CHAPTER V

EXPORTS

1. Main Developments

In 1977, exports continued to grow at the 13 percent rate recorded in 1976. This growth took place at a time when dollar prices climbed rapidly due to the depreciation of the dollar on the international currency markets. While the general trend of exports was upward, a number of different trends manifested themselves among the components: on the one hand, the export of services, propelled mainly by the increase of tourism[1], skyrocketed, and on the other hand, the export of goods slowed, owing to the stagnation of diamond exports, the slowdown of other agricultural exports, and a strong curb in the rise of military exports. This year, as in 1976, the increase of the Gross National Product relied heavily on the growth of exports, and the weight of exports in output continued to grow.

In the last two years a rapid growth of exports became evident, both in relation to actual uses and in relation to the productive capacity of the economy (which was higher in the last years than the actual product). The rapid growth of exports constitutes a turning point in the trend prevalent in the years 1973 and 1974, and its pace outstripped that of the period between 1969 and 1972. It is too early to determine whether this development heralds the beginnings of a long range process, but it is evident that a change in the employment structure, which is a prerequisite to such a process, did not occur in these two years. Employment in exports increased in branches which showed rapid growth. But this increase came mainly at the expense of employment in production for domestic use, while most of the additional employment in the last 3-4 years was absorbed by the service sectors. Therefore the structure of employment did not change in favor of sectors with an export potential.

The factors that spurred the growth of exports this year were mostly domestic, and the factors connected with the expansion of world markets made a lesser contribution. As regards determining forces, driving forces of exports, the trends already evident in 1976

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[1] Data on tourism revenues are problematic and in the last two years have caused biases in the estimates of changes in exports of tourism services in particular, and in exports in general. See below, in the paragraph dealing with the development of the tourism sector.

TABLE V-1

EXPORTS BY MONEY SUPPLY AND BY NATIONAL ACCOUNTS, 1972–1977

	1972	1973	1974	1975	1976	1977
COMMODITY EXPORTS ($ million)						
1. Exports by foreign trade (net)	1,101.7	1,391.9	1,736.7	1,834.8	2,306.0	2,964.3
2. Exports to administered areas	136.9	194.3	298.7	370.0	392.3	452.1
3. Balance of payments adjustments	–18.6	–24.2	–30.5	–24.4	–28.5	–25.6
4. Total by balance of payments [(1) + (2) + (3)]	1,220.0	1,562.0	2,004.9	2,180.4	2,669.8	3,390.8
EXPORTS OF SERVICES ($ million)						
5. Exports of services (CIF values)	1,036.3	1,289.4	1,733.1	1,723.3	1,856.6	2,289.8
6. Exports to administered areas	44.0	51.1	77.0	59.4	80.3	76.8
7. Import adjustment from CIF to FOB	–77.9	–117.0	–182.1	–195.6	–178.2	–196.5
8. Total by balance of payments [(5) + (6) + (7)]	1,002.8	1,223.5	1,628.0	1,587.1	1,758.7	2,170.1
9. Receipt of interest of the public sector	4.1	94.1	129.0	113.0	98.7	88.5
10. Total exports of services [(5) + (6) – (9)]	1,076.2	1,246.4	1,681.1	1,669.7	1,838.2	2,278.1
EXPORTS BY NATIONAL ACCOUNTS[a] (IL million)						
11. Exports of commodities and services (current prices)	10,469	12,828	18,414	26,658	39,387	65,203
12. Exports of commodities and services (1970 prices)	7,834	8,118	8,570	8,746	9,941	11,228
13. Quantitative increase or (–) decrease compared to previous year (percent)		3.6	5.6	2.1	13.7	17.9

[a] Exports at the official exchange rate plus export incentives.

continued in 1977. The accumulation of excess productive capacity continued, against a background of burgeoning capital stock and employment. The cumulative excess productive capacity constituted a central factor in the increase of exports by weakening excess demand on the product market. This reduced the attractiveness of the domestic market and released resources for export.

This year as well, the slack in final demands was not reflected in the labor market. Unemployment increased very slightly, its level not reflecting the level of excess productive capacity. The emergence of open unemployment has been avoided in recent years. This impeded a transfer of workers to industries that could have expanded exports rapidly. This policy did not facilitate restraint of wages and domestic prices; hence, it failed to fully exploit the potential influence of the domestic demand restraint and nominal devaluation in expanding exports.

This year as well, the relative profitability of exports increased, i.e. the real devaluation in relative export prices of the economy as a whole continued. With regard to industrial exports, the trend is less unequivocal, and it can be assumed that their growth was not a *product of substantial shifts in favor of export profitability.*

The trend of moderate improvement in the index of export profitability was coupled with a rapid increase in prices for industrial exports relative to prices for domestically marketed industrial output. This reflects an increase in the relative profitability of exports in comparison with production for the domestic market. It is possible that the trend for recent years is in fact sharper than can be surmised from the data (see Table V-5). This is due to the extensive subsidies awarded exports in terms of cheap credit during present inflationary conditions. On the other hand, the index of returns received for added value in exports relative to wage costs reflects a deterioration of the profitability of exports. The *relatively rapid increase of wage costs since mid-1975 attests to a reduction in the profitability of recruiting workers for expanding exports.*

The 5-6 percent growth of export markets in 1977 was about half the 1976 growth rate. In 1975 and 1976, the main part of variations in export volume were attributable to changes in the world economy. This year the global economy's contribution to the increase of exports was smaller, and conversely the influence of domestic factors was greater than in the past. In the long term, the relation between the composition of exports and changes in world trade patterns also bulks large: the penetration of developing countries, possessing abundant cheap manpower resources, into trade in various industrial products, reduced the competitiveness of developed countries, Israel included. In Israeli exports this has had part in the decline of traditional industries, such as textiles and clothing, a trend that continued this year as well.

TABLE V-2

PRICE OF EXPORT COMPARED TO PRICE OF OTHER DOMESTIC USES, 1968–1977

(1972 = 100)

	GNP	Exports	Domestic uses	Product in export	Product in domestic uses	Non-tradable product	Exports/ domestic uses	Product in export/ product in domestic uses	Product in export/non-tradable product in GNP
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1968	71.3	69.3	69.4	74.4	70.2	69.8	99.9	106.0	106.6
1970	78.0	74.9	76.8	78.4	77.9	77.8	77.5	100.6	100.8
1972	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1973	121.4	118.3	123.0	112.6	124.6	125.7	96.2	90.4	89.6
1974	161.5	160.8	169.5	137.2	170.3	173.5	94.9	80.6	79.1
1975	221.0	228.2	233.8	195.3	230.3	233.7	97.6	84.8	83.6
1976	279.1	296.6	298.9	264.6	284.3	286.2	99.2	93.1	92.5
1977	405.6	434.7	423.6	405.4	405.7	405.7	102.6	99.9	99.9

NOTE: All calculations are close to export factor prices and based on national accounts data.

Column (1) – GNP excluding attributed housing services.

Column (3) – Domestic uses excluding imports of ships and aircraft, direct defense imports and attributed housing services.

Column (4) – Discounting general import component of 40 percent in 1972 prices. Input from import prices were used as import component prices, excluding imported oil (CIF), at effective exchange rate, and the domestic price of oil (in IL).

Column (5) – The difference between GNP prices (excluding attributed housing services) and product in export prices.

Column (6) – Taken from the GNP prices and the product in exports prices, assuming that the tradable product (including exports) is 33 percent of the product at 1972 prices.

TABLE V-3

EXPORT GROWTH COMPARED TO OTHER USES
(percent)

	Increase or (–) decrease, annual averages			
	1969-1972	1973-1977	1975-1977	1976-1977
In the Economy				
Potential product[a]	–	7.2	7.5	7.0
Actual product (excluding housing services)	11.2	2.4	1.4	0.6
Domestic uses (excluding imports of ships and aircraft, direct defense imports and housing services)	10.5	2.4	–1.1	–2.2
Exports (value in domestic market)	14.0	7.5	9.5	13.3
In Industry				
Potential product[b]	–	9.4	9.4	9.4
Actual industrial output (excluding diamonds)	11.6	4.7	4.4	5.5
Industrial output to domestic destinations	11.4	3.6	2.4	2.6
Industrial exports, excluding diamonds	12.5	11.3	15.1	24.5

a For explanation of definitions and calculations, see Table II-7.
b For explanation of definitions and calculations, see Appendix to Chapter III.

The foreign currency reform of October 1977 had three major implications for exports: the unification of exchange rates in all the segments of export, effective devaluation at various rates for various sections' exports, and the floating of exchange rates, which was intended to end existing distortions, was expressed in an effective devaluation at very different rates in various sections of export: in the service branches, the rate was lowered to a greater extent than the average devaluation in commodity exports, which was low (about 6 percent). In a number of industrial branches, with a relatively low value added, there was actually a revaluation. The unification of exchange rates does not apply to tradable uses other than exports. The protective rate for import substitutes even increased in relation to the exchange rate for exports, thus revealing a distortion which has not been dealt with by the present reform.

