors.

[31] Owing to the similarity in the direction of the change in derived and recorded capital imports, we shall not differentiate between the two in the following discussion on relative cost.

[32] It is conceivable that in order to generate capital imports a positive gap beyond a certain level must be created, since overdraft facilities are granted for an indeterminate period, whereas the foreign credit is granted for three-month periods.

[33] This assumption is supported by the fact that during all of 1981 the forward rate of the German mark and the Dutch guilder, for example, was higher than the spot rate. In addition, $422 million in currency valuation changes was recorded by the Bank of Israel and the commercial banks—an indication of erroneous expectations. In this case, in estimating the anticipated cost of the dollar, we shall substitute for the devaluation of the basket of currencies the devaluation of the dollar under the same assumption regarding the structure of expectations, and get an approximation of the incorrectly anticipated devaluation in relation to the dollar.

[34] The expected cost of dollar credit is defined as follows: interest on the Eurodollar, including the interest levy and bank commission, plus the expected devaluation (assuming adjusted expectations with a one-quarter lag).

Table

FOREIGN CURRENCY ASSETS

($ million, at

End of year	1977	1978	1979	1980
1. Net liabilities[b, c] (2-3-4)	8,822	9,497	11,135	12,027
2. Foreign currency liabilities[d] (2a+2b+2c)	11,096	12,978	15,284	16,624
a. Government[e]	8,335	9,048	,10,175	11,360
b. Private nonfinancial sector	1,478	1,919	2,373	2,452
c. Commercial banks[f]	1,283	2,011	2,736	2,812
3. Liquid assets in Bank of Israel and other financial institutions	1,770	2,783	3,235	3,526
4. Exporters' credit to foreigners	504	689	914	1,071
5. Net current foreign liabilities (5a+5b+5c-3-4)	1,079	631	1,477	1,638
a. Net liquid foreign liabilities of commercial banks	1,765	2,582	3,648	3,912
b. Short-term liabilities of the nonfinancial sector[g]	722	691	1,021	1,252
c. Repayment (principal) in following year o/a long- and medium-term debt	866	839	957	1,071
6. Ratio of net current liabilities to total liabilities (5/1x100)	12.2	6.6	13.3	13.6

[a] The nominal percentage change deflated by the percentage change in the price of nondiamond commodity exports during the year. The percent increase in the index of export prices was as follows (according to the Paasche index):

1977	1978	1979	1980	1981
7.5	16.3	16.0	10.0	1.6

Since there is no price index which includes all tradables, this index constitutes the best approximation for Israel.

[b] When changes in the government's foreign assets are taken into account, the figures in lines 1, 2, 2a, 4, 4b, and 5 will differ from the official data; for example, net liabilities after this adjustment will be as follows (in $ million):

1977	1978	1979	1980	1981
8,524	9,711	10,703	11,914	13,479

VII-24

AND LIABILITIES, 1977-81

current prices)

	Percent annual increase							
		Nominal				Real[a]		
1981	1978	1979	1980	1981	1978	1979	1980	1981
13,090	7.7	17.2	8.0	8.8	-7.4	1.1	-1.8	10.6
17,951	17.0	17.8	8.8	8.0	0.6	1.6	-1.1	9.8
12,153	8.6	12.5	11.6	7.0	-6.7	-3.1	1.5	8.7
2,361	29.8	23.7	3.3	-3.7	11.6	6.6	-6.1	-2.1
3,437	56.7	36.1	2.8	22.2	34.8	17.3	-6.6	24.2
3,814	57.2	16.2	9.0	8.2	35.2	0.2	-0.9	9.9
1,047	38.5	30.9	17.2	-2.2	19.1	12.9	6.5	-0.7
1,965	-41.5	134.1	10.9	20.0	-49.7	101.8	0.8	21.9
4,637	46.3	41.3	7.2	18.5	25.8	21.8	-2.5	20.5
1,217	-4.3	47.8	22.6	-2.8	-17.7	27.4	11.5	-1.2
972[h]	-3.1	14.1	11.9	-9.2	-16.7	-1.7	1.7	-7.8
15.0								

[c] The extensive international financial activity of the Israeli banking system is reflected in the growth of foreign currency assets and liabilities. It is therefore of greater interest to relate to net foreign currency liabilities, changes in which are influenced mainly by the level of the current account deficit. Net liabilities are also influenced by the changes in the value of foreign currencies against the dollar; they do not include net foreign investment in Israel.

