CHAPTER XI

INDUSTRY

1. Main Developments

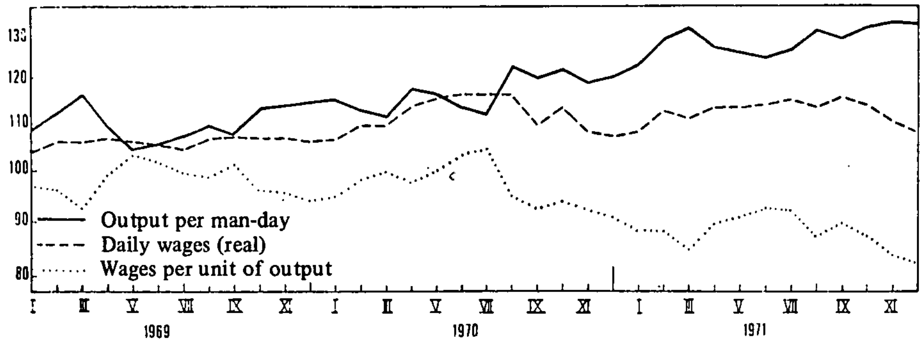
Gross industrial output expanded in 1971 by approximately 12 percent in real terms and totalled IL 13,000 million (at 1970 prices). This was a faster increase than in 1970, and it can be attributed mainly to the recovery of the diamond industry from the slump of the past several years. The rate of growth achieved appears to signify a return to the trend typical of the period 1958-65, after deviating from it during the recession and recovery and in 1970, when special exogenous factors were at work.

The expansion of output was made possible by a 6.5 percent growth in the supply of productive factors and a 5.5 percent rise in the rate of factor utilization (in 1970 the respective increases were 8 and 2 percent). One of the reasons for the sharply higher productivity level was the change in the branch composition of output. Industrial employment was up 4-5 percent and the stock of capital assets by 10.6 percent. Excluding the diamond industry from the productivity calculation reduces the difference between the two years but does not erase it completely.

Figure XI-1

CHANGES IN OUTPUT PER MAN-DAY, UNIT LABOR COSTS, AND REAL DAILY WAGES, 1969-71

(January 1968 = 100)



Semilogarithmic scale.

Demand for industrial output[1] continued upward, apparently even more rapidly than in 1970. Along with the acceleration of demand, there was a change in its composition: exports grew in importance, accounting for half the total output increment, while the weight of domestic uses fell proportionately. The composition of domestic uses likewise changed. Sales of industrial goods to the public sector accelerated somewhat (a rise of 20 percent as against 18 percent in the previous year), in spite of the general cutback in its purchases. The growth of consumer goods sales to households sagged further – from 10 percent in 1969 and 5 percent in 1970 to 4 percent in 1971. Production of capital goods rose at the same rate as total output, so that their share in total uses remained constant.

Table XI–1

CHANGES IN OUTPUT AND FACTOR INPUTS, 1961-71

(percentages)

	Annual increase or decrease (–)						Dec. 1971 as against Dec. 1970
	Average 1961-65	1967	1968	1969[a]	1970	1971	
Industrial output	13.4	–3.1[b]	28.7	15.9	10.4	12.0	11.6
Number of workers	3.3	–5.4	14.9	10.4	6.3	3.7	2.9
Real investment	6.0	–22.4	87.6	32.5	13.2	10.1	–
Real gross capital stock[c]	11.0	2.4	1.7	7.8	11.1	10.6	11.0
Output per worker	9.8	2.4	12.0	5.0	3.9	8.0	8.5
Output per unit of capital	2.2	–5.4	26.5	7.5	–0.6	1.3	0.5
Change in factor productivity	7.0	2.4	19.1	6.6	2.2	5.5	–
Daily nominal wages per worker	16.2	2.1	4.9	4.8	10.5	13.0	13.5
Domestic market prices	5.0	1.1	2.4	1.9	6.8	9.2	10.3
Daily nominal wages per worker/ index of domestic market prices of output	10.7	1.0	2.4	2.8	3.5	3.5	2.9
Real wages per worker/output per worker	0.1	–1.4	–8.6	–2.1	–0.4	–4.2	–4.4
Turnover, at constant prices	14.8	–0.7	27.8	16.0	8.5	12.6	16.2
Exports (f.o.b.)	17.7	3.2	24.8	15.6	5.8	26.0	43.8
Industrial export prices	–	–2.0	–1.5	4.8	–0.7	2.6	–

[a] As of 1969 data on output, wages, prices, and exports were reclassified and based on a new sample.
[b] The datum relates to the calendar year, in contrast to industrial survey data, which relate to the fiscal year; hence the discrepancy between the figures based on these two sources.
[c] At the beginning of the year.
SOURCE: Central Bureau of Statistics.

1. Since direct data on the volume of demand are not available, the final uses of industrial output serve here as an indicator of developments in this sphere.

Wholesale prices of industrial output in the domestic market advanced 9 percent on an annual average, compared with less than 7 percent in 1970. The rise in December levels was somewhat higher, but below the figure for the previous year, probably because of the price controls introduced after the official devaluation of the Israeli pound in August 1971 (such a policy was not adopted in August 1970, after the unofficial devaluation carried out then – see Chapter VI).

Industrial export prices jumped 15 percent, with most of the increase occurring after August. The rise in the price of total output (including exports) was approximately 11 percent.[2]

The increase in industrial output prices was accompanied by a 15 percent increase in production costs (10 percent in 1970). Turnover was up 23 percent, compared with 15 percent in the previous year. Despite the much higher costs in 1971, profitability was not adversely affected and probably even improved.[3] Total gross profits advanced by more than 24 percent in nominal terms.[4] The 24 percent nominal gain in the value of output and the similar gain in the stock of productive capital assets indicate that the long-run rising profitability trend reasserted itself during the year reviewed after being checked in 1970.[5] In the course of the year, particularly after the August devaluation, there was apparently a further improvement in profitability, despite mounting production costs. The growth of total profits and profitability was, of course, not spread evenly among the various branches or producers. In general, those marketing part of their output abroad fared better in this respect than those working almost solely for the domestic market.

The f.o.b. value of industrial exports (including diamonds) went up at a faster 26 percent rate in 1971 to reach $ 750 million. Total export value added rose 27 percent, from $ 303 million to $ 385 million.

The upward thrust came from several sources. First and foremost, the pickup in diamond sales to the U.S. accounted for more than $ 60 million of the export increment. Secondly, there were a number of special developments that affected both "other industrial exports" and the "special items" group.[6] The principal developments were the placing of large orders with a number of industries, the more sluggish growth of domestic noncivilian demand for certain essentially export commodities, and bumper crop yields (particularly of citrus). Thirdly, the advancing trend in the profitability of exports (relative to domestic sales) carried over through the year reviewed, as a result of the unofficial devaluation of 1970 and the official devaluation of 1971.

