

CHAPTER XII

INDUSTRY

1. MAIN DEVELOPMENTS

DEVELOPMENTS IN THE INDUSTRIAL SECTOR in 1964 for the most part represented a continuation of trends prevailing during the three preceding years. The rise in productivity, which was particularly notable in 1962 and 1963, carried over through the year reviewed. The deceleration of the export growth rate, which since 1962 has been reflected by a steady drop in the relative share of exports in incremental output, became more pronounced in 1964, and for the first time since 1957 they increased at a slightly lower rate than output.

As in the previous two years, mounting domestic demand not only slowed down exports but also generated demand pressure in the labor market, which was reflected in a manpower shortage.

Industrial production advanced by close to 14 percent in 1964, similar to the average rate for recent years. Most of the increment may be attributed to the larger supply of productive factors available to industry, but a considerable portion was also due to increased productivity. Real gross capital stock expanded by nearly 11 percent. The number of man-days went up 7 percent, and real output, as stated, advanced by 14 percent.

The value of industrial output at current prices amounted to IL 6,183 million, compared with IL 5,204 million in 1963—a nominal gain of 19 percent. Industrial prices are estimated to have gone up by 2 to 4 percent.¹ The higher average price level in 1964 was chiefly due to price changes in the domestic market. In 1963 prices had remained almost completely stable, and the difference between the average level in 1964 and 1963 stemmed entirely from rises in 1964, particularly in the second part of the year.

In 1964, as in the two preceding years, the demand for industrial products grew considerably. Most of the upward pressure on prices generated thereby was contained this year too by price-stabilization policy measures designed primarily to stimulate export. Such a policy can prove effective only if the growth of domestic demand is temporary in nature and provided factor prices are held down. However, in the last two years the Government's price restraints

¹ The nominal increase in the value of output came to 19 percent, whereas the real increase was 14 percent. The implied price index thus reached approximately 4 percent. On the other hand, a direct measurement of industrial prices shows a rise of only 2 percent (see also explanatory note to Table XII-3).

were applied mainly to industrial goods, while the surplus demand itself was not reduced. Accordingly, output prices in other sectors of the economy rose, while the relative price of industrial products declined. The demand for industrial goods was thus accentuated, and in its wake, also the demand for labor. Under conditions of full employment, this inevitably generates pressure for wage hikes.

The growth of industrial employment has tended to slow down since 1962. The average number of persons gainfully employed in industry rose by 5 percent in 1964, as against 8 percent in 1963. Although the labor input went up at a faster rate, by 7 percent, here too the advance was slower than in the previous year, when the number of man-days increased by 9 percent. Nominal daily wages rose by 9 percent, as compared with 12 percent in the preceding year. Nevertheless, a labor shortage was still felt.

Table XII-1
INDUSTRIAL OUTPUT AND FACTOR INPUTS, 1958-64
(percentages)

| | Increase over preceding year | | | | | | Annual average ^a increase | |
|--|------------------------------|------|------|------|------|------|--------------------------------------|-------------------|
| | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | From 1959 to 1961 | From 1962 to 1964 |
| Real output | 15.4 | 11.6 | 16.7 | 13.4 | 15.5 | 13.9 | 14.4 | 14.2 |
| Number of wage earners | 9.0 | 8.6 | 12.5 | 8.3 | 7.5 | 5.2 | 9.9 | 6.9 |
| Number of production workers | 8.3 | 8.7 | 12.9 | 7.8 | 7.4 | 5.3 | 9.8 | 6.7 |
| Number of man-days by production workers | 11.6 | 9.2 | 13.2 | 7.6 | 9.0 | 7.1 | 11.4 | 7.9 |
| Real gross capital stock | 12.8 | 15.0 | 11.3 | 12.5 | 11.0 | 10.0 | 12.9 | 12.9 |
| Output per man-day | 3.4 | 2.1 | 3.0 | 5.3 | 5.0 | 6.3 | 2.8 | 5.5 |
| Change in total productivity | 3.0 | 0.4 | 3.6 | -3.7 | 5.3 | 5.5 | 1.6 | 4.7 |
| Nominal daily wages | 4.0 | 3.5 | 9.0 | 12.2 | 11.6 | 9.1 | 5.0 | 10.9 |
| Exports | 43.7 | 22.1 | 19.4 | 19.6 | 21.1 | 13.5 | 26.6 | 17.7 |

^a Geometric average.

SOURCE: Central Bureau of Statistics.

Industrial development in 1964 should be surveyed in the light of the trends which first became discernible in 1961-62. The main change which took place in those years was the marked intensification of demand, which caused domestic commodity prices to move up rapidly after three years of relative stability. Contributing to this upward price movement was the growth of cartelization.

Industrial production advanced between 1962 and 1964 at a rate approximating the annual average for the period 1958-61, while the annual increase

in industrial exports other than diamonds slowed down appreciably and that of domestic sales became more rapid. This development contrasts with the particularly big rise in the relative share of exports in the destinations of industrial output in 1958-61.

