

## CHAPTER XI

### INDUSTRY

#### 1. MAIN DEVELOPMENTS

INDUSTRIAL PRODUCTION continued to expand strongly in 1972, although not quite as much as in the previous year—11.2 as against 12.6 percent on an

**Table XI-1**  
**INDICATORS OF INDUSTRIAL DEVELOPMENT, 1961-72**  
(percentages)

	Annual increase or decrease (-)						Dec. 1972 as against Jan. 1972 <sup>b</sup>
	Average 1961-65	Average 1966-68	1969 <sup>a</sup>	1970	1971	1972	
Industrial production <sup>c</sup>	13.4	11.5	15.9	10.4	12.6	11.2	11.9
Sales, at current prices	20.5	14.6	17.2	15.9	22.9	28.0	23.8
Number of workers <sup>d</sup>	3.3	4.3	9.7	5.7	4.7	4.8	3.2
Real investment	6.0	10.5	32.5	13.2	10.1	9.6	—
Real gross capital stock <sup>e</sup>	11.0	11.0	7.8	11.1	10.6	11.0	10.6
Output per worker	9.8	6.9	5.7	4.4	7.5	6.1	8.4
Output per unit of capital	2.2	0.5	7.5	-0.6	1.8	0.2	1.2
Change in factor productivity <sup>f</sup>	7.0	4.5	7.0	2.5	5.5	3.9	—
Domestic wholesale prices	5.0	1.8	1.9	6.8	9.2	11.6	10.4
Sales per unit of output, at current prices	6.3	2.8	1.1	5.0	9.1	15.1	10.6
Industrial export prices (f.o.b.)	—	—	4.8	-0.7	2.6	7.9	—
Nominal wages per worker	16.2	3.5	4.8	10.5	13.9	14.6	19.0
Total payroll outlay	—	8.0	15.7	17.6	18.2	20.8	23.6

<sup>a</sup> In 1969 data on output, wages, prices, and exports were reclassified and based on a new sample.

<sup>b</sup> Average for December 1972 and January 1973, divided by the index for these months during the preceding period.

<sup>c</sup> The data relate to calendar years.

<sup>d</sup> Until 1968 calculated according to the index of employees.

<sup>e</sup> At the beginning of the year.

<sup>f</sup> The method of calculation is presented in Appendix Table A-XI-1 (in Hebrew only).

SOURCE: Central Bureau of Statistics, Ministry of Commerce and Industry, and Bank of Israel calculations.

annual average; the increase between the beginning and the end of the year was slightly higher—11.9 percent.<sup>1</sup>

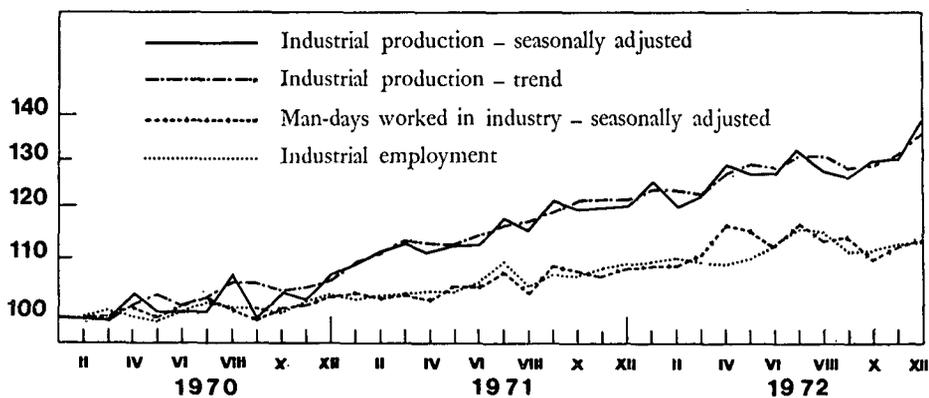
The main feature of 1972 was the conspicuous structural change in the demand for the sector's output: sales to the public sector were down 8 percent in absolute terms,<sup>2</sup> while those for private consumption rose 15 percent. Exports advanced more slowly in 1972, but this did not significantly affect total industrial output owing to the relatively small weight of this destination; what is more, the deceleration was partly due to random factors. The slackening of growth in capital goods production was surprising, but was nevertheless consistent with the weakening of the uptrend in real domestic capital formation.

These changes in the demand for industrial output led to a change in the branch structure of production. The slump in sales to the public sector was accompanied by a slackening of growth in the metal, transport equipment, and electronic industries, which market much of their output to the public sector. These branches were to blame for the decrease in the growth rate for the sector as a whole.<sup>3</sup>

The brisker sales to the private sector in the year reviewed did not result in an accelerated production of textiles, apparel, and leather goods, which account for an appreciable share of total industrial sales. One reason lay in the absence of any slack capacity in these industries following the closure of

Figure XI-1

**CHANGES IN INDUSTRIAL PRODUCTION AND MAN-DAYS WORKED, 1970-72**  
(January 1970=100)



Semilogarithmic scale.

<sup>1</sup> The change between the beginning and the end of the year is calculated as the average change in the index of industrial production for December 1972 and January 1973 compared with the corresponding period the year before.

<sup>2</sup> The data on public sector purchases are provisional.

<sup>3</sup> Less transport equipment and metal products, industrial production made greater headway in 1972 than in the previous year.

several concerns during the year (due to legal and not economic reasons) and the previous year's decline in demand, which discouraged the further expansion of capacity.

Industrial employment and the stock of capital assets moved up to about the same extent as in 1971. The number of industrial workers increased by about 9,000 (4.7 percent) and the capital stock by 11 percent. Industrial investment—which will be reflected in the sector's capital stock in the coming year but whose volume is also influenced by current activity—grew by 11 percent, as against 10 percent in 1971.

The combined result of the increase in the factors of production at roughly the same rate as in 1971 and the slower expansion of production was a smaller percentage rise in factor productivity as compared with the previous year. This was most pronounced in the metal, transport equipment, and electronic products industries.

Industrial developments in 1972 do not reveal a clear trend. Production and turnover were up 12 and 24 percent respectively, while employment grew by a mere 3 percent. The production curve rose sharply in the first and second quarters, flattened noticeably in the third, and turned steeply upward again in the last three months. The more sluggish rise in the third quarter was apparently of a transitory nature and not indicative of a new trend.

Output prices in the domestic market moved up very rapidly this year. Wholesale prices advanced 11.6 percent on an annual average—an unprecedented rate. The increase between the beginning and the end of the year was slightly milder—10.4 percent, about the same as in 1971. This rise was due to demand pressure in the home market, the gradual lifting of price controls, and mounting costs.