[d] For 1979 and 1980 there is a difference of approximately $150 million (annual average) between the figures published by the Controller of Foreign Exchange at the Bank of Israel and those published by the Central Bureau of Statistics (on which this table is based). This stems from differences in the time of recording the receipt of loans (mainly for defense).

[e] Includes the Bank of Israel and liabilities in Israeli currency.

[f] Includes bank loans to foreign residents and foreign securities in the banks' portfolio.

[g] Excludes short-term foreign assets held by both the government and the private nonfinancial sector.

[h] Estimate.

better if capital movements are compared only with the anticipated cost of foreign credit rather than with the difference between costs (see curve 3). This might reflect the impossibility of substituting between foreign and domestic credit in the short run because of the existence of credit ceilings.

7. THE EXTERNAL DEBT[35]

Israel's net foreign currency liabilities to foreigners increased in 1981 by approximately $1 billion; this represented a nominal growth of 8.8 percent, about the same as in the previous year. Adjusted for advances, the net external debt rose by $1.5 billion, which reflected a nominal increase in the balance of payments deficit on current account. In real terms the growth of the net debt accelerated by 10.6 percent (15 percent after adjustment for advances), mainly owing to a steep rise in government and bank liabilities. The commercial banks' gross liabilities[36] averaged 26 percent higher in 1977-81, while their liquid assets went up 30 percent on an average.[37] This testified to the rapid expansion of the international financial operations of the country's banking system.

CURRENT ACCOUNT DEFICIT AND LIABILITIES TO FOREIGNERS, 1977-81
($ million)

	1977	1978	1979	1980	1981
1. Current account deficit	464	1,037	1,150	960	1,545
2. Change in net foreign currency liabilities to foreigners[a]	1,078	675	1,638	892	1,063
	(1,204)	(1,187)	(992)	(1,211)	(1,565)

[a] Includes liabilities arising from changes in the value of foreign currencies in relation to the dollar. The difference between the two series presented here also stems from net investments of foreigners in Israel and errors and omissions. The data in line 2 were calculated from end-year balances as listed in Table VII-24, line 1. On the figures in parentheses see also note b in the same table and note 35 below.

[35] Changes in government assets abroad arising from the receipt of advances for defense imports have not been included in the official data on the external debt, but are treated as capital movements in the balance of payments. For the calculation see Table VII-24, note b.

[36] See Central Bureau of Statistics, *Statistical Monthly*, Table G-5, Assets and Deposits of Foreign Currency in Monetary Institutions.

[37] Bank of Israel calculations.

Table VII-25

INDICATORS OF THE NET DEBT SERVICING BURDEN, 1977-81

($ million, at current prices)

	1977	1978	1979	1980	1981
1. Interest payments on the gross external debt	706	934	1,232	1,729	2,110
2. Interest receipts from foreign currency assets	285	377	632	843	1,378
4. Currency valuation changes (gain +, loss -) (incl. banking system)	129	211	60	-222	-424
4. Net interest payments on net external debt, incl. currency valuation changes (1-2-3)	292	346	540	1,108	1,156
5. Other debt services[a]	710	808	810	917	1,067
6. Total net debt service (4+5)	1,002	1,154	1,350	2,025	2,223
Percentages					
7. Interest as a percent of net external debt (average)[b]	3.7	3.8	5.3	9.8	9.1
8. Interest as a percent of exports[c]					
a. Interest payments on net external debt[d]	5.3	5.3	7.0	11.8	11.9
b. Net debt service[e]	18.2	17.6	17.4	21.6	23.0
9. Expected real interest on net external debt[f]	-1.2	-2.1	-6.0	-4.5	-0.8
10. Net debt service as a percent of GNP[g]	8.8	9.5	9.0	11.3	11.8

[a] Interest and dividend payments o/a net foreign investment in Israel and repayment of principal o/a long- and medium-term debt.

[b] Line 4 divided by the average net external debt.

[c] Exports f.o.b., excluding capital services.

[d] Line 4 divided by exports.

[e] Line 6 divided by exports.

[f] The nominal interest on the net external debt (line 7), deflated by the inflationary expectations. As an indicator of inflationary expectations we used a three-year moving average of the annual percent increases in the index of export prices (excluding diamonds). The increases were as follows (percentages): 1977—5; 1978—6; 1979—12; 1980—15; 1981—10.

