

## CHAPTER XII

# INDUSTRY

### 1. MAIN DEVELOPMENTS

INDUSTRIAL OUTPUT turned downward in 1966, for the first time since 1952 and after many years of rapid growth. While the real gross industrial product remained at about the same level as in 1965 and real gross output was even about 2 percent higher, this was almost entirely due to the rise recorded in 1965 and the first two months of 1966, for in March the trend began to change. The drop in output was accompanied by an even sharper decline in industrial employment and in the number of man-days, so that despite the fall in the level of output, that per man-day increased, although much more slowly than in previous years. The change was more noticeable in factor productivity,<sup>1</sup> which decreased in 1966 after several years of rapid and steady growth. Industrial investment was down by nearly a quarter, after declining in 1965 as well.

Industrial exports, on the other hand, expanded more rapidly in the year reviewed, exceeding the 1965 figure by about 19 percent. There was a particularly strong rise in diamond sales, which accounted for more than half the incremental industrial export.

The change in the industrial output trend was partly due to economic developments in the previous year. The slowdown of construction activity gradually affected the level of output in various branches of industry. About a tenth of total industrial output consists of construction inputs, and a decline in construction activity directly influences their production, although after some time-lag. The decrease in construction occurred mainly in building starts, whereas the area of completions expanded in 1965 and tapered off in 1966. Thus the weakening of demand was felt initially in inputs for the early stages of building—quarry products, clay, lime, and cement and cement products—and gradually spread to those for the later stages of construction—the products of the wood, metal, nonmetallic mineral, electrical equipment, and plastics industries. As the number of buildings in the final stages was still falling off at the end of 1966, the decline in the demand for and output of these products had not yet come to an end.

<sup>1</sup> The reference is to that portion of the incremental output that cannot be attributed to capital and labor inputs. The methods of calculation is explained in the appendix to this report (in Hebrew only).

Besides the slackening of construction activity, the smaller volume of investment in general and that in industry in particular contributed directly to the reduction of industrial output. The downtrend in investment also began in 1965, and it mainly affected the metal and machinery industries and the production of transport equipment.

**Table XII-1**  
**CHANGES IN INDUSTRIAL OUTPUT AND FACTOR INPUTS, 1959-66**

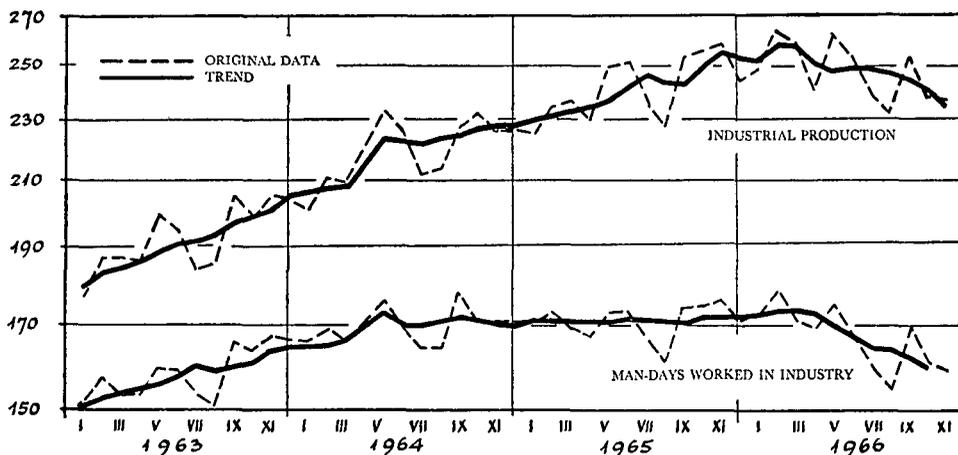
	Percent increase or decrease (-) as against preceding year							
	1959	1960	1961	1962	1963	1964	1965	1966
Real output	15.4	11.6	16.7	13.4	15.5	15.0	9.9	1.8
Number of wage earners	9.0	8.6	12.5	8.3	7.5	5.2	1.5	-1.4
Number of production workers	8.3	8.7	12.9	7.8	7.4	5.3	0.6	-2.4
Number of man-days by production workers	11.6	9.2	13.2	7.6	9.0	7.1	0.6	-2.9
Real investment	27.6	-2.3	19.7	6.9	16.9	10.0	-9.3	-24.5
Real gross capital stock <sup>a</sup>	12.8	15.0	11.0	12.1	14.5	11.8	9.4	6.2
Output per man-day	3.4	2.2	3.1	5.4	6.0	7.4	9.3	2.9
Factor productivity	3.0	0.5	3.7	3.9	4.1	5.7	6.0	-0.7
Daily wages per worker	4.3	3.7	8.2	11.3	11.1	10.2	14.2	16.2
Exports (\$, f.o.b.)	43.7	22.1	19.4	19.6	21.1	13.3	12.7	18.9
Share of exports in incremental output	43.9	36.7	30.8	39.0	31.6	19.0	22.7	140.0
Domestic market prices	2.2	2.8	5.8	10.5	3.8	0.9	4.0	4.4

<sup>a</sup> At the beginning of the year, for the purpose of calculating productivity.

Also influencing the demand for industrial products was the decline in incomes and the slower growth of consumption. These mainly affected demand for durable goods, and led to a smaller output of household equipment, transport equipment, and furniture. Current consumption, on the other hand, continued upward throughout most of the year. Output of foodstuffs averaged more than in 1965; the figure for textiles and clothing also rose, although to a smaller extent than in 1965. Only toward the end of the year were there signs of a decline in the output of these industries (see Diagram XII-3). This development is not surprising, for the demand for durable goods is more sensitive to a fall in income, and especially to expectations of lower income, than is the demand for consumer goods. It should also be remembered that some of the durable consumer goods are complementary to residential construction, and the weakening of the new housing market may influence the demand for such products.

The liberalization of imports contributed only negligibly to the reduction of output. The increase in imports under this program, as compared with the

**Diagram XII-1**  
**INDEXES OF INDUSTRIAL PRODUCTION AND LABOR INPUT, 1963-66**  
 (1958=100)



Semi-logarithmic scale.

SOURCE: Central Bureau of Statistics.

previous year, amounted to \$6.4 million—about 0.7 percent of the value of output exposed to competition—and they included many items which do not compete directly with the products of local industry. Even in industries where the influence of competing imports was relatively strong—such as footwear and furniture—the additional import did not exceed 1 percent of the output.

Industries which continued to expand rapidly in 1966 were those mainly geared to export—diamonds, mine and quarry products (except building materials), and petroleum refining. These branches account for more than half of industrial exports, but their weight in total industrial output is small.