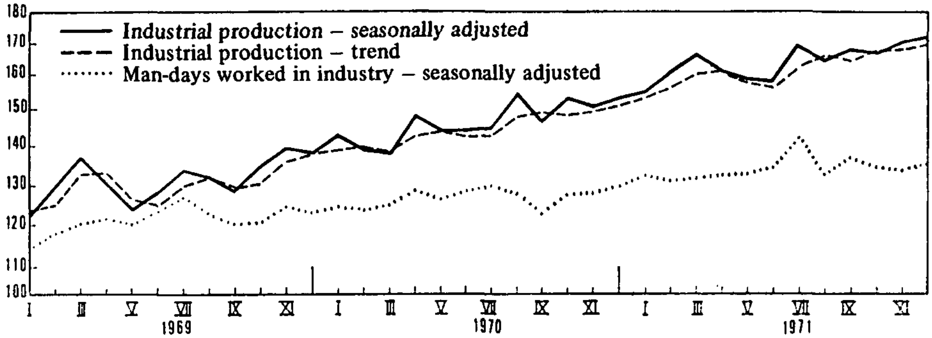
Overseas sales of special items were up $ 23 million (18 percent), as against only $ 2

2. The changes in domestic and export prices weighted by the proportions of these destinations in total output for the year.
3. "Profitability" is defined as the ratio between total gross profits before taxes and the capital stock, or as the ratio between total gross profits before taxes and output at current factor prices.
4. See Table XI-2 in the appendix (in Hebrew only).
5. The rate of profit on the total capital stock understates the profitability of the individual firms because of the difference between the capital stock and equity capital. The estimate does not, of course, include capital gains arising out of the devaluation and the rise of prices in the economy.
6. See the note on page 242 below.

Figure XI–2

CHANGES IN INDUSTRIAL PRODUCTION AND MAN-DAYS WORKED, 1969-71

(January 1968 = 100)



Semilogarithmic scale.

million (2 percent) in the previous year. Most of the increase was in "other metal products", edible oils and fats, and citrus products.

"Other industrial exports" gained more than \$ 65 million, compared with \$ 44 million in 1970. In line with the pattern evident since 1964, a wide range of products shared in the growth.

The domestic market affected exports to only a minor degree in 1971. However, in a number of industries there were signs of a slowdown or even decline in overseas sales, which can apparently be ascribed to heavier domestic demand. This applied in particular to refined petroleum products, basic metal products, wood and wood products, and machinery. Apart from the refineries, these industries normally sell a large part of their output to the construction sector.

Industrial investment rose by 10 percent, as against 13 percent in 1970 and 32 percent in 1969, and totalled IL 1,057.1 million at 1971 prices, compared with IL 860 million in the previous year.

2. OUTPUT

The value of industrial output[7] was up 12 percent from 1970. Total gross census value added (at 1970 producer prices) advanced from IL 5,200 million to IL 5,900 million, and real output (also at 1970 producer prices) from IL 11,600 million to IL 12,900 million. These figures indicate a more rapid growth than in 1970. Diamonds were mostly responsible for the acceleration: after encountering formidable difficulties in foreign markets in 1969-70, the industry enjoyed brisk sales in 1971.[8] In the course of the year the

7. Census value added.

8. The value of diamond output is calculated by multiplying the value of exports by the official rate of exchange. The larger export of this item in 1971 explains about half of the 2 percent increase in the industrial output growth rate. But even if diamonds are left out of the calculation, this would not materially affect the principal trends in the sector during the year.

upward trend in industrial production also gathered momentum, and in December the level stood 11.6 percent higher than in December 1970 (this compares with a 10 percent rise the year before).

The stronger pace of industrial expansion during the year restored the growth rate to the level prevailing during the period 1958-65; in other words, the sector apparently resumed its long-run growth trend, after departing from it during the recession and subsequent recovery. This really should have taken place in 1970, when full employment was reached; but it was retarded by difficulties that cropped up in a number of export industries in 1970, notably diamonds, because of developments in overseas markets.

Table XI–2

GROSS INDUSTRIAL OUTPUT, BY BRANCH, 1968-71

(percentages)

Branch	Output in 1971, at 1970 factor prices	Percent annual real increase or decrease (–)				Change in rate of increase in 1971
		1968	1969[a]	1970	1971	
Mining and quarrying	310.7	18.5	5.0	19.0	0.0	0.0
Food	2,477.0	14.0	8.0	5.6	9.6	3.8
Textiles	1,199.2	28.7	15.0	12.2	20.2	7.1
Clothing	688.2	29.9	5.0	11.4	3.4	–7.2
Wood, wood products, and furniture	409.7	41.4	8.0	5.6	4.4	–1.1
Paper and paper products	294.5	19.5	5.0	7.6	12.4	4.5
Printing and publishing	276.3	13.3	15.0	0.9	–5.2	–6.0
Leather and leather products	121.0	22.8	8.0	4.6	4.4	–0.2
Rubber and plastic products	560.8	44.5	20.0	15.0	17.4	2.1
Chemicals and refined petroleum products	1,205.3	27.6	11.0	16.2	12.4	–3.3
Nonmetallic mineral products	503.7	26.4	12.0	12.5	11.9	–0.5
Diamonds	1,075.6	18.9	11.6	–3.4	24.9	40.4
Basic metals	359.4	45.5	24.0	–2.4	0.0	2.5
Metal products	1,234.5	37.4	20.0	7.5	19.4	11.1
Machinery	512.7	40.9	24.0	18.6	5.4	–11.1
Electrical and electronic equipment	837.9	71.1	48.0	7.4	10.1	2.5
Transport equipment	768.0	41.1	28.0	28.1	18.9	–7.2
Miscellaneous	156.6	34.3	26.0	7.9	32.3	22.6
Total	12,991.1	28.7	15.9	10.4	12.0	1.4

[a] See note [a] to Table XI-1.

SOURCE: Central Bureau of Statistics.

Table XI–3

FACTORS AFFECTING THE GROWTH OF INDUSTRIAL OUTPUT, 1967-71

(percentages)

	1967		1968		1969		1970		1971[a]	
	Annual average increase	Share in increment	Annual average increase	Share in increment	Annual average increase	Share in increment	Annual average increase	Share in increment	Annual average increase	Share in increment
					A. Supply factors					
Value of industrial output (census value added)	–3.1	–100	28.7	100	15.9	100	10.4	100	12.0	100
Labor	–5.4	–103	14.9	31	10.4	39	6.3	38	3.7	22
Capital stock	2.4	32	1.7	2	7.8	19	11.1	44	10.6	42
Increase in value of output due to increase in inputs	–5.5	–71	9.6	33	9.3	58	8.2	79	6.5	54
Measured productivity[b]	2.4	171	19.1	67	6.6	42	2.2	21	5.5	46
					B. Indicators of contribution to incremental demand[c]					
Private consumption	5.6	51	2.4	31	10.3	36	5.0	28	4.0	15
Public consumption	56.9	67	21.1	10	13.0	12	18.4	29	19.8	23
Investment	–19.6	–64	22.1	15	29.6	30	8.0	16	12.0	16
Total domestic uses	4.0	54	15.4	56	15.8	78	8.4	73	8.7	54
Exports[d]	10.2	46	34.4	44	12.2	22	8.9	27	22.1	46
Total uses		100		100		100		100		100

[a] Based on input-output estimates prepared for the 1970 *Annual Report*.

[b] Assuming that the aggregate production function in industry lends itself to the method of calculation used here.

