

CHAPTER X

INDUSTRY

THE VALUE of industrial production rose, at current prices, from IL. 1,519 million in 1957 to IL. 1,715 million in 1958,—i.e., by 12.9 per cent. Net output¹ increased by 13.2 per cent,—from IL. 581.7 million to IL. 658.2 million. Allowing for an estimated 2 to 3 per cent rise in the prices of industrial commodities, the real increase in output (at constant prices) was 10 per cent.

The rate of expansion in 1958 was thus roughly similar to that of previous years (12 per cent in 1955, 9 per cent in 1956 and 15 per cent in 1957). It was chiefly determined not by the shortage of production factors at prevailing prices, but rather by the demand for industrial products on the domestic and foreign markets. The limited growth of local demand was due to the Government's income policy and long-term balance of payments considerations. The factors of production required for the expansion of output were available in most branches. New investments made during the last few years increased the quantity of modern equipment at the disposal of industry. The fact that this equipment was not fully utilized, made a rapid expansion of production possible. As a result of the availability of equipment and the higher productivity of labour, output could be increased without necessitating a corresponding increase in skilled and unskilled personnel in the various enterprises. In addition, a larger number of workers was employed in industry. The amount of imported and locally-produced raw materials available at prevailing prices permitted the expansion of output to the level determined by demand. This situation was the result of the rise in agricultural production, the high level of capital imports, and the drop in the world prices of raw materials. It would also seem that the stocks of raw materials, which had been quite large in 1957, declined after the introduction of liberalization. All these factors caused the rate of expansion in certain branches (such as textiles, clothing, wood, leather, rubber, plastics, building materials and metals), to be determined by the level of demand.

In certain branches, the rate of expansion was determined either by the quantities of locally-produced raw materials available from agriculture—as in some branches of the food industry—or by the physical production capacity of existing equipment, as in the case of paper, basic chemicals, mining and quarrying.

The channelling of most industrial commodities to the local market was re-

¹ The definition of net output differs from that appearing in Chapter II—"Resources, Product and National Income", as different computing methods were used.

sponsible for the fact that output expanded at rates determined by the level of local demand, except in branches where it was limited by a shortage of production factors. Only in a few branches did fluctuations in demand on foreign markets cause a decline in production.

The volume of industrial exports remained unchanged, its share in total output thus falling from 11.5 to 10 per cent. This was due to a number of contradictory factors: Certain branches, which produce mainly for foreign markets, increased their exports as their production capacity or the amount of raw materials at their disposal expanded, and as a result of their gradual penetration of new markets. Exports of other commodities declined. This applies especially to goods sent to protected markets,—such as trade agreement countries.

Investments in capital goods were considerably larger, rising from IL. 124 million in 1957 to IL. 157 million in 1958. This was mainly due to the Government's policy of encouraging investment. Most of the new investments were directed to branches where the expansion of production capacity is likely to increase the supply of import substitutes and exports at reasonable production costs. And indeed, these investments considerably increased the production capacity of such branches. An additional factor determining the allocation of investment funds was the policy of industrializing development areas. Investments in enterprises where the input of capital is high relatively to the input of labour likewise increased. As the expansion of production capacity in 1958 exceeded the increase in exports and in output, a smaller percentage of capacity was utilized in some branches, causing keen competition between producers. The latter was reflected mainly in changes in terms of payment rather than in price reductions.

In branches with a high wage component, there was an increase in the share of small enterprises and crafts, which can expand production with smaller increases in their total wage bill than larger concerns with more highly paid staff, which carry a heavy burden of wages and social benefits.

The process of "deepening" production (i.e., dealing with earlier stages in the production process) continued, as did the substitution of imports by locally-manufactured goods. Technical improvements and a higher degree of vocational skill enabled the production of certain commodities previously imported or only assembled in this country. This applies particularly to the metal, machinery, electric appliances, textile, wood, paper, chemical and building materials branches. The higher standard of local production, together with the greater variety and the shift to more expensive products, reduced the import component within the total value of industrial output.

The overall wage bill rose less than production, and the wage component per unit of output declined. The prices of imported raw materials fell, and despite higher imposts their cost to the producer in Israel pounds was lower than last year. Improved production methods raised the output per worker and reduced the operating costs of equipment. On the other hand, the expanded production

capacity increased the burden of debt in connection with the purchasing of equipment. In conclusion, it would seem that production costs per unit of output declined. The bigger volume of credit extended by manufacturers to their clients caused a strain in the liquidity situation in industry, while profitability increased somewhat.