At the beginning of 1978, industrial wage agreements entailing vast increases were signed. A too rapid increase of costs in relation to export prices, together with the recovery that became evident in domestic demand at the end of 1977 and the beginning of 1978, may damage the profitability of industrial exports.

2. The Development of Factors Affecting Exports

Factors affecting the development of exports can be divided into two categories: factors connected with events taking place on the world market, and domestic factors connected with local economic developments. Among the domestic factors, a central role is ascribed to the increased profitability of exports, either directly, as reflected in the relative price of exports, or indirectly, as for example, through increased support embodied in subsidized credit extended to exporters.

The reduction of demand pressures in the economy, both on the commodity and on the labor market, are factors enhancing the growth of exports. Additionally, long range importance is given to the increased productive capacity of enterprises and sectors bearing an export potential. With regard to outside factors, the increased demand of the world economy in general, and the demand for Israeli exports in particular, contribute to the aggregate growth of exports. The composition of Israeli exports is determined by international trade patterns in terms of product mix and the share of the various countries, as well as by changes in the competitive position of Israel in the various segments of export.

In 1977, the relative price of exports as compared to domestic uses[2] continued to rise at a rate of 3.4 percent, as opposed to an increase of about 1.6 percent in the previous

[2] Calculations of Table V-2 present an approximation of the price relations between tradable and nontradable products, which expresses the real rate of exchange. Price changes of nontradable products are not measured directly but are calculated as the difference between changes in the GNP deflator and changes in the prices of tradable products. Such a calculation requires assessing the size of tradable parts of the product and the prices that should be attributed to them. In comparing value added prices in exports with those in domestic uses no such assessments are made, but prices of domestic uses include in this comparison a component of a nonexport tradable value added. In comparing export prices to prices of other uses, less assumptions are made (such as the product component in exports, and prices of imported inputs for export), but it is deficient in that it compares output prices and not prices of value added representing remuneration to productive factors.

year[3]. (Value added prices in exports as compared to other uses increased by 7 percent, and value added prices in exports as compared to the prices of the nontradable part of the GNP by 8 percent.) Real devaluation taking place now in the third consecutive year results from a combined process wherein nominal devaluation is being implemented against a background of slack domestic demand. The real devaluation constitutes a reversal of the trend of steep decline in the relative price of exports characterizing 1973 and 1974. That trend was fueled by the deterioration of the terms of trade of the Israeli economy and the lag in adjusting exchange rates to the inflation in those years.

As mentioned, since 1975 real devaluation has taken place alongside the continued restraint of domestic demand. This restraint served to alleviate the balance of payments problem by curbing the growth of imports. But, in addition, it created economic conditions designed to promote a rapid expansion of exports. With the continued growth of productive factors, excess productive capacity was created in the economy, while domestic demand pressures, which had characterized the period preceding the Yom Kippur War, had moderated to a great extent, thus reducing the attractiveness of the domestic market to producers. The devaluation that took place in the relative price of exports is also linked with the moderation of domestic demand. Despite the rapid increases on the cost side that took place in the economy during recent years, the restraint of the domestic market prevented price increases in domestic uses at a rate similar to that governing exports. It did this mainly by reducing returns to capital in domestic activity (see below).

Contrary to the recession of 1966–1967, excess productive capacity was not reflected in a parallel rise of unemployment in recent years. This blunted a greater stimulus to exports that had been embodied in the economic policy. Such a contribution may be made on two levels: the availability of workers, and the level of wages. On the first level, the existence of open unemployment, as opposed to hidden unemployment, facilitates a shift of manpower to enterprises which are interested in expanding export production but are hampered by manpower shortages. In another sphere, it could be assumed that if conditions of slackness were extended to the labor market, the increase in real wages (from the point of view of the employer) would have been smaller. This would have enhanced the profitability of exports. The effect of unemployment on exports was evident during the previous recession. At the end of 1967 an official devaluation of 17 percent was introduced. Against a background of record unemployment, wage increases and

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3 This year's increase is very much affected by the rapid but temporary increase of prices for diamond exports. Export prices of diamonds increased this year by 36 percent, as against about 6 percent for other industrial exports, and 15 percent in the export of raw diamonds.

TABLE

COMMODITY EXPORTS (FOB) BY BRANCH

	1973	1974	1975	1976	1977
	($ million, at current prices)				
AGRICULTURAL EXPORTS					
Citrus	108.8	120.8	176.4	172.4	191.3
Other	61.6	71.4	101.4	152.6	195.1
Total	170.4	192.2	277.8	325.0	386.4
INDUSTRIAL EXPORTS					
Mining & quarrying	48.1	90.2	84.4	60.8	76.5
Potash	(29.6)	(44.8)	(55.4)	(38.3)	(54.9)
Phosphates	(3.2)	(21.1)	(14.3)	(12.5)	(13.5)
Food	104.8	128.4	125.4	154.2	177.8
Citrus preserves	(56.3)	(68.4)	(57.0)	(72.6)	(81.8)
Textiles	60.4	62.7	52.3	62.4	63.9
Clothing	86.9	97.6	104.1	125.4	149.3
Leather	7.0	7.0	5.4	7.9	9.1
Total textiles, clothing, leather	154.3	167.3	161.8	195.7	222.3
Wood	19.0	14.9	12.8	20.3	27.7
Plywood & Construction carpentry	(13.5)	(11.2)	(8.4)	(10.4)	(14.5)
Furniture	(4.2)	(2.8)	(3.3)	(8.2)	(10.3)
Paper	2.3	3.8	2.8	3.9	4.5
Printing & publishing	13.7	18.8	18.6	11.1	14.5
Rubber and plastics	25.8	36.3	44.7	53.6	67.5
Tires and tubes	(16.4)	(23.4)	(29.4)	(31.9)	(37.2)
Chemicals	81.8	218.7	185.9	221.5	269.9
Basic chemicals	(36.8)	(102.5)	(99.6)	(86.9)	(112.9)
Medicines	(13.7)	(20.3)	(27.7)	(39.5)	(32.2)
Pesticides	(21.6)	(44.1)	(49.9)	(36.8)	(49.7)
Chemicals excl. fuel					
Non-metallic minerals	2.7	5.8	6.5	7.1	9.7
Glass and glass products	(1.9)	(4.6)	(4.4)	(4.5)	(5.8)
Basic metals	13.8	23.3	26.1	19.8	34.0
Metal pipes	(5.9)	(13.4)	(19.5)	(8.7)	(13.0)
Metal products	36.3	51.7	69.9	121.6	188.2

V-4

AND MAJOR GROUP, 1973–1977

Quantity				Price			
Annual increase or (–) decrease							
1974	1975	1976	1977	1974	1975	1976	1977
(percent)							
3.6	16.0	–1.9	2.8	7.2	25.9	–0.4	8.0
3.3	34.2	28.7	19.1	12.2	5.8	17.0	7.3
3.7	23.1	9.2	10.5	8.8	17.4	7.1	7.7
17.8	–15.2	–2.8	44.9	59.2	10.3	–25.9	–13.2
(8.5)	(–10.6)	(–9.9)	(70.4)	(39.5)	(38.4)	(–23.3)	(–15.7)
(61.9)	(–40.5)	(35.3)	(6.5)	(307.2)	(13.8)	(–35.4)	(–5.2)
–1.3	–8.5	22.0	5.3	24.1	6.8	0.8	9.5
(6.0)	(–22.2)	(21.0)	(2.4)	(14.6)	(7.1)	(5.3)	(10.0)
–7.5	–8.1	19.7	–5.4	12.2	9.1	–0.3	8.2
1.2	1.9	13.0	10.0	11.0	4.7	6.6	8.2
–8.7	–17.5	23.3	9.8	9.5	–6.4	18.6	4.9
–2.6	–3.5	15.2	5.1	11.3	0.3	5.0	8.1
–38.0	–6.0	48.7	20.0	26.4	–8.7	6.7	13.8
(–37.7)	(–3.5)	(13.7)	(23.6)	(33.1)	(–22.3)	(8.9)	(12.8)
(–42.1)	(5.9)	(138.6)	(9.6)	(15.1)	(11.3)	(4.1)	(14.6)
4.2	–12.6	38.1	8.9	58.5	–15.7	0.9	6.0
–13.4	17.4	–40.9	23.2	58.5	–15.7	0.9	6.0
3.9	9.0	21.3	17.6	35.5	12.9	–1.2	7.1
(6.4)	(5.3)	(9.4)	(10.0)	(34.1)	(19.3)	(–0.8)	(6.0)
48.0	18.5	32.3	20.4	80.7	4.4	–9.9	1.2
(59.0)	(–5.0)	(3.9)	(32.0)	(75.2)	(2.3)	(–16.0)	(–1.5)
(1.3)	(39.9)	(49.6)	(–22.0)	(46.3)	(1.9)	(–4.7)	(4.6)
(59.7)	(–3.5)	(–11.1)	(34.0)	(27.9)	(17.2)	(–7.1)	(–0.4)
41.6	–1.6	8.9	19.9				
97.2	7.1	5.7	19.1	8.9	4.6	3.3	14.7
(124.7)	(–4.2)	(–1.8)	(14.5)	(7.7)	(–0.2)	(4.1)	(12.6)
16.0	2.3	–18.9	61.4	45.6	9.5	–6.5	6.4
(43.5)	(29.6)	(–45.3)	(58.3)	(58.2)	(12.3)	(–18.4)	(–5.6)
23.6	24.4	73.3	39.1	15.2	8.7	0.4	11.3