The decline in the national unemployment rate was accompanied in 1961-64 by an accelerated rise in nominal wages per gainfully employed. The labor shortage, which until several years ago was confined to skilled workers only, has since spread to unskilled categories as well. The bigger increase in output per worker in the last three years as compared with the preceding period did not match this rise in wages, and consequently labor input per unit of output went up considerably. In addition, there was an advance in the prices of services and intermediate goods serving *inter alia* as inputs to the export branches. At the same time, the index of f.o.b. export prices remained virtually stationary, and the local currency proceeds per dollar of export likewise showed only a slight rise during these years—and this at the beginning of the period. Since prices of industrial commodities sold on the home market moved up, the profitability of such production was not affected by the above-mentioned developments, but the relative profitability of export production was.

The devaluation of 1962 did not bring about any real increase in the effective exchange rate for a considerable portion of the export industries, whereas the customs tariff introduced under the import liberalization policy has amply sheltered the local market. The lowest rates of customs duty fixed upon the lifting of administrative protection range from 45 to 60 percent and apply to metal products and electrical equipment, while the highest rates have been imposed on textiles and clothing (100-200 percent) and on motor vehicles (170-270 percent). As duties on imported raw materials not produced in Israel are much lower, ranging between 0-10 percent, the amount of protection on the value-added component of commodities manufactured for the domestic market is therefore greater than would appear from the official customs tariff, which applies to finished products, including the direct import component. On the other hand, the rate of exchange per dollar of value added from export is equal to the official rate in most industries and exceeds it in industries where export is subsidized through equalization funds.

The discrimination between the amount of protection granted to production for the home market and the rate of exchange allowed for exports leads to the misallocation of the factors of production, with its attendant long-run effects. Inefficient industries working for the local market are liable to enjoy priority over efficient industries selling a larger proportion of their output abroad. Thus investments destined for the domestic market may be given preference over investments oriented chiefly toward the foreign market, even when the cost of the dollar saved on the production of import substitutes is higher than the cost of the value-added dollar from export.

In 1964 industrial exports amounted to \$ 281 million f.o.b., as against \$ 248

million in 1963—an increase of 13.5 percent. This rate is considerably below that for 1963—21.1 percent. Whereas in former years commodities other than diamonds were responsible for the slower percentage rise, in 1964 there was a marked deceleration in both diamonds and other industrial items.

As to the distribution of incremental real output by final uses, we find a rising trend in the share of domestic uses—77.4 percent as against 70.9 percent in 1963. Exports accounted for 23.6 and 29.1 percent respectively. The pattern of the past three years differed conspicuously from that for the years 1958–61, when the weight of exports advanced steadily. As in 1963, marked changes took place during the year surveyed in the allocation of real output to final uses within the individual industries. This was particularly noticeable in industries geared mainly to the local market. Most of them showed a substantial expansion of output, but the real growth rate in domestic sales was higher still, bringing down the relative share of exports. Even in the case of tires, cement, glass, and metal pipes—which in 1958–62 accounted for a large part of the absolute increase in total industrial exports other than diamonds—the domestic market swallowed up much of the incremental output, while exports declined even in absolute terms.

2. OUTPUT

The real value of aggregate industrial output in 1964 was 13.9 percent higher than in 1963. The high growth rate of the past few years was thus maintained in the year reviewed.

Production expanded considerably in all branches. The growth rates in the different branches suggest a change of pattern in the composition of industrial output. Output advanced much faster than average in household equipment, mining and quarrying, rubber and plastics, wood and carpentry, and transportation equipment. Leather and leather products, basic metals, glassware and ceramics, machinery and equipment, and much of the food industry showed very low percentage increases. The remaining branches moved up at a rate close to average.

Branches experiencing an above-average growth rate in the past showed a continuation of this trend in 1964. On the other hand, in branches where output moved up at a below-average rate, the trend was less consistent, with the exception of leather and footwear and part of the food industry, where the rate was low throughout the entire period. The remaining industries displayed greater fluctuations. In the majority of cases the change in growth rate was determined by the demand conditions. The increased demand for industrial products stemmed mostly from the rise in income level and the expansion of the population. The importance of relative price changes in this connection was negligible.