[c] The increase in output stemming from changes in final demands. The data are provisional and indicative of orders of magnitude only. The estimates are based on input-output tables for 1965.

[d] Excluding exports to the administered areas; these are included under private consumption because of the impossibility of separating the data.

SOURCE: Part A – see the source to Table XI-1 in the appendix to the 1968 *Annual Report* (in Hebrew only).

Part B – Bank of Israel input-output calculations (provisional data).

The expansion of industrial production in the year surveyed was made possible by a 6.5 percent quantitative increase in factors of production and a 5.5 percent improvement in their rate of utilization. The rise in measured productivity surpassed the previous year's figure but failed to match the rates achieved during the boom years of the early sixties.

Productivity gains above the average for the sector as a whole were recorded in those industries experiencing accelerated growth. Diamonds enjoyed a particularly strong advance: the number of workers fell below the level of 1970 (a slump year), while the capital stock rose only fractionally. The expansion of output in this industry despite the drop in employment can apparently be attributed in part to sales out of stocks – which in the available statistics are defined as current output. Another factor was technological changes, which led to a reduction of the work force and a slight rise in capital stock per worker and per unit of output.

Even if the productivity gain in diamonds is deducted, the sector still showed a faster rise in 1971 in measured productivity – 3.8 percent vs. 2.2 percent in 1970.[9] This can be credited mainly to stronger output growth in food and metal products as compared with 1970, which more than offset the sagging rate of increase in textiles and chemicals.

The structural change which the sector underwent in 1971 enabled it to step up production in 1971 in spite of the tight labor market and slower growth of the capital stock. This was the decisive influence on measured productivity in the year reviewed, in contrast to the situation in 1967-70, when measured productivity increased because of the exploitation of reserves of unemployed factors of production in most branches.

The industrial capital stock expanded by 10.6 percent, while employment rose by 3.7-5.1 percent, depending on the index selected, as against 4.5-6.5 percent in the previous year. Total industrial employment went up from 244,000 in 1970 to 256,000.

Together with the more sluggish growth of factors of production, there was a much heavier demand for the sector's output in 1971. No direct data are available on the size and composition of the demand, but data on the uses of output and other developments in the economy point to an acceleration of demand and a change in its composition. The latter development first became evident in 1970, when the weight of exports and public consumption rose, that of private consumption fell, and investment demand held steady (16 percent). This pattern became more pronounced in the year reviewed. The proportion of output sold abroad went up from 25 percent in 1970 to 27 percent, that destined for public consumption edged up from 14 to 15 percent, while the weight of private consumption declined from 45 to 42 percent. More than half of the output increment was marketed abroad, while the share of public consumption was a shade lower than in 1970 despite its contribution to the acceleration of overall production. The decline in private

9. A measurement of productivity with the labor input based on the number of industrial workers shows a gain of about 5 percent in 1971, as against 2.5 percent the year before. Excluding diamonds from the calculation reduces the increase to less than 1 percent; and if the labor input is based on the number of man-days worked, there was no increase at all. If the labor input is based on an average of the various employment indexes, there was still a notable improvement in productivity, even if diamonds are left out of the calculation. The trend described above would therefore seem to be a fairly valid assessment.

Table XI–4

DISTRIBUTION OF INDUSTRIAL OUTPUT, BY FINAL DEMAND, 1967-71[a]

(percentages)

	1967	1968	1969	1970	1971
Private consumption	50	48	46	45	42
Public consumption	10	13	13	14	15
Investment	14	14	16	16	16
Total domestic uses	74	75	75	75	73
Exports	26	25	25	25	27
Total final uses	100	100	100	100	100

[a] Figures have been rounded off. The 1967 estimates are based on the 1963 input-output table of the Bank of Israel; those for 1968-71 are based on the input-output table for 1967.

consumption was particularly marked in incremental output, where it accounted for only 15 percent of the total.

Export production was up 22 percent, and this was the principal factor in the 12 percent growth of the sector's output in 1971. The stronger upswing in overseas sales was accompanied by a decline in the weight of domestic uses from 75 percent in 1970 to 73 percent. Outstanding export gains were posted by foodstuffs, textiles, metal products, and diamonds, which together accounted for most of the incremental direct exports.

Direct and indirect purchases of the public sector rose 20 percent, compared with 18 percent in 1970, bringing up the weight of public consumption in the sector's output from 14 to 15 percent. Most of the additional purchases consisted of metal products, chemicals and allied products, electrical and electronic equipment, and transport equipment. Procurement orders by the defense establishment made up a large percentage of the purchases, and were a major factor in stimulating industrial expansion during the year reviewed. The large volume of public sector purchases can be credited to the continued emphasis on the manufacture of import substitutes and to the introduction of new lines of production to meet defense needs.

The private sector also stepped up its purchases of industrial goods, but its relative importance fell for the second year running. Private consumption slowed appreciably; this depressed its share in incremental industrial output to 15 percent, with sales to the household subsector moving up at a very slack 4 percent (in contrast to 50 percent in the previous year and 10 percent in 1969). The composition of output for private consumption continued to change in line with the trend that appeared in 1970. There was a fall in the share of consumer durables (particularly household equipment), machinery, metal products, and transport equipment; and a slight rise in current consumption goods – mainly foodstuffs, textiles, leather goods, and footwear.

The manufacture of capital goods was up 12 percent, as against 18 percent in 1970, and their weight in total industrial output remained unchanged at 16 percent. There was

Table XI–5
DISTRIBUTION OF TOTAL AND INCREMENTAL REAL INDUSTRIAL OUTPUT, BY MAIN BRANCH, 1968-71
(percentages)

Branch	Distribution of total output				Distribution of incremental output			
	1968	1969	1970	1971	1968	1969	1970	1971
Mining and quarrying	2.6	2.4	2.7	2.4	2.0	1.1	5.0	0.0
Food	21.6	20.2	19.3	19.0	12.1	11.7	12.7	15.5
Textiles	8.2	8.3	8.6	9.1	8.6	8.6	11.4	14.4
Clothing	6.2	5.6	5.7	5.3	6.5	2.1	6.6	1.6
Wood and furniture	3.7	3.5	3.4	3.2	5.0	2.1	2.4	1.2
Paper and paper products	2.5	2.1	2.3	2.3	1.9	0.9	2.0	2.3
Printing and publishing	2.7	2.7	2.5	2.1	1.5	2.8	0.7	−1.1
Leather and leather products	1.1	1.0	1.0	1.0	1.0	0.6	0.6	0.4
Rubber and plastic products	3.7	3.9	4.1	4.3	5.3	5.0	6.3	6.0
Chemicals	8.9	8.6	9.2	9.2	8.9	6.8	14.8	9.5
Nonmetallic minerals	3.8	3.7	3.9	3.9	3.7	3.2	5.2	3.8
Diamonds	9.4	9.1	8.0	8.3	6.9	7.2	−2.6	13.3
Basic metals	3.2	3.5	3.1	2.8	4.6	5.1	−0.4	0.0
Metal products	8.6	9.0	8.8	9.5	10.7	11.5	7.7	14.2
Machinery	3.5	3.8	4.2	4.0	4.7	5.7	7.6	2.0
Electrical and electronic equipment	5.2	6.7	6.6	6.5	9.8	16.2	5.5	5.4
Transport equipment	4.2	4.7	5.6	5.9	5.7	7.8	13.5	8.8
Miscellaneous	0.9	1.0	1.0	1.2	1.1	1.6	1.0	2.7
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

SOURCE: Central Bureau of Statistics.

no significant change in the branch structure of production, the growth being concentrated (as in 1970) mainly in nonmetallic mineral products, metal products, wood, machinery, and electrical equipment. In all these branches a large proportion of the capital goods was destined for construction to meet the much greater demand.