TABLE

COMMODITY EXPORTS (FOB) BY BRANCH

	1973	1974	1975	1976	1977
	($ million, at current prices)				
Machinery	27.5	39.7	64.1	110.1	154.2
Transport equipment	30.5	40.3	39.7	91.6	116.3
Aircraft and parts	(27.5)	(26.6)	(31.4)	(74.6)	(63.8)
Ships and parts	(0.0)	(8.6)	(0.5)	(0.8)	(35.3)
Electrical & electronic equipment	35.6	59.6	97.7	112.3	122.1
Communications equipment	(12.0)	(20.5)	(48.5)	(60.2)	(60.5)
Total metals & electronics	143.7	214.6	297.5	455.4	614.8
Excluding defense exports					
Diamonds (gross)	617.2	641.1	640.8	799.8	1,099.0
Diamonds (net)	(551.7)	(562.2)	(548.6)	(712.0)	(1,002.7)
Various industries	28.4	29.2	31.3	44.0	66.0
Total industrial exports	1,241.8	1,569.1	1,612.3	2,027.4	2,650.2
Excl. diamonds	624.6	928.0	971.5	1,227.6	1,551.2
Excl.diamonds, minerals & fuel					
Excl. defense exports					
Total industrial & agricultural exports	1,412.2	1,761.3	1,890.1	2,352.4	3,036.6
OTHER EXPORTS	46.9	63.7	50.9	62.2	46.6
Fuel & food for ships & aircraft	18.4	28.8	18.2	23.2	23.5
Sale of old ships & aircraft	8.8	14.0	6.2	23.6	9.3
Total commodity exports (gross)	1,459.1	1,825.2	1,941.0	2,414.6	3,083.2
Returned exports	67.2	88.3	106.2	108.6	118.9
Total commodity exports (net)	1,391.9	1,736.7	1,834.8	2,306.0	2,964.3
Commodity exports, excl. ships & aircraft (net)	1,383.1	1,722.7	1,828.6	2,282.4	2,955.0

SOURCE: Central Bureau of Statistics, foreign trade data.

V-4 (Cont.)

AND MAJOR GROUP, 1973–1977

Annual increase or (–) decrease							
Quantity				Price			
1974	1975	1976	1977	1974	1975	1976	1977
(percent)							
32.3	50.1	73.3	25.6	9.1	7.6	–0.9	11.5
20.7	–16.7	126.4	14.4	9.5	18.3	1.9	11.0
(–11.7)	(–0.1)	(125.4)	(–22.6)	(9.5)	(18.1)	(5.4)	(10.4)
(–)	(–95.1)	(57.0)	(3,875.2)	(9.5)	(18.3)	(1.9)	(11.0)
57.2	55.9	15.0	1.7	6.5	5.1	0.0	6.9
(60.4)	(125.5)	(23.9)	(–4.8)	(6.5)	(4.9)	(0.2)	(5.6)
30.3	28.4	53.5	22.9	14.6	7.9	–0.3	9.9
44.2	–7.2	20.5	24.0				
–2.2	1.6	16.4	1.3	6.3	–1.6	7.3	35.6
(–4.1)	(–0.8)	(21.0)	(3.9)	(6.3)	(–1.6)	(7.3)	(35.6)
–7.8	0.2	35.2	28.4	11.6	6.3	4.6	16.8
5.7	0.2	24.6	11.3	19.7	2.6	0.9	17.4
12.3	–1.0	30.4	18.8	32.3	5.4	–3.1	6.4
11.8	5.3	28.4	17.0				
11.7	–4.6	16.2	15.0				
5.3	2.5	22.3	11.3	18.4	4.7	1.8	16.0
5.7	1.6	22.2	10.1	18.4	4.7	1.8	16.0
5.4	0.9	23.5	40.8	18.4	4.7	1.8	16.0
5.2	1.4	22.6	11.6	18.4	4.7	1.8	16.0

prices trailed behind the devaluation rate for a long time, and this left its mark on the high growth rate of exports in the following years. In the last two years the unemployment rate increased at a slower pace (0.5 percent in 1976 and 0.3 percent in 1977). Even this small rate contributed to the expansion of industrial exports, especially in 1977, when the contribution of external factors, such as the expansion of international trade, diminished.

Industrial exports constitute a large segment of exports, most of whose components are largely subject to the same economic factors. The indicators of the profitability of industrial exports[4] are based on price indices specific to the industrial sector (as against price indices of national accounts, which are derivative, and reflect an average with a great range of variation). The picture that emerges from an examination of industrial exports is in a number of ways similar to that of exports in general, but it facilitates a broader examination of relative profitability.

The trend of exporter prices in Israeli pounds in relation to prices on the domestic market points to a considerable increase in the profitability of exports in recent years. In 1977 these prices continued to increase, following increases in the two preceding years as well, and the 1977 level was 14 percent higher than that of 1973. The changes in the profitability index of industrial exports[5] testify to the direction of the changes in (gross) profit per output unit, and the share of profit in total output at current prices. (Indirectly, by taking the relation between capital and output in physical terms and the price of invested capital and output for export into account, the changes in the share of profit in total output point to the changes in the rate of return on invested capital.) Since the end of 1976, the index of export profitability points to an increase (except for the second quarter of 1977, which was very much influenced by the cost of living allowance and wage agreements), and on an annual basis it averaged a 3 percent increase. The trend characterizing this index during the last years is not unequivocal, but it is clear that profitability at the end of 1977 was higher by a considerable percentage than in the preceding years.

In essentially export industries (having no clear substitutes on the domestic market) the profitability index constitutes a clear-cut criterion for gauging the profitability of

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4 The discussion here is of the profitability of industrial exports excluding diamonds, minerals, and fuel. The exports of these three sectors are only superficially related to conditions of the economy and domestic price trends.

5 The profitability index of exports is the price in IL obtained by the exporter per output unit, relative to the cost of the basket of purchased input (i.e. wages and intermediate input from imports and from domestic production) required for the production of this output unit.

expanded export production, i.e. a rise in the index indicates a tendency to expand production for exports, while a decline signifies the reverse. The influence of profitability on industrial exports, which compete with domestic uses for industrial output, depends, among other things, on the profitability of exports vis-a-vis production for domestic markets. A combined examination of the profitability index and the relative price index points to a continuous decrease of the profitability of production for domestic destinations in recent years. This phenomenon is mainly the result of the present economic development binding a restraint of domestic demand with cost inflation, thus preventing local producers from adjusting their nominal profits to the inflation. Thus, the profitability of industrial exports increased relative to production for the domestic market.

Since mid-1975, wage costs per output unit rose at a quicker pace than the price of the added value in industrial exports, a development that moderated towards the end of 1976[6]. This indicator points to a decrease in the profitability of exports by about 5 percent in 1976 and about one percent in 1977, after many years of definite increase. In the short run (during which capital stock and the import component are constant, exporters will equate the marginal output of labor with wage deducted by the return for the added value. The relatively rapid wage increases will point to a lack of profitability in raising manpower and enlarging production in export sectors. This picture is appended to the deteriorating trend, already apparent in 1974, when wage costs per output unit in industrial exports between Israel and developed industrialized countries are compared. This negative trend means that the competitiveness of industrial exports will decrease. With all due caution concerning wage data for the last two years[7], it is almost certain that the growth of real wages in industry is meaningful – a fact which points to an obstacle in the face of expanding exports in this sector.

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6 Wage increases are deflated by the estimate of increase in output per working-hour. Calculations presented in Table V-5 are based on estimates of an increase of labor productivity at a rate of 3.5 percent in 1976 and 5.1 percent in 1977. This implies that real wages from the point of view of the employer increased during this period faster than labor productivity.

7 Data on wages in 1976 include retroactive payments inherent in wage agreements. It is also possible that following the income tax reform there was a shift from paying out profits to payments in the form of directors' salaries. In addition, it is worth mentioning that the increase of labor productivity embodied in the calculations is not based on measurements, but on assessments and extrapolations of past trends and it may be that in certain export industries productivity increased faster than assumed in the calculations.