The principal cost components—labor and imported and local inputs—went up about 15 percent per unit of output, roughly the same as in 1971. Wage-labor rose 9 percent, as against 5 percent the year before; the price of local intermediates also went up a little faster in the year reviewed, as indicated by the wholesale price index of industrial output; but imported intermediates became only 15 percent dearer in 1972, as contrasted with 24 percent the year before. As a result of these developments, the weight of labor and domestic intermediates in the incremental cost of production rose, while that of imported inputs declined somewhat.

Turnover per unit of output, which is an indicator of the movement of producer prices, rose 15 percent, as against 9 percent in 1971. Profit per unit of output grew by 12 percent, so that the gross rate of return on the net stock of capital assets held virtually steady, for the second consecutive year. But it should be noted that what interests the industrialist most is not the rate of return on the capital stock but on own capital.

The f.o.b. value of industrial exports (including diamonds) advanced 24 percent, compared with 26 percent in 1971 and 6 percent in 1970. Diamonds

were responsible for nearly all of the change in growth rates; sales of this commodity soared 47 percent, as against 32 percent in 1971. Most of the increment went to the U.S., where demand continued upward after ebbing noticeably in 1969 and 1970. Excluding diamonds, the gain in industrial exports came to 11 percent, as contrasted with 23 percent the year before. The deceleration encompassed both the "special items" group,<sup>4</sup> where the change was due to special exogenous factors, and "other industrial exports", which were up 10 percent, following a much greater advance in previous years.

The laggard headway in nondiamond industrial exports may be ascribed to a number of factors, which had a differential effect on the various branches.

**Table XI-2**  
**GROSS INDUSTRIAL OUTPUT, BY MAIN BRANCH, 1969-72**  
(percentages)

Branch	Output in 1972 at 1970/71 factor prices	Percent annual increase or decrease (-)			
		1969 <sup>a</sup>	1970	1971	1972
Mining and quarrying	340.7	4.7	19.0	0.0	14.4
Food, beverages, tobacco	2,571.5	8.2	5.1	9.7	7.2
Textiles <sup>b</sup>	1,141.9	15.0	12.2	10.3	7.0
Clothing <sup>b</sup>	1,204.5	5.0	11.4	32.4	25.0
Leather and leather products	143.4	8.0	4.6	4.4	0.9
Wood, wood products, furniture	542.5	8.0	5.6	5.3	12.5
Paper and paper products	301.3	5.0	7.6	11.5	6.4
Printing and publishing	301.0	15.0	1.3	-5.2	7.3
Rubber and plastic products	649.0	20.5	14.5	17.4	19.1
Chemicals and refined petroleum products	1,242.3	11.0	16.2	12.4	14.5
Nonmetallic mineral products	553.9	11.2	12.5	10.3	14.4
Basic metals	377.7	23.6	-2.4	0.0	8.3
Metal products <sup>b</sup>	1,363.8	20.0	7.5	18.0	7.3
Machinery <sup>b</sup>	532.3	24.0	18.6	2.4	9.2
Electrical and electronic equipment	892.8	48.4	7.4	10.1	10.3
Transport equipment	753.6	28.4	28.1	18.9	2.6
Diamonds	1,083.2	4.2	-2.1	24.9	22.1
Miscellaneous	192.9	26.0	5.7	30.8	9.8
<b>Total</b>	<b>14,188.3</b>	<b>15.9</b>	<b>10.4</b>	<b>12.6</b>	<b>11.2</b>

<sup>a</sup> See note <sup>a</sup> to Table XI-1.

<sup>b</sup> Provisional data; only partially adjusted to the new branch classification.

SOURCE: Based on Central Bureau of Statistics data.

<sup>4</sup> See the note to Table XI-9.

The business boom in Israel was the main reason in such branches as minerals, plywood, leather, refined petroleum products, nonmetallic mineral products, and several textile and garment items. Besides the more buoyant home demand, the relative profitability of exports declined; this applied in particular to textiles, apparel, and leather, owing to the Government's policy of equalizing the price supports given to these branches with those granted to other branches in the economy. However, the effect of this measure was apparently of only secondary importance, and found expression chiefly toward the end of the year.

Random factors also played a part in the slowdown, especially in the case of panty hose, fabrics, knitwear, mine and quarry products, and electrical and electronic products. The uptrend also faltered in a number of branches which in 1971 had scored exceptional gains, such as transmitting and receiving apparatus, printing and publishing, and transport equipment.

Industrial investment was up 10 percent in 1972, slightly slower than in the previous year (12 percent). However, this did not affect the growth of the industrial capital stock, where the figure was again 11 percent. The upward trend in industrial investment has been sagging for the past several years. But since investment can be regarded as essentially the process of adjusting the capital stock to the growth of output, the expansion of the capital stock in the last three years was consistent with the expansion of industrial output. Several reasons can be given to account for this process, but they do not fully explain it, particularly considering the large amount of financing made available to investors, especially in 1972. The tapering of the rates of return in this sector at a time when elsewhere they were on the rise may have been responsible for the slower growth of industrial investment. In addition, some of the funds may have been used for completing the financing of investments made in earlier years, a development made necessary by the rise in investment prices.

## 2. INDUSTRIAL PRODUCTION<sup>5</sup>

Industrial production was up 11.2 percent in 1972: census value added (at 1970 producer prices) increased by IL 6,600 million, compared with IL 5,900 million in 1971, and real output (at 1972 producer prices) by IL 14,000 million, as against IL 12,600 million in 1971. These data point to a sagging of the industrial production growth rate in the year reviewed (the 1971 advance was 12.6 percent); however, the deceleration was not very great, and presumably it was the outcome of special factors at work in 1972.

The gain in industrial production can be credited to a 7 percent increase in the primary factors of production (capital and labor) and a 4 percent im-

<sup>5</sup> The industrial production data are only provisional. The increase in the value of production is defined here as the change in the index of industrial production published by the Central Bureau of Statistics. The changes in census value added and gross output are equal to the change in industrial production.

provement in their utilization rate.<sup>6</sup> The rise in measured productivity was not as great as in the previous year, let alone the early sixties. In 1971 the quantitative growth of the productive factors was the same as in the year reviewed, but industrial production had gone up at a faster rate.