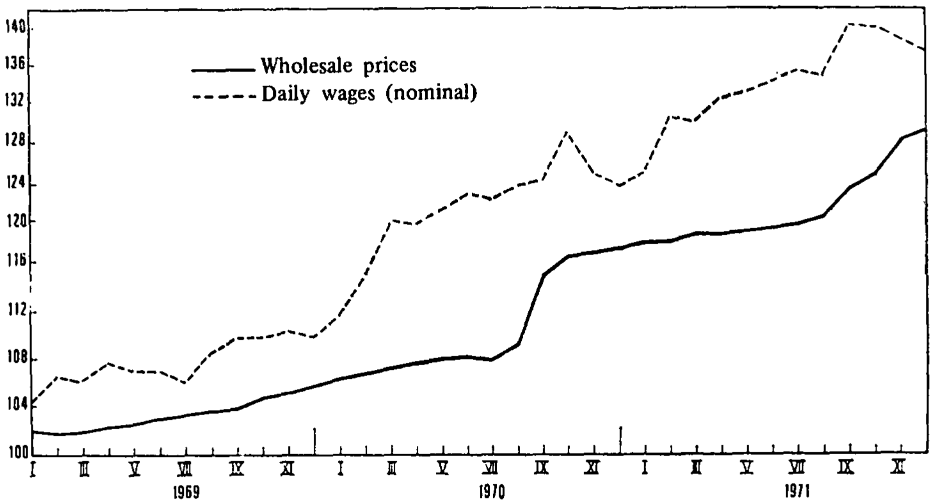
3. Growth of Industrial Production During 1971

Industrial production expanded during 1971 at an average monthly rate of 0.9 percent; the increase in December levels was 12 percent, as against 11 percent in the previous year. During 1971 the curve moved up at an irregular rate. In the first quarter it ascended fairly steeply, as in the last two months of the preceding year. In the second quarter the curve largely flattened out, but in the second half of the year it turned up somewhat. The available data do not make it possible to identify the factors underlying these quarterly movements. Partial indicators show that the growth of final demands grew stronger as the year progressed, while the uptrend in available factors of production slackened. After the faltering of demands for industrial goods toward the end of 1970, the share of output channelled to export rose. The other demands probably developed similarly (that is, a deceleration in the final part of 1970 and a resumption of strong growth in 1971), but the available data do not permit an analysis of this sort.

Figure XI–3

DAILY WAGES (NOMINAL) PER WORKER AND WHOLESALE PRICES OF INDUSTRIAL OUTPUT FOR DOMESTIC USE, 1969-71

(January 1968 = 100)



Semilogarithmic scale.

Industrial employment[10] rose between December 1970 and December 1971 by 3-4 percent. The curve ascended mildly in the first, second, and fourth quarters, and much more sharply in the third quarter (annual vacation time).[11] It was the growth of the labor supply that determined the increase in employment, and apparently far more workers could have been absorbed.

Wages rose 13.5 percent per capita in the course of the year, slightly more than the annual average increase and far greater than any other official increase since the early sixties. The rise was fairly steep through August; in September the growth rate levelled

10. The change in industrial employment is estimated on the strength of several indexes: the number of employed, the number of wage earners, and the number of man-days worked, These point to a rise of the magnitude mentioned in the text. The calculations and estimates in this chapter are based on the number of wage earners.

11. Adjusting for seasonality does not eliminate this factor entirely.

Table XI–6

REAL CHANGES IN INDUSTRIAL OUTPUT, HALF-YEARLY, 1967-71

(percentages)

Branch	Changes in half-yearly levels										Average monthly rate of change			
	Jan. 1967-July 1967	July 1967-Jan. 1968	Jan. 1968-July 1968	July 1968-Jan. 1969	Jan. 1969-July 1969	July 1969-Jan. 1970	Jan. 1970-July 1970	July 1970-Jan. 1971	Jan. 1971-July 1971	July 1971-Dec. 1971	Jan. 1970-July 1970	July 1970-Jan. 1971	Jan. 1971-July 1971	July 1971-Dec. 1971
Mining and quarrying	−15.8	14.4	29.5	−15.5	34.4	−0.8	11.7	−6.0	9.5	−13.8	1.9	−1.1	1.5	−2.9
Food	20.4	−14.7	14.3	2.2	−3.7	4.9	0.0	15.7	0.8	7.1	0.0	2.5	0.1	1.2
Textiles	15.2	12.8	8.0	11.1	6.3	12.6	−6.0	11.9	16.3	0.6	−1.1	1.9	2.3	−0.1
Clothing	13.8	−1.0	14.9	13.3	−2.0	15.2	10.5	−3.2	−4.1	12.0	1.7	−0.6	−0.7	3.0
Wood and furniture	−1.1	17.8	36.6	2.3	4.5	4.3	−7.4	5.4	11.0	−8.4	−1.1	0.9	1.8	−1.1
Paper and paper products	15.6	9.6	−3.9	−19.1	−7.3	5.0	−0.4	22.9	−11.6	37.7	−0.1	3.5	−1.8	4.9
Printing and publishing	7.7	8.3	6.2	−2.9	16.0	−9.5	14.3	−13.3	19.2	−15.3	2.3	−2.1	3.0	−3.2
Leather and leather products	25.2	8.3	17.4	−2.0	19.8	−1.8	2.8	−7.3	21.6	10.5	0.5	−1.3	3.3	1.6
Rubber and plastics	13.9	24.5	15.5	1.5	13.0	11.5	6.6	1.4	17.7	−2.3	1.1	0.2	2.8	−0.2
Chemicals	30.8	9.3	5.8	11.0	7.6	14.9	−2.3	14.1	0.7	4.1	−0.4	2.3	0.1	0.8
Nonmetallic minerals	−31.5	46.8	23.0	−3.5	21.0	−1.6	13.5	−9.6	31.2	−8.7	2.1	−1.7	4.6	−1.2
Diamonds	−9.1	6.2	39.7	−12.4	2.8	−12.8	10.5	12.4	12.7	−0.8	1.7	2.0	2.0	−0.2
Basic metals	17.9	37.2	44.8	12.4	30.1	−17.2	14.4	−17.3	26.7	−11.3	2.3	−3.1	4.0	−2.3
Metal products	−7.6	23.5	23.4	0.4	30.0	−7.9	14.5	0.8	21.5	−6.7	2.3	0.1	3.3	−1.1
Machinery	−7.6	36.1	12.0	12.5	12.7	15.3	1.4	4.1	1.3	1.3	0.2	0.7	0.2	0.3
Electrical and electronic equipment	−0.4	14.8	28.3	60.1	13.8	12.1	−3.8	−4.6	20.8	1.1	−0.7	−0.8	3.2	0.3
Transport equipment	28.4	13.8	15.5	22.7	21.5	10.4	0.6	19.9	10.4	−18.3	0.1	3.1	1.7	−4.0
Miscellaneous	−2.3	35.5	19.8	2.8	11.9	18.0	−6.2	10.4	6.7	37.7	−1.1	1.7	1.1	6.6
Total	6.2	10.7	16.3	7.0	9.2	6.2	1.4	7.1	9.5	0.2	0.2	1.3	1.5	0.1

SOURCE: Central Bureau of Statistics indexes of industrial production (seasonally adjusted).

off and subsequently turned downward (see Figure XI-3). This pattern resembled that of the previous year, although the total rise in 1971 was greater than in 1970.[12] It is difficult to assess the contribution of the various factors driving up wages, but the shortage of labor, particularly skilled, unquestionably goes far to explain the increase.