INDICATORS OF INDUSTRIAL EXPORT

	Exporter price (in IL)	Change from previous period	Import input prices (in IL)	Wage per output unit	Domestic input prices	Weighted price of inputs	Change from previous period
	(1)	(1")	(2)	(3)	(4)	(5)	(5")
1966	55.6		54.0	83.1	72.3	70.0	
1972	100.0	79.9	100.0	100.0	100.0	100.0	42.9
1973	125.5	25.5	129.1	113.5	118.8	120.3	20.3
1974	173.3	38.1	184.7	149.8	176.5	172.5	43.2
1975	246.8	42.4	246.8	207.3	242.6	235.3	36.6
1976	305.5	23.8	304.4	269.7	301.2	294.5	25.2
1977	423.1	38.5	420.4	377.5	392.8	396.6	34.7
1975 I	240.7	16.8	248.3	196.1	230.9	227.3	13.5
II	245.5	2.0	241.5	202.3	237.3	230.0	1.2
III	241.0	−1.8	238.5	211.1	240.6	233.0	1.3
IV	257.2	6.7	255.4	221.5	261.5	250.2	7.4
1976 I	272.8	6.1	270.2	232.4	273.5	262.7	5.0
II	297.1	8.9	292.1	263.6	295.3	268.8	9.2
III	308.8	3.9	314.6	272.5	306.9	300.7	4.8
IV	344.1	11.4	342.1	309.4	329.2	327.9	9.0
1977 I	369.2	7.3	361.3	327.5	347.1	346.2	5.6
II	391.3	6.0	383.5	373.1	367.7	373.3	7.8
III	425.7	8.8	418.1	383.8	399.0	400.5	7.3
IV	506.0	18.9	520.1	423.3	457.5	466.2	16.9
1977							
July-October	432.9	8.3	426.7	393.3	403.4	407.3	9.1
November-December	533.8	23.3	560.0	427.5	477.4	487.7	19.7
1978[b] IA	551.2	8.9	587.7	478.7	501.0	519.1	11.3
IB	567.7	12.2	605.3	478.7	501.0	523.8	12.4

NOTES:

a These data are for industrial exports excluding diamonds, minerals and fuel. For explanations of the calculations see Appendix.

b Calculations for the first quarter of 1978 are based on partial data and appear in two alternative

V-5

PROFITABILITY, 1966–1977

Export profit-ability relative to inputs (1)/(5) = (6)	Change from previous period (6")	Output prices in do-mestic market (7)	Change from previous period (7")	Relative price to exporter (1)/(7)= (8)	Change from previous period (8")	Compen-sation com-pared to wage per output unit (9)	Change from previous period (9")
79.4		74.3		74.8		68.4	
100.0	25.9	100.0	34.6	100.0	33.7	100.0	46.2
104.3	4.3	117.8	17.8	106.5	6.5	108.1	8.1
100.6	–3.6	166.1	41.0	104.3	–2.1	109.5	1.3
104.9	4.3	222.1	33.7	111.1	6.5	119.0	8.7
103.7	–1.1	270.5	21.8	112.9	1.6	113.6	–6.5
106.7	2.9	347.8	28.6	121.7	7.7	112.6	–0.9
105.9	2.9	210.9	11.4	114.1	4.9	119.6	3.2
106.7	0.8	217.9	3.3	112.7	–1.3	123.0	2.8
103.4	–3.1	221.2	1.5	109.0	–3.3	115.1	–6.4
102.8	–0.6	238.3	7.7	107.9	–0.9	116.8	1.5
103.8	1.0	248.2	4.2	109.9	1.8	118.3	1.3
103.6	–0.2	264.8	6.7	112.2	2.1	114.3	–3.4
102.7	–0.9	274.4	3.6	112.5	0.3	111.5	–2.5
104.9	2.2	294.4	7.3	116.9	3.9	111.7	0.2
106.6	1.6	308.6	4.8	119.6	2.4	114.7	2.6
104.8	–1.7	329.4	6.7	118.8	–0.7	106.5	–7.1
106.3	1.4	350.9	6.5	121.3	2.1	112.5	5.6
108.5	2.1	402.4	14.7	125.7	3.7	116.8	3.9
106.3	1.4	356.6	8.3	121.4	2.2	111.4	4.6
109.5	3.0	416.4	16.8	128.2	5.6	119.9	7.6
106.2	–2.1	440.6	9.5	125.1	–5.0	108.9	–6.8
108.4	–0.1	440.6	9.5	128.8	2.5	112.5	–3.7

forms: calculation IA does not reflect price rises abroad; in calculation IB price rises in dollars at the rate of 3 percent were taken into account, as an example, compared to last quarter of 1977. Rates of change appearing in the calculations are as compared to last quarter of 1977.

Policy measures adopted in recent years were intended to create a structural change in the economy in favor of exports, and, indeed, some of the examinations reveal that changes are taking place in the desired direction. In the years 1975–1977, particularly in the last two years, the average growth rate for export seems to be higher than the growth rate that could have been assumed for the economy in the absence of the present conditions of restraint. Thus, for instance, exports in the years 1976 and 1977 increased at an annual average of 13 percent, while the productive capacity of the economy increased by 7 percent (9.5 percent in exports, as against 7.5 percent in productive capacity between 1975 and 1977). In industry, there was an average growth of 24 percent in industrial exports (excluding diamonds) during those years, as against a growth of 9 percent in the last three years. During those years the gap between the growth rates of exports and of total productive capacity exceeded the gap in the years 1969–1972. The average trend in the years 1973–1977 (see Table V-5) therefore reflects two subperiods with opposite trends: the years 1973 and 1974 (and to a certain extent 1975 as well), in which there was a strong decrease in the relative growth of exports, and the years 1976 and 1977, in which exports increased at a rapid rate as compared to total productive capacity.

Since the sectoral composition of employees in industry did not vary much in recent years, and capital accumulated relatively quickly in sectors displaying rapid export growth[8], one can, in summation, ennumerate the causes contributing to the considerable growth of exports : (a) an increase of employment in production for exports at the expense of employment in production for domestic destinations; (b) the increase of productivity; (c) the increased importance of capital among productive factors. It is possible that the productive factors in industry geared themselves to accord with the shift towards exports that had taken place in the sector product destination. But in the economy as a whole, there was no shift of employment to industries with an export potential. The influx of employees in recent years was diverted to the various service sectors. From the construction industry, employees were not released in numbers commensurate with contraction in the sector, and the number of employees in industry was similar in 1977 to the 1974 level. Despite a number of positive exceptions (such as the slow increase of employment in industry in the last two years after a recession in this area in 1975, and the growth of employment in the tourism services sectors), the general conclusion remains unaltered: changes in the employment structure did not abet desired structural changes in the economy. To a large extent, this is the result of the expansionary employment policy of the public sector in recent years.

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8 See Chapter XV.

Developments in the world economy, and the fluctuations in the volume of Israel's foreign markets contributed more lately than in the past to changes in exports. Given a background of stagnation in the Israeli economy, the erratic nature of both terms of trade and the relative prices of exports, plus the uncertainty surrounding the future development of the economy, international economic developments have a greater role than in the past in explaining export behavior. Since 1973, the world economy experienced a recession and a subsequent recovery. The recovery of large industrial economies, which started in the second half of 1975, slackened over the course of 1976, and their combined GNP, which had decreased by 1.5 percent in 1975, increased by 5.5 percent in 1976 and by 4.0 percent in 1977.

Israel's foreign markets expanded this year at a rate of 5-6 percent, about half to two-thirds of the previous year's rate of expansion[9]. The impetus to Israeli exports provided by the growth of the world market in 1977 was much smaller than in 1976, when the world economy recovered from the recession .

Changes in world trading patterns also influence the composition of Israeli exports. In recent years, the importance of developing nations in the world trade of traditional industrial products increased considerably. This increase was based mainly on the availability of cheap manpower in these countries. Together with other factors, this affects the continuously decreasing real share of industrial exports retained by industries such as textiles, clothing, wood, and plastics.

A number of changes took place in recent years in the policy of export promotion through the rate of exchange. In July 1975, the method of "creeping devaluations" of the official exchange rate was introduced to provide a more gradual and continuous adjustment of the exchange rate to the rapid inflation. Since March 1976 a creeping

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[9] The differences in the intensity of the change according to different indicators should be noted (see Table V-8). Imports of industrial countries, which are the main countries of destination for Israeli exports, include raw materials which are part of Israeli exports (except minerals). The exports of industrial countries are similar in nature to that of Israel, and they can serve as an approximation of the changes in the export markets of Israel, but their countries of destination are not always identical with those of Israel. World import data also include trade of countries with which Israel does not trade, but which nevertheless affect export markets indirectly through their trade with other countries. Attention is being drawn also to the effect of special conditions in certain years on the various indicators: in 1974, for instance, exports of industrial countries increased as a result of the imports from the OPEC countries, while their imports reflected the beginnings of their economic recessions; the year 1976 was remarkable due to the considerable increase of trade in crude oil, in which Israel does not participate, and this enhanced the growth rate of imports in that year and reduced it in 1977.