The lower production costs per unit of output did not reduce commodity prices, except in a few cases. Lower production costs may greatly influence the development of the Israel economy by increasing the domestic accumulation of investment capital and creating new opportunities for the export of industrial commodities.

The decline in production costs in 1958 was partly due to factors over which the Israel economy has no control, such as the lower prices of imported raw materials and of fuel. However, some local production factors—e.g., the unutilized output capacity and the maturing of investments in equipment and professional "know-how"—have not yet been fully exploited.

Insofar as the Israel industry will continue to channel most of its output to the local market, the rate of expansion of industrial production will be determined by domestic demand and raw material supplies. In order to continue expanding output at a rapid rate, thus raising the percentage of capacity utilized and cutting production costs, it is, therefore, imperative to expand industrial exports. This necessitates changes in production methods and in the organization of exports.

1. OUTPUT

In 1958, most industrial branches expanded their output by 10 to 15 per cent. Branches where production declined were chiefly those producing for export and affected by slumps in foreign markets or by adverse developments in certain countries (such as Turkey) linked with Israel by trade agreements. The commodities affected were: woollen yarn, cement, diamonds and pencils.

Subsidiary branches where production increased slowly were: Bakeries, tobacco, footwear, certain building materials, cooking utensils, domestic electrical appliances, radios and gramophones. This was due mainly to developments affecting consumption and building, which are discussed in the chapters covering these subjects.

On the other hand, production expanded rapidly in the following branches: Potash, oil, meat manufactures, dairy products, tinned fruit and vegetables, flour milling, sugar, cotton spinning, paper, basic chemicals, heating and cooking utensils, agricultural machinery, pumps and basic electrical equipment. The causes in each individual branch are discussed below.

Table X-1 gives provisional estimates of output in the main industrial branches and of their added value in 1957 and 1958. More detailed estimates of output in subsidiary branches are cited in the review of individual branches.

The data appearing in Table X-1 refer to changes in output at current prices. The prices of industrial products are estimated to have risen by 2 to 3 per cent. The absence of an accurate index of production prices makes it impossible to measure the real expansion of output in the subsidiary branches directly.

TABLE X-1
Estimates of Output and Added Value in Industry
(current prices), 1957-1958
(millions of IL.)

Branch	Value of output		Percentage increase or decrease(—) from 1957 to 1958	Added value		Percentage increase or decrease(—) from 1957 to 1958
	1957	1958		1957	1958	
Mining and quarrying	33.4	37.0	10.8	19.8	22.1	11.5
Foodstuffs	305.9	362.2	18.4	87.4	103.0	17.8
Textiles	203.8	223.7	9.8	75.1	83.6	11.4
Clothing	146.5	167.0	14.0	56.7	64.6	14.0
Wood and furniture	91.1	96.9	6.4	37.6	39.9	5.9
Paper and printing	74.1	86.5	16.7	37.0	43.1	16.6
Leather and leather goods	67.7	71.0	4.9	25.9	27.2	5.1
Rubber and plastics	40.4	45.9	13.3	16.6	19.0	14.5
Chemicals	128.9	154.2	19.6	42.1	50.9	20.9
Non-metallic minerals	103.8	102.7	-1.1	50.8	50.9	0.1
Diamonds	68.9	66.2	-3.9	16.3	17.3	6.3
Metals	137.8	167.8	21.8	61.7	75.0	21.6
Machinery	35.4	38.9	9.9	13.5	15.1	12.1
Electrical equipment	35.0	36.3	19.0	15.4	18.2	18.2
Transport vehicles	35.0	40.6	15.8	17.5	20.1	14.7
Miscellaneous	16.0	15.8	-1.5	8.3	8.0	-3.0
<i>Total</i>	<i>1,519.3</i>	<i>1,714.8</i>	<i>12.9</i>	<i>581.7</i>	<i>658.2</i>	<i>13.2</i>

Note: This table accepts the classification used in the Industrial Census of 1956 prepared by the Central Bureau of Statistics. Differences between this classification and that appearing in the 1957 Report are as follows: Foodstuffs include meat manufactures (excluding poultry meat); dairy produce includes the value of bottled milk; flour milling includes the turnover of the mills but *not* the value of the flour; chemicals include oil refineries.

In contrast to the data on the value of industrial output published by the Central Bureau of Statistics, the data cited here include the output of craft workshops in the clothing, furniture and footwear branches.

The item "miscellaneous" comprises the manufacture of precision tools, optical instruments, photographic equipment, jewelry, art work, religious articles, office and writing equipment, and some other items.

SOURCE: Central Bureau of Statistics and Bank of Israel.