The growth of the capital stock, which conceptually is calculated by adding net investment in 1971 to the 1970 stock, came to 11 percent, somewhat above the annual average.

The sluggish expansion of the supply of productive factors as contrasted with the accelerated growth of production stands out more in a quarterly analysis than in a comparison of annual averages. This is because of the aforementioned change in the branch composition of production, which stemmed from changes in the final demands for the sector's output.

Examination of the movement of industrial input prices over the year indicates an increase of 9 percent in total production costs in the predevaluation months (January - August). Most of the rise was in labor, which accounted for more than half the total. The dearer cost of imported inputs was responsible for 32 percent of the total increase, while price rises in the domestic market were of minor importance. During the rest of the year costs jumped 11 percent, of which 65 percent was due to higher import prices, and a third[13] to higher domestic prices; wage increases played an insignificant role during this period.

Turnover advanced 10 percent in the first subperiod and 16 percent in the second. Comparison of cost and turnover data shows that while costs mounted rapidly in the second subperiod, this was more than outweighed by the gain in turnover, so that gross nominal profits moved up at a stronger rate than in the January-August period and even in comparison with total costs (including wages). Here, too, the increased profitability of exports relative to sales in the domestic market is evident.

4. Industrial Output Prices

Wholesale prices of industrial output for the domestic market went up in 1971 by over 9 percent on an annual average, compared with 7 percent in the previous year.[14] The rise in the course of the year (from December 1970 to December 1971) was 10.3 percent, as against 11.3 percent the year before. Together with exports, the increase in output prices came to 10.7 percent.[15]

12. Total wage payments increased by about 17 percent during the year, as against 19 percent on an annual average.
13. This figure has a downward bias, as the prices of various services purchased directly by industry were not taken into account. The prices of legal services, transport, and advertising rose particularly rapidly.
14. Although wholesale prices of industrial output are not conceptually synonymous with producer prices, in 1971 the increase in the former largely reflected the change in the latter.
15. The overall rise in output prices was calculated by weighting the changes in domestic and export market prices by the proportions of these destinations in total output for the year.

Table XI–7

CHANGES IN INDUSTRIAL OUTPUT PRICES IN THE DOMESTIC MARKET, 1966-71

(percentages)

Branch	Annual increase or decrease (–)						Dec.1970 as against	Dec.1971 as against
	1966	1967	1968	1969	1970	1971	Dec.1969	Dec.1970
Mining and quarrying	1.5	–0.9	3.6	1.9	4.4	8.9	8.1	10.5
Food	4.7	1.6	2.4	0.9	3.8	8.8	7.6	10.0
Textiles	6.3	5.3	–0.1	0.9	4.6	9.0	11.7	7.1
Clothing	4.6	1.3	2.2	3.4	5.1	8.5	13.7	4.4
Wood and furniture	2.0	–0.1	2.7	1.3	10.7	12.8	17.8	12.2
Paper and paper products	0.6	–0.1	1.0	0.1	7.5	12.8	17.7	12.0
Leather and leather products	15.4	–	4.1	2.9	5.4	8.6	10.2	9.8
Rubber and plastics	0.8	1.3	0.8	0.8	2.8	6.2	9.6	5.8
Chemicals and refined petroleum products	5.5	3.0	4.0	–0.1	2.5	10.3	8.0	13.1
Nonmetallic minerals	4.3	1.3	1.1	2.3	7.2	9.3	10.1	11.6
Basic metals	6.3	2.4	7.2	4.4	13.6	6.9	7.9	8.1
Metal products	5.1	0.7	4.9	5.4	14.0	7.2	11.4	9.8
Machinery	2.6	–1.8	–1.0	2.7	8.8	9.8	12.6	7.9
Electrical and electronic equipment	3.3	0.5	4.8	3.1	11.6	7.9	14.1	8.6
Transport equipment	7.8	–0.4	2.1	3.4	9.3	15.9	13.9	19.6
Miscellaneous	3.9	1.1	7.1	2.4	7.0	7.2	10.6	6.0
Total	4.8	1.2	2.3	1.9	6.8	9.2	11.3	10.3

SOURCE: Central Bureau of Statistics.

This accelerated upswing in domestic industrial output prices represented a departure from the stability that had marked the sector from 1963 through the years of recession and recovery. It was the combined result of buoyant demand for the sector's output under full employment conditions and of upward pressure from the costs side.

Production costs per unit of output were 10.5 percent over the previous year's level, compared with a rise of 9 percent in 1970. Most of the increase was due to the devaluation of the Israeli pound and the higher c.i.f. import prices. The price rise in the direct import component of output accounted for 40 percent of the incremental costs.

The second largest cost component is intermediate goods and services purchased domestically. In 1971 these became 9.2 percent dearer, as measured by the wholesale price index. The large weight of domestic inputs makes them a major source of pressure from the costs side.[16]

Unit labor costs also went up during the year, but because of the relatively low

16. Assuming that average production costs go up to the same extent for export as for domestic production, and that the change in wholesale prices reflects the change in producer prices.

weight of the direct labor input and the small recorded rise in wages per unit of output, wages were only a minor factor in the growth of production costs.

Comparison of the increases in costs and income per unit of output points to a slight widening of the profit margin, with a rise in the case of export production being largely counterbalanced by a decline in that of output marketed locally.

Prices moved up more precipitately in the latter part of the year. Between January and August (the month of the devaluation) the rise was moderate – 2.2 percent out of the total increase of 4 percent.

The path described by domestic prices largely resembled that of 1970. In both years the advance was fairly mild until August, when the Israeli pound was devalued (in 1970 unofficially, and in 1971 officially); thereafter the curve ascended steeply. In the year reviewed the price rise was moderated to some extent by the imposition of administrative controls and by the inventory-tax policy introduced (see Chapter VI). Price controls probably retarded the advance of prices immediately after the devaluation (this measure was not employed after the levying of an import surcharge in August 1970).

The price rise in 1971 embraced all industrial branches. Particularly sharp increases were recorded for transport equipment (20 percent), mineral and wood products, and branches selling the bulk of their output to the construction industry (12 percent). Chemical and refined petroleum products went up by an appreciable 13 percent, but in clothing the rise was mild (4.4 percent). Garment production did not expand during the year, and domestic consumption actually fell. Rubber and plastic products, textiles, and the "miscellaneous" group registered increases well below the average for the sector as a whole.