The growth of industrial exports in 1966 exceeded that of industrial output in absolute terms, whereas in previous years the share of export in incremental output ranged from 20 to 40 percent. This can be attributed more to the slower rise of output than to the accelerated expansion of export. Examination of the composition of industrial export reveals that only a small percentage of the increase was contributed by industries where home demand competes with exports, and that the bulk of it was accounted for by a number of industries producing primarily for the overseas market.<sup>1</sup> The direct dependence of these industries on the level of local demand is very small, although the weakening of such demand affects them indirectly in that it eases the competition for local factors of production.

<sup>1</sup> See Table XII-6 and the discussion in the section on industrial exports. The subject is discussed at greater length in Chapter III, "The Balance of Payments", the section on exports.

The contraction of output is likely to be a temporary phenomenon, attributable to the time required to adapt production from the home to the overseas market. But in order that this reorientation should come about, it is necessary that the returns to the exporter should cover production costs and leave him a reasonable profit. The increase in production costs in recent years, at a time when foreign prices for most of Israel's exports did not rise,<sup>1</sup> tended to make export less worthwhile. To offset this development, export subsidies were enlarged in 1966, particularly toward the end of the year.<sup>2</sup> It is too early to ascertain whether the increased support will lead to a substantial expansion of export; provisional data for the early part of 1967 do not show any acceleration of the growth rate.

Industrial employment declined by 1.3 percent on an annual average and by 8 percent in the course of the year. The number of production workers fell more rapidly than the total number of employees, and the number of man-days per production worker also decreased. The latter development became more pronounced in the last months of the year, when many firms went over to a short working week. There was a net separation of gainfully employed in most branches of industry, and even in those where output increased, the number of workers either declined or did not go up. The sole exception was the diamond industry, where employment was more than 20 percent higher than in 1965.

The transition from a labor shortage to a labor surplus did not increase labor mobility, mainly because there was practically no additional demand for workers in industry. Other reasons were the practice of dismissing workers on a first-in-first-out basis rather than according to their suitability, and the extent of unemployment, which discouraged workers from leaving their jobs. On the other hand, there was apparently a greater willingness on the part of workers to change jobs within their place of employment.

Despite the reduction of industrial employment, wages rose very rapidly in 1966—by an average of about 16 percent as compared with 1965. The various industries did not display widely disparate growth rates, and even in those where output and employment contracted very sharply, wages went up at a close to average rate. This is explained primarily by the fact that most of the rises were the result of institutional arrangements reached before the economic slowdown was fully felt, and also because the wage structure is rigid and does not respond readily to changes in the state of the market. Most of the increase took place at the beginning of the year—when the cost-of-living allowance was raised and when many new wage agreements went into effect—and the majority of the rises granted during the course of the year also

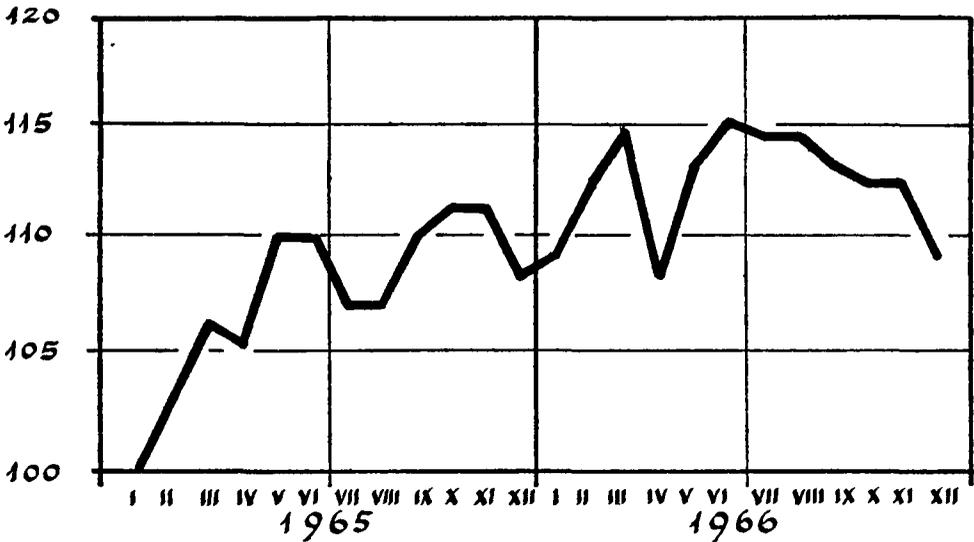
<sup>1</sup> As is explained further on, about a third of the increase in industrial exports in 1966 stemmed from higher prices. While this increase is relatively large, it was concentrated in a small number of products, whereas the prices of most export items did not rise.

<sup>2</sup> For a fuller discussion of this, see Chapter III, "The Balance of Payments".

stemmed from the implementation of agreements reached earlier. It should be noted that the moderation of economic activity and the growth of unemployment slowed down the wage rise, since it led to postponements and delays in implementing some of the wage agreements. The effect of the recession was apparently felt even more—although it cannot be measured—in the freezing and even abolition of hidden concessions.

Diagram XII-2

INDEX OF INDUSTRIAL OUTPUT PER MAN-DAY, 1965-66  
(January 1965=100)



Semi-logarithmic scale.

SOURCE: Based on Central Bureau of Statistics data.

As a result of the 0.1 percent decline in industrial product and the 2.9 percent decline in the labor input, output per man day advanced 2.9 percent. This was the smallest increase since 1960 (see Table XII-1). Examination of the change in the course of the year shows that the trend continued upward until the second quarter and then turned down to some extent (see Diagram XII-2). As the capital input (measured by the real gross capital stock) was 6 percent higher in 1966, the downturn in factor productivity was even more pronounced—a drop of 0.7 percent as against an increase of 6 percent per annum in the two preceding years.<sup>1</sup>

<sup>1</sup> Relevance should be attached mainly to changes in productivity over time. The change in a given year must be regarded cautiously, as it is influenced to a large extent by the assumptions underlying the calculation. These assumptions and the method of calculation are presented in the appendix (in Hebrew only).

The changes in productivity were apparently the result of opposing influences. The creation of an excess supply of labor and fear of dismissal were factors tending to raise work morale and productivity. But there were weightier influences acting to lower it, of which the following three should be noted: (1) the time-lag between the reduction of output and that of the labor force, owing partly to the difficulty of dismissing redundant workers because of institutional factors, and partly to the fact that many employers tend to hold on to excess labor either in order to avoid paying severance compensation or so as not to lose personnel in whose training they have invested and whom they will again need once the recession is over; (2) the lower rate of capital utilization—reflected *inter alia* in fewer shifts and a shorter working week—simultaneously with a further growth of the gross stock of capital assets; and (3) the loss of economies of scale as a result of production cutbacks.