Output per industrial worker rose more sluggishly in 1972,<sup>7</sup> indicating a similar development in total productivity. These trends stood out most in the metal, electronics, transport equipment, textile, apparel, and diamond industries. In metals and transport equipment, the slacker expansion of output per worker

Table XI-3

DISTRIBUTION OF TOTAL AND INCREMENTAL REAL INDUSTRIAL OUTPUT,  
BY MAIN BRANCH, 1969-72

(percentages)

Branch	Distribution of total output				Distribution of incremental output			
	1969	1970	1971	1972	1969	1970	1971	1972
Mining and quarrying	2.4	2.4	2.3	2.4	0.9	0.5	0.0	3.0
Food, beverages, tobacco	20.1	18.1	18.7	18.1	12.2	11.2	14.6	11.8
Textiles	8.3	8.1	8.4	8.0	8.7	11.1	6.9	5.2
Clothing	6.3	8.5	7.6	8.5	2.4	7.9	16.2	16.5
Leather and leather products	1.3	1.0	1.1	1.0	0.7	0.6	0.4	0.1
Wood, wood products, furniture	4.2	3.8	3.8	3.8	2.5	2.6	1.7	4.2
Paper and paper products	2.3	2.1	2.2	2.1	0.9	1.9	2.0	1.2
Printing and publishing	2.8	2.1	2.2	2.1	2.9	0.4	-1.1	1.4
Rubber and plastic products	3.9	4.6	4.3	4.6	5.3	6.2	5.6	7.2
Chemicals and refined petroleum products	8.0	8.7	8.5	8.8	6.4	14.1	8.3	10.9
Nonmetallic minerals	3.8	3.9	3.8	3.9	3.0	5.2	3.1	4.8
Basic metals	3.5	2.7	2.7	2.7	5.3	-0.9	0.0	2.0
Metal products	9.7	9.5	10.0	9.6	12.9	7.9	13.4	6.4
Machinery	3.9	3.8	3.8	3.8	6.0	8.0	0.8	-3.1
Electric and electronic equipment	6.6	6.3	6.4	6.3	17.3	5.4	5.1	5.8
Transport equipment	4.7	5.3	5.8	5.3	8.3	14.2	8.1	1.3
Diamonds	7.0	7.7	7.0	7.6	2.3	-1.6	12.0	13.9
Miscellaneous	1.2	1.4	1.4	1.4	2.0	0.8	2.9	1.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

SOURCE: 1970—Central Bureau of Statistics, Industry and Crafts Surveys; 1969, 1971, 1972—see the source to Table XI-2.

<sup>6</sup> The estimate of the quantitative increase in factors of production is sensitive to changes in the weights assigned to capital and labor and to the employment index used in the calculation. The use of alternative employment indexes and set of weights changes measured productivity by 2.7 to 4.1 percent. The computation here is based on the index of total employment, and the weights assigned to labor and capital are 60 and 40 percent respectively.

<sup>7</sup> See the appendix to this chapter (in Hebrew only).

is attributable to factor underutilization. The other industries mentioned took on more workers, but apparently they could not be fully employed either because of a shortage of other productive factors, or because they were hired in order to assure a reserve in the face of the mounting demand for manpower in the economy. Another reason for the milder rise in productivity was the smaller production advances in the diamond, metal products, and transport equipment industries following respectable gains in 1971. These are growth industries, and apparently they can fare better in factor utilization than other branches of the economy.

Along with the increase in factors of production and their productivity, there was a further growth of demand for the sector's output. Data on domestic purchases of industrial goods and other information on general economic developments indicate the changes in the composition and magnitude of the demand for industrial output.<sup>8</sup>

The most striking feature was the absence of any significant change in the output proportions of the domestic and export markets (see Table XI-5). However, there was a change within the domestic uses—a rise in the share of private consumption, a smaller one in investment, and a decline in public consumption.

The changes in the destination of the incremental uses were more pronounced. The steepest increase took place in private consumption; from 1967 through 1971 industrial output for this destination, calculated according to input-output coefficients, did not move up faster than either total industrial output so calculated or the total industrial product. In the year reviewed, however, it outpaced the latter two, advancing by 11.5 percent as against 10 and 11 percent respectively, thereby greatly increasing its weight in incremental output (see Table XI-5).

Together with the much heavier volume of sales to this destination, those to the public sector fell off: after a notable 29 percent gain in 1971, the level was down nearly 8 percent this year. The decline was partly due to the cutback in defense procurements following a strong upswing after the Six Day War and the war of attrition. Metal products and machinery were hardest hit by this development.

The dampening effect of the reduced sales to the public sector on industrial production outweighed the contribution of the other uses, which grew by 13 percent in 1972, as contrasted with 11.5 percent in 1971.

The accelerated expansion of domestic capital formation resulted in a slightly faster increase in the production of capital goods in 1972.

<sup>8</sup> Account must also be taken, of course, of such demand as could not be met from local output and found expression in a rise in prices or in imports. However, no data are available on this.

The export share of incremental output moved down from 38 percent in 1971 to 30 percent. This is explained by the sagging of the uptrend in total industrial exports in general and of nondiamond industrial exports in particular, after several years of vigorous growth. As will be seen below, the deceleration may be attributed, at least partly, to random factors and to the buoyant domestic demand under conditions of full factor employment in the sector.

As already noted, the structural change in uses strongly affected the metal, transport equipment, and electronic industries, whose weight in total nondiamond industrial output came to 32 percent, as well as the textile, apparel, and leather industries, which accounted for 20 percent of the total.

The slackening of the uptrend in metal and electronic products came after several years of above-average gains (in some subbranches the curve began to flatten in 1971, but this does not alter the general picture). As already noted, the slowdown was due, according to available data, to the slashing of public sector purchases. After the Six Day War these industries were the main suppliers of defense goods; the cutback in such orders apparently left them with excess capacity, and since they failed to find alternative markets, this led *inter alia* to the discharge of workers in the military industries and a slower increase in domestic sales of the aircraft industry and in the import and local production of earthworking and other heavy engineering equipment. The value of output marketed to the public sector was down approximately 10 percent, after a 30 percent rise in 1971; this more than offset the increase in the other destinations, owing to the dominant share of public consumption in total output (over 30 percent).

The textile, apparel, and leather industries deviated somewhat from the general trend, owing to the different weights of the various uses in their output. The slowdown of production in these industries was therefore not due to a slackening of sales but was accompanied by their vigorous growth (after a marked deceleration in 1971). Output destined for private consumption was up 42 percent, after a 12 percent drop in 1971. While industrial exports advanced in 1972, the percentage increase was smaller than in the previous year and this, combined with the smaller share of exports in total industrial output, failed to prevent the generation of pressure on available factors of production in this sector. It was not possible to boost production capacity or to divert part of it from other uses in order to meet the much heavier private consumption demand. The weight of this use in industrial output rose from 45 percent in 1971 to 56 percent.