[g] GNP in dollar terms was calculated using the average effective exchange rates for exports and imports.

SOURCE: Central Bureau of Statistics and Bank of Israel calculations.

The need to finance the basic balance of payments deficit (in contrast to previous years, when there was a surplus) and the increase in short-term liabilities resulted in a net nominal growth of 20 percent in current liabilities. This brought up the ratio of the net current debt to the net overall debt from 13.6 to 15 percent (see Table VII-24, line 5). This is consistent with the above explanation concerning the shortening of the repayment schedule of the public's foreign currency liabilities (see section 5b).

8. THE EXTERNAL DEBT BURDEN

The net external debt burden grew in 1981, as indicated by the ratio of net debt service to the gross national product (see Table VII-25). This ratio has been rising since 1979, and in 1981 it moved up from 11.3 percent the year before to 11.8 percent. Real interest on the net debt also rose, from -4.5 to -0.8 percent. This adverse change was largely due to the fact that most of the foreign currency liabilities are in dollars, which bear a relatively high nominal interest rate, while most of Israel's export goes to Europe, and in 1981 it suffered a decline in dollar prices because of the weakening of European currencies against the dollar. If this change in exchange rates is a passing phenomenon, then too much importance should not be attached to it. But there is another indicator of the mounting burden: debt service as a percent of total export proceeds[38] has been rising steadily since 1979, and in 1981 the ratio came to nearly one quarter.

The rate of interest on the net external debt nevertheless declined slightly in 1981 to stand at 9.1 percent. This was because gross liabilities are only marginally affected by a rise in world interest rates, while income from the investment of the country's international reserves expands rapidly, as they are mainly invested for short terms.

9. BANK OF ISRAEL RESERVES

The Bank of Israel's international reserves at the end of 1981 were sufficient to cover 2.6 months of imports, compared with 2.7 months the year before (see Table VII-26). This continued the falling trend evident since 1978, when the reserves could finance more than three months' imports. Net reserves grew slightly in nominal terms in 1981. This was the net outcome of three principal

[38] Exports f.o.b., less capital services.

Table VII-26

FOREIGN EXCHANGE RESERVES HELD AT THE BANK OF ISRAEL, 1975-81

($ million)

End of month	Gross reserves	Less: Foreign bank deposits	Less: Patach deposits [a]	Net reserves	Change in net reserves: Before adjust-ment	Change in net reserves: Valuation changes	Change in net reserves: Adjusted for valuation changes	No. of months' imports covered by reserves[b]
1975 December	1,183	2	142	1,039	-31	-36	5	2.0
1976 December	1,373	10	207	1,156	117	57	60	2.2
1977 December	1,571	10	202	1,359	203	114	89	2.2
1978 December	2,679	8	429	2,242	883	164	719	3.1
1979 December	3,120	13	537	2,570	328	43	285	2.8
1980 December	3,395	5	609	2,781	211	-138	349	2.7
1981 December	3,542	4	691	2,847	66	-301	367	2.6
1981 January	3,354	5	374	2,775	-6	-129	123	
February	3,358	5	573	2,780	5	-26	31	
March	3,547	5	560	2,982	202	18	184	
April	3,593	5	592	2,996	14	-105	119	
May	3,543	5	579	2,959	-37	-99	62	
June	3,541	4	587	2,950	-9	-45	36	
July	3,494	4	607	2,883	-67	-76	9	
August	3,407	4	597	2,806	-77	31	-108	
September	3,410	4	599	2,807	1	48	-47	
October	3,463	4	622	2,837	30	65	-35	
November	3,530	3	645	2,882	45	62	-17	
December	3,542	4	691	2,847	-35	-45	10	

[a] Deposits of foreign residents.

[b] Monthly average of commodity and service imports (c.i.f.), excluding direct defense imports.

SOURCE: Bank of Israel.

factors: (a) a $122 million increase in income from the investment of reserves (interest and other income went up by $414 million, but the strengthening of the dollar against European currencies, in which the bulk of Israel's reserve portfolio is held, shaved $292 million from the figure); (b) government deposits with the Bank were, at $239 million (net), 77 percent less than in 1980, reflecting the sharp contraction of the public sector's basic surplus; (c) private sector purchases of foreign currency amounted to only $369 million in 1981, as contrasted with a $910 million average in the previous two years.