Despite the weakening of demand, the domestic market prices of industrial output advanced more rapidly than in the two preceding years—by 4.4 percent as against 4.0 percent in 1965 and 0.9 percent in 1964. This accelerated increase in a year of falling demand can presumably be attributed mainly to higher production costs. Prices rose primarily in those industries which had to pay more for imported raw materials (metal and leather) or where additional taxes were imposed (textiles, clothing, automotive vehicles, beverages and tobacco). In addition, there were big wage hikes in all industries—an average of 16 percent. While there are no direct statistics on changes in industrial profitability, it apparently declined; at any rate, the share of wages in the value of output rose. This suggests that the sagging of domestic demand led to the absorption by producers of part of the increased production costs, which otherwise would have pushed up prices to a greater extent. The fact that most of the price rises took place in the first half of the year, when the contraction of demand had not yet assumed significant proportions, tends to support this conclusion. Some of the price rises can be ascribed to increased production costs in previous years, which the Government's policy of price restraint prevented from being passed on to the consumer. With the sharpening of the decline in demand in the second half of the year, the upward movement of prices slowed down appreciably in most industries, and in some the trend even turned downward.<sup>1</sup>

In some cases the mounting of prices presumably depressed demand to a marked degree. This may explain the development in the leather industry, where prices went up by an average of 16 percent and sales dropped to the same extent (in real terms). It should be noted in this connection that in a period of transition from boom to slump, the price index tends to overstate the actual rise of the price level, since it does not fully reflect discounts given as a result of the greater bargaining power of customers or better sales

<sup>1</sup> Except for the textile and clothing industries, which are discussed below.

and payment terms. Hence the actual price advance may have been smaller than that shown by the index.

According to provisional data, real gross industrial investment declined by approximately 24 percent in 1966, following a 9 percent decrease in 1965. The increment to the real gross capital stock<sup>1</sup>—the true measure of the growth of industrial production capacity—amounted to 3 percent in 1966, as against 6 percent in 1965 and an average of 12 percent in the years 1961–64. The much lower growth rate in the year reviewed was due to both a decline in gross investment and an increase in assets discarded.

Part of the reduction in capital formation in 1966 can be attributed to the recession, but in the main it was the outcome of earlier influences. Various indicators show a slower growth of investment activity in 1964 and a decline in 1965 (see Table XII–8). This trend was apparently due to the marked expansion of the industrial capital stock in the years 1961 to 1963, the decrease in industrial profitability, and the completion of several large investment projects. Added to these factors in 1966 was the recession, but it was only partly reflected in the developments during the year.

It should be noted that these conditions provide an opportunity for greater investment initiative on the part of the Government, for private investors are reluctant to invest during a period of recession and unemployment; moreover, the existence of idle factors of production makes investments cheaper from the viewpoint of the national economy because of the comparatively low real price of the local components of investment. Government initiative has in fact found expression in the amended Law for the Encouragement of Capital Investments, which aims at increasing Government participation in the financing of approved investments.

But since the economy is interested in expanding export production, the new investments should be made principally in enterprises that will market a substantial part of their output abroad. In order to encourage this, it is not enough to offer favorable investment terms, but it is also necessary to ensure a fair return on export. The additional incentives granted at the end of 1966 increased the profitability of export in comparison with the position earlier in the year, but for investment in new export enterprises to be worthwhile, a greater incentive has to be offered than for inducing existing concerns to step up overseas sales, since in the former case it is necessary to earn a profit on total costs, whereas in the latter case it is enough to cover variable costs.

## 2. OUTPUT

The value of industrial output in real terms was 1.8 percent higher in 1966, while the real gross product showed no increase whatever (according to the

<sup>1</sup> Gross investment less discards. See Chapter V, "Domestic Investment", note <sup>5</sup>, p. 101, and note <sup>1</sup>, p. 102.

Table XII-2

## GROSS INDUSTRIAL OUTPUT, BY BRANCH, 1963-66

(IL million, at current prices)

	1965/66 <sup>a</sup>	Percent real increase or decrease (-) as against previous year <sup>b</sup>			
		1963	1964	1965	1966
Mining and quarrying	165	23.6	27.5	24.6	2.6
Food	1,300	10.5	14.6	4.6	6.5
Textiles	673	18.6	24.3	10.2	4.2
Clothing	207	17.8	18.1	24.5	5.6
Wood and carpentry	376	20.3	19.8	17.3	1.8
Paper, printing, publishing	304	11.4	16.9	7.5	8.4
Leather and leather products	106	4.0	11.2	11.3	-2.4
Rubber and plastics	121	21.4	30.7	10.5	9.8
Tires	59	-7.8	13.3	11.0	-4.5
Chemicals	308	13.0	18.1	17.8	8.9
Petroleum refining	232	29.1	12.7	13.6	16.0
Nonmetallic minerals	301	10.3	4.3	6.2	-7.6
Diamonds	384	22.0	3.0	7.7	11.2
Basic metals	192	1.7	12.3	8.1	-7.0
Metal products	416	12.9	22.6	5.4	-4.6
Machinery and electrical equipment	214	28.9	12.6	9.6	-1.7
Household equipment and misc.	262	19.5	2.9	6.1	-13.4
Transport equipment	403	21.4	1.7	4.6	-12.9
<b>Total</b>	<b>6,023</b>	<b>15.5</b>	<b>15.0</b>	<b>9.9</b>	<b>1.8</b>

<sup>a</sup> Output at factor prices, according to preliminary returns from the census of industry and crafts for 1965/66.

<sup>b</sup> Percentage changes in 1963 and 1964 were calculated from data of the Central Bureau of Statistics industrial surveys, and those for 1965 and 1966 according to its production indexes.

calculation it was 0.1 percent lower).<sup>1</sup> The difference between these two rates stems from the fact that output increased significantly in 1966 in industries with a low value-added component and declined in those with a high component. As may be seen from Table XII-3, the four industries contributing most to output growth in 1966 were those with the lowest value-added component, while the three which accounted for most of the decline have a high component.

<sup>1</sup> The change in industrial product is calculated by weighting the production indexes of the subbranches by their weighted value added according to preliminary returns from the 1965 census of industry and crafts. The change in output is calculated by weighting the same production indexes by the weighted value of output of the subbranches according to the same source.

Industrial output, as already noted, continued upward in the first two months of 1966. It began to fall in March, and declined steeply in April. The level (seasonally adjusted) held steady during the middle four months of the year, and subsequently fell off again, being lower at the end of the year than at the start. Over the year as a whole, the figure declined by 11.5 percent.