Table XII-2

DISTRIBUTION OF GROSS INDUSTRIAL OUTPUT, BY FINAL DESTINATION, 1963-64

(percentages)

| Branch | Distribution of output in 1964 | | | Distribution of incremental output | | | | | |
|---------------------------------------|--------------------------------|--------|-------|------------------------------------|--------|--------|---------------|--------|-------|
| | Domestic uses | Export | Total | 1963 | | | 1964 | | |
| | | | | Domestic uses | Export | Total | Domestic uses | Export | Total |
| Mining and quarrying | 50.3 | 49.7 | 100.0 | 0.1 | 99.9 | 100.0 | 34.7 | 65.3 | 100.0 |
| Meat, fish, and oil and milk products | 97.6 | 2.4 | 100.0 | 98.4 | 1.6 | 100.0 | 93.6 | 6.4 | 100.0 |
| Other foodstuffs | 85.4 | 14.6 | 100.0 | 76.6 | 23.4 | 100.0 | 65.5 | 34.5 | 100.0 |
| Textiles | 60.7 | 39.3 | 100.0 | 64.3 | 35.7 | 100.0 | 40.4 | 59.6 | 100.0 |
| Clothing | 83.4 | 16.6 | 100.0 | 114.5 | -14.5 | 100.0 | 76.8 | 23.2 | 100.0 |
| Wood and carpentry | 87.3 | 12.7 | 100.0 | 83.9 | 16.1 | 100.0 | 90.0 | 10.0 | 100.0 |
| Paper, printing, publishing | 80.4 | 19.6 | 100.0 | 82.6 | 17.4 | 100.0 | 85.5 | 14.5 | 100.0 |
| Leather and footwear | 96.1 | 3.9 | 100.0 | 102.9 | -2.9 | 100.0 | 94.4 | 5.6 | 100.0 |
| Rubber and plastics | 83.3 | 16.7 | 100.0 | 68.1 | 31.9 | 100.0 | 98.1 | 1.9 | 100.0 |
| Tires | 39.6 | 60.4 | 100.0 | 20.1 | -120.1 | -100.0 | 213.8 | -113.8 | 100.0 |
| Chemicals | 75.1 | 24.9 | 100.0 | 56.9 | 43.1 | 100.0 | 78.3 | 21.7 | 100.0 |
| Oil refining | 72.8 | 27.2 | 100.0 | 30.4 | 69.6 | 100.0 | 64.6 | 35.4 | 100.0 |
| Glass and ceramics | 91.6 | 8.4 | 100.0 | 59.2 | 40.8 | 100.0 | 98.7 | 1.3 | 100.0 |
| Cement | 90.6 | 9.4 | 100.0 | 114.2 | -214.2 | -100.0 | 150.6 | -50.6 | 100.0 |
| Diamonds | 0.9 | 99.1 | 100.0 | 3.3 | 96.7 | 100.0 | -6.1 | 106.1 | 100.0 |
| Basic metals and pipes | 88.2 | 11.8 | 100.0 | 59.9 | 40.1 | 100.0 | 107.5 | -7.5 | 100.0 |
| Metal products | 86.3 | 13.7 | 100.0 | 55.7 | 44.3 | 100.0 | 411.3 | -311.3 | 100.0 |
| Machinery and electrical equipment | 89.9 | 10.1 | 100.0 | 74.1 | 25.9 | 100.0 | 99.4 | 0.6 | 100.0 |
| Household equipment and appliances | 90.5 | 9.5 | 100.0 | 141.3 | -41.3 | 100.0 | 91.3 | 8.7 | 100.0 |
| Transport equipment | 81.8 | 18.2 | 100.0 | 115.7 | -15.7 | 100.0 | 77.3 | 22.7 | 100.0 |
| Total | 77.0 | 23.0 | 100.0 | 70.9 | 29.1 | 100.0 | 76.4 | 23.6 | 100.0 |

In most industries showing a rapid expansion of output in 1964—wood and carpentry, rubber and plastics, and transportation equipment—a rising income level can be expected to accentuate demand. Together with this, it may be

Table XII-3
GROSS INDUSTRIAL OUTPUT, BY BRANCH, 1964
(at 1962 prices)

| Branch | Output in 1964 (IL m.) | Average annual change 1959-62 (%) | Percent real increase or decrease (-) as against preccding year | | Percentage distribution | |
|--|------------------------------|---|--|-------------|----------------------------|----------------------------------|
| | | | 1963 | 1964 | Total output in 1964 | Incremental output in 1964 |
| Rubber and plastics | 117 | 32.9 | 21.4 | 27.5 | 1.8 | 3.6 |
| Household equipment and appliances | 240 | 21.6 | 19.5 | 22.5 | 3.9 | 6.3 |
| Mining and quarrying | 137 | 24.5 | 23.6 | 20.6 | 2.2 | 3.3 |
| Wood and carpentry | 471 | 11.4 | 20.3 | 17.1 | 8.0 | 9.8 |
| Transport equipment | 326 | 17.5 | 21.4 | 17.1 | 5.5 | 6.8 |
| Oil refining | 197 | 14.7 | 29.1 | 14.7 | 3.4 | 3.6 |
| Foodstuffs, excl. meat and milk products | 685 | 13.9 | 7.1 | 14.7 | 11.9 | 12.5 |
| Textiles and clothing | 1,023 | 11.7 | 18.2 | 14.7 | 17.8 | 18.7 |
| Paper, printing, publishing | 288 | 11.0 | 11.4 | 14.6 | 5.0 | 5.2 |
| Chemicals | 368 | 14.5 | 13.0 | 14.5 | 6.4 | 6.6 |
| Metal products | 363 | 13.1 | 12.9 | 12.4 | 6.4 | 5.7 |
| Meat, fish, and oil and milk products | 361 | 13.8 | 16.2 | 11.2 | 6.4 | 5.2 |
| Diamonds | 339 | 27.2 | 22.0 | 10.0 | 6.1 | 4.4 |
| Machinery and electrical equipment | 228 | 19.7 | 28.9 | 9.8 | 4.1 | 2.9 |
| Glass, ceramics, cement, and products thereof | 261 | 12.4 | 10.3 | 7.6 | 4.8 | 2.6 |
| Tires | 54 | 14.4 | -7.8 | 7.6 | 1.0 | 0.5 |
| Basic metals and pipes | 141 | 27.4 | 1.7 | 6.3 | 2.6 | 1.2 |
| Leather, leather products, footwear | 144 | 2.6 | 4.0 | 5.7 | 2.7 | 1.1 |
| Total | 5,741 | 14.6 | 15.5^a | 13.9 | 100.0 | 100.0 |