Production of food, beverages, and tobacco products, which accounted for 20 percent of total nondiamond industrial output, grew more slowly in the year reviewed, owing to the slacker rise in domestic sales for private consumption. Here, too, the change in exports had only a minor effect on total production.

**Table XI-4**  
**FACTORS AFFECTING THE GROWTH OF INDUSTRIAL OUTPUT, 1969-72**  
 (percentages)

	1969		1970		1971		1972	
	Annual average in-crease	Share in incre-ment	Annual average in-crease	Share in incre-ment	Annual average in-crease	Share in incre-ment	Annual average in-crease <sup>a</sup>	Share in incre-ment
<b>A. Supply factors</b>								
Values of industrial output (census value added)	15.9	100	10.4	100	12.6	100	11.2	100
Labor	9.7 <sup>b</sup>	73	5.7	33	4.7	22	4.8	26
Capital stock	7.8	19	11.1	43	10.6	34	11.0	39
Increase in value of output due to increase in inputs	8.9	56	7.9	76	7.1	56	7.3	65
Measured productivity <sup>c</sup>	7.0	44	2.5	24	5.5	44	3.9	35
<b>B. Indicators of contribution to incremental demand<sup>d</sup></b>								
Private consumption	6.4	25	6.0	28	4.4	13	11.5	45
Public consumption	13.0	14	13.8	20	28.8	28	-7.6	-12
Investment	32.4	39	12.3	23	16.9	21	19.8	38
Total domestic uses	<b>12.6</b>	<b>78</b>	<b>8.8</b>	<b>71</b>	<b>11.9</b>	<b>62</b>	<b>9.4</b>	<b>68</b>
Exports	9.8	22	9.9	29	19.6	38	11.3	32
Total uses <sup>e</sup>	<b>11.9</b>	<b>100</b>	<b>9.1</b>	<b>100</b>	<b>14.0</b>	<b>100</b>	<b>10.0</b>	<b>100</b>

<sup>a</sup> See note <sup>a</sup> to Table XI-1.

<sup>b</sup> Calculated according to the index of employees.

<sup>c</sup> Assuming that the aggregate production function in industry lends itself to the method of calculation used here.

<sup>d</sup> 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.

<sup>e</sup> The discrepancy between the data on output originating and those on industrial production stems from changes in the input mix since 1965/66, the base year for the input-output calculations presented in Tables XI-5 and XI-6. But it seems that the major cause of the discrepancy is the quality of the data.

SOURCE: Part A—Appendix (in Hebrew only).

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

Table XI-5

DISTRIBUTION OF INDUSTRIAL OUTPUT, BY FINAL DEMAND, 1968-72<sup>a</sup>

(percentages)

	1968	1969	1970	1971	1972
Private consumption	46	43	42	39	39
Public consumption	13	13	14	15	13
Investment	14	17	17	18	19
Total domestic uses	73	73	73	72	71
Exports	27	27	27	28	29
Total uses	100	100	100	100	100

<sup>a</sup> Figures have been rounded off. The estimates are based on the 1965 input-output table of the Bank of Israel.

## 3. GROWTH OF INDUSTRIAL PRODUCTION DURING 1972

Industrial production expanded during 1972 by a monthly average of 0.9 percent, the same as in the previous year; the increase in December levels was 11.9 percent. During 1972 the curve rose at an irregular pace. In the first quarter it moved up to about the same extent as in the last quarter of the preceding year, but did not describe an even path. From the second quarter until August it virtually flattened out; in August it turned sharply downward, after which it again rose, by a relatively rapid 2.8 percent a month.

Industrial turnover advanced 24 percent, with the curve moving up steadily throughout most of the year; in the third quarter it tapered slightly but thereafter ascended fairly steeply (see Figure XI-1).

The available data are not sufficiently accurate for analyzing the factors affecting the growth of production and sales during the year. However, it appears that the third-quarter change of trend was due to a combination of factors, most of them random. First of all, the data were only partially deseasonalized, for the practice has spread of closing down the entire plant during annual vacation time, usually in August. Secondly, there were strikes in the food (Elite) and metal (Steel City) industries. Thirdly, there was a strike by customs officials, and sanctions were adopted by port workers; this harmed exports in general and those of manufactures in particular. Other factors retarding exports were the uncertainty that arose in European markets following the floating of the pound sterling, and random difficulties which were felt throughout the year (see section 5 below).

The third-quarter slowdown does not reveal a consistent pattern. True, in textiles, apparel, leather, and food the uptrend faltered, but only briefly, after which it accelerated fairly strongly. While the deceleration may partly be at-

**Table XI-6**  
**INDICATORS OF INDUSTRIAL DEVELOPMENT, 1971-72<sup>a</sup>**

(percent quarterly change)

	1971				1972			
	I	II	III	IV	I	II	III	IV
Industrial production <sup>a</sup>	6.9	-0.9	3.9	3.1	3.5	3.5	-1.3	4.9
Number of workers <sup>b</sup>	1.2	1.1	4.1	-0.9	1.5	0.6	2.9	-1.2
Sales <sup>a</sup>	4.6	3.6	7.1	10.6	3.7	7.8	2.7	9.4
Industrial exports <sup>a</sup>	-8.3	19.6	-3.0	24.9	-8.5	9.7	-1.2	21.9
Domestic wholesale prices <sup>a</sup>	1.1	0.6	2.0	5.3	1.8	1.6	2.1	3.6
Wages per worker <sup>c</sup>	2.6	4.5	2.6	1.3	5.0	6.0	1.7	0.7
Daily wages per worker <sup>a</sup>								
Original data	2.5	3.5	2.7	1.5	4.7	4.1	1.0	4.1
Seasonally adjusted	2.8	2.1	3.1	2.3	5.1	2.5	1.2	5.7
Total payroll outlay	3.6	4.0	7.0	0.4	7.2	7.4	4.9	-1.2
Sales, at constant prices	3.2	3.0	5.0	5.0	1.9	6.1	0.6	5.6
Index of employees								
Original data	0.9	-0.4	4.3	-0.8	2.0	1.4	3.2	-1.9
Seasonally adjusted	1.2	0.7	1.8	0.3	2.4	2.1	0.9	-0.4
Wages per unit of output	-2.7	3.9	1.2	-1.8	4.8	2.7	4.5	0.0
Sales per unit of output, at current prices	-1.8	3.5	1.3	8.9	1.4	3.1	2.3	5.8

<sup>a</sup> Original data (those for output and sales also reflect the quarterly changes in the seasonally adjusted series).