10. MAIN DEVELOPMENTS IN THE WORLD ECONOMY

(a) Summary

1981 was a period of major disturbances in the world economy, primarily in the form of world recession and interest and exchange rate fluctuations. Specifically, the year saw a deepening recession in Europe, a partial recovery and relapse into recession of the U.S. economy, and declining (although still positive) growth elsewhere. (The surprising strength of Israeli exports against this background is discussed in the trade sections of this chapter.)

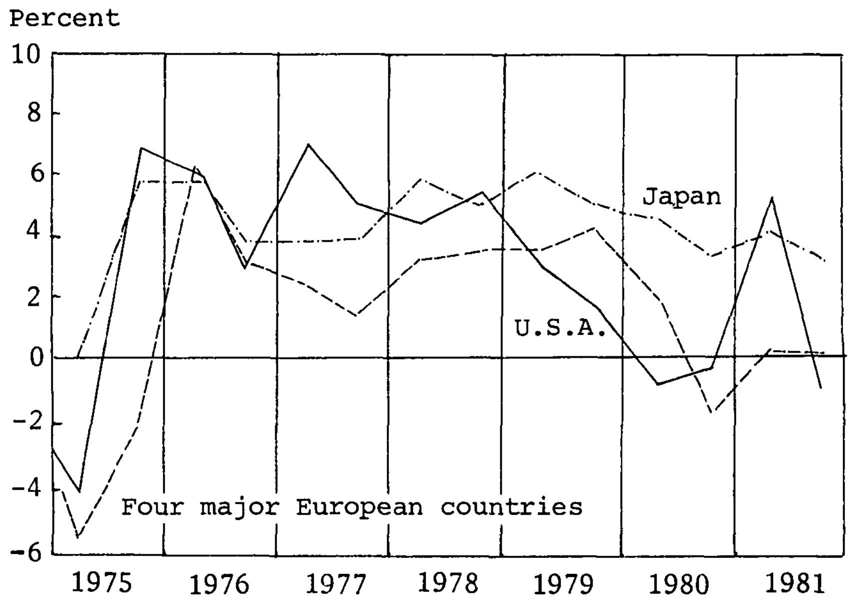
A second source of disturbance was the height (and to some extent the volatility) of interest rates, especially real dollar rates. This phenomenon was causally linked to the third disturbance noted—the continued rise of the dollar relative to the other major currencies. For Israel, these developments had varied implications, including negative pressure on the price of imports and exports, capital losses on foreign exchange reserves, and direct pressure toward reduced long-term capital imports.

(b) Growth and Inflation

The year reviewed witnessed the continuation of the "second oil shock" recession in Europe, together with an aborted recovery and a relapse of the U.S. economy. The European recession began in 1980, after two years of moderate cyclical recovery from a lengthy period of below-potential growth. (The latter trend had persisted since an initial brief recovery from the "first oil shock" recession of 1974-75—see Figure VII-9.) This description is supported by the record of European unemployment rates, which rose gradually until the 1978-79 recovery, began to fall slightly during the latter period, and have since risen dramatically to postwar record highs.

The United States economy has now been nearly flat on a year-to-year basis since 1979. However, this span of time has been characterized by extraordinary volatility: in 1979 a rapid falling off from the relatively strong growth of the previous three-and-a-half years, a sharp but very short recession

Figure VII-9
REAL GNP GROWTH IN MAJOR INDUSTRIAL COUNTRIES, 1975-81
(Half years, at annual rates)



SOURCE: OECD, *Economic Outlook.*

in early 1980, a three-quarter period of accelerating recovery, and finally (in late 1981 and early 1982) a relapse into recession.

In contrast to Europe and North America, growth was fairly well maintained during 1981 in Japan at 3-4 percent, although even here only with a gradual weakening (see Figure VII-9). As in 1980, however, most of this growth consisted of a rise of net exports, with domestic demand increasing by only 1-1.5 percent.[39] Moreover, this was accomplished while bringing inflation quickly back from the second oil shock peak of 9.5 percent (first half of 1980) to the previous 4 percent trend—a performance recalling that which followed the 1974 oil shock, and which testifies to greater flexibility in the Japanese wage-price structure.

No world total is available for the nonindustrial countries, but IMF figures show that GNP actually fell sharply for the OPEC group (by 4.5 percent),

[39] To a much smaller extent, a similar pattern prevailed for the industrial countries as a whole. GNP growth was boosted nearly 1 percent (over domestic demand growth) by increasing net exports to the oil producers and the developing countries (where the recession was generally less severe). Most of the large Japanese export, however, was absorbed by the other industrial countries (mainly the U.S. and Canada), creating pressure for restricting such imports.