^a This series was compiled from different sources. The data for 1959-63 were taken from the industrial surveys of the Central Bureau of Statistics, and those for 1964 from its industrial production indices. The survey figures are given in current prices, and have been deflated according to the price indices in order to calculate the real values. Between 1959 and 1962 the real rate of increase in total industrial production obtained in this way was identical with the real increase shown by the industrial production indices. In 1963, however, the latter indicated a real increase of 14.6 percent, compared with 15.6 percent as computed from the survey data.

SOURCE: Central Bureau of Statistics; Bank of Israel.

assumed that the demand for plastic goods and transport equipment is affected also by changes in their price relative to that of both locally manufactured and imported substitutes. The price of plastic goods relative to that of local substitutes has been declining steadily, and this has resulted in the displacement of a long list of paper, cement, and even metal items.

The marked changes introduced in the customs tariff on imported vehicles sharply reduced the relative price of locally manufactured cars as compared with imported models.

The rapid increase in the output of mines and quarries was of a different nature. The principal destination of these products is the overseas market, where demand is very elastic. Here the fast growth of production can be attributed to a rapid increase in productive capacity resulting from heavy investments made in recent years and which are still being made.

The slow expansion of output in the leather and footwear industry and many subbranches of the food industry has persisted for several years, and is ascribable to the rise in income level. Glass and ceramics and basic metals also recorded below-average growth rates in 1963-64. This was no doubt due largely to the particularly low output of the glass and pipe industries, where productive capacity was only partially utilized owing to the stoppage of work in order to permit the installation of new plant. The growth rate also slowed down in the machinery and equipment and metal products industries, which again suffered from an acute labor shortage.

In the period after the devaluation the administrative protection generally applied to industries producing primarily for the local market was abolished in respect of a large portion of the output.¹ Under these circumstances it might have been expected that the replacement of administrative protection by a low level of fiscal protection would produce a greater degree of specialization and more efficient factor allocation—the main objective contemplated. Some locally manufactured goods might thus have yielded their place to imported items, and the productive factors freed thereby would be diverted to export industries. However, the policy was carried out mainly in the hope of streamlining production as per the example of the foreign products, with import serving as a spur for improving the quality of local goods.

The rate of fiscal protection conferred on local production for the domestic market exceeded the rate of exchange allowed for export goods. Moreover, the effective exchange rates introduced for imports were far from uniform, ranging between IL 4 and IL 11 approximately per dollar. The overwhelming majority of the commodities freed from customs duty either enjoyed natural protection (i.e. they are not traded on the world market), so that the imposition of such a tax would have been pointless, or were raw materials not produced in Israel

¹ Under this administrative protection industries producing import substitutes enjoy preferential treatment even when the cost of the marginal dollar saved on such production is higher than the cost of the marginal dollar of value added from export.

at all. The new schedule of exchange rates was thus designed to safeguard the existing enterprises.¹

The import liberalization policy has therefore introduced no far-reaching changes in the degree of protection accorded to industries working for the local market, since even relatively inefficient industries are sheltered.

As regards the effect on the general price level, however, there is a big difference between the former policy of administrative restrictions and the present system of fiscal protection. With the partial removal of import barriers, fiscal protection is likely to hold down prices in the long run, as long as import prices do not change and customs tariffs are not raised.

Output per man-day went up by 6 percent in 1964, somewhat more than in 1963; this indicates a continuation of the rising productivity trend. In the last three years the growth rates ranged between 5 and 6 percent, compared with only 2-3 percent in 1958-61. The increase no doubt reflects both the higher capital intensity of local industry and technological advances. At the same time, however, there was apparently a decline in the degree of disguised unemployment of the productive factors—capital, labor, and especially management—during the year reviewed.