<sup>b</sup> Seasonally adjusted.

<sup>c</sup> Weighted by the number of working days in each quarter.

tributed to the difficulties encountered in export, this was apparently only of secondary importance.<sup>10</sup>

Industrial employment<sup>11</sup> rose 0.3 percent a month, or 3.2 percent for the year. The curve sloped mildly during the first part of the year, slightly more steeply in the third quarter, and tapered somewhat in the final quarter. The annual average level rose less than in 1971, but whether this signified a change in trend

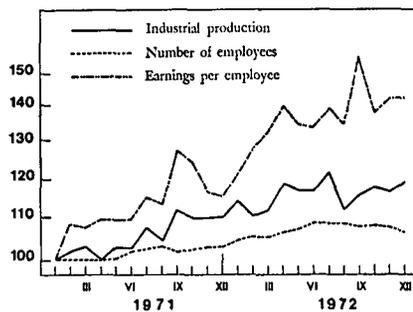
<sup>10</sup> As already noted, the slowdown in electronic products, machinery, metal products, and basic metals in the second half of the year was apparently due to the cutback in defense procurements. But no data are available to confirm that this happened precisely in the second and third quarters of the year. In these branches the production data were also affected by their partial revision, which for technical reasons could be made only for the fourth quarter.

<sup>11</sup> The various employment indexes, such as the number of man-days worked in industry and the number of employees, reveal a slightly disparate within-year picture. The main difference is a rapid growth of employment in February, March, and April according to the index of man-days, compared with a moderate rise in these months according to the index of industrial employment. The growth of employment according to the index of employees may be seen in Figure XI-2.

is difficult to say at this stage; it may have been a response to the random slowdown in production and turnover.

Wage expenditure rose 24 percent during 1972, compared with 19 percent the year before. The increases awarded industrial workers were the result of the new labor agreements negotiated in the sector. In some branches the agreements were concluded early in the year, and hence the accelerated rise in total and per employee wage outlay in the first and second quarters. Toward the end of the third quarter there was another spurt, due to the payment of advances in branches where agreements had not been concluded earlier in the year.

**Figure XI-2**  
**INDUSTRIAL PRODUCTION,**  
**EMPLOYMENT, AND EARNINGS**  
**PER EMPLOYEE, 1971-72**  
 (percentages)



Semilogarithmic scale.

#### 4. INDUSTRIAL OUTPUT AND INPUT PRICES

Domestic industrial output prices (wholesale prices) averaged 11.6 percent higher in 1972, the steepest rise since the establishment of the State. Whereas in 1967-70 the level did not go up by more than 2 percent a year, since then the uptrend has been gathering speed. It is hard to pinpoint all the underlying causes of the accelerated advance. The structural change in the demands for industrial goods undoubtedly created production bottlenecks, and in industries where output could not be stepped up the price rise was due solely to demand pressure. But it is noteworthy that the increase encompassed the entire sector. Presumably mounting costs, in particular the persistent uptrend in several major imported inputs, resulted in a strong cost-push on prices, which partly found expression in the retail prices, depending on the intensity of the demand pressure in the branch concerned. The price rise in the course of the year (the average for December 1972 and January 1973 compared with that for the same period in the previous year) was somewhat milder (about 10 percent) than the annual average rise. In contrast to the uneven advance of prices in 1971—a precipitate increase after the devaluation of the Israeli pound—in the year reviewed the curve sloped upward fairly evenly, with a slight acceleration in the second half of the year (see Figure XI-3 and Table XI-7). The faster increase in the last six months was apparently connected with the relaxation of price controls and the jump in foreign prices, which was recognized as a valid reason for authorizing a hike in the domestic price.

All branches showed an accelerated price rise in the year reviewed, except paper products and chemical and refined petroleum products. The advance was

especially sharp in industries where production growth sagged during the year: nonmetallic minerals, plywood, basic metals, leather and leather products, yarns, woven and knit fabrics, and outerwear (here production expanded more strongly but prices still went up very steeply), tinware, structural metal goods, and various electrical products (such as wire and cables, fixtures, heating elements, meters, electric bulbs, industrial ovens, etc.). These products are sold mostly for private consumption and to the construction industry, and both these demands grew considerably in the year reviewed.

Administrative control of prices was confined mainly to industrial products, and its effectiveness was apparently limited to the fact that it postponed somewhat the hikes demanded by producers. Control proved more effective for products manufactured in Government-owned establishments. Because of organizational and other difficulties, the controls were applied selectively. Changing the system at the beginning of 1973 also failed to stem the persistent rise of industrial output prices in the domestic market, although the prices of essential items were held down, with producers (and importers) absorbing the extra costs.

The main per unit cost components—labor and imported and local intermediates—became 15 percent dearer in 1972, about the same as in the previous year.<sup>12</sup> The similarity in the rates of increase in these two years masks a differential movement. Wage-labor costs went up 9 percent in 1972, compared with 5 percent the year before;<sup>13</sup> the prices of domestic inputs also rose more rapidly in 1972 (estimated according to the wholesale price index of industrial output, which climbed by more than 11 percent, as against 9 percent in the previous year). In contrast, the prices of imported inputs went up more slowly this year—16 percent as against 24 percent. These data, of course, are averages for industry as a whole, and in some inputs the rises were especially steep. As a result of these developments, the weight of wages and domestic inputs in incremental production costs rose, while that of imports declined.

In attempting to estimate industrial profits numerous difficulties were encountered owing to the lack of reliable data, notably on producer prices. Rough estimates show that the gain in gross profit per unit of output was greater this year than in 1971<sup>14</sup>—12 as against 8 percent.

The change in profit per unit of output only serves, of course, as an indicator of profitability. The estimated rate of gross return on the net stock of productive

<sup>12</sup> The increase in these costs was estimated on the basis of input-output coefficients for 1968.

<sup>13</sup> The calculated increase in wages per worker probably does not reflect the actual increase, for two reasons: (a) the change in fringe benefits is excluded; and (b) some of the wage increases were paid retroactively in the latter part of 1972 or in 1973. On the other hand, not all of this sum should be regarded as wage outlay on account of 1972 only. Moreover, it is very unlikely that all producers took these wage increases into account when upping their prices.

<sup>14</sup> Turnover per unit output was up 15 percent in 1972. This seems to accord more with the increase in producer prices than the wholesale prices of industrial output marketed locally.