TABLE

COMMODITY EXPORTS

(Index: 1972 = 100.0;

		Other agricul-tural exports	Mining and quarrying	Food	Textiles clothing & leather	Other light industry[b]
1973		94.4	87.9	99.8	93.6	94.8
1974		97.7	103.5	98.5	91.2	89.6
1975		130.9	87.7	90.2	88.0	89.8
1976		168.5	85.3	109.9	101.4	105.5
1977		200.8	123.6	115.7	106.6	128.1
1974	I	77.4	88.6	107.7	101.2	95.6
	II	123.5	97.9	108.7	92.0	87.5
	III	85.6	117.6	89.9	89.6	90.8
	IV	101.7	111.9	98.1	83.4	85.6
1975	I	118.9	108.8	93.4	78.9	82.3
	II	116.0	94.9	83.7	80.9	88.8
	III	129.6	63.3	97.0	90.6	93.0
	IV	156.8	80.4	95.5	98.8	93.9
1976	I	164.8	80.3	99.4	100.7	91.0
	II	156.2	83.4	106.3	101.8	103.0
	III	185.1	89.1	121.5	102.0	105.3
	IV	179.4	88.0	121.2	100.4	117.2
1977	I	170.1	96.7	105.9	113.0	135.7
	II	197.9	110.5	123.9	105.7	127.2
	III	208.0	124.4	117.2	194.1	124.3
	IV	236.0	161.7	124.9	103.6	128.2
1978	I[d]	267.6	132.8	136.5	116.0	150.4

[a] The adjustment was made from quarterly data, in order to take seasonal prices into account.
[b] Exports of wood, paper, printing, rubber and plastics, nonmetallic and other industries.

AT FIXED PRICES, 1972–1977

seasonally adjusted data[a])

Chemicals, excl. fuel	Metal & electronics industries[c]	Diamonds gross	Industrial exports, excl. diamonds	Industrial exports excl. diamonds, quarrying & fuel	Industrial exports excl. diamonds quarrying fuel & defense exports	Total net exports, excl. ships & aircraft
118.9	100.9	112.2	98.5	100.0	100.8	103.0
168.0	131.5	109.7	110.6	111.8	112.6	108.8
165.6	168.9	111.5	109.4	117.6	107.4	110.3
180.4	259.2	129.8	142.7	150.9	124.7	135.2
216.2	318.5	131.5	169.4	176.5	143.5	150.9
149.5	115.3	109.4	109.3	110.4	113.5	106.2
166.1	124.7	109.1	109.9	111.6	114.4	109.0
180.9	143.5	104.1	116.2	116.5	118.0	109.9
173.3	138.8	115.8	108.6	109.7	110.3	110.6
172.3	156.7	105.4	107.7	113.0	109.6	106.0
160.8	157.8	115.1	105.0	111.2	103.0	108.0
153.8	145.4	112.8	104.7	114.5	107.5	109.4
173.7	210.7	112.8	120.9	131.9	115.5	117.8
154.8	225.8	117.8	128.5	134.3	114.9	123.6
178.7	260.5	120.8	140.3	149.1	123.3	131.2
183.1	272.0	139.8	150.2	159.3	127.4	143.6
202.5	272.1	141.2	151.2	160.2	137.3	144.4
208.0	242.2	155.5	150.1	158.1	139.4	146.8
209.0	284.4	125.0	160.1	168.0	147.8	144.9
225.3	349.2	118.1	181.0	186.7	146.4	152.0
223.5	376.3	124.7	185.5	192.3	146.9	160.3
252.9	340.0	142.9	187.7	217.1	163.7	162.3

[c] Industrial exports of metal and metal products, machinery, transport equipment, electricity and electronics.

[d] The data are temporary. Indexes are calculated from export data at prices of the last quarter of 1977.

devaluation of export incentives, proceeding at a similar rate, was linked to this method, superseding the previous method which had made possible differential devaluations to various export groups. In 1976, the policy of linking the IL to the dollar yielded to linkage to a "basket" of five currencies. This was done to guarantee that total revenues of exporters in IL would not fluctuate as a result of changes between the various exchange rates of currencies included in the basket. In 1977, a general reform in the field of foreign currency was introduced, comprising, among other things, a fully uniform effective exchange rate for all types of exports in the economy and their import comonent. Simultaneously, a devaluation was effected, and the exchange rate was allowed to float.

The exchange rate reform was accompanied by a very significant rate depreciation to most service exports that had previously suffered discrimination. We shall probably observe its effect in the future development of the service sectors that are sensitive to exchange rates: mainly exports of tourism and "other services". It can be assumed that the influence on exports of transportation and insurance will be small.

The effective depreciation of the exchange rate in the export of commodities amounted to 6 percent, comprising 8 percent in agricultural exports and 4 percent in industrial exports. (Changes of the effective exchange rates for added value varied, for instance, between a devaluation of 13 percent in the diamond sector and a revaluation of 4 percent in rubber and plastic products.)

The unification of exchange rates exposed the inherent distortion in the great difference that had prevailed in exchange rates for added value in exports. The wide variety in devaluation rates that ensued in the various sectors of industrial exports reflected the elimination of an existing distortion.

The effective exchange rate was unified for exports, but it remains discriminatory in respect of uses, where the export component is subject to varying customs duties. The dispersal of protective rates on industrial import substitutes has not changed at all, and the discrimination in exchange rates between exports and industrial import substitutes, in favor of the latter, actually increased from 20 to 30 percent[10]. The reduction of customs duties is part of a policy of exposure to competition that has been in force for a long time (and a further small reduction of customs duties was affected in October 1977). But the logic of increasing economic efficiency that underpinned the unification of exchange rates in exports likewise necessitates an adequate rapid reduction of customs duties in order to approach a uniform rate in import substitutes and exports.

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[10] For a detailed discussion see the article of J. Baruch, in the forthcoming Survey of the Bank of Israel.

TABLE V-7

UNIT WAGE COSTS IN ISRAEL AND INDUSTRIAL COUNTRIES[a], 1965–1977
(Index: 1970 = 100.0)

Year	Israel			8 largest industrial countries		Unit wage cost ratio between Israel and the Eight	
	Unit wage cost	IL price to exporter	Unit wage cost less return to exporter	Unit wage cost less return to exporter	Unit wage cost discount-ing domestic exporter	(3):(4) =	((3):(5) =
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1965	85.4	69.3	123.2	101.7	102.2	121.2	120.6
1966	94.6	73.4	128.9	102.0	101.6	126.4	126.9
1967	94.6	80.4	117.7	100.4	99.0	117.2	118.9
1968	90.2	88.0	102.5	98.4	99.6	104.2	102.9
1969	90.2	91.3	98.8	97.9	99.3	100.9	99.5
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1971	105.7	114.7	92.2	103.2	100.4	89.3	91.8
1972	113.9	132.1	86.2	105.3	99.7	81.9	86.5
1973	129.2	165.8	77.9	102.8	96.9	75.8	80.4
1974	170.5	228.9	74.5	94.5	86.9	78.8	85.7
1975	236.2	326.0	72.5	98.1	92.9	73.9	78.0
1976	307.2	403.5	76.1	93.8	87.7	81.0	86.8
1977	430.0	558.9	76.9	92.9	87.0	82.8	88.4

a Column (2) – the effective exchange rate doubled in the export price index in dollars (industrial exports, excluding diamonds).
Column (4) – the data of the eight countries have been weighted according to each country's weight in the total exports of these countries.
Column (5) – the data of the eight countries have been weighted according to each country's weight in Israel's industrial export, excluding diamonds.

b Discounted by the exchange rate.

SOURCE: British National Institute (N.I.E.R.), International Monetary Fund (I.F.S.) and O.E.C.D.

TABLE V-8

REAL TRADE CHANGES IN EXPORT MARKETS, 1973–1977
(percent)

	1973	1974	1975	1976	1977
1. World imports	13.0	5.0	–4.5	12.0	5.0
2. Import of industrial countries	12.5	1.0	–7.5	14.5	5.0
3. Export of industrial countries	14.0	7.5	–4.5	10.5	5.0
4. Import of industrial countries weighted by each one's share in Israeli export[a]	8.1	–1.3	–7.1	17.4	6.5

[a] Import of 17 countries is weighted by each one's share in the industrial export, excluding diamonds, in 1976.

SOURCE: Lines 1–2 – processed according to International Monetary Fund data. Line 4 – Bank of Israel data.

The minimal effective devaluation in export of commodities and the repercussions that the floating of the exchange rates will have on the dynamics of the exchange rates. place the influence of the new economic arrangements on exports in question. The profitability of industrial exports surely increased in the months of November-December 1977 due to the lag in price and wage increases following the devaluation. Temporary data permit us to assume that in the first quarter of 1978 the profitability of exports did not drop beneath its level prior to October 1977. The dubiousness concerning a continued increase in the profitability of exports stems from economic developments in the remaining part of 1978. The new wage agreements herald an accelerated wage increase in industry in the course of 1978. Given the evident resurgence in domestic demand in recent months, there are grounds to fear that the profitability of exports in the coming months will be harmed.

3. Commodity Exports

In 1977, the real growth rate in the export of commodities amounted to 11.5 percent, about half its rate in 1976. This development reflects a pronounced deceleration in the growth of military exports and the export of diamonds, as well as a decline in agricultural exports – decelerations that overshadowed the strong surge in the export of minerals and chemicals.