In respect of the import component of aggregate industrial output, no visible changes occurred in 1964. Following recent investments, especially in the basic chemical industry, production was begun of materials hitherto imported, but the relative size of the investment in import-substituting industries is too slight to influence the average import component. Moreover, the import component in both industries connected with the expansion of private consumption and those producing for export is higher than the average, so that in these cases it exerts an influence in the opposite direction.

It should further be noted that the subbranches of the basic chemical industry, which are turning out import substitutes, rely on exports as the mainstay of their production. An examination of the list of items imported so far—a large part of which are machinery and equipment—reveals that for the overwhelming majority the domestic market is not sufficiently big to permit their production at a competitive price unless a substantial part of the output can be exported. The large-scale substitution of locally manufactured goods for imports is therefore impossible unless exports are expanded at the same time.

3. EXPORTS

The value of industrial exports, including diamonds, amounted to \$ 281 million in 1964, as against \$ 248 million in 1963—an increase of 13.5 percent

¹ This was ensured through a supplementary arrangement providing that wherever the value of competitive imports exceeds 15 percent of the value of local production, the item is to be brought up for reconsideration. So far there has been only one such case, and the import of the commodity concerned was indeed discontinued.

as compared with 21.1 percent in 1963. This slower growth rate stands out all the more when compared with the rate of increase in the predevaluation period. The annual average increase in industrial exports other than diamonds came to 29.3 percent in 1959-61, in contrast to 14.4 percent in 1962-64. In 1961-63 such exports were responsible for the slowing down of the overall growth rate, while in 1964 both diamonds and other industrial goods showed slower increases.

Table XII-4
GROWTH OF INDUSTRIAL EXPORTS, AT CURRENT F.O.B. PRICES,
1959-64
 (percentages)

| | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | Annual average | |
|------------------------------------|------|------|------|------|------|------|----------------|---------|
| | | | | | | | 1959-61 | 1962-64 |
| Industrial goods excl. diamonds | 49.3 | 23.1 | 22.2 | 13.3 | 19.4 | 13.5 | 29.3 | 14.4 |
| Diamonds | 36.1 | 20.6 | 15.1 | 29.9 | 23.5 | 13.5 | 23.9 | 22.3 |
| Total | 43.7 | 22.1 | 10.4 | 19.6 | 21.1 | 13.5 | 26.6 | 17.4 |

SOURCE: Central Bureau of Statistics.

The total increment to industrial exports amounted to \$ 33.5 million, of which \$ 14.1 million was accounted for by diamonds. Diamond exports rose by 13.5 percent in 1964, as against 23.5 percent in 1963. Sales are apparently limited by the existing demand for the type in which the local industry specializes¹ and in which it has reached 80 percent of total world production. The high rates of increase in the past can largely be attributed to the rapid growth of Israel's share of total world supply, only a minor portion being due to increased demand.

The absolute increment to industrial exports other than diamonds was \$ 19.4 million. Most of this was accounted for by a small number of products whose weight in total export is high and which have been moving up at a rate far above the average. The absolute increase in copper-cement exports amounted to \$ 5.0 million—115 percent more than in the previous year. Exports of citrus products advanced by \$ 5.0 million, or 38 percent, and those of cotton yarn by \$ 3.1 million, or 47 percent. Synthetic yarn showed a rise of \$ 2.6 million (63 percent), and potash—\$ 2.3 million (42 percent). The absolute increase in these items taken together was equal to the total rise in industrial exports other than diamonds.

¹ Melées, or medium-sized diamonds.

Table XII-5

INCREMENTAL EXPORT OF PRINCIPAL ITEMS OTHER THAN DIAMONDS,
1964

(at current f.o.b. prices)

| Product | F.o.b. value (\$ '000) | | Percentage distribution | | Cumulative percentage | |
|--|------------------------|------------------|-------------------------|---------------------|-----------------------|---------------------|
| | Total exports in 1964 | Increase in 1964 | Total exports | Incremental exports | Total exports | Incremental exports |
| Citrus products | 18,087 | 5,023 | 11.1 | 25.8 | 11.1 | 25.8 |
| Copper-cement | 9,278 | 4,968 | 5.7 | 25.5 | 16.8 | 51.3 |
| Cotton yarn | 9,772 | 3,137 | 6.0 | 16.2 | 22.8 | 67.5 |
| Synthetic yarn | 6,625 | 2,585 | 4.1 | 13.3 | 26.9 | 80.8 |
| Potash | 7,714 | 2,266 | 4.7 | 11.7 | 31.6 | 92.5 |
| Refined petroleum products | 9,444 | 1,996 | 5.8 | 10.3 | 37.4 | 102.8 |
| Total industrial exports other than diamonds | 162,881 | 19,423 | 100.0 | 100.0 | 100.0 | 100.0 |

SOURCE: Ministry of Commerce and Industry.

Examination of the composition of exports during the past three years reveals that a decreasing number of industries were responsible for the increment, while a growing number showed an absolute drop in their export volume. In earlier years a much bigger range of products contributed to the export growth, and the absolute decline was relatively much smaller.