Table XI-7

CHANGES IN INDUSTRIAL OUTPUT PRICES IN THE DOMESTIC MARKET, 1967-72  
(percentages)

Branch	Annual increase or decrease (-)						Change in end-year levels	
	1967	1968	1969	1970	1971	1972	1971	1972
Mining and quarrying	-0.9	3.6	1.9	4.4	8.9	11.2	8.8	9.8
Food, beverages, tobacco	1.6	2.4	0.9	3.8	8.8	8.5	9.8	5.6
Textiles	5.3	-0.1	0.9	4.6	9.0	12.0	7.8	16.4
Clothing	1.3	2.2	3.4	5.1	8.5	12.0	6.5	14.7
Leather and leather products	—	4.1	2.9	5.4	8.6	27.5	11.7	34.5
Wood, wood products, furniture	-0.1	2.7	1.3	10.7	12.8	19.4	13.8	15.7
Paper and paper products	-0.1	1.0	0.1	7.5	12.8	11.2	12.4	2.4
Rubber and plastics	1.3	0.8	0.8	2.8	6.2	7.6	6.8	3.9
Chemicals and refined petroleum products	3.0	4.0	-0.1	2.5	10.3	9.7	12.4	4.1
Nonmetallic minerals	1.3	1.1	2.3	7.2	9.3	10.7	11.3	9.3
Basic metals	2.4	7.2	4.4	13.6	6.9	13.2	9.5	16.1
Metal products	0.7	4.9	5.4	14.0	7.2	12.9	9.6	14.6
Machinery	-1.8	-1.0	2.7	8.8	9.8	10.9	8.2	10.6
Electrical and electronic equipment	0.5	4.8	3.1	11.6	7.9	11.1	9.2	6.6
Transport equipment	-0.4	2.1	3.4	9.3	15.9	17.6	17.3	15.5
Miscellaneous	1.1	7.1	2.4	7.0	7.2	10.6	7.9	8.9
Total	1.2	2.3	1.9	6.8	9.2	11.6	10.0	10.4

SOURCE: Central Bureau of Statistics.

capital remained unchanged in 1972.<sup>15</sup> A stable return on capital during a boom period is liable to affect the relative profitability of industrial investment. On the other hand, the capital stock is merely an indicator of the relevant variable in investors' decisions—own capital, which constitutes part of the industrial capital stock.

## 5. INDUSTRIAL EXPORTS

The f.o.b. value of industrial exports, including diamonds, reached \$ 924 million in 1972, compared with \$ 750 million the year before—a gain of 24 percent, as against 26 percent in 1971 and 6 percent in 1970. Excluding diamonds, growth amounted to only 11 percent, as against 23 percent in 1971. Sales of “special items”—which exhibit an erratic year-to-year pattern<sup>16</sup>—were

<sup>15</sup> Extrapolation of industrial survey data for 1970 shows that the growth of total industrial profits was equal to, or slightly greater than, that of the net stock of capital assets.

<sup>16</sup> For a definition of “special items” see Table XI-8. The definition of this group lost some of its significance in the past two years because of the influence of fortuitous factors on some of the items in the “other industrial exports” group (discussed below). But because of the sharp fluctuations in the former group, it still merits a separate discussion.

up 12 percent, compared with 18 percent in 1971 and a mere 2 percent in 1970. Other industrial exports advanced 10 percent, as contrasted with 25 percent the year before.

**Table XI-8**  
**GROWTH OF INDUSTRIAL EXPORTS, 1966-72**  
(at current f.o.b. prices)

	Total industrial exports	Diamonds	Industrial exports, excl. diamonds	Special items <sup>a</sup>	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	747.7	265.3	482.4	149.3	333.1
1972	924.1	389.0	535.1	169.0	366.1
	Percent annual increase or decrease (-)				
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	31	23	18	25
1972	24	47	11	13	10

<sup>a</sup> 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 data.

The total export gain (excluding diamonds) came to \$ 50 million, as against \$ 90 million in the previous year. This increase in nondiamond industrial exports was the smallest posted since 1966, both relatively and absolutely.

Diamond sales, on the other hand, shot up by an unprecedented 47 percent, compared with 32 percent in 1971. This notable headway was mainly connected with the continued buoyant demand in the U.S. market (for the second straight year); the slump in such demand in the wake of the economic slowdown in 1969-70 had brought on a crisis in the local industry during those years.

Table XI-9

GROWTH OF INDUSTRIAL EXPORTS, BY MAJOR CATEGORY, 1968-72

	Annual increase (\$ million)					Percent of total increment				
	1968	1969	1970	1971	1972	1968	1969	1970	1971	1972
Diamonds	36.9	21.6	-13.1	64.7	123.7	37.9	27.8	-40.2	41.8	70.1
Special items	28.4	5.8	2.0	22.8	19.7	29.1	7.5	6.1	14.7	11.1
Other industrial exports	31.1	50.3	43.7	67.3	33.0	33.0	64.7	134.1	43.5	18.8
Total industrial exports	96.4	77.7	32.6	154.8	176.4	100.0	100.0	100.0	100.0	100.0

SOURCE: See Table XI-8.

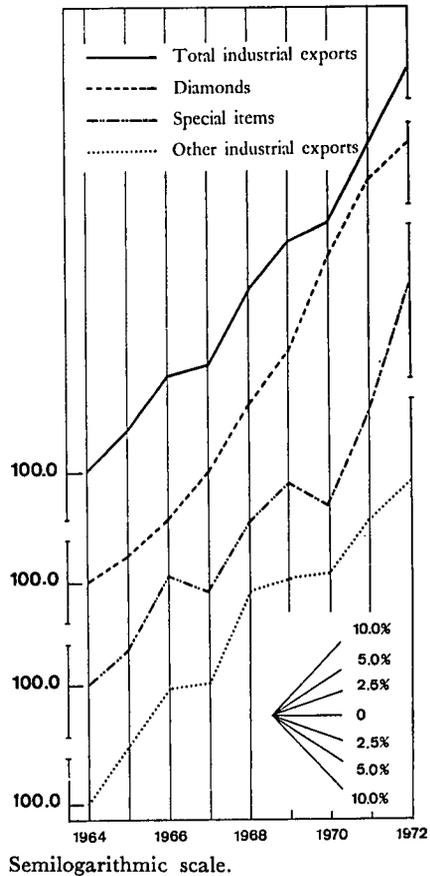
Special items were up \$ 18 million, of which some \$ 14 million was in citrus products alone. A striking development in 1972 was the decline in refined petroleum products.

Other industrial exports rose by \$ 34 million to reach \$ 388 million. The leading items here were scientific instruments, jewelry, machinery, apparel, pesticides, pharmaceuticals, and electrical and electronic equipment.