Table VII-27

ECONOMIC INDICATORS FOR INDUSTRIAL COUNTRIES, 1963-81

	U.S.A.	U.K.	W. Germany	France	Italy	Japan	Four large European countries	Total OECD
GNP growth (%)								
1963-73 (average)	4.0	2.7	4.4	5.4	4.7	9.4	4.4	5.0
1973-77 (average)	3.0	1.8	2.3	3.4	3.0	4.1	2.6	
1979	3.2	2.0	4.4	3.5	4.9	5.2	3.0	3.3
1980	-0.8	-2.3	1.8	1.8	3.8	5.0	1.3	1.0
1981	1.8	-2.0	-1.0	0.5	—	3.8	-0.6	1.3
First half	4.7	-1.2	-0.4	0.2	2.4	4.0	0.1	2.4
Second half	-1.5	-1.5	-1.0	2.3	-0.5	3.8	0.0	—
Inflation rate (consumer price index), annual average								
1979	11.3	13.4	4.1	10.8	14.8	3.6	9.3	9.8
1980	13.5	18.0	5.5	13.3	21.2	8.0	14.5	12.9
1981								
Annual average	10.4	11.9	5.9	13.1	19.5	4.9	11.4	10.6
December-December	9.0	11.9	6.6	14.2	16.6	4.5	11.5	—
Monetary growth (M1), nominal (fourth quarter-fourth quarter)								
1979	7.6	9.1	4.3	10.6	25.1	5.6	10.5	—
1980	7.3	4.0	4.5	8.3	11.3	-1.8	6.6	—
1981	5.0	12.0	-1.5 [a]	15.0 [a]	7.5	11.0	7.4 [b]	—

Government demand surplus change[c] (percent of GNP)								
1979	—	-0.6	0.2	-0.8	-0.1	-0.5	-0.4	-0.2
1980	1.5	-0.6	0.2	-0.5	-0.8	-0.4	-0.3	0.4
1981	-0.5	-0.8	0.4	1.8	0.5	-0.1	0.5	0.1
Unemployment rate								
1970–79 (average)	6.0	4.4	2.4	3.7	6.2	1.7	3.8	
1980 (December-December)	7.0	7.4	3.1	6.3	7.4	2.0	5.6	
1981 (December-December)	7.5	11.2	4.6	7.6	8.2	2.2	7.4	
1981 (fourth quarter, preliminary estimate)	8.2	12.3	5.3	7.9	8.3	2.2	8.0	

[a] November 1980 to November 1981.
[b] Preliminary estimate.
[c] A positive value indicates a net increase in government demand.
SOURCE: OECD, *Economic Outlook*; Federal Reserve Bank of St. Louis; NIER, *Economist*.

while regions tightly integrated (as raw material suppliers) with the industrial countries, including Africa and Latin America, fell into a recession nearly equal to that in the former area (0-2.5 percent). On the other hand, new non-OPEC oil exporters (Egypt, Mexico, and several others) did quite well (GNP rose 6.6 percent), and at 4.7-5.7 percent, growth dipped only moderately in the Middle and Far East.

The disparate growth experience described is partly a result of differences in the degree of demand tightening policies and the divergent reaction of prices to these policies. While not equaling the flexibility shown in Japan, inflation also fell in the U.S. (especially in late 1981 and early 1982), and a downtrend was apparent in Europe as well. The fall in inflation undoubtedly reflected the passing of the second oil price shock, the impact of exceptionally tight monetary policies, and deepening recession. The rise in the dollar against the European currencies was directly related to the appreciable fall in U.S. inflation, but it also reflected the greater impact of the second oil price shock on Europe and the earlier tightening of monetary policy, the rise in interest rates, and the movement toward recession in the U.S. The record at least suggests more wage-price flexibility in the U.S. as well (compared with the U.K., for example).