The rates of change in export volume in 1964 varied widely from industry to industry. This was mainly due to factors influencing the supply of local goods to the export market, while demand factors carried very little weight. As in the previous year, all industries whose overseas sales advanced at a rate far above the average relied on foreign markets as the main outlet for their output. Some of the industries which export a considerable part of their output and which in the past had shown a steady upward trend in such sales, experienced an absolute drop in 1964, since the increase in their production failed to match the expansion of domestic demand.

Exports of mine and quarry products advanced at the very rapid rate of 64 percent, owing to a 23 percent rise in prices and a 33 percent increase in volume. The two principal products of this industry are copper-cement and potash. The former accounted for most of the average price increase in 1964; apparently the rise in this item was only a temporary phenomenon, for by the beginning of 1965 a drop was already discernible. On the other hand, the rise in the price of potash (about 4 percent) represents a longer-run trend.

The absolute growth of copper-cement exports was partly connected with the expansion of productive capacity. The volume of production, however, is largely

Table XII-6
INDUSTRIAL EXPORTS, 1963-64
(at current f.o.b. prices)

| Branch | Export in 1964 (\$ '000) | Percent increase or decrease (-) | | | |
|--|--------------------------------|----------------------------------|----------------------|----------------------|----------------------|
| | | Average 1958-61 | From 1961 to 1962 | From 1962 to 1963 | From 1963 to 1964 |
| Mining and quarrying | 18,725 | 40.2 | -9.3 | 37.5 | 63.9 |
| Transport equipment (production and repair) | 4,282 | -8.1 | 60.3 | 2.9 | 51.1 |
| Citrus products | 18,087 | 12.3 | 24.8 | 31.6 | 38.4 |
| Household equipment and appliances | 6,362 | 26.0 | -18.6 | 1.3 | 33.4 |
| Leather, leather products, footwear | 773 | -2.3 | 95.6 | -8.5 | 32.6 |
| Textiles, excl. clothing | 30,373 | 48.4 | 25.1 | 15.3 | 28.2 |
| Oil refining | 9,570 | — | 86.3 | 110.5 | 21.8 |
| Basic wood products and plywood | 7,115 | 13.7 | 24.1 | 6.8 | 17.6 |
| Chemicals | 17,293 | 60.4 | -2.5 | 18.6 | 15.5 |
| Foodstuffs other than citrus products | 5,857 | 26.2 | 2.7 | 14.9 | 15.0 .. |
| Clothing | 9,396 | 39.6 | 8.0 | -12.0 | 11.2 |
| Paper, printing publishing | 9,145 | 39.6 | 8.0 | -12.0 | 11.2 |
| Basic metals and pipes | 3,470 | 52.1 | 62.5 | 24.1 | -0.7 |
| Glass and ceramics | 3,057 | 28.2 | -1.8 | 32.1 | -3.3 |
| Tires | 8,430 | 13.8 | 17.8 | -11.0 | -4.1 |
| Rubber and plastics | 1,844 | 42.9 | -27.2 | 102.7 | -6.9 |
| Cement | 996 | 18.0 | -8.7 | -33.3 | -19.3 |
| Machinery and electrical equipment | 1,531 | 55.2 | 52.5 | -1.4 | -22.5 |
| Metal products | 10,558 | 128.1 | 24.0 | 54.6 | -43.6 |
| Furniture and building carpentry | 17 | 312.7 ^a | 500.0 ^a | 151.5 ^a | -92.7 ^a |
| Industrial exports other than diamonds | 162,881 | 31.5 | 13.3 | 19.4 | 13.5 |
| Diamonds | 118,205 | 23.9 | 29.9 | 23.4 | 13.5 |
| Total industrial exports | 281,086 | 28.4 | 19.6 | 21.1 | 13.5 |

^a The base level is too low for these changes to be of any significance.
SOURCE: Central Bureau of Statistics.

dependent on a chance factor—the richness of the ores mined. In contrast to the preceding years, the layers mined in 1963 and 1964 had a particularly high copper content.

The growth of potash exports is limited by the productive capacity of the potash works. The accelerated expansion of such exports reached a peak in 1964 as a result of investments which are still in progress, but the rate will no doubt decline after their completion.

The products principally responsible for the big increase in textile exports in 1964 were cotton yarn and synthetic yarn. The export of cotton yarn is explained by the existence of surplus productive capacity, which is subsidized, as in all other textile and clothing branches, by means of a higher effective rate of exchange than that applicable to most other industries. The accelerated growth of exports in 1964 can largely be ascribed to the particularly low rate in 1963 owing to the accumulation of stocks. In 1964 the indirect export premium was increased and stocks declined.

Demand for these products abroad, at existing prices, is extremely elastic, but it should be noted that there is stiffening competition on the part of other exporting countries, mainly Hong Kong, which also affects the price level.