2. INPUT

The expansion of production and the stability of prices were made possible by the supply of all the required input at prices only slightly higher—and in some cases even lower—than in 1957. Consequently, in many branches production costs per unit of output declined. This applies especially to the prices of imported raw materials, though the prices of certain raw materials produced by Israel agriculture, such as meat and sugar beet, also fell.

(a) *Employment and wages*

The total outlay on industrial wages is estimated to have risen by 10 to 11 per cent in 1958. This increase was due to a 3 per cent rise in the number of workers employed, while the average wage per worker was 6 per cent higher.

The expansion of output without a corresponding increase in employment was made possible by the more efficient utilization of existing manpower, so that the larger raw material input enabled production to be expanded without necessitating a corresponding increase in the number of workers. It would seem, however, that the input of labour increased at a slightly faster rate than employment, as average working hours per worker were longer.

Additional factors contributing to the increase in output per worker were the expansion and modernization of the Israel industry. During 1958, the volume of new industrial investments expanded considerably, and past investments began to bear fruit. Many of these investments were capital intensive, a phenomenon caused by the relative prices of capital and labour, as well as by the trends of industrial development. As a result, both the capital invested per worker and the average output per worker increased. The latter has been steadily rising for some years; in 1958 it rose by 6–7 per cent. Nevertheless, this process has apparently not yet terminated, and it is still possible to increase output and reduce real input per unit of production by raising the utilization rate of industrial equipment and of existing manpower.

The annual average of workers employed in industry rose from 139,000 in 1957 to approximately 142,000 in 1958—an increase of about 2.5 per cent. The largest increases were registered in the diamond, electrical appliances, paper and printing branches. Employment in the textile, clothing, leather, wood and furniture branches rose only slightly. Elsewhere, the increase conformed to the average.

The slight increase in average earnings per worker was due to wage agreements and to the stability of prices. As agreements were signed at the beginning of 1957, providing that agreements on basic wages would be concluded only once every two years, basic wages did not rise in the year under review. The stability of prices was responsible for the fact that, as from the middle of 1957, the cost-of-living allowance was increased only once—in July 1958—by 3.6 per cent. This only affected wages during the second half of the year. The

TABLE X-2
Employment in Industry, by Branches, 1958
(thousands)

<i>Branch</i>	<i>Number of employed</i>
Mining and quarrying	3.1
Foodstuffs and tobacco	21.0
Textiles, clothing and leather	35.8
Wood, wood products and furniture	12.0
Paper, cardboard and printing	8.2
Rubber, chemicals and oil	9.2
Non-metallic minerals	7.4
Diamonds	3.0
Metals and metal products, machinery and transport vehicles	35.4
Electrical appliances	3.7
Miscellaneous	3.1
<i>All branches</i>	141.9

SOURCE: Central Bureau of Statistics.

average wage was further increased by overtime payments and the "wage drift" resulting from up-gradings and the larger volume of family allowances, seniority allowances and grants.

A factor slowing down the rise in wages was the greater proportion of unskilled workers and of female employees (whose average wages are lower than those of male workers). For instance, most of the additional workers in the textile branches were unskilled.

As a result of all these trends, the sum total of wages paid out by industry rose from IL.335-340 million in 1957 to IL.370-375 million in 1958,—an increase of 10-11 per cent. The income of self-employed workers and profits increased at a higher rate.

(b) *Raw materials from the agricultural sector*

The value of raw materials supplied to industry from the agricultural sector rose, at current prices, by 13.4 per cent,—from IL. 119.8 million in 1956/57 to IL. 135.0 million in 1957/58,¹ though the rise in prices to the industrial producer was negligible. This was due to the expansion of agricultural production. Indeed, industry served as an outlet for surpluses of fresh produce which could not be marketed at higher prices either locally or abroad. The manufacture of meat

¹ Data for agricultural years (from October to September of each year) cause a certain downward bias, mainly in the dairy produce branch.

products from local meat was expanded, since domestic meat prices rose. The output of sugar beet likewise increased.

In cases where the output of a certain subsidiary industrial branch exceeded the input from the agricultural sector, the latter was complemented by imports of agricultural raw materials. This was made necessary in the case of wheat, tobacco and oilseeds by poor harvests; and in the case of cotton spinning—because the expansion of raw cotton production lagged behind the increase in the output of cotton yarn by industry.