Table XII-3

**DISTRIBUTION OF INCREMENTAL REAL GROSS INDUSTRIAL OUTPUT,  
BY BRANCH, 1964-66**

(percentages)

	Share in incremental output			Share of value added <sup>a</sup> in output, 1965
	1964	1965	1966	
Food	18.4	12.3	63.9	34.4
Diamonds	5.3	4.1	32.5	24.6
Textiles and clothing	18.6	21.7	29.9	40.4
Petroleum refining	3.7	1.0	28.0	10.6
Chemicals	6.5	10.3	20.8	49.7
Paper, printing, publishing	5.1	4.4	19.4	52.5
Rubber and plastics	3.3	4.4	6.8	60.1
Wood and carpentry	8.6	11.2	5.1	42.4
Mining and quarrying	2.3	6.8	3.2	68.8
Leather and leather products	2.5	1.9	-2.0	43.7
Machinery and electrical equip.	3.9	3.9	-2.8	53.2
Basic metals	2.6	3.0	-10.1	44.3
Metal products	6.7	3.1	-11.8	47.3
Nonmetallic minerals	4.3	4.7	-17.2	60.5
Household equipment and misc.	3.4	3.8	-26.5	55.7
Transport equipment	4.8	3.4	-39.2	58.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>44.8</b>

<sup>a</sup> Value added here is census value added, calculated as a percent of gross output according to the census of industry and crafts for 1965/66. It differs from value added as defined in the national accounts in that it includes depreciation and general expenses. However, this conceptual difference apparently does not greatly affect the ranking of the branches according to their value-added component.

SOURCE: 1964—Central Bureau of Statistics industrial surveys; 1965 and 1966—CBS production indexes.

The industrial branches and subbranches show pronounced divergences in both the rates of change in output level and in the occurrence of the turn in trend. As to the latter, it can be seen from Diagram XII-3 that industries producing mainly construction inputs, capital goods, or consumer durables began to experience a decline in 1965, or at the latest at the beginning of

1966, and those producing largely for current consumption, only at the end of 1966.

The distribution of the rates of change around the general average differs conspicuously from that in previous years. Three industries which enjoyed a relatively fast growth in previous years reported similar gains in 1966—namely, petroleum refining, chemicals, and rubber and plastics (excluding tires). On the other hand, the wood, tire, and electric equipment industries showed a lower figure in 1966, after above-average increases before. There was also a significant decline in metal products, transport equipment, household goods, and nonmetallic minerals—industries supplying mainly construction inputs, investment goods, or consumer durables. The rising trend in the diamond, food, and paper and publishing industries accelerated in the year reviewed.

Table XII-4

CHANGE IN INDUSTRIAL OUTPUT PRICES IN THE LOCAL MARKET,  
1964-66  
(percentages)

Branch	Weight in total output	Average rate of increase, 1960-63	Increase or decrease (-) as against previous year		
			1964	1965	1966
Mining and quarrying	1.9	4.1	2.7	6.9	1.2
Meat, fish, oil, and milk products	8.2	3.9	2.7	13.5	5.2
Other food products	15.4	6.3	0.8	1.2	3.3
Textiles	11.5	3.3	1.2	1.4	5.6
Clothing	3.5	3.9	-1.9	1.1	7.7
Wood and carpentry	6.9	7.9	2.3	3.3	1.9
Paper, printing, publishing	5.7	8.0	1.7	0.8	0.7
Leather and leather products	2.1	5.6	1.8	6.5	15.9
Rubber and plastics	2.9	2.9	-1.9	-1.2	0.7
Chemicals	5.2	3.9	-0.2	2.3	6.8
Petroleum refining	4.0	11.4	0.5	0.5	1.8
Nonmetallic minerals	5.6	6.9	1.0	3.6	4.7
Basic metals	3.3	8.2	1.3	2.8	6.0
Metal products	7.4	6.9	1.3	6.1	3.7
Machinery and electrical equip.	4.0	4.6	2.1	4.8	3.7
Household equipment and misc.	4.8	4.8	0.1	1.0	2.7
Transport equipment	7.6	5.6	1.4	10.2	7.5
Total	100.0	5.7	0.9	4.0	4.4

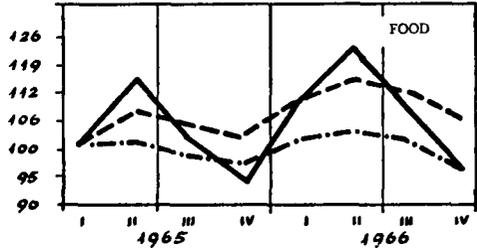
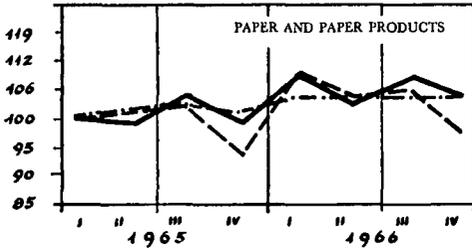
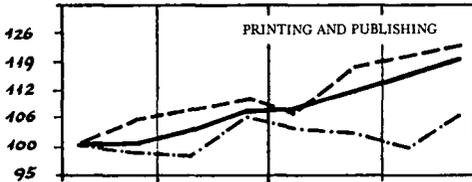
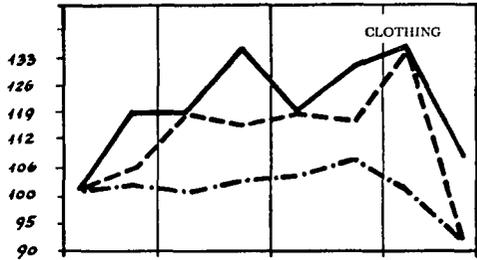
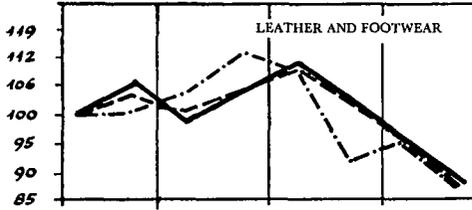
SOURCE: Based on Central Bureau of Statistics data.