Synthetic yarn sales are different in character. Here there is a rising world demand, and indications are that supply is unable to keep pace. Exports have been limited solely by the productive capacity of the local plants. It should further be pointed out that most of the export increment has been accounted for by a type of yarn that is sold at the official rate of exchange.

Exports of refined petroleum products increased by 22 percent, which is much higher than the average for industry as a whole but considerably less than in the preceding year. This development was expected: the capacity of the refineries was doubled following big investments made in the last few years, and as a result exports rose appreciably in 1962 and 1963. In actual fact, however, capacity was only restored to its level of pre-statehood days.

The branches enumerated so far are the ones showing the most striking increase in exports, in both absolute and relative terms. Among the leading export products we should also note plywood, sales of which expanded by 18 percent in 1964, and clothing, which showed a gain of 11 percent—a little below the average for the entire sector. Plywood is not exported at the official rate of exchange; higher local currency proceeds per dollar of value added are provided for this item, the difference over the official rate being financed through an equalization fund created from the levies on raw materials destined for the local market. This arrangement ensures that total turnover from both domestic and overseas sales covers all production costs, including profits. As a result, the growth of exports is subject to an upper limit, linked to the growth of the local market. It should be noted that this method of financing the export premium prevents the further expansion of overseas sales.

It also distorts the relative price in the domestic market—a distortion essentially similar to that resulting from a monopoly situation. In addition, it creates differential effective exchange rates for the various export industries, or even for different products of the same industry. The rates are fixed independently of one another in the course of negotiations with the enterprises in each industry, and in this manner greater encouragement is given to relatively less efficient industries.

Garment exports went up 11 percent in 1964; this followed a decline of 12 percent in 1963, so that the level of 1962 was not fully regained. This item developed very sluggishly in the past three years: whereas the annual export increment between 1958 and 1961 averaged 40 percent, it dropped to a mere 8 percent in 1962, followed by a recession in 1963 which was not made good by the increase of 1964.

Despite the fact that the clothing exported so far has been manufactured mainly from imported cloth, the effective rate of exchange for this industry is quite high. Henceforth the industry will absorb the surplus cotton yarn from local production, the direct export of which is unprofitable and where the cost of the dollar saved is high. The indirect export of such yarn in the form of garments is liable to increase the cost of the value-added dollar in the garment industry.

Raincoats, bathing suits, and knitted goods, which accounted for over two-thirds of total clothing exports in 1964, each registered a lower export figure than in 1963—in fact even lower than the absolute level of 1961. The only item to show a constant, though slow, increase is apparel made from imported cotton, which constituted the remaining third.

In a considerable number of industries exports were smaller in 1964 than in 1963; these include industries whose weight in total exports is appreciable and whose absolute export gains in the past had accounted for a major portion of the overall export increment. The decline in tire and cement sales started in 1963 and 1962 respectively, as a result of surging local demand coupled with the limited productive capacity of the existing enterprises. The smaller export of pipes and glass, as already mentioned, was due to the diminished local supply caused by temporary work stoppages during the installation of new equipment. A particularly large decline, in both absolute and relative terms, occurred in the export of other metal products, which in 1963 had accounted for some 27 percent of the total increment to industrial exports other than diamonds; however, it should be pointed out that this export is not governed by purely economic considerations.

4. INVESTMENT

Industrial investment rose by 8 percent in 1964, as against 17 percent the year before,¹ the slower rate reflecting the absolute decrease in the mining and quarrying branch. Investment in other industries increased by 12 percent, about the same rate as in 1963. Real capital stock advanced approximately 10 percent. Aggregate industrial investment is estimated at about IL 470 million at current prices, broken down as follows: 18 percent in mining and quarrying, 17 percent in foodstuffs, 16 percent in textiles and clothing, 12 percent in chemicals and oil refining, and some 37 percent in the remaining branches. This composition does not differ greatly from that of the last few years. The high level of investment in the textile industry has persisted since 1958. Investment in mining and quarrying reached substantial proportions for the first time in 1962, and that in the chemical industry in 1963, with the establishment of the petrochemical enterprises (see Table XII-7).

Investment in the expansion of the potash works represented some 75 percent of total capital formation in the mining and quarrying industry in 1964. Capital outlay on the establishment and expansion of stone quarries is estimated at 15 percent; this is an appreciable growth over the previous year and is apparently attributable to the ban imposed on the quarrying of sea sand. Of the remaining items, note should be taken of the significantly larger investments in the phosphate works and the ceramic materials enterprise. The bulk of the investment in mining and quarrying was designed to expand sales in the export market.

Of total capital formation in the food industry, some 25 percent was accounted for by the citrus canneries, mostly for the expansion of existing plants. The proportion invested in poultry slaughterhouses, cold storage plants, and fodder mills is likewise estimated at 25 percent. Approximately 10 percent went to enlarge sugar production capacity. The remainder was dispersed over a number of subbranches. The expansion of citrus canning capacity was connected primarily with demand conditions in the foreign markets, while the other branches were affected mainly by demand conditions at home. The relative amount spent on the establishment and expansion of poultry slaughterhouses, cold storage plants, and fodder mills was particularly prominent in recent years.