Agricultural exports increased this year in real terms by 10 percent (as against 9 percent in 1976). Citrus exports grew by 3 percent and the rate of growth for other agricultural exports slowed from 29 percent to 19 percent. The price increases in 1977 for the two main components of agricultural exports was equal (contrary to the trend in previous years) and similar to the general rate of price increases in Western Europe. The relative stability in the export of citrus fruit in the past two years expresses the long-term equilibrium reached by the sector: a considerable part of the market is controlled by Israel, and since new markets have not been penetrated, changes in demand are restricted to those arising from changes in consumption patterns and changes in per capita consumption in the target countries. The situation is different for other agricultural export. There exists a very great marketing potential in most products, and exports have been climbing rapidly for a number of years. After a great leap forward in 1975, there was a lag in the rate of growth of exports in 1976 and 1977, but it is possible that the pace stepped up again in the latter half of 1977 and at the beginning of 1978. The expanded and cheapened air transport facilities in the past year exerted a positive influence on agricultural exports. Exports hitherto unviable (technically) via sea transport were now viable, and the profitability of certain crops increased.

Data for the diamond sector, an export sector par excellence, pose a number of questions. Gross export increased in real terms by about one percent, as against 16 percent in the previous year. The increase of exports took place along with a price increase of 35 percent (at the end of 1977, export prices in dollars were 55 percent higher than at the close of 1976). The trend in the export of raw diamonds was totally different: their prices increased by 15 percent, and there was a quantitative growth of 30 percent. The differences in the development of diamond imports and exports is in fact an accentuation of similar trends prevailing in both 1975 and 1976. The ratio of imports to exports at constant prices increased between 1976 and 1977 from 0.75 to 1.18 and clearly signifies a considerable growth in the raw material inventory in the sector.

Such a prolonged lag of the import prices behind the export prices, despite a deterioration of the terms of trade of the sector in the years 1974-1975, is puzzling. The international cartel of raw material, which is the source of most of the raw diamonds in the world and directly supplies almost 50 percent of Israeli imports, did not raise its prices at a sufficient rate, and this was the main reason for the lag in import prices, (and indeed, prices have just been raised by about 40 percent as an obvious adjustment step). On the secondary raw diamond market, where Israel purchases the remainder of its raw materials, there was a price increase twice as high as that of the cartel in 1977. The quick growth

TABLE

CHANGES IN EXPORTER COMPENSATION

(per-

	Increase or (–) decrease				
	1973	1974	1975	1976	1977
1. Export prices in dollars[a]	18.3	24.3	9.3	–1.4	7.8
2. Dollar exchange rate against basket of 15 currencies[b]	7.4	–0.7	3.3	–6.4	2.8
3. Export prices, deducting the influence of currency fluctuations, [(1):(2)][c]	10.1	25.2	5.3	5.3	4.8
4. Average effective IL exchange rate against the dollar	4.9	10.6	34.6	25.8	27.6
5. Average effective IL exchange rate against basket of 15 currencies, [(2)x(4)]	12.7	9.8	39.0	17.7	31.2
6. Exporter compensation excl. influence of currency fluctuations, [(3)x(4)]	15.5	38.5	42.3	32.4	33.8
7. Exporter compensation in IL [(1)x(4) or (3)x(5)]	24.1	37.4	47.0	24.0	37.5

a Commodities exports excluding diamonds and fuel.
b Weight of fluctuations in the dollar rate against the 15 currencies according to the

V-9

COMPONENTS, 1973–1977
cent)

from previous period								
1976				1977				1978
I	II	III	IV	I	II	III	IV	I
1.2	–2.0	2.3	4.1	0.7	1.8	3.1	1.5	
–0.6	–2.1	–0.1	1.1	1.1	0.5	1.0	2.4	4.5
1.8	0.1	2.4	3.0	–0.4	1.3	2.1	–0.9	
4.4	6.3	5.2	6.8	5.6	4.0	6.7	14.7	9.4
3.8	4.1	5.1	8.0	6.8	4.5	7.8	17.4	14.4
6.3	6.4	7.8	10.1	5.2	5.3	8.9	13.7	
5.7	4.1	7.6	11.3	6.3	5.9	10.0	16.4	

relative weight of each country in export to Israel.
c Reflects the export prices in the currency of the destination countries.

of export prices in relation to import prices raises suspicions that stock accumulation was made for speculative reasons. Accumulation was aided by financing through diamond funds of the Bank of Israel at an interest rate of 6 percent. There are some signs that the diamond sector has begun to trade in raw materials in addition to exporting polished diamonds (thus, for instance, "returned imports" should be considered exports of raw materials). It is possible that the trend affects the increase of the business inventory of raw diamonds. Theoretically, there also was a motive for a fictitious exaggeration of import data (until October 1977), because the exchange rate for diamond exports was higher than the free rate, and the right to sell dollars at this rate was allotted according to the volume of actual imports. As mentioned, the syndicate raised prices of raw diamonds sharply at the beginning of 1978, and it seems that a period of relatively quick increase of import prices is to be expected. This will cut into the improvement that had taken place in the sector's terms of trade and reduce raw material stocks.

The following discussion refers to segments of industrial exports subject to the influence of nearly identical factors. Thus, for instance, exports of diamonds, minerals, and fuel were excluded from total exports; diamonds and minerals being export branches par excellence (there is no real substitute for them on the domestic market), and fuel is a mostly conjunctural export, bearing only a modest influence on the use of domestic production factors. Military exports are also discussed separately, since they are affected by special considerations – apart from the usual factors of profitability, etc.

Industrial exports, excepting diamonds and fuel, increased this year by 18 percent in quantitative terms as against 26 percent in 1976. Prices increased in these exports at a rate of 6.5 percent after a decrease of 3.5 percent in the previous year. The decline that took place this year stems from difficulties impeding the continued rapid expansion of military exports. The "civilian" part of exports (excepting diamonds, minerals, and fuel) continued to grow in 1977 at a rate of 15 percent, similar to that of last year.

In the export of minerals, the trend of growth was renewed in mid-1976; this trend was reinforced in the course of 1977 reflecting principally exports of potash. In the export of phosphates there were supply limitations, difficulties stemming from haulage difficulties in the ports. The level of international prices stabilized in the course of 1977 following heavy drops in the last two years, and it is still far below the peak achieved at the beginning of 1975. In the export of products from the chemical sector, where a considerable excess capacity has existed since 1975, a clear upward trend began in mid-1976 in both quantities and prices. During the current year this recovery was concentrated in the branches of basic chemistry and pesticides, while exports of the pharmaceutical branch, whose development is dependent upon the capability to meet standard requirements of the destination countries, did not grow this year.

In "military exports"[11] growth slowed severely. After posting an annual increase of about 80 percent in 1975 and 1976, military exports increased in 1977 by only 22 percent. This development in turn lowered the growth rate for the metals, machinery, transport vehicles, and electronics branches – where exports have grown relatively quickly in recent years – from 54 percent in 1976 to 22 percent this year. The rapid growth of military exports in the years 1975 and 1976 relied on a number of factors. As specialization and reputation enabled Israel to develop a comparative advantage in the production of military products, the reduced domestic military demand for industrial products in 1975 and 1976 released a considerable volume of productive capacity. There is a great substitutability in the production of military goods between exports and the domestic market, and it would have been easy to channel surplus productive capacity to export. Accordingly, the restraint of domestic demand had in this case a rapid and comprehensive influence in expanding exports. The 1975 and 1976 breakthrough in military exports also benefited from the large scale expansion of the world market for military products after the Yom Kippur War[12].

Since the end of 1976 and in the course of 1977 it became clear that political considerations restrict the continued growth of military exports. The main slowdown was in products which include American know-how and components, while in exports based on local developments, the deceleration was much less pronounced. This development confirms previous estimates that this export segment is subject to the relatively strong influence of non-economic factors which involve no small degree of uncertainty.

A new trend observed in the past, a decrease in the weight of traditional industries and a rise in the weight of industries based on modern technology, continued this year as well. (See Table V-11 "Light industries" as against the rest.) In the light industries group, the deceleration of food exports and the decline in textile exports stood out this year, while exports of the clothing sector increased at the 1976 rate. In the civilian part (i.e. excluding military exports) in the metals, machinery, transport vehicles, power, and electronics branches, the continued rapid quantitative growth is striking (24 percent in 1977 and 21 percent in 1976). In exports of "miscellaneous industries", some of which bear the nature of technologically based industries, (instruments and laboratory equipment), the rapid growth that had characterized the year 1976 continued in 1977 as well.

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11 Data on "military exports" in this chapter are based on exports of the main producers of these products. In addition to the export of military products, the data include a component of civilian products due to the impossibility of making a statistical distinction between the two.