These developments led to a structural change in total and incremental industrial exports. Most outstanding was the increased share of diamonds, which accounted for nearly 70 percent of the total export gain, compared with 40 percent in 1971. Other industrial exports, on the other hand, fell steeply, from 44 to 19 percent. The decline in special items was of slight importance.

The more sluggish growth of non-diamond industrial exports this year can be attributed to a number of factors, which had a differential effect on the various branches. One was the faster increase in the producer prices of output marketed locally compared with that sold abroad. Actually, in quite a few

Figure XI-3  
CHANGES IN INDUSTRIAL EXPORTS, BY COMPONENT GROUP, 1964-72  
(percentages; original data)



branches the increase in the relative price of exports, which had persisted for several years, was checked in 1972. The relative-price effect was stronger toward the end of the year and hence was not a decisive factor in the sagging of the 1972 export growth rate. Along with the rise in the relative price of domestically marketed output, a number of subbranches experienced a livelier domestic demand for their products, and this strengthened the preference for the home over the export market. This was especially true of minerals, plywood, leather, nonmetallic minerals, refined petroleum products, and some textile and clothing items which suffered from production limitations.<sup>17</sup> The deceleration in "other

**Table XI-10**  
**CHANGES IN PRICES TO THE EXPORTER, 1969-72**  
(percentages)

	1969	1970	1971	1972
Effective rate of exchange: industrial exports				
less diamonds and minerals (IL/\$)	4.10	4.47	5.04	5.40
Annual change in effective rate of exchange	—	9.0	12.8	7.1
Export prices (f.o.b.)	4.8	0.3	4.1	5.3
Price to exporter per unit of exported output	—	9.3	17.4	12.8
Sales per unit of output	2.1	4.9	8.8	15.0

SOURCE: Central Bureau of Statistics and Ministry of Commerce and Industry.

industrial exports" must also be partly attributed to the exceptionally impressive headway made in 1971, when the execution of a number of large orders was begun but whose completion in the year reviewed did not lead to any further gains. This was most prominent in transmitting and receiving equipment, printing and publishing, transport equipment, and metal products (discussed below). Special and random factors retarded, or even depressed, exports of such items as panty hose, knit fabrics, minerals, and electronic products.

#### *Exports by branch and product group*

In some branches overseas sales fell off in absolute terms. The sharpest drop was in textiles—down some \$ 4 million. The decline was concentrated in knit fabrics owing to stiff competition abroad and production difficulties encountered by one of the leading mills. At the same time, however, there was a greater domestic demand for knit goods. Cotton yarn continued downward owing to the steady expansion of the home market. The relative return on textile

<sup>17</sup> The production capacity constraint is not an indispensable condition for inducing substitution between the home and export markets. In the above-mentioned branches both factors were at work.

exports fell for the third consecutive year, which suggests that the influence of the price factor is very strong here.

Mineral exports also declined in 1972, although to a much smaller extent (\$ 1.7 million). The steepest drops were in plate glass, asbestos, and ceramic and clay products, which enjoyed a steadily growing domestic demand over the past few years.

**Table XI-11**  
**INDUSTRIAL EXPORTS, BY MAIN BRANCH, 1969-72**  
(at current f.o.b. prices)

Branch	Total exports (\$ million)		Percent annual increase or decrease (-)					
	1971	1972	1969	1970	1971	1972		
						Value	Quantity	Price <sup>a</sup>
Mining and quarrying	41.9	42.4	14.0	13.7	2.6	1.0	0.1	0.9
Food, beverages, tobacco	81.2	98.7	29.4	13.2	24.0	21.5	16.0	4.7
Textiles	49.4	45.7	31.8	7.1	15.7	-7.6	-9.9	2.6
Clothing	69.8	77.7	8.0	30.9	30.2	11.2	5.8	5.1
Leather and leather products	4.8	6.4	86.1	-5.4	37.4	32.8	26.7	4.8
Wood, wood products, furniture	9.6	11.4	12.9	3.6	-0.5	18.7	19.9	-1.0
Paper and paper products	2.5	2.8	-2.2	45.8	-19.9	9.1	4.3	4.6
Printing and publishing	11.2	12.5	28.9	17.1	90.1	11.2	0.2	11.0
Rubber and plastics	27.4	30.6	28.1	24.3	16.4	11.5	2.7	8.6
Chemicals and refined petroleum products	63.6	69.0	6.3	18.2	9.3	8.3	3.6	4.5
Nonmetallic minerals	3.7	2.1	-12.1	-9.5	22.0	-43.8	-47.2	6.5
Diamonds (net)	265.3	389.0	11.2	-6.1	31.8	46.6	31.4	11.6
Basic metals	9.1	8.1	0.0	-4.2	-10.1	-12.2	-15.6	4.0
Metal products	44.6	48.6	0.4	-13.8	56.5	8.8	3.2	5.4
Machinery	9.2	12.9	63.2	21.7	-12.8	40.4	31.3	6.9
Electrical and electronic equipment	25.3	29.7	69.5	65.8	97.1	17.0	7.1	9.2
Transport equipment	13.9	13.4	-0.4	-16.7	53.0	-4.1	-8.1	4.4
Miscellaneous	15.2	23.1	9.4	25.0	30.3	52.4	37.4	10.9
<b>Total industrial exports</b>	<b>747.7</b>	<b>924.1</b>	<b>15.6</b>	<b>5.8</b>	<b>26.0</b>	<b>23.1</b>	<b>14.0</b>	<b>7.9</b>
<b>Total, excl. diamonds</b>	<b>482.4</b>	<b>535.1</b>	<b>18.9</b>	<b>13.2</b>	<b>23.0</b>	<b>10.9</b>	<b>5.4</b>	<b>5.2</b>

<sup>a</sup> The data on prices seem to be deficient and should be accepted with caution.