Diagram XII-3

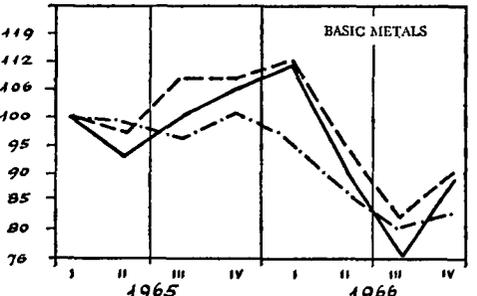
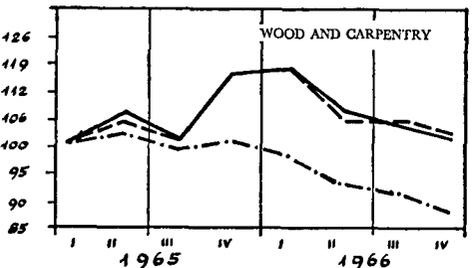
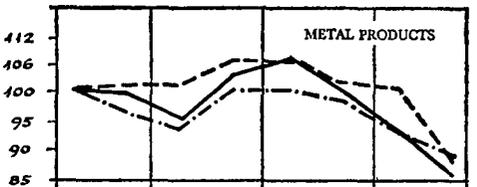
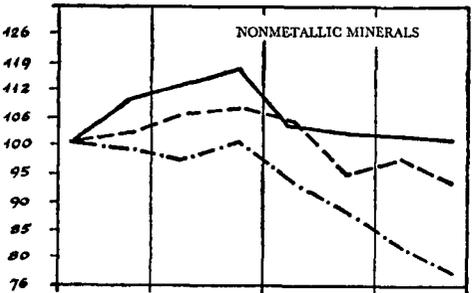
INDEXES OF INDUSTRIAL PRODUCTION AND LABOR INPUT,<sup>a</sup> QUARTERLY, 1965-66  
(1st quarter 1965=100)

A. Industries producing mainly for current consumption

PRODUCTION — ORIGINAL DATA  
MAN-DAYS WORKED - - - SEASONALLY-ADJUSTED DATA

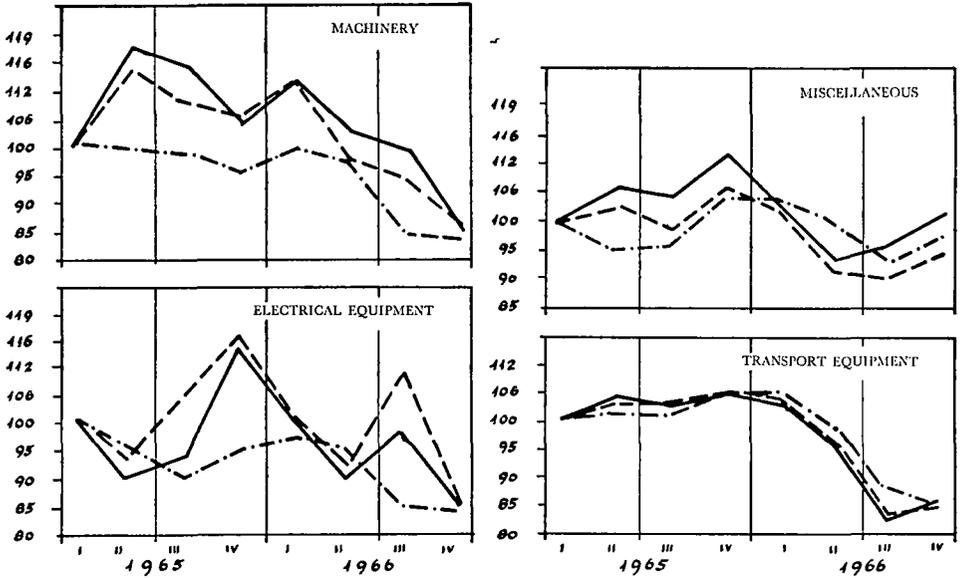


B. Industries producing mainly for construction

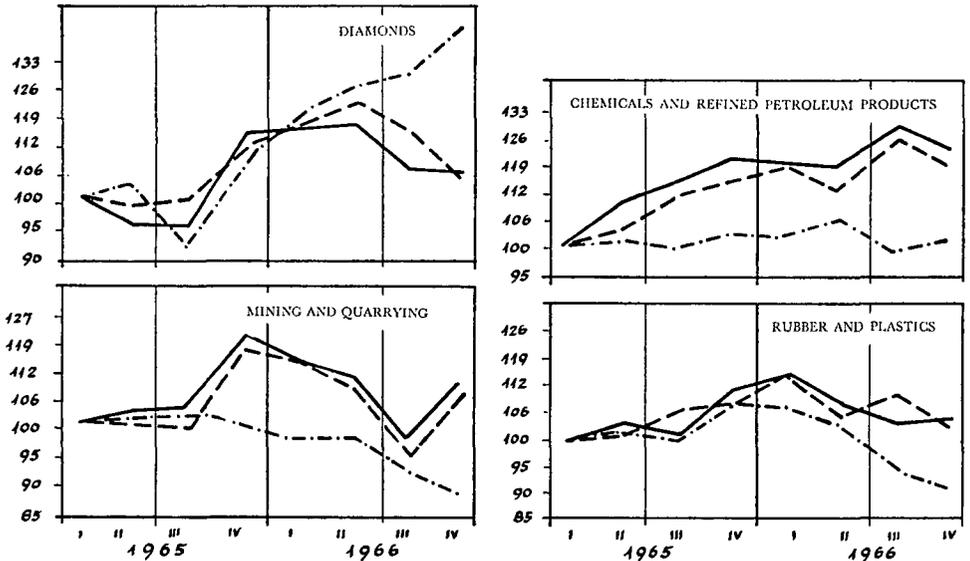


INDEXES OF INDUSTRIAL PRODUCTION AND LABOR INPUT,<sup>a</sup> QUARTERLY, 1965-66 (cont.)

C. Industries producing mainly investment goods and consumer durables



D. Other industries



Semi-logarithmic scale.

<sup>a</sup> Main industrial branches (according to the Central Bureau of Statistics' classification, which differs somewhat from that of the Bank of Israel), grouped by principal destination of output. Some of the main branches include subbranches with different output destinations (for example, in mining and quarrying the quarries produce construction inputs, whereas most of the output of mines is exported).

SOURCE: Central Bureau of Statistics.

In some cases there were marked disparities between the subbranches. This was especially striking in mining and quarrying, where output went up only slightly after a very strong advance in previous years. This was the resultant of a rapid rise in copper and phosphates, a slower increase in potash, a marked decline in stone and sand quarrying, and a moderate decline in petroleum and gas extraction.

Nearly all subbranches of the chemical industry contributed to the further expansion of production, except paints. Output of pharmaceuticals and cosmetics rose substantially, and the figure for basic chemicals also continued upward, thanks to the fuller exploitation of earlier investments. The contraction of domestic demand did not affect this subbranch, as it was offset by the new uses developed for plastic raw materials.

In the food industry, processed meat, canned fruit and vegetables, and soft drinks showed the biggest increases; wine production, on the other hand, fell off.

As to textiles and clothing, increases occurred mainly in wool yarns—the output of which had contracted in 1965—and fabrics. Cotton yarn production declined, as in 1965, and in contrast to previous years, there was a smaller output of synthetic yarns and fabrics.

In the wood industry, output of plywood and furniture fell off. There was no decline in building carpentry, since these products are intended principally for the final stages of building, and the area of completions did not decrease until the end of the year.