Thus, by late 1981 and early 1982 deflationary pressures had pushed inflation to much lower levels in the U.S. (3-4 percent, but wage rises to only about 7 percent). Nominal monetary expansion was exceptionally low during 1981 in the U.S., but in Europe it continued on average (with sharp variations between countries) at about the same rate as in 1980. On the other hand, the speedier decline in inflation in the U.S. partly offset this difference in relation to real monetary growth, the variable more directly relevant to real demand (see Figure VII-10).[40]

Fiscal policy in the U.S. (under the impact of "supply-side economics") began to move toward tax cuts and deficit expansion. But with the first major cuts scheduled to take place only in July 1982, there was in fact a slight tightening (decline) in the U.S. fiscal deficit in 1981. For the seven largest industrial countries as a group (including the U.S. and Japan) there was virtually no change. It is clear from this that "real money" rather than fiscal factors were predominant in 1981.[41]

[40] Figure VII-10 shows that the recovery in the first half of 1981 in the U.S. (yielding the moderate upturn in growth for the year despite the ensuing recession) followed an upturn in real monetary growth. Consistently, recession in Europe throughout 1981 followed a continuing fall in real M growth there. The unusual "relapse" in the U.S. in late 1981 was related to a sharp tightening of nominal and real M growth during the year (see note 41). The 1980-81 data also suggest some shortening of earlier lags in the effect of monetary expansion on economic activity.

[41] The U.S. M1 growth rate fell sharply, while that of M2 remained stable. However, radical institutional changes in banking during 1981 were rapidly increasing the proportion of new,

(c) **Interest Rates**

Dollar interest rates showed the same volatility as U.S. growth. After an extraordinary peak in the first quarter of 1980, prime lending and short-term rates dropped sharply in the second-quarter recession, then climbed back to their previous peak levels (close to 20 percent) during the three quarters of recovery. Finally the interest rates fell (more moderately, to about 13-15 percent) with the ensuing recession in late 1981. This exceptional height in real terms continues to be a major subject of both public and academic debate. Although some other factors may be involved, expected large U.S. government deficits, stubbornly high inflationary expectations (despite the clear drop in current inflation), and tight monetary policy apparently all play a part in accounting for this phenomenon.[42]

In any case, high U.S. interest rates tended to spread to Europe and other areas, deepening local recessions (triggered primarily by the second oil price shock). This followed from the tendency of governments to "defend" their currencies against devaluation in relation to the dollar mainly through a tightening of monetary policy and thus a rise in interest rates above the levels required by domestic inflationary expectations.

(d) **Oil Prices and Demand**

The retreat of demand for OPEC oil continued during 1981 and early 1982, carrying OPEC export shipments down from 23.8 million barrels a day (second half of 1980) to about 18 million in the early months of 1982. An accelerating erosion of real and even nominal dollar prices became apparent during this period, although dollar prices still rose on average by about $4 a barrel from 1980 to 1981. By early 1982 spot prices in real dollar terms had actually retreated by over half of their advance during 1979-80 (i.e. down from about 125 percent to 55 percent), although the relative fall of nondollar currencies kept real prices in Europe and elsewhere higher by about 10 to 15 percent. With the major exception of Saudi Arabia, which persisted in higher output throughout 1981, most of the OPEC countries were collecting real revenue at no higher (or even lower) rates than before the second great boost of prices. Moreover, only a small part of this retreat resulted from the world recession: OECD total oil consumption dropped 15 percent from 1979 to early 1982, while GNP rose by 3.5 percent. For the most part it followed from reductions in "oil intensity" (i.e. oil demand/GNP). The OECD reckons that

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higher interest-earning components of M1 and M2—especially interest-bearing demand deposits and money market funds. This stimulated a rise in demand for both M1 and M2, which implied, by either measure, a still greater degree of monetary tightness.

[42] Among the other possible factors are the international saving-investment balance and the aforementioned institutional changes in U.S. banking.

in 1978-81 overall energy intensity declined by about 8 percent and oil intensity by as much as 23.7 percent for the seven largest economies. Total OPEC exports fell by about a third during the same period, reflecting both the response to the new price shock and the belated but accelerating effect of longer-term demand elasticity (i.e. conservation and the substitution of nonoil fuels and non-OPEC oil) in response to the first price shock.[43]

(e) World Trade, Exchange Rates, and Israel's Export Markets

As always, the widening recession led to a still further general slump in (already depressed) world trade during 1981. This occurred despite a surprisingly sharp increase in U.S. imports of manufactured goods. However, as is evident from Tables VII-28 and VII-31), the changes in the index of world trade do not constitute a good approximation of the changes in the demand for specific export goods or of the market facing the exports of specific countries. As indicated by the "All goods" figure of Table VII-28, the world trade growth rate declined from 1.5 percent in 1980 to zero in 1981. This, and even more so total OECD imports, reflects the steep fall in oil imports. OECD imports of manufactures or of all goods excluding energy were somewhat less depressed. OECD prices (exports) rose by about 9.5