12 See a more detailed explanation in the 1976 Report.

TABLE V-10

EXCHANGE RATES FOR COMMODITY EXPORTS

	Official exchange rate	Effective rate in the high incentive group	Average effective rate for industrial exports	Overall effective rate for industrial exports	Effective rate for import for export production	Effective rate for commodities with added value of		Effective rate corrected by import & export prices on commodities with added value of	
						45%	60%	45%	60%
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(Agurot to the dollar)					Indexes (Basis 1972 = 100.0)			
1972	420.0	512.6	510.9	507.5	504.0	100.0	100.0	100.0	100.0
1973	420.0	540.2	535.8	532.9	507.3	109.1	108.5	120.2	124.2
1974	445.6	600.2	593.7	599.0	563.5	120.9	120.6	158.3	167.9
1975	632.8	809.1	797.6	803.2	727.7	166.8	167.4	241.2	252.3
1976	794.0	1,014.0	1,001.9	1,007.6	913.1	207.6	209.0	296.5	310.9
1977	1,049.2	1,290.5	1,276.5	1,297.2	1,167.1	264.5	265.2	409.4	427.3
	Annual increase or (–) decrease (percent)								
1973	0.0	5.4	4.8	5.0	0.7	9.1	8.5	20.2	24.2
1974	6.1	11.1	10.8	12.4	11.1	10.8	11.2	31.7	35.2
1975	42.0	34.8	34.3	34.1	29.1	38.0	38.8	52.4	50.3
1976	25.5	25.3	25.6	25.4	25.5	24.5	24.9	22.9	23.2
1977	32.1	27.3	27.4	28.7	27.8	27.4	26.9	38.1	37.4

Indexes (Basis 1972 = 100.0)

1975	I	142.7	147.6	146.2	148.6	136.9	154.5	154.7	226.1	239.4
	II	143.2	152.2	150.3	151.5	137.3	161.7	162.1	243.0	253.2
	III	148.7	157.9	155.9	156.1	142.5	167.2	168.2	236.1	247.8
	IV	167.6	173.4	171.7	172.9	160.7	183.4	181.9	256.8	262.7
1976	I	174.7	180.6	179.1	180.2	167.4	187.2	189.4	266.5	278.3
	II	183.8	192.1	190.4	191.7	176.2	201.3	202.7	292.9	304.7
	III	193.3	202.1	200.4	199.7	185.3	212.0	213.3	291.1	309.3
	IV	203.9	216.1	214.1	214.7	195.4	229.4	229.9	334.3	350.7
1977	I	214.3	228.2	225.9	226.8	205.4	242.7	243.4	365.2	380.6
	II	221.9	237.5	235.0	236.6	212.6	253.3	254.1	385.6	403.4
	III	235.7	253.4	250.7	249.8	225.9	271.0	271.7	417.9	438.4
	IV	326.3	287.3	287.1	292.9	281.6	290.7	291.1	473.5	489.8
1978	I	381.6	312.8	313.9	316.5	318.2				

NOTES:

Column 3 – Average of the effective rate in the various incentive groups, weighted in fixed weights of the export division among those groups in previous year.

Column 4 – Average of the effective rate of each product according to its weight in exports during the year. This rate expresses the actual compensation of each export dollar, but contrary to the average rate, part of the changes for each year stem from changes in export composition during the year. There is also a seasonal component in this rate.

Column 5 – The official rate plus the defense levy on imports.

Columns 6–9 Calculation of the rate to value added was made according to the effective rate in the suitable incentive group. The corrected rate was calculated according to price indexes in dollars for industrial exports and import inputs. The industrial exports in this Table do not include diamonds, quarrying and fuel.

This process of continued change in the sectoral structure of industrial exports apparently reflects a change in the system of comparative advantages for economic sectors. This change itself is the result of various factors. On the one hand, the importance of developing nations in the world trade of traditional industrial products is growing. In these countries, manpower is relatively cheap, and this leads to reduced Israeli competitiveness in these areas. On the other hand, industry, via its growth pattern in the last decade, developed expertise in products of the metals and electronics branches, which raised the competitiveness of the economy in these branches.

As mentioned, the civilian part of total industrial exports (excluding diamonds, minerals and fuel) continued to grow in 1977 at a rate similar to that of 1976. Contrary to the previous year, the effect exerted by expanding world markets on the growth of exports was relatively small. The increase stemmed mainly from factors connected with the profitability of exports and conditions generally prevalent in the Israeli economy.

4. Exports of Services

Exports of services, excluding exports to the administered areas and based on CIF import records, increased in 1977 by $433 million as against $743 million in 1976. The rate of real growth was exceptional as compared to the past – 16 percent. In the recent years, export of services increased at a slower pace than the export of commodities: between 1973 and 1977, real exports of services increased by 35 percent, as opposed to a 50 percent increase in the export of commodities.

About half the current developments in the export of services are chiefly determined by various factors abroad. This half includes mainly transportation and tourism services (excluding the transport of imports and exports of the economy). The influence of the economy on these sectors is exerted through general price levels, which help determine the competitiveness of these sectors abroad, and through investments, which determine capital stock and the long-range productive capacity of these sectors.

More than $200 million, about half the growth in the export of services this year, derives from the growth of revenues from transporting tourist and selling services to them in Israel. Estimating the real growth in revenues from tourists in Israel (44 percent in 1977 and 17 percent in 1976) is most thorny. Income from the tourism sector as recorded in the balance of payments comprises only receipts from foreign exchange conversions transacted in banks, both by tourists and suppliers of services to tourists. Thus, it does not comprise the economy's total income from tourism. Fluctuations in the figure, along with variations in the number of tourists and their average expenditure in the country,

TABLE V-11

DIRECT EXPORT WEIGHT IN INDUSTRIAL OUTPUT, BY TYPE, 1969–1977

(percent)

	Average 1969-1972	1973	1974	1975	1976	1977
LIGHT INDUSTRIES						
Growth in exports	15.2	–5.1	–2.8	–2.5	19.9	8.7
Growth in total output	10.1	7.3	1.1	–1.2	5.2	6.6
Direct export	2.5	–0.9	–0.4	–0.4	3.0	1.5
Export weight in output	17.5	15.6	15.0	14.8	16.9	17.3
Export weight in output[a]	16.6	17.2	14.7	13.7	15.5	16.5
CHEMICAL INDUSTRIES						
Growth in exports	15.6	19.0	41.6	–1.6	8.8	20.0
Growth in total output	14.2	7.6	12.5	1.2	8.3	10.0
Direct export	2.9	3.7	8.9	–0.4	2.3	5.3
Export weight in output	18.5	21.5	27.1	26.3	26.4	28.8
Export weight in output[a]	25.3	30.7	35.8	39.4	36.4	39.0
METAL AND ELECTRONICS INDUSTRIES						
Growth in exports	11.8	0.5	32.5	28.4	49.5	22.2
Growth in total output	15.1	3.3	10.6	9.0	4.9	5.2
Direct export	1.0	0.0	2.9	3.0	6.2	4.0
Export weight in output	8.9	8.9	10.7	12.6	17.9	20.8
Export weight in output[a]	11.2	12.1	12.3	15.5	22.1	27.4
TOTAL INDUSTRIES						
Growth in exports	14.5	–1.5	10.1	5.8	26.6	15.2
Growth in total output	11.7	5.9	5.2	2.6	5.3	6.5
Direct export	2.0	–0.2	1.4	0.8	3.9	2.7
Export weight in output	14.3	13.6	14.2	14.6	17.6	19.1
Export weight in output[a]	14.9	16.0	15.4	16.2	18.9	21.4

a At current prices and effective exchange rate: elsewhere – calculated at producer prices, fixed 1968 prices.

DEFINITIONS: Light industries: Food, textiles, clothing, leather, wood, nonmetallic minerals, rubber and plastics, and other industries. Chemical industries: chemicals, excluding fuel exports. Metals and Electronics industries: metal and metal products, machinery, transport equipment, electricity and electronics. Total industries: all industries excluding diamonds, quarrying and fuel.

SOURCE: Bank of Israel calculations.

TABLE

EXPORTS OF

	1972	1973	1974	1975
				($ million,
TRANSPORT	389.7	472.5	736.2	738.1
Export shipments	33.5	42.2	62.4	77.6
Shipments between foreign ports	134.3	164.4	284.5	263.8
Import shipments with Israeli firms	71.8	104.8	167.5	181.2
Passengers	79.9	81.9	101.6	107.0
Other	70.2	79.2	120.2	108.5
INSURANCE	151.8	182.5	249.7	221.3
Export shipments	5.8	7.2	10.7	8.6
Import shipments with Israeli firms	6.1	12.2	14.6	14.4
Other	139.9	163.1	224.4	198.3
Tourism	212.2	230.4	195.0	233.3
Capital services	127.0	239.7	354.0	321.1
Government n.e.s.	27.0	19.0	26.0	24.0
Other services	128.6	145.3	172.2	185.5
Total	1,036.3	1,289.4	1,733.1	1,723.3

[a] Exports, FOB, imports, CIF, excluding exports to the administered areas.