The nonmetallic mineral industry can be divided into two groups from the aspect of developments during the year. The output of those subbranches serving the early stages of construction—clay and lime products, cement, and cement and asbestos products—was appreciably lower than in 1965. On the other hand, the output of subbranches producing for the final stages of construction—sanitary ware, decorative ceramics, and glass—was slightly higher than in 1965, although the trend turned downward during the year.

There were also diverse trends in the output of machinery and electrical equipment. Production of agricultural machinery, pumps, and compressors increased, while that of industrial and building machinery and electrical installations fell off.

The decline in household equipment was due mainly to the sharp cutback in the production of machines for the services, commerce, and household use, but the other subbranches also showed smaller figures.

Most of the decline in transport equipment resulted from the substantial drop in the production and repair of motor vehicles. This stemmed from the smaller demand for both investment goods (trucks) and consumer durables (private cars). It should be noted that purchases of locally produced transport equipment fell off relatively more sharply than total purchases.

Prices of industrial output sold in the home market averaged 4.4 percent higher in 1966. The distribution of the growth rates around the average shows a wide dispersion. Prices of leather goods and transport equipment, which had increased substantially in previous years, again went up at an above-average rate. Other industries showing a rapid advance in 1966, after below-average rates in previous years, were chemicals, clothing, and textiles. Clothing and textile prices mounted in the second half of the year, when other prices had firmed. This can be attributed to the change in the Government's method of subsidizing textile exports: up to mid-1966 exports had been supported through branch funds whose deficits were covered by the Government; in the middle of the year a system of direct supports was introduced, financed by additional indirect taxes, which consequently pushed up prices in the home market.

Th rise in chemical prices was also largely connected with export subsidies. The main increase—with Government approval—was in basic chemicals, some of which are exported at prices substantially below those in the domestic market.

The sluggish rise in the prices of rubber and plastic goods and refined petroleum products resulted in a further decline in their relative prices. There were also below-average rises in mining and quarrying, paper, and wood—industries where changes in their relative prices in recent years have not displayed any uniform trend.

### 3. EXPORT

The f.o.b. value of industrial exports, including diamonds, reached \$ 374 million in 1966 as against \$ 315 million the year before—an increase of 18.9 percent. This was a much faster growth rate than in previous years—13.3 percent in 1964 and 12.7 percent in 1965. Two-thirds of the gain stemmed

Table XII-5

GROWTH OF INDUSTRIAL EXPORTS, AT CURRENT F.O.B. PRICES, 1960-66  
(percentages)

	1960	1961	1962	1963	1964	1965	1966	Annual average	
								1960-1963	1964-1966
Industrial goods									
excl. diamonds	23.1	22.2	13.3	19.4	13.1	13.5	14.5	19.4	13.7
Diamonds	20.6	15.1	29.9	23.5	13.5	11.5	25.1	22.2	16.5
Total	22.1	19.4	19.6	21.1	13.3	12.7	18.9	20.5	15.0

SOURCE: Based on Central Bureau of Statistics data.

from a physical increase and one-third from higher prices. Diamonds accounted for more than half the incremental export—\$ 33 million out of a total of \$ 59 million. Sales of this item were up 25 percent from the 1965 level—double the rate in the two preceding years and comparable to that for 1962 and 1963.

The high growth rates in 1962 and 1963 were mainly due to Israel's greatly increased share in total world production of *melés*.<sup>1</sup> Since then Israel has supplied most of the world demand for this type of stone, and the expansion of exports depends on the expansion of world demand. The accelerated growth of exports in 1966 was the outcome of both a big increase in world demand for diamonds and a rise in prices. The advance of prices—more than 13 percent—accounted for more than half of the incremental value of diamond exports. At the end of 1966 and the beginning of 1967, the boom in the world diamond market came to an end and stocks accumulated in the hands of exporters.

It should be noted that in order to overcome the limitation imposed by existing demand, which is liable to restrict future growth, attempts have recently been made to diversify the types of diamonds worked. So far these have had an insignificant effect.

Industrial exports other than diamonds advanced by \$ 26 million, or 14.5 percent, compared with 13.5 percent in 1965 and 13.1 percent in 1964. This growth was accounted for by a small number of products, and in the main did not result from the weakening of domestic demand. As may be seen from Table XII-6, 63 percent of the incremental industrial export other than diamonds was contributed by six products, and of these only one (vehicles) was directly affected by the reduction of local demand. The others are either items marketed almost exclusively abroad (copper-cement and phosphates) or produced by industries with surplus capacity and which received special Government assistance (petroleum refining and textiles). The export of these two groups of products depends very little on domestic demand. It should be noted in this context that the reference is only to the direct effect of local demand for the finished product. The slackening of such demand may also affect export indirectly by easing competition for local factors of production. This may have contributed to the accelerated growth in the traditional export industries, particularly diamonds which took on many additional workers.

The changes in the export of commodities for which home demand fell off markedly display no uniform trend. Some of them show a higher export figure: apart from the \$ 1.6 million increase in vehicle sales, the gain in tires (\$ 0.8 million), metal pipes (\$ 0.7 million), and cement (\$ 0.3 million) should be noted. On the other hand, both domestic demand and exports fell off in some items, noticeably plywood, refrigerators, asbestos pipes, sanitary ware, and paints. In discussing the influence of the contraction of domestic demand on exports, it should be borne in mind that the diminished profitability of export—

<sup>1</sup> Medium-sized diamonds in which Israel specializes.

Table XII-6

**INCREMENTAL EXPORT OF MAJOR ITEMS OTHER THAN DIAMONDS, 1966**  
(at current f.o.b. prices)

Product	Value (\$ '000)		Percentage distribution		Cumulative percentage	
	Total export in 1966	Increase in 1966	Total export	Incremental export	Total export	Incremental export
Refined petroleum products	15,826	5,638	7.6	21.3	7.6	21.3
Copper-cement	12,160	4,561	5.8	17.3	13.4	38.6
Fabrics	6,374	1,954	3.1	7.4	16.5	46.0
Automotive vehicles	2,484	1,633	1.2	6.2	17.7	52.2
Phosphates	4,425	1,540	2.1	5.8	19.8	58.0
Wool yarn	2,798	1,364	1.3	5.2	21.1	63.2
<b>Total</b>	<b>44,067</b>	<b>16,690</b>	<b>—</b>	<b>—</b>	<b>21.1</b>	<b>63.2</b>
<b>Total industrial exports excl. diamonds</b>	<b>209,355</b>	<b>26,439</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

SOURCE: Based on Central Bureau of Statistics data.

discussed further on—would have depressed overseas sales of products sensitive to fluctuations in local demand had such demand continued to be strong. It should also be remembered that the reorientation of production to export, especially in the case of new exporters, requires time, so that the consequences of the economic slowdown on export are liable to be reflected only after a certain interval.