Table VII-28

CHANGES IN WORLD TRADE, 1968-81

(Percentages)

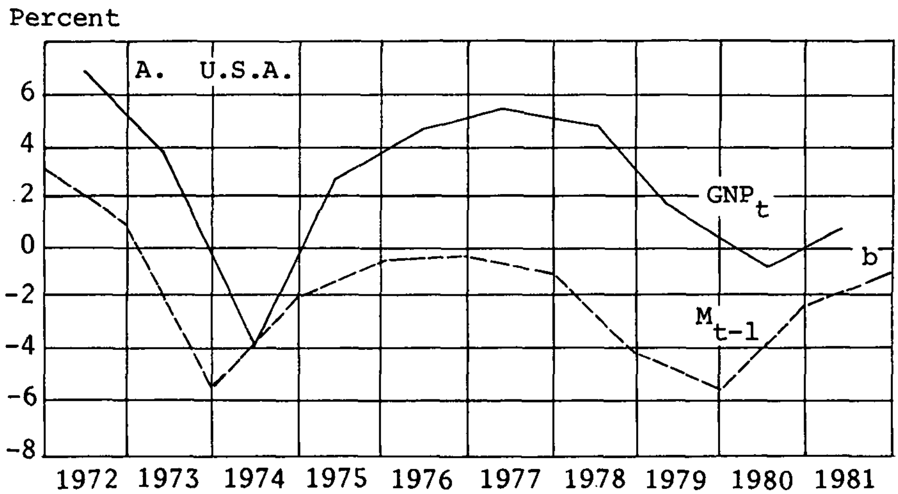
	1968-78	1979	1980	1981
All goods (volume)	6.5	6	1.5	—
Manufactures (volume)	7.5	5.5	4.5	2.0
OECD imports (volume)	—	8	-1.25	-2.5
OECD exports (volume)	—	5.5	4	3
OECD imports (price)	—	19	22	12.25
OECD exports (price)	—	16.5	12.5	9.5
Intra-OECD exports (volume)	—	7.5	2.25	-0.5

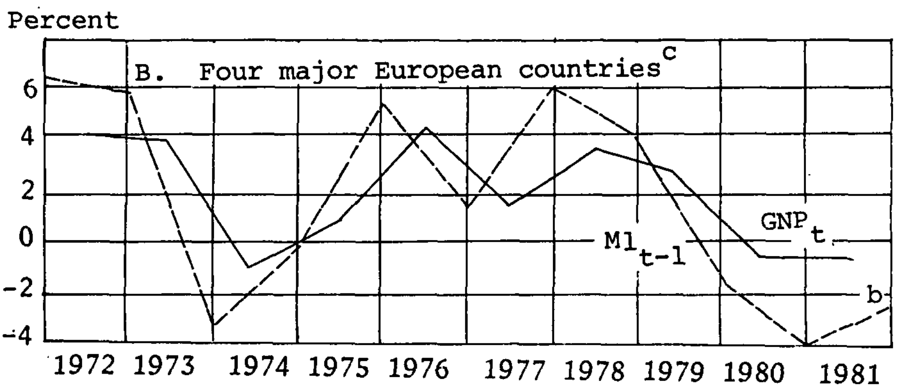
SOURCE: NIER, February 1982; OECD, *Economic Outlook*, December 1981.

[43] In the U.S. in particular the full pass-through of the earlier OPEC price rises was delayed until about the period of the second shock.

Figure VII-10

RATE OF REAL GNP GROWTH[a] AND LEADING REAL MONEY GROWTH IN U.S.A. AND FOUR MAJOR EUROPEAN COUNTRIES, 1972-81





[a] Since upward pressures from the cost side (e.g. OPEC price rises) influence demand with very little lag, "leading money growth" here refers to nominal M1 of the previous year (t-1), divided by the price level of the current year (t). In general, dividing by the price level of the previous year (t-1) also provides a fairly good forecast of the growth of real GNP.

[b] The percent changes in real money for 1982 refer to actual M1 of 1981, divided by the forecast price levels of 1982.

[c] U.K., Germany, France, and Italy.