5. INDUSTRIAL EXPORTS

The f.o.b. value of industrial exports went up from about \$ 600 million in 1970 to approximately \$ 750 million – an increase of 26 percent, as against 6 percent the year before. Excluding diamonds, the gain was 23 percent. Exports of "special items"[17] advanced by a respectable 18 percent, after moving ahead by only 2 percent in 1970. Net of special items and diamonds, the increase was 25 percent, as against 20 percent in the previous year; in absolute terms, the rise came to more than \$ 150 million. The upward thrust in these three categories did not emanate from the same sources.

The increase of approximately \$ 65 million (32 percent) in diamond exports came after two years of recession in Israel's principal diamond market, the United States. It was the recovery of this market and the upturn of prices there that made the big gain possible. In quantitative terms growth came to 27 percent, while prices went up 4 percent.

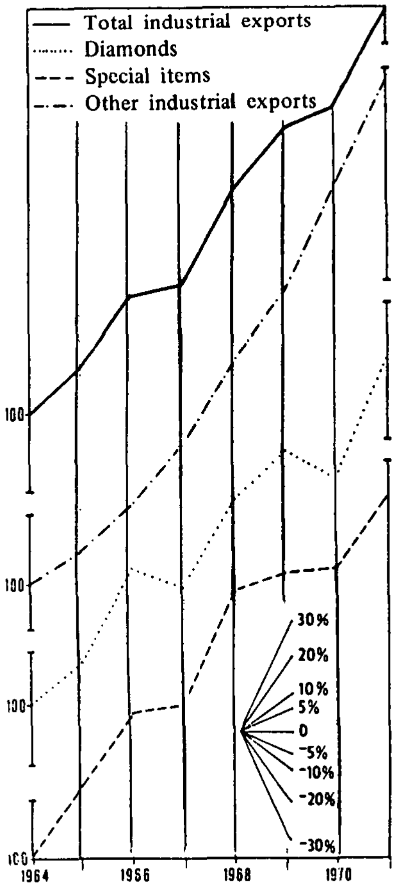
Special items also advanced strongly – by \$ 23 million as against \$ 2 million in the previous year. The quantitative increase here was 19 percent, but the average prices

17. Mine and quarry products, citrus products, edible oils and fats, refined petroleum products, "other metal products", production and repair of ships and aircraft, and scrap. Some of these exports are affected by special factors unrelated to general economic developments in the country.

Figure XI–4

CHANGES IN INDUSTRIAL EXPORTS, BY COMPONENT GROUP, 1964-71

(percentages; original data)



Semilogarithmic scale.

commanded slipped somewhat. The headway made by this group reflected contrasting developments. "Other metal products" rose by an impressive $13 million, thanks to some slackening in domestic purchases of certain items and to a more energetic export effort. The growth in this group was achieved in spite of a price decline, apparently due to some change in the product mix. Citrus products also made impressive headway, chalking up an increase of close to $8 million. The chief factors here were bumper crop yields, a marketing policy which made it possible to divert surplus supplies to the canneries, and rising prices in the world market. In contrast to these items, sales of scrap and refined petroleum products lost ground. In the latter case this was due to expanding consumption in the home market, limited refining capacity, and some weakening of the European market. Mine and quarry products showed a rise of only $1 million, the net outcome of a $6 million gain in potash and a $5 million drop in copper-cement and phosphates (which slipped for the second successive year). Edible oils and fats contributed $7 million to the export increment, after falling off in 1970.

'Other industrial exports" rose by $66 million, compared with $44 million in the previous year – or by 25 as against 20 percent. The higher growth rate was achieved in the face of a somewhat slower increase in prices – 2.4 percent vs. 4 percent in 1970; the quantitative growth was 22 percent as against 15 percent. In line with the trend evident since 1964, a wide range of products shared in the increment. This can apparently be credited chiefly to the development of industries which from the start were designed to market a substantial portion of their output abroad, and hence are not greatly affected by fluctuations in domestic demand. Another contributory factor was the cumulative increase in the relative profitability of exports over the past several years. (We are unable to estimate the relative importance of these two factors.) Among "other exports", outstanding gains were scored by transmitting and receiving apparatus – despite a 2 percent drop in prices, these were up $ 11 million, thanks to special transactions; knitted fabrics of synthetic fiber – up $9 million, with no change in prices; and panty hose – a rise of $ 8 million. There were also significant increases in tires and in books and other printed matter.

Table XI–8

INDUSTRIAL EXPORTS AND VALUE ADDED, 1967-71

(at current f.o.b. prices)

	Percent annual increase or decrease (–)					Total exports in 1971
	1967	1968	1969	1970[a]	1971[b]	($ million)
			Exports			
Industrial exports, excl. diamonds	9.5	25.8	18.6	13.2	23.0	482.4
Diamonds, net	–4.4	23.4	10.8	–5.8	31.8	268.0
Total industrial exports	**3.4**	**24.8**	**15.8**	**6.0**	**26.0**	**750.4**
			Value added			
Industrial exports, excl. diamonds	9.1	29.2	14.4	12.1	26.0	327.0
Diamonds, net	–7.0	19.5	9.7	1.2	30.4	57.9
Total industrial exports	**4.7**	**26.9**	**13.4**	**10.5**	**26.7**	**384.9**

[a] Based on data in the 1970 *Annual Report.*

[b] Value added is calculated by deducting from exports the component imports valued at producer prices and not, as previously, at f.o.b. prices.

SOURCE: Exports – Central Bureau of Statistics; value added – Bank of Israel estimates based on provisional input-output data.

Table XI–9

GROWTH OF INDUSTRIAL EXPORTS, 1966-71

(at current f.o.b. prices)

	Total industrial exports	Diamonds	Industrial exports, excl. diamonds	Special items[a]	Industrial exports, excl. diamonds and special items
			$ million		
1966	376.1	165.1	211.0	89.7	121.3
1967	387.9	157.9	231.0	90.3	140.7
1968	485.3	194.8	290.5	118.7	171.8
1969	563.0	216.4	346.6	124.5	222.1
1970	595.6	203.3	392.3	126.5	265.8
1971	750.4	268.0	482.4	149.3	333.1
			Percent annual increase		
1966	19	25	14	18	11
1967	3	–4	10	1	16
1968	25	23	26	31	23
1969	16	11	19	5	29
1970	6	–6	13	2	20
1971	26	32	23	18	25