Nevertheless, it must be stressed that the reduction of demand pressure is not in itself sufficient to speed up the growth of overseas sales. For the existing enterprise to export, the return thereon has to cover the variable costs of the products. In the case of a new enterprise, not only must the variable costs be covered but all costs, including the investment. It should be pointed out that, with the exception of a few branches where there was a significant increase in world prices, the return on export rose more slowly than the domestic market prices of output and much more slowly than production costs. Such a development is liable to deter export from existing productive capacity, and certainly will not encourage investment in export industries. Since the possibilities of trimming per unit production costs—by reducing wages or substantially increasing productivity—are limited, the return to the producer must be increased if export is to be stepped up. Toward this end, export subsidies were enlarged in 1966, especially in the latter part of the year.<sup>1</sup>

<sup>1</sup> A detailed discussion on this will be found in Chapter III, "The Balance of Payments".

(a) *Export, by branch*

As in previous years, industrial export growth rates vary considerably. The figure for mine and quarry products was up 21 percent from the 1965 level. There are three main items in this group: copper-cement, potassium chloride, and phosphates. The biggest increase was in copper-cement, which advanced 60 percent to stand at over \$ 12 million. In 1964 too this item rose sharply, but

**Table XII-7**  
**INDUSTRIAL EXPORTS, 1966**  
(at current f.o.b. prices)

Branch	1966 (\$ '000)	Percent increase or decrease (-) as against preceding year			
		Average 1960-63	1964	1965	1966
Petroleum refining	15,826	—	21.8	6.5	55.3
Leather and leather products	1,142	21.5	32.4	1.0	46.4
Machinery and electrical equip.	3,279	32.3	-36.0	78.5	45.8
Transport equipment	5,832 <sup>a</sup>	-2.5	40.4	-17.1	44.1
Rubber and plastics	2,609	42.6	0.9	2.1	28.0
Mining and quarrying	29,826	12.9	63.9	31.3	21.4
Foodstuffs, excl. citrus products	15,437	13.4	5.5	10.3	18.0
Metal products	15,718	32.4	-44.8	30.2	16.9
Textiles, excl. clothing	34,760	34.0	30.0	0.1	14.7
Basic metals	7,935	45.6	-1.2	102.7	13.4
Tires	9,622	8.7	-4.4	4.9	9.1
Household equipment and misc.	4,979	-3.8	25.4	-0.9	5.6
Clothing	10,784	24.9	19.8	8.9	5.6
Citrus products	19,731	15.8	41.0	5.8	3.1
Chemicals	14,450	17.2	23.8	26.7	2.0
Nonmetallic minerals	5,317	1.6	-9.9	34.7	-0.3
Paper, printing, publishing	4,640	16.4	-0.8	-7.7	-0.7
Plywood	7,239	8.9	18.2	13.2	-10.1
Building carpentry and furniture	229	11.2	93.2 <sup>b</sup>	361.1 <sup>b</sup>	175.9 <sup>b</sup>
Industrial exports other than diamonds	209,355	19.4	13.1	13.5	14.5
Diamonds	165,113	22.2	13.5	12.7	25.1
Total industrial exports	374,468	20.5	13.3	12.7	18.9

<sup>a</sup> Excluding the sale of ships and aircraft, which totalled \$ 5,120,000.

<sup>b</sup> These percentage changes lack significance as the absolute amounts involved are very small.

SOURCE: Based on Central Bureau of Statistics data.

in the following year it dropped by about a million dollars. Potash exports showed an opposite development. Between 1963 and 1965 they increased two-and-a-half times as a consequence of expanded production capacity and higher world prices. The entry of new producers in the world market sharpened competition and slightly depressed the price level in 1966. As a result, sales fell by half a million dollars, since the local potash works marketed only part of its output. Phosphate exports continued to increase rapidly (as in 1965), and amounted to \$ 4.4 million.

Several textile products also made strong gains. Textile exports as a whole went up by 15 percent, whereas there had been no increase whatever in 1965. The larger export of this industry—which is characterized by excess production capacity—was presumably due in the main to the higher premiums granted at the beginning of the year for fabrics, ready-made garments, and wool yarn. Overseas sales of these products increased rapidly—fabrics were up 44 percent to \$ 6.4 million; wool yarn doubled to \$ 2.8 million, and knitwear advanced by nearly a million dollars.

The subsidy on cotton yarn was raised in mid-1966, but the local market price went up even faster, thus enhancing the relative profitability of home sales. This development, together with the keener competition in the world market and the tighter restrictions on imports by some of Israel's major countries of destination, resulted in a half a million dollar drop in exports of cotton yarn and the accumulation of a large inventory by spinning mills.

Garment exports rose more slowly than in 1965. The outstanding increase here was that of 50 percent in leather coats, which, together with fur coats, totalled \$ 2.7 million. There was also a much larger sale of baby clothes and swimsuits. On the other hand, decreases were recorded in raincoats—which were down in 1965 as well—and in men's clothing, which had increased substantially in 1965. The leading item in the leather industry was furs, the export of which doubled in 1966 to stand at \$ 0.9 million.

Most of the growth in transport equipment was accounted for by automobiles, which, at \$ 2.5 million, were three times above the 1965 level. This sharp gain was largely due to the smaller volume of domestic sales, which led to an accumulation of stocks and stimulated export despite the relatively much smaller return thereon.

Overseas sales of rubber and plastic goods moved up more strongly in 1966. The figure for tires was up by nearly a million dollars, following a small increase in 1965 and a drop in 1964. The accelerated growth in 1966 is attributable to the contraction of local demand. There was also a big rise in decorated laminated plastic sheets, which doubled in value to more than a million dollars.

Another industry showing a faster rise than in 1965 was foodstuffs (excluding citrus products). The outstanding gain here was the doubling of instant coffee sales to more than a million dollars.

Shipments of citrus products rose only to a slight extent, as in 1965. As was explained in the 1965 Annual Report, the canneries have excess capacity and export is limited mainly by the amount of citrus sold to industry. Attempts have been made of late to set up a branchwide organization that would prevent competition between local processors in overseas markets, but so far they have not been successful.

There was a moderate rise in sales of basic metals and metal pipes following a rapid growth the year before. The increase took place in metal pipes (up a third) and copper scrap (up a half).

Topping the list of metal products were plumbing fixtures, which rose 70 percent to stand at \$ 1.7 million; tools, which doubled to \$ 1.3 million; and "other metal products", which were nearly a million dollars larger.