V-12

SERVICES[a], 1972–1977

1976	1977	Annual increase or (–) decrease in quantity					1977 indices based on 1972	
		1973	1974	1975	1976	1977	Quantity	Price
at current prices)		(percent)						
782.7	914.6	12	22	2	0	12	156	151
85.8	107.8	15	13	25	5	22	107	156
306.9	344.6	11	32	–7	10	9	165	156
164.7	182.6	33	24	9	–14	8	166	153
129.8	172.5	2	3	0	8	25	142	152
95.5	107.1	0	25	2	–13	5	116	131
241.6	288.9	4	12	–22	1	10	100	191
7.0	4.0	–4	27	–26	–20	–51	36	190
13.5	13.9	56	–8	–2	–4	–5	129	177
221.1	271.0	2	12	–24	2	13	101	192
291.6	455.1	–7	–35	20	17	44	122	176
311.7	349.3	60	21	–12	–6	0	160	172
21.0	24.0	–39	4	–7	–16	11	55	162
208.0	257.9	–3	–10	9	7	22	124	162
1,856.6	2,289.8	10	6	–2	2	16	135	164

also reflect changes in the rate of conversions in banks. These are connected mainly with the gap between the official exchange rate for the dollar and the dollar's rate on the black market (see Figure V-1), and their fluctuations are numerous: the average conversion per tourist in 1977 was \$ 461, as against \$ 366 in 1976, \$ 377 in 1975, and \$ 372 in 1974[13]. Real growth was estimated by deducting the nominal change in foreign exchange revenue from tourists from the change in the price of services to tourists in dollars, and thus, quantitative changes also include changes in conversion rates in banks. An alternative measure of the quantitative change in the export of tourist services which relies on a real indicator, such as a change in the number of tourists, indidates that tourism increased in 1977 by about 24 percent, and in 1976 by about 28 percent. If statistical calculations were based on this alternative estimate, the estimated growth of service exports would total about 13 percent in 1977 and about 3 percent in 1976 (as against 16 and 2 percent in the same years). Growth in general, which amounted to 13 percent in 1977 and 14 percent in 1976, would be about one percent greater in 1976 and about 2 percent greater in 1977.

The boom in tourism[14], for the second consecutive year, followed a sharp decrease in the number of tourist during 1973 and 1974 and stabilization in 1975. The number of tourist in 1977 reach 986,000 compared to 121,000 in 1972. The development of tourism to Israel in recent years is the result of different trends in tourism from North America and other parts of the world, principally Western Europe. The decline in tourism from the U.S. and Canada, chiefly Jewish tourism, had already commenced in 1973 before the Yom Kippur War. Despite the recovery evidenced in the last two years, this tourism has no yet attained the level of 1972. Other tourism, which decreased only slightly in the year following the Yom Kippur War, was 64 percent higher in 1977 than its 1972 level, and its weight in total tourism increased from 57 to 69 percent respectively.

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13 Average conversion per tourist was at a peak level of \$510 in the first quarter of 1975 (seasonally adjusted data); it decreased steeply to a level of \$305 in the second quarter of 1976 and increased at the end of the same year to \$465. In the course of 1977 average conversion decreased, and it decreased again in the third quarter to a level similar to that at the end of 1976. Data for the last quarter of the year is greatly biased upwards this year, as a result of the inclusion of conversions by returning residents together with tourist conversions in the reports submitted by banks following the foreign exchange reform. Average conversion in this quarter stood at \$663.

14 For detailed data on developments in tourism, see Chapter XV.

TABLE V-13

INFLUENCE OF UNIFICATION OF EXCHANGE RATES ON EXPORTS, 1976–1977

	Distribution in 1976: Exports	Distribution in 1976: Added value in exports	Added value in foreign currency[a] in 1976	Effective exchange rate to export dollar[b]	Effective exchange rate to added value dollar[b]	Devaluation ratio[c] according to IL 15.20 rate to dollar
	(percent)		(percent)		(IL to dollar)	
Total commodity exports (excluding fuel estimate and other exports)	100	100	48.0	12.61	14.30	6.3
Agriculture	14	23	79.0	13.62	14.08	8.0
Citrus	7	12	77.0	13.62	14.13	7.6
Other	7	11	82.0	13.62	14.00	8.6
Diamonds	34	15	20.0	10.97	13.45	13.0
Quarrying	3	5	84.0	13.62	13.39	13.5
Other industry	49	57	56.0	13.43	14.63	3.9
Food	7	9	62.4	13.46	14.40	5.6
Textiles and clothing	8	10	57.0	13.25	14.27	6.5
Textiles and clothing[e]	8	10	57.0	13.75	15.14	0.4
Leather	0	1	67.1	13.15	13.76	10.5
Wood	1	1	56.9	13.35	14.45	5.2
Paper & publishing	1	1	71.8	13.40	13.99	8.6
Rubber and plastics	2	2	43.4	13.60	15.82	−3.9
Chemicals (excl. fuel)	8	7	47.7	13.58	15.42	−1.4
Non-metallic minerals	0	0	48.8	13.61	15.40	−1.3
Basic metals	1	1	45.9	12.93	14.14	7.5
Metal products and machinery	10	13	60.7	13.56	14.63	3.9
Electricity and electronics	5	6	54.9	13.48	14.78	2.8
Transport	4	4	51.8	13.09	14.20	7.0
Miscellaneous	2	2	60.6	13.39	14.36	5.8
Total export of general services[f]	100	100	79.0	10.84	10.56	43.9
Tourist hotels	15	15	80.0	12.83	13.06	16.4
Know-how exports	5	6	95.0	12.91	12.96	17.3

a Due to many limitations of the data the added value percentage must be considered only as an estimate.

b The calculation of the effective rate is based only on direct incentives given to the exporter. On 17.10.77, date of the last creeping devaluation before the reform, the official exchange rate was fixed at IL 10.35 to the dollar and the import rate for export at 11.90. The average incentive in the export groups where various incentives existed was built according to the export division between types of incentives in 1976.

c The exchange rate in the first days after the "reform".

d In diamond exports the effective import rate is the official rate.

e In the textiles and clothing branches there were also funds which gave an additional incentive, reaching only about IL 0.5 to the dollar.

f Export of services here does not include export of capital services and direct export of added value (such as various commissions received from abroad). It is nearly certain that most export of services did not profit from the calculation of customs and purchase tax, so that the import exchange rate was higher and the added value rate lower than those in the table.

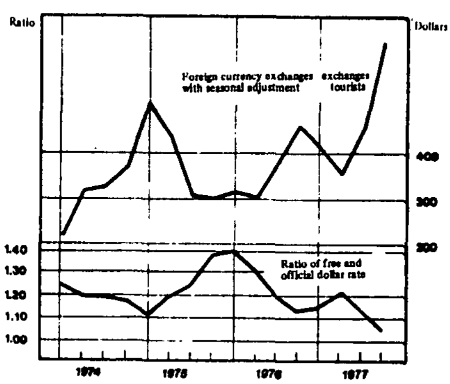
The tourist boom this year relies partly on the expansion of charter flights. This factor assisted the increase in the number of tourists both directly, through the number of those arriving by charter flights, and indirectly, by moderating price increases for regular flights. The tourist sector as a whole received additional encouragement from the unification of exchange rates at the end of 1977. This was connected with the very high rate of devaluation for the sector as compared with the export of commodities.

The export of transport services increased this year by 12 percent in quantitative terms, with uneven developments in the various sub-sectors. The transport of passengers increased at a rate of 25 percent, similar to the growth in the number of tourists. The transport of export cargo increased mainly in its air transport segment, with an expansion in air transport of agricultural products to Europe. The increase in the transport of export cargo is also affected by a 45 percent increase in the export of minerals. Transport between foreign ports reflects mainly the activity of the Eilat-Ashkelon oil pipeline and Zim's long container line. Contrary to 1976, when international fuel trade increased considerably, there were no great changes this year in the volume of fuel transport. However shipping between foreign ports continued to grow at a considerable rate. The item "other transport" reflects mainly the sale of port services to foreign ships and planes and revenue from the leasing of ships.

Cargo insurance is of small dimensions. It is connected to the transport of import and export cargo, and thus not subject to great fluctuations. In the item "other insurance" there is a close relationsip between the credit and the debit sides of the balance of payments, since against the revenue from claims on the credit side, there are payments for premiums and commissions on the debit side, and vice versa. The net balance of "other insurance" is negative, and it amounted to $ 38 million in 1975, $ 15 million in 1976, and $ 33 million in 1977. The credit side of the capital services item contains returns on foreign exchange balances of the economy invested abroad and income from other investment. Profits from investment amounted to $ 150

FIGURE V-1

TOURIST FOREIGN CURRENCY EXCHANGE AND RATIO OF FREE AND OFFICIAL DOLLAR RATES, 1974–1977



million, and they remained at a level similar to that of last year, while the growth of interest on foreign exchange deposits is explained mainly by the growth of foreign exchange reserves.

The export of other services includes mainly payments to domestic production factors for the export of know-how, service of management, maintenance, import agencies, work performed abroad, and various commissions and royalties. The nominal growth of this item in 1977 reached the impressive rate of 24 percent. Prior to the foreign exchange reform at the end of 1977, most of these exports were not eligible for export incentives and the rate of their effective devaluation was therefore high when compared to other sectors of the economy. The influence of this devaluation in the encouragement of exports might find expression in the coming years.