The relative amount invested in the textile and clothing industry in 1964 did not fall below the level of recent years, but the branch composition under-

¹ According to various indicators this rate seems to have an upward bias (see also Chapter V, "Domestic Investment"). The value of total domestic investment in equipment has been estimated according to the commodity-flow approach. That in the industrial sector has been derived as a residual, after netting out investment in the rest of the economy, and hence includes errors in the estimates for the other sectors. It may include items which constitute investment goods for other sectors, or components purchased abroad for local assembly. The increase in expenditure on equipment that can be identified as exclusively industrial equipment—from both local production and imports—does not exceed 4 percent.

Table XII-7
DISTRIBUTION OF CAPITAL STOCK IN 1958 AND DISTRIBUTION
OF INVESTMENT IN 1962-64, BY BRANCH

(percentages)

| Branch | Capital stock in 1958 | Investment | | |
|---------------------------------------|--------------------------|------------|------------|------------|
| | | 1962 | 1963 | 1964 |
| Mining and quarrying | 5.3 | 36 | 22 | 18 |
| Food | 13.5 | 15 | 15 | 17 |
| Textiles and clothing | 14.1 | 17 | 17 | 16 |
| Wood and wood products | 5.9 | 3 | 2 | 3 |
| Paper, printing, publishing | 5.2 | 2 | 2 | 3 |
| Leather and footwear | 2.1 | 0 | 0 | 0 |
| Rubber and plastics | 2.6 | 2 | 3 | 4 |
| Chemicals and oil refining | 19.9 | 8 | 15 | 12 |
| Glass, ceramics, cement | 10.4 | 2 | 9 | 9 |
| Diamonds | 0.7 | 0 | 0 | 0 |
| Basic metals and pipes | 5.5 | 1 | 2 | 2 |
| Metal products | 6.7 | 1 | 4 | 5 |
| Machinery and electrical equipment | 4.8 | 2 | 4 | 7 |
| Transport equipment | 3.3 | 11 | 5 | 4 |
| Total | 100.0 | 100 | 100 | 100 |

SOURCE: Central Bureau of Statistics and Bank of Israel.

went a change. Whereas formerly a large part of the capital outlay was for the establishment and expansion of cotton spinneries, during the year reviewed there was a marked deceleration in such investment, which actually began in 1963. In 1964 no new spinneries were established, and capacity was enlarged only as a result of the expansion of vertically-integrated textile plants.¹ Investment in the latter accounted for as much as half of total investment in the textile and clothing industry, and was channelled partly to integrated cotton factories and partly to integrated wool plants. Investment in synthetic yarn production came to 20 percent of the total; most of the sum was expended on one plant, the construction of which was begun in 1963. The remaining investments were spread more or less equally over knitwear factories, cotton gins, and clothing factories.

The chemical and oil refining industry has undergone a marked expansion of

¹ These are enterprises combining spinning and weaving, and in many cases also finishing and sewing.

capacity in recent years. Investment here reached sizeable dimensions in 1963 with the establishment of the petrochemical concerns. The relative share of investment in this subbranch in 1964 is estimated at 20 percent. The proportion expended on the new lubricant oil plant is estimated to be the same as that for the expansion of the oil refineries. Of the remaining investments, mention should be made of the large increase in the capacity of the enterprises producing basic materials for the plastic industry and the investment in pharmaceutical plants. The enlarged capacity of the petrochemical plants and that of the lubricant oil plant considerably exceeds local requirements; part of the output will replace imports and part will be diverted to the overseas market.

As to the rubber and plastic industry, there was a big percentage rise in outlay on the establishment and expansion of plastic enterprises. This investment was mainly connected with local demand conditions. A large part of it was in plants producing inputs for the construction sector. Investment in tire production was also relatively high—about a quarter of the total for the entire branch.

The weight of the other branches was smaller. This distribution of investment closely resembles the composition of the capital stock in 1958.¹ Slight changes occurred in the weights of the various branches, but the available data are not sufficiently reliable to permit an estimate.

About 25 percent of aggregate industrial investment went to expand existing enterprises; in 1963 the proportion was 30 percent, as against 70 percent for the establishment of new enterprises.

Public funds financed 30 percent of total industrial investment in 1964. This rate varies not only from one branch to another but also as between enterprises in the same branch.² There is a connection between the percentage of public finance and the region in which the concerns are situated. Of the total capital invested in industrial firms in development areas, 47 percent was financed by the Government, compared with 32 percent in the case of enterprises located elsewhere. These rates are averages for the entire industrial sector; in some branches the percentage of public investment capital is greater in plants located outside the development areas.

¹ See M. Bruno, *Interdependence, Resource Use and Structural Change in Israel*, Bank of Israel, Jerusalem, 1962.

² These data relate to all enterprises which received loans from the Industrial Development Bank.