(c) *Imported raw materials*

Imports of raw materials for industry (excluding fuel) rose by 3 per cent only. Stocks of imported raw materials, which had been particularly large in 1957, probably declined. Imports for the food industry fell in 1958, but imports for other branches rose by 4.7 per cent. Even if a certain reduction of stocks is allowed for, it will be found that the total import component in industry has declined. This may be attributed to the cumulative effect of a number of factors, such as the "deepening" of local production, the improved quality of many

TABLE X-3

*Input of Local Agricultural Raw Materials for Industry (current prices),
1956/57-1957/58
(millions of IL.)*

Subsidiary branch	1956/57*	1957/58	Percentage increase or decrease (-) from 1956/57 to 1957/58
Meat (excluding poultry meat)	27.9	33.3	19.4
Fish	0.5	0.6	20.0
Milk	46.1	51.5	11.7
Tinned fruit and vegetables	4.2	7.8	85.7
Flour milling	9.1	8.5	-6.6
Sugar	3.1	5.2	67.7
Wine, alcohol and drinks	6.2	7.2	16.1
Tobacco	2.7	2.1	-22.2
Miscellaneous	1.4	1.5	6.3
Cotton	10.1	11.6	14.9
Wool	0.2	0.4	100.0
Wood	1.0	1.0	—
Oil and Soap	6.5	4.3	-33.8
<i>Total</i>	119.8	135.0	13.4

* The difference between the value of total output in this table and in Table IX-3 represents compensation for losses paid to cotton growers by the Government.

SOURCE: Central Bureau of Statistics and Bank of Israel, based on data from the Ministry of Agriculture and other sources.

commodities and the accelerated rate of expansion in certain branches with a low import component. Whereas output rose only slightly in such branches as wool spinning, wood, cement and diamonds, the expansion of production in mining and quarrying, foodstuffs, clothing, basic chemicals and some other industries with a relatively low import component was very rapid. The export prices of imported raw materials, at Israel harbours, declined by 7-8 per cent in comparison with 1957, so that despite the additional duties on raw materials for the metal, plastics and other industries, the prices of such input fell by an estimated 5 per cent.

TABLE X-4
Imports of Raw Materials for Industry, by Destination, 1957-1958
(millions of U.S. dollars)

Destination	1957		1958 current prices	Percentage increase or decrease(—) from 1957 to 1958 (1958 prices)
	current prices	1958 prices		
The food industry	47.8	44.9	44.0	-2.0
Other industries	144.0	133.8	140.1	4.7
<i>Total</i>	191.8	178.7	184.1	3.0

SOURCE: Central Bureau of Statistics.

(d) Fuel

Total fuel consumption in the economy rose from approximately 1,381 million tons in 1957 to 1,524 million tons in 1958, industry being responsible for most of the increase. Fuel prices fell by an estimated 5 per cent only, despite the greater decline in international transportation costs. Most fuel imports are carried to Israel by ship, in accordance with agreements covering periods of one to two years concluded at the beginning of 1957,—at the time of the Suez fuel crisis, when transportation prices had reached a peak. Thus, the economy benefited from the lower transportation prices only at the end of 1958.

(e) Electricity

The industrial consumption of electricity supplied by the Israel Electric Corporation rose by 14.8 per cent,—from 462.9 million kwh to 532.3 million kwh. This rate of increase somewhat exceeds that of industrial production, mainly because the expansion was most marked in branches where electricity constitutes a large proportion of total production costs.

The average price of electricity for industry rose in April 1958 by 10 per cent.

However, this price is still relatively low as compared to the cost of added value in the economy. The price of electricity produced by the industrial enterprises themselves remained unchanged, owing to the stability of fuel prices.

3. INVESTMENT

Gross investments in fixed capital goods in industry and mines totalled IL. 157 million in 1958, as against IL. 124 million in 1957—an increase of 26 per cent. As depreciation on industrial assets increased more slowly, the net volume of investments expanded at a faster rate. This was largely due to a deliberate Government policy aimed at expanding industrial production capacity and allocating for this purpose large amounts in the form of long-term foreign and local currency loans on easy terms. The Government also helped local industry by controlling the prices of production factors and preventing competitive imports. The Government's share in the financing of investments remained at 37 per cent in industry and at 95 per cent in mining.

Government financing was the major factor helping to channel investments to branches defined as having priority from the viewpoint of the national economy.

The loans granted by the Government enable it to control the distribution of investments more extensively than its share would appear to warrant, since it generally finances only part of the investment supported, on condition that the remaining capital be provided from private sources. As the Government rarely finances the replacement of equipment, most new industrial investments were channelled—with the aid of Government loans and concessions to “approved enterprises”—to branches which it considered economically desirable.