The rapid increase in machinery and electrical equipment occurred mainly in one item—a rise of nearly a million dollars in presses. These are exported by a single factory, which works primarily for the overseas market and which began to operate at full strength in 1966. Sales of agricultural machinery were also expanded after a number of producers organized for a joint export effort.

There was a moderate growth in chemical products, which had expanded rapidly in previous years. The deceleration occurred in most subbranches, and some even experienced a decline. The biggest increases were in pesticides, pharmaceuticals, PVC, and cosmetics, while there were conspicuous decreases in bromides and paints.

There was also a small rise in household equipment. Exports of air conditioners increased appreciably, while those of refrigerators dropped sharply.

Exports of nonmetallic minerals held steady, although the component items did not display a uniform trend. Cement was up 25 percent, but the figure fell off in sanitary ceramics, asbestos products, and glass. This presumably reflects the low competitiveness of local producers, for domestic demand for these items did not increase and productive capacity grew, so that there were good reasons to expect a larger export. As in the past, a large percentage of these exports originated in orders placed by Israeli construction firms carrying out jobs abroad.

The only branch to show a substantial decline (approximately 10 percent) was wood and carpentry. This was due to smaller sales of plywood, practically the only export item here. This decline occurred despite a fall in domestic demand, and can apparently be ascribed to the higher duty levied on plywood in the UK, the principal buyer, at the end of 1965. The item resumed its upward movement at the beginning of 1967, following a reduction in the duty at the end of 1966. Furniture sales were up threefold in 1966, but the increment was not large in absolute terms.

#### 4. INVESTMENT

Gross industrial investment was down 24 percent in 1966. This is partly explained by the recession, for a slump period has a detrimental effect on new investments, both because of the creation of idle production capacity and because of the belief that the slump will continue. However, in view of the amount of time that lapses between the investment decision and its completion—and even between the start and end of its implementation—the diminished volume of investment in 1966 presumably cannot be attributed primarily to the recession, but was the outcome of earlier factors. Examination of Table XII-8 strengthens this conclusion, for it shows that the trend began to slow down in 1964 and to decline in the following year, when demand was still strong. The downtrend is particularly striking in industrial equipment other than for construction purposes. There were apparently three underlying factors: first, a substantial increase in the stock of industrial capital assets in the years 1961-63; second, the arresting of the rising trend in industrial profitability that marked the period up to 1964; and third, the completion of a number of large investment projects, the most important of which was the Dead Sea Works.

**Table XII-8**  
**ANNUAL CHANGES IN REAL INDUSTRIAL INVESTMENT,<sup>a</sup> 1961-66**  
(percentages)

	1961	1962	1963	1964	1965	1966
Total investment	20	7	14	9	-9	-31
Total investment, excl. construction equipment <sup>b</sup>	..	..	17	10	-9	-24
Investment in buildings	23	17	16	20	-15	-44
Investment in total equipment	23	3	12	4	0	-26
Investment in nonconstruction equipment <sup>b</sup>	..	..	17	4	-5	-13
Gross capital stock <sup>c</sup>	12	14	12	9	6	3

<sup>a</sup> Including investment in mines and quarries and in construction equipment.

<sup>b</sup> In the absence of reliable data, investment in construction equipment has been derived by estimation.

<sup>c</sup> Increase between the beginning and the end of the year.

While the third factor—the product of institutional decisions—had an important bearing on the smaller investment in equipment in 1965, the changes in such investment are apparently more indicative of the behavior of private enterprise than are the changes in total investment. Total investment comprises, in addition to equipment, buildings and construction equipment. It was the fluctua-

Table XII-9

**DISTRIBUTION OF FIXED INDUSTRIAL INVESTMENT,<sup>a</sup> 1964-66**  
(percentages)

Branch	1964	1965	1966
Mining and quarrying	22	15	13
Food	15	18	15
Textiles, clothing, leather	12	14	15
Paper and printing	3	6	9
Wood and carpentry	3	4	5
Nonmetallic minerals	10	7	9
Chemicals and petroleum refining	13	9	6
Rubber and plastics	4	4	4
Metal	8	11	12
Machinery, electrical equip., misc.	6	5	6
Transport equipment	4	7	6
Total	100	100	100

<sup>a</sup> Data are based on the census of industry and crafts and industrial investment surveys of the Central Bureau of Statistics. Total industrial investment according to these sources differs from that according to the national accounts (this is explained in the appendix to this chapter—in Hebrew only).

It should be remembered that total investment declined between 1964 and 1966, so that a rise in the weight of a given branch does not necessarily indicate a rise in the absolute level of its investment.

tions in these two items that obscured the start of the investment slowdown in 1964 and aggravated it in 1966, for both showed a high figure in 1964 and a steep drop in 1966. However these fluctuations mainly reflect influences exogenous to industry. The greatly expanded investment in buildings in 1964 was due primarily to the much faster tempo of erecting industrial centers in 1964, and the lack of such construction in 1966 was largely responsible for the sharp fall in investment that year.<sup>1</sup> It should be borne in mind that these centers were built primarily at the initiative of the Government and local authorities and not of industrialists, and that some of the premises remained vacant and did not serve industry at all. As to construction equipment, this item really does not belong to the industrial sector, and is included only because of the statistical difficulty of differentiating it from industrial equipment.

The growth of the gross capital stock slowed down precipitately; besides the smaller volume of investment, this was due to an increase in discarded assets.

<sup>1</sup> For further information on investment in industrial buildings in 1964 which did not reflect an increase in industrial production capacity, see Chapter XIII, "Construction and Housing", the section on nonresidential construction.

Discards have risen steeply in recent years, since equipment acquired shortly after the establishment of the State—a period of exceptionally high investment in relation to pre-State years—has been reaching the end of its economic life.

It should be noted that half the assets discarded by the economy in 1966 belonged to industry, while only a quarter of the economy's gross capital stock at the start of the year was in this sector. This is explained by the fact that the weight of equipment, which has a much shorter life-span than buildings, is bigger in industry than in other sectors. From this it follows that, in order for industry to maintain its share of aggregate gross capital stock, it must constantly increase its proportion of gross investment. In 1966 the opposite occurred—only a fifth of gross investment was in industry, compared with a quarter in previous years.

The branch distribution of industrial investment in the years 1964 to 1966 is presented in Table XII-9. It shows a significant drop in the share of mines and quarries and of chemicals and refined petroleum products. In both industries this was due to the completion of the establishment or expansion of large enterprises. There was an exceptionally big increase in the share of the paper and printing industry, while that of other industries did not change materially between 1964 and 1966. This too would seem to indicate that the recession was not a major factor in the reduced investment, for if it had been due primarily to the recession, investment presumably would have fallen off in those industries where customer demand decreased the most. However, we must be wary of drawing conclusions without more detailed data on the distribution of industrial investment.