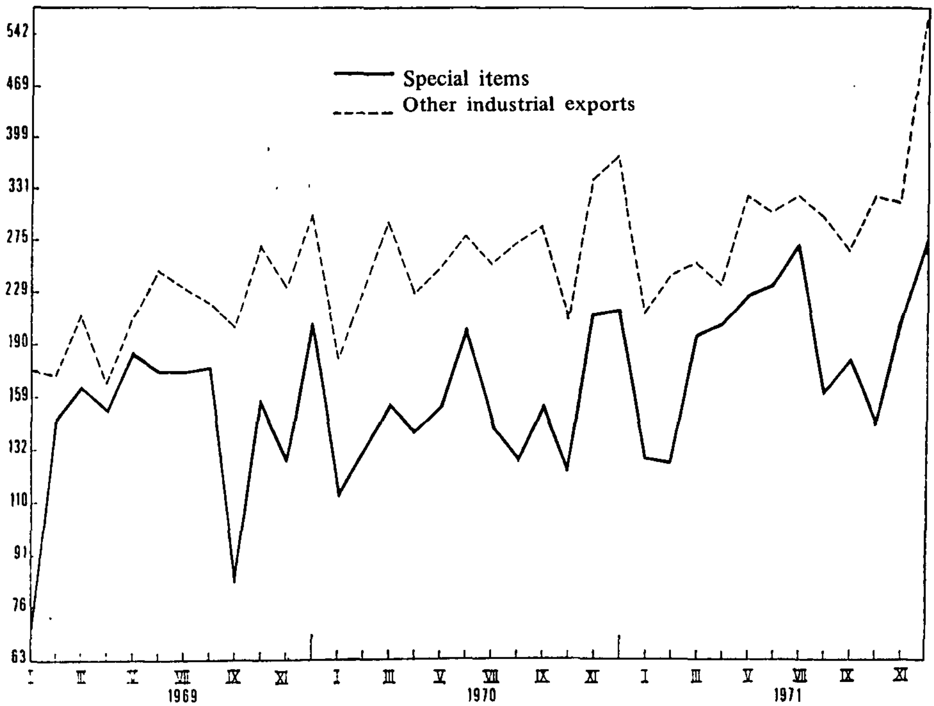
[a] Minerals, citrus products, edible oils and fats, refined petroleum products, "other metal products", production and repair of ships and aircraft, and scrap. Some of these exports are affected by special factors unrelated to general economic developments in the country.

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

Figure XI–5

EXPORTS OF SPECIAL ITEMS AND OTHER INDUSTRIAL PRODUCTS, 1969-71

(percentages; original data: January 1968 = 100)



Semilogarithmic scale.

Table XI–10

GROWTH OF INDUSTRIAL EXPORTS, BY MAJOR CATEGORY, 1967-71

	Annual increase ($ million)					Percent of total increment				
	1967	1968	1969	1970	1971	1967	1968	1969	1970	1971
Diamonds	−7.2	36.9	21.6	−13.1	64.7	−56.3	37.9	27.8	−40.2	41.8
Special items	0.6	28.4	5.8	2.0	22.8	4.7	29.1	7.5	6.1	14.7
Other industrial exports	19.4	31.1	50.3	43.7	67.3	151.6	33.0	64.7	134.1	43.5
Total industrial exports	12.8	96.4	77.7	32.6	154.8	100.0	100.0	100.0	100.0	100.0

SOURCE: See Table XI-9.

The rebounding of diamonds and the accelerated growth of special items led to a change in the export product mix. From 1967 until 1970 most of the increment was contributed by "other industrial exports" and was spread over a large number of products. In 1971 this group diminished in importance, accounting for only 43 percent of the total increment, as contrasted with 143 percent in 1970 and 65 percent in 1969. On the other hand, the weight of special items rose from 6 percent in 1970 to 15 percent. It is difficult to say whether these changes signify the start of a new trend – one typical of the pre-1966 period. It may very well be that part of the increase in each of these groups was of a random nature, and there is no assurance that the level of exports or their rate of growth will be sustained in the coming years.

The headway made by exports in 1971 is explained by a number of factors. In the first place, the recovery of the U.S. diamond market, as already noted, contributed over $60 million to the export gain. The second factor was the $23 million advance in special items, which was due to various influences enumerated above. Thirdly, in the group of "other industrial exports" there was further maturing of investments made specifically to boost exports – a process that has been going on for a number of years. Fourthly, price rises in the domestic market were only partly reflected in producer prices. In the export markets, on the other hand, there were a number of price increases, due to the upward revaluation of currencies in Europe and Japan, the devaluation of the Israeli pound, and an increase in export incentives, which of course augmented the price received by the producer. In other words, the higher incentives introduced at the end of 1970, when export profitability was continuing to rise, and the further increases granted in 1971 shored up the profitability of exports relative to sales in the domestic market. A fifth factor, especially important in 1971, was a random increase in a number of export items. The influence of domestic demand and the expansion of the domestic market was of secondary importance.

The trends described above brought up the weight of exports in total industrial output from 19 percent in 1970 to 22 percent (the contribution of exports to total

Table XI–11

CHANGES IN INDUSTRIAL EXPORTS, BY MAJOR CATEGORY, 1970-71

	Percent annual increase or decrease (–)					
	1970			1971		
	Price	Quantity	Value	Price	Quantity	Value
Special items	0.8	0.8	1.6	–0.9	19.1	18.0
Diamonds	–3.7	–2.4	–6.0	4.1	26.6	31.8
Special items plus diamonds	–2.4	–0.9	–3.3	2.8	23.1	26.5
Other industrial exports	4.1	15.0	19.7	2.4	22.4	25.3
Total industrial exports	–0.8	6.7	5.8	2.6	22.8	26.0

SOURCE: Central Bureau of Statistics.

Table XI–12

MAIN INDUSTRIAL EXPORTS,[a] 1968-71

(at current f.o.b. prices)

	Value ($ million)				Percent annual increase or decrease (–)			Percent of total export increment		
	1968	1969	1970	1971	1969	1970	1971	1969	1970	1971
Citrus products	26.0	32.3	35.1	43.0	24.4	8.7	22.5	11.2	6.1	8.9
Other metal products	26.2	23.3	18.3	31.0	–11.1	–21.5	69.4	–5.2	–10.8	14.2
Refined petroleum products	18.2	15.6	14.0	7.5	–14.4	–10.3	–46.4	–4.6	–3.5	–7.3
Synthetic yarns	10.0	15.8	18.8	17.5	57.7	19.0	–6.9	10.3	6.5	–1.5
Copper-cement	11.6	15.0	14.6	11.3	29.0	–2.7	–22.6	6.0	–0.9	–3.7
Knitwear	11.0	15.2	25.4	34.8	38.6	67.1	37.0	7.5	22.1	10.5
Tires and tubes	10.6	13.4	16.2	18.0	25.5	20.9	11.1	5.0	6.1	2.0
Potash	13.5	13.2	21.1	26.7	–2.4	59.9	26.5	–0.5	17.1	6.3
Panty hose, socks, stockings	5.6	12.1	16.5	25.4	118.6	36.4	53.9	11.6	9.5	10.0
Cotton yarn	9.6	7.9	5.3	4.4	–17.8	–32.9	–17.0	–3.0	–5.6	–1.0
Phosphates	6.9	7.4	4.9	3.5	7.5	–33.8	–28.6	0.9	–5.4	–1.6
Pharmaceuticals	6.6	7.8	8.0	9.0	18.1	2.6	12.5	2.1	0.4	1.1
Edible oils, fats, oilcake	5.5	7.1	6.3	13.2	29.3	–11.3	109.5	2.9	–1.7	7.7
Plywood	6.9	7.0	6.8	6.6	1.7	–2.9	–2.9	0.2	–0.4	–0.2
Pesticides	4.1	6.0	7.3	9.4	46.5	21.7	28.8	3.4	2.8	2.4
Clothing	5.6	8.3	8.2	9.3	49.0	–1.2	13.4	4.8	–0.2	1.2
Cotton fabrics	4.4	4.1	4.0	3.7	–7.9	–2.4	–7.5	–0.5	–0.2	–0.3
Leather garments	3.6	4.3	5.0	7.9	17.2	16.3	58.0	1.2	1.5	3.3
Woolen fabrics	3.3	4.1	2.7	1.2	22.9	–34.1	–29.4	1.4	–3.0	–1.7
Motor vehicles	2.3	4.1	2.9	2.7	78.2	–29.3	–6.9	3.2	–2.6	–0.2
Transmitting and receiving apparatus	1.6	3.6	5.4	17.7	128.8	50.0	227.8	3.6	3.9	13.8
Total	193.1	227.3	246.8	303.8	17.7	8.6	23.1	61.5	41.7	63.9
Total industrial exports, excl. diamonds	290.5	346.6	392.3	482.5	19.3	13.2	23.0	100.0	100.0	100.0
Total industrial exports, incl. diamonds	485.3	563.0	595.6	750.4	15.6	5.8	26.0	–	–	–