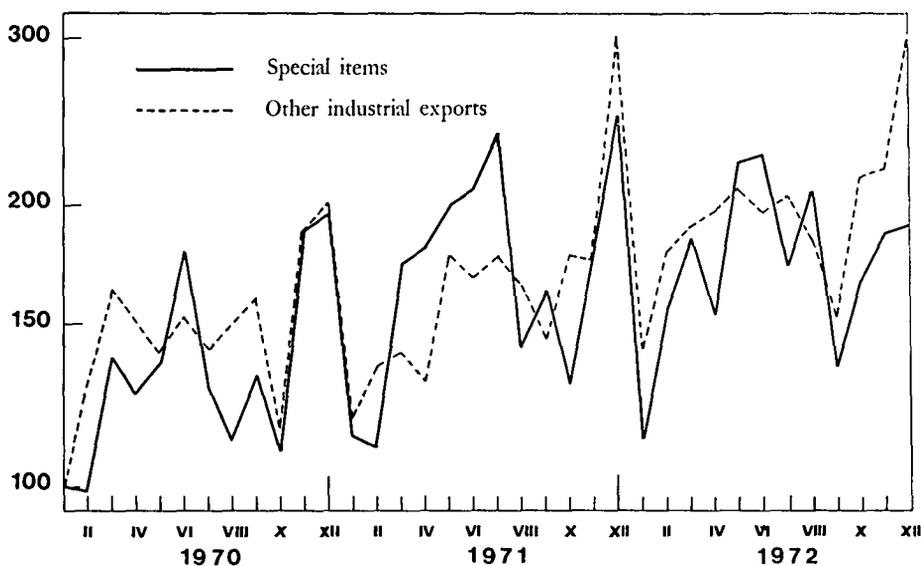
SOURCE: Central Bureau of Statistics.

The decline of some \$ 1 million in exports of basic metals can be attributed to the more buoyant domestic demand for special nonferrous castings. On the

other hand, there was a much larger export of pipes (local production of which was stepped up), but not enough to offset the decrease in nonferrous metals.

The fall in transport equipment is attributable to the completion of a large order in 1971 by Israel Shipyards. The sharply higher export by the aircraft industry was not sufficient to offset this decline.

**Figure XI-4**  
**EXPORTS OF SPECIAL ITEMS AND OTHER INDUSTRIAL PRODUCTS, 1970-72**  
(percentages; original data)



Semilogarithmic scale.

In rubber and plastics export growth slackened appreciably, while domestic sales were up strongly. The slowdown in exports was most marked in intermediates, which were diverted to local industry, and less so in finished goods.

As regards chemicals and refined petroleum products, the smaller gain is explained by the further growth of domestic demand for refined petroleum products. Here, too, production limitations led to a preference for the home market. Trends in other component items were mixed: exports of fertilizers were up by an appreciable 30 percent, reflecting the steadily rising foreign demand. Notable advances were also recorded in pesticides and disinfectants, in line with the trend of the past few years. The differential development of these items (fertilizers and pesticides and disinfectants) is explained by the fairly mild growth of domestic demand for fertilizers, so that most of the expanded production capacity was diverted to export; in pesticides and disinfectants production, exports, and domestic sales all increased more strongly in

1972. In cosmetics, explosives, and paints exports were stepped up following the accelerated expansion of production.

Overseas clothing sales went up by \$ 7.5 million, compared with \$ 17 million the year before (11 vs. 30 percent). The item most responsible for the smaller gain was panty hose, which was down \$ 5 million after a steady advance begun in 1966; the uptrend was arrested because of the appearance of new competitors in the world markets and a partial switch to exports of yarns for the manufacture of stockings and socks in place of finished panty hose. Despite the expansion of production, other garment exports went up more slowly in 1972 because of brisker domestic sales.

In printing and publishing the trend was similar to that of panty hose. After the initial flurry of sales of the *Encyclopaedia Judaica* in 1971, they tapered off and even turned downward toward the end of the year. As a result, the uptrend in this industry slowed considerably, and in quantitative terms the level remained virtually steady.

The deceleration in mine and quarry products was the net result of a slight decline in potash, owing to production difficulties; a drop in copper-cement, due to the fall in world prices and higher production costs; and an increase in phosphates, following the more regular operation of the local plant and a slight advance in foreign prices.

The deceleration in leather products was due to the reduction of production capacity following the closure of one of the leading concerns. The industry encountered difficulties this year because of the imposition of price controls on its products in the domestic market and because of an exceptionally steep rise in input prices. Another factor was the buoyant domestic demand for leather products and the cutback in shoe production. The latter development is explained by the keen competition from the administered areas and the livelier domestic demand for imported brands, which rendered the protective tariff less effective.

Stiff Japanese competition in the world markets explains the slower export growth of electrical and electronic products. Sales to Uganda were discontinued because of the political crisis.

In metal products the deceleration was concentrated mainly in "other metal products." Sales to such countries as Uganda and Peru fell off because of special factors, but as against this exports by Israel Military Industries continued upward.

Bigger export gains were posted this year by wood and furniture, machinery, and "miscellaneous manufacturing". The last-mentioned rose by a very respectable \$ 8 million, headed by precision and fine instruments, optical and photographic instruments, jewelry, and works of art—items which have been forging steadily ahead during the past few years. Spare parts, refrigerators, pumps, and compressors have shown a consistent increase in overseas sales. In the wood industry there was a larger export of furniture and a decline in plywood. During the year the possibility was even discussed of discontinuing the export of ply-

wood and cutting the customs tariff, as the mounting local demand exceeded production capacity.

Food exports showed no significant change in 1972. The biggest gain was in citrus products, followed by edible oils and fats, overseas sales of which are largely determined by various random factors.

## 6. INVESTMENT

Industrial investment again increased more slowly in 1972, by 10 percent compared with 12 percent in 1971 and 13 percent in 1970. The capital stock, as already noted, expanded by 11 percent, roughly the same rate as for the past several years.

The more sluggish growth of investment and the stable uptrend in the capital stock may indicate the adjustment of the latter to its desired level. The capital stock is a function of changes in the demand for industrial output and the existing stock. This is illustrated by developments in the metal industries, where capital spending held steady despite a marked slowdown in demand. Another possible reason for the slower expansion of investment is the stabilization of the return on the industrial capital stock at a time when in other sectors the rate

Table XI-12

### INDUSTRIAL INVESTMENT IN 1972 AND REAL ANNUAL CHANGES IN 1967-72

	Percent annual increase or decrease (-)						Investment in 1972 (IL m.)
	1967	1968	1969	1970	1971	1972	
Investment in machinery and equipment	-24.5	108.4	50.2	11.7	13.1	10.5	1,092.2
Thereof:							
Imported	-31.9	156.0	45.8	16.0	12.4	10.4	854.7
Locally manufactured	-11.3	34.9	65.0	-1.2	11.8	10.5	237.5
Investment in structures	-17.8	50.2	-5.3	19.0	6.6	6.4	248.4
Total investment	-23.4	91.1	35.3	13.0	11.8	9.6	1,340.6

SOURCE: Central Bureau of Statistics.

was moving up strongly. The slackening of investment growth stands out against the much larger volume of long- and medium-term loans and grants provided to industry in 1972—an increase so great as to suggest that the amount of financing made available exceeded the actual volume of investment.<sup>18</sup>

<sup>18</sup> This is discussed in Chapters V and XV.