SOURCE: Federal Reserve Bank of St. Louis, quarterly data; part of the 1981 data are from the OECD and *The Economist*.

percent on average in local currencies, but as a direct result of the strong upswing of the dollar exchange rate, dropped about 4.5 percent in dollar terms. Because of the erosion of the earlier real price gains of oil described above, the terms of trade of the industrial countries (OECD) fell on average in the first half of 1981, stabilized in the second, and began to rise in early 1982. In both trade prices and terms of trade, developments in Israel roughly paralleled those in the OECD.

The most significant exchange rate development was the rise of the dollar relative to the other major currencies. This was reflected in the quite different rates of devaluation of the sheqel relative to the dollar and to a wider currency measure, such as the five-currency basket or the 14-currency import and export baskets shown in Table VII-29.

Table VII-29

CHANGES IN THE SHEQEL EXCHANGE RATE, 1979-81[a]

(Percentages)

		In relation to the dollar	In relation to a basket of 5 currencies	In relation to a basket of 14 currencies	
				Export-weighted	Import-weighted
1979	Dec.-Dec.	81.50	92.00	88.90	87.70
1980	Dec.-Dec.	117.50	108.80	103.60	95.40
1981	I	19.24	13.98	13.68	13.77
	II	29.14	19.04	18.35	19.18
	III	14.97	12.86	14.62	14.83
	IV	22.65	19.75	20.94	21.46
	Dec.-Dec.	106.80	83.40	86.49	89.10

[a] Percent change in monthly average rates in last month of period from last month of previous period.

SOURCE: Bank of Israel, *Main Israeli Economic Data.*

Table VII-30

MONEY MARKET AND EURODOLLAR INTEREST RATES, 1980-82I

(Percentages, average for period)

	1980		1981				1982
	III	IV	I	II	III	IV	I
1. Money market (short-term)							
U.S.A.	9.9	15.9	16.6	17.8	17.6	13.6	14.2
U.K.	14.6	13.8	12.2	11.6	13.6	14.8	14.0[a]
W. Germany	9.3	9.0	10.5	11.7	12.0	10.9	10.2
Japan	12.1	10.0	8.5	7.1	7.3	6.9	6.6
Eurodollar (one-month deposit)	12.1	16.9	17.1	17.7	18.2	13.9	15.2
2. Long-term (government bond yields to maturity)							
U.S.A.	11.0	12.2	12.7	13.5	14.5	14.1	14.3
U.K.	13.3	13.3	13.8	14.2	15.3	15.7	14.7
W. Germany	7.9	8.6	9.8	10.6	11.1	10.0	9.7

[a] January-February average.
SOURCE: IMF, *International Financial Statistics*, March 1982.

Table VII-31

GROWTH OF ISRAEL'S EXPORT MARKETS, 1980-81

(OECD imports weighted by Israel's exports)

	Manufactures				All imports, excl. energy			
	A[a]		B[b]		A[a]		B[b]	
	1980	1981	1980	1981	1980	1981	1980	1981
Seven major OECD countries	1.6	2.0	3.0	0.8	0.9	0.9	2.0	0.3

[a] Weighted by total Israeli commodity exports to each country.
[b] Weighted by Israeli commodity exports, excluding diamonds.

Table VII-32

CHANGES IN OIL (OPEC) AND NONOIL COMMODITY PRICES, 1979-81

(Percent change in dollar prices)

	1979	1980	1981
OPEC (weighted average)	46	68	13
Food	9	16	-18
Agricultural raw materials	23	11	-13
Metals and minerals	29	13	-12
All nonoil commodities	15	15	-16
All nonoil commodities in SDR prices	13	14	-8
OPEC average prices (in U.S. $ per barrel)	19.0	31.9	36.0

SOURCE: NIER, February 1981 and 1982; covers principal commodity exports of developing (non-OECD) countries.

Table VII-33

WORLD CURRENT ACCOUNT, 1979-81

($ billion, including official transfers)

	1979	1980	1981[a]
U.S.A.	1.4	3.7	8.75
Four major European countries	-0.4	-25.9	-10.3
Japan	-8.8	-10.7	5.5
OECD, total	-31	-72.7	-35
OPEC	68	110	60
Nonoil developing countries	-37	-60	-68
Other	-3	-1	-5
World total[b]	-3	-24	-48

[a] Estimate.

[b] The difference from zero reflects errors and omissions.

SOURCE: OECD, *Economic Outlook*, December 1980 and 1981, Tables 27 and 30.