[a] Commodities whose export in 1968 amounted to more than $1 million.

SOURCE: Central Bureau of Statistics.

output growth soared from 11 to 42 percent).[18] Examination of the influence of the domestic market reveals an irregular pattern: in several branches the share of exports fell in the wake of stronger domestic demand. Declines were most marked in refined petroleum products, basic metal products, wood and wood products, and machinery. In certain other branches a marked sagging of domestic demand produced an opposite effect; this

Table XI–13

INDUSTRIAL EXPORTS, BY MAIN BRANCH, 1968-71

(at current f.o.b. prices)

Branch	Total exports ($ '000)		Percent annual increase or decrease (–)					
						1971		
	1970	1971	1968	1969	1970	Value	Quantity	Price
Mining and quarrying	40,839	41,910	9.5	14.0	13.7	2.6	–7.8	11.3
Food	65,496	81,201	21.7	29.4	13.2	24.0	17.4	5.6
Textiles	42,653	49,359	21.5	31.8	7.1	15.7	15.5	0.2
Clothing	53,585	69,789	22.8	8.0	30.9	30.2	21.7	7.0
Wood and furniture	9,644	9,600	–5.0	12.9	3.6	–0.5	4.2	–4.5
Paper and paper products	3,153	2,549	8.4	–2.2	45.8	–19.9	19.9	0.0
Printing and publishing	5,909	11,234	5.3	28.9	17.1	90.1	68.7	12.7
Leather and leather products	3,488	4,791	28.9	86.1	–5.4	37.4	33.7	2.8
Rubber and plastics	23,529	27,376	14.9	28.1	24.3	16.4	19.4	–2.5
Chemicals and refined petroleum products	58,274	63,663	19.1	6.3	18.2	9.3	8.4	0.8
Nonmetallic minerals	3,033	3,700	–19.4	–12.1	–9.5	22.0	24.5	–2.0
Diamonds (net)	203,259	267,958	22.9	11.2	–6.1	31.8	26.6	4.1
Basic metals	10,097	9,081	15.0	0.0	–4.2	–10.1	–8.8	–1.4
Metal products	28,514	44,616	149.0	0.4	–13.8	56.5	68.1	–6.9
Machinery	10,506	9,156	6.2	63.2	21.7	–12.8	–15.2	2.8
Electrical and electronic equipment	12,845	25,313	97.0	69.5	65.8	97.1	103.4	–3.1
Transport equipment	9,108	13,935	37.6	–0.4	–16.7	53.0	47.4	3.8
Miscellaneous	11,655	15,186	46.0	9.4	25.0	30.3	28.1	1.7
Total industrial exports	595,587	750,417	24.8	15.6	5.8	26.0	22.8	2.6
Total, excl. diamonds	392,328	482,458	25.8	18.9	13.2	23.0	20.5	2.1

SOURCE: *Central Bureau of Statistics.*

18. These data on the weight of exports in total output do not correspond to the estimates derived from the input-output calculations at the beginning of this chapter. The discrepancy arises from the fact that the calculation here relates to the weight of direct exports in actual output, whereas at the beginning of the chapter they relate to the share of output directly and indirectly channelled to export in total derived output.

applies especially to other metal products, clothing, electrical equipment, and printing and publishing.

Among the export commodities, outstanding gains were posted by the group of special items, knitwear, and transmitting and receiving apparatus (see Table XI-12).

6. INVESTMENT

The expansion of industrial investment sagged further in 1971, when the real increase came to 10 percent, following rises of 13 and 32 percent in 1970 and 1969 respectively. This deceleration apparently reflected the process of adjusting the industrial capital stock, after capital expenditure by the sector had soared by an average of over 60 percent p.a. in 1968 and 1969. In 1970 and 1971 the capital stock expanded at a steady 10 percent annual rate, and this may possibly explain the slackening of investment growth.

Table XI–14

INDUSTRIAL INVESTMENT IN 1971 AND REAL ANNUAL CHANGES IN 1966-71

	Percent annual increase or decrease (–)						Investment in 1971 (IL million)
	1966	1967	1968	1969	1970	1971	
Investment in machinery and equipment	–15.0	–25.9	111.6	50.3	11.7	12.3	863.6
Thereof:							
Imported	–14.9	–31.9	156.0	45.8	16.0	12.4	673.0
Locally manufactured	–16.5	–11.3	34.9	65.0	–1.2	11.8	190.6
Investment in structures	–40.1	–17.9	50.6	–5.2	20.8	0.9	193.5
Total investment	–24.9	–23.4	91.1	32.5	13.2	10.1	1,057.1

SOURCE: Central Bureau of Statistics.

Investment in new enterprises (i.e. those in the construction or running-in stage) accounted for 13.4 percent of total industrial investment in 1971, compared with 12 percent in the previous year. As in 1970, the bulk of such investment was made in textiles, food, and chemicals. Appreciable increases were also recorded by industries experiencing a vigorous expansion of production in recent years, such as metal products, electrical and electronic equipment, and basic metal products.

The branch structure of industrial investment[19] did not undergo any substantial change in the year reviewed. The weight of branches that are heavy investors – metal

19. Data on imported equipment, which account for more than 60 percent of total equipment outlays, serve here as an indicator of the branch distribution of industrial investment.

products, textiles, and clothing – rose by over 40 percent, as against slightly more than 33 percent in 1970. The weight of food and printing and publishing went up despite the slower increase in their capital spending. The weight of electrical equipment, machinery, and basic metals fell.

A breakdown of investment by type of asset shows that outlays on structures edged up only 1 percent, as contrasted with 21 percent in the previous year. This much slower growth may have been simply a compensatory decline from earlier years of over-investment. However, it may also reflect a steady structural change in the input of capital assets, stemming from changes in the branch composition of production and a reduction in the amount of structures required per unit of equipment. Another possible explanation lies in the gestation period of specific projects, the time distribution of which is largely fortuitous, so that the structures-equipment ratio should really be examined for completed projects only (see the *Annual Report* for 1970, Chapter V, for a detailed discussion of this).