The principal criterion for the extension of Government loans partially financing certain investments was the effect on the balance of payments;—i.e., how far the investment concerned would help to reduce the import component of production and to expand exports at a reasonable cost per dollar of added value or per dollar saved. Additional criteria were the impact on employment—especially in development areas—and the ensuring of adequate supplies of locally-produced vital commodities in times of emergency. However, the interpretation put upon these criteria by the competent authorities was rather vague, each of these criteria justifying the extension of assistance for the establishment of a plant, as long as it complied with certain other criteria.

During the last few years, Government policy led to large-scale investments in the following branches: Mining and quarrying, textiles, chemicals and metals. As the production capacity of branches producing consumer goods has expanded beyond the level of local demand at prevailing prices, the Government is channelling most of its own investments to industries utilizing local raw materials or increasing the proportion of intermediate products and capital goods.

Despite the Government's considerable influence on the direction of industrial development, the initiative as regards the establishment of industrial enterprises

in 1958 usually rested with private investors (except in the mining and quarrying branch). The Government's function was to provide financial assistance insofar as the proposed enterprises conformed with the criteria listed above. The enterprises had to create their added value at a reasonable dollar cost, but the prices of local input—and particularly the price of unskilled labour—are high in comparison to the prices of such input in competing countries at the now effective exchange rate. In order to make investments profitable, the Government reduced the relative cost of capital goods to investors. This was done by granting loans and foreign currency allocations for the purchase of duty-free equipment and by extending long-term low-interest loans only partly linked,—which reduces the real price to the investor.

That is one of the reasons why the demand for loans to finance investment exceeded, in 1958 as in previous years, the funds allocated for this purpose by the Government. This was reflected both by the total number of requests submitted and by the fact that towards the end of the fiscal year Government departments were obliged to reject requests for loans.

The foundation of capital-intensive enterprises, requiring little labour, is to a certain extent an inevitable result of the directions of industrial development during the last few years. It was brought about by the greater stress on the establishment of basic industries producing capital assets and raw materials rather than consumer goods, and thus caused the expansion of investments in mines, quarries and basic chemicals. The relative prices of production factors also encouraged larger investments in capital-intensive branches. Moreover, they made it more profitable for the investor to prefer a high ratio of capital to labour even in cases where labour could have been substituted for capital. In the year under review, an initial attempt was made to remedy this situation by imposing duties on raw material imports. However, these imports were kept low, in view of their possible impact on the cost-of-living index, while equipment and electricity remained relatively cheap. Consequently, these measures had little effect on existing industries and even less on the planning of investments.

The profitability and financing of industry were likewise affected: Industrial enterprises were able to invest larger amounts from their own resources in the modernization of equipment, and even to utilize some of their profits for the financing of new investments. The share of self-financing within gross industrial investment rose from IL. 78 million in 1957 to IL. 98 million in 1958—i.e., by 24 per cent. The higher profits increased the allocations to depreciation funds, especially in the governmental sector, though private industrial enterprises were also able to increase their share in the financing of their own investments. Hitherto, Israel industry has failed to raise even part of its investment capital through the stock exchange. The only exception is the Israel Industrial Institute (a body representing industry as a whole, in which the Government and the banks also participate). In 1958, the Institute made its first attempt to raise capital in the

market, successfully obtaining IL.8.5 million for the granting of long-term loans to industrial enterprises. Insofar as industry financed investments from credits, the latter were usually short-term loans, which reduced working capital and worsened the liquidity situation.

4. INDUSTRIAL EXPORTS

The total value of industrial exports (including diamonds) declined from \$84.1 million in 1957 to \$82.2 million in 1958,—i.e., by 2.2 per cent. As average import prices were 3 per cent lower, the physical volume of exports rose by only 0.8 per cent. The percentage of added value increased somewhat, so that the net yield of foreign currency from industrial exports remained at its 1957 level, totalling \$28.6 million. This was due to the contraction of exports to countries the trade with which is based on a disagio. The total value of industrial exports did not rise, as a result of various developments at home and in the countries of destination. The recession which affected the United States and its impact on other countries were chiefly responsible for the slump in diamond exports. The partial closing of the Turkish market to Israel goods, following changes in the terms of trade with that country, reduced the flow of various industrial exports thither. Owing to the low degree of competitiveness of Israel industrial exports, however, Turkey and other trade agreement countries were in the past the most convenient markets for them. An additional factor were the changes introduced in the methods of export promotion in Israel. With the liberalization of imports, it was possible to obtain raw materials for domestic production without having to export. This was reflected in the gradual decline of the PAMAZ system. On the other hand, there was an increase in the production of goods with regard to which the Israel economy apparently possesses a competitive advantage. Such an advantage may be due to the low international price of a major input item, as a result of climate or the availability of natural resources, cheap skilled labour and "know-how", or to a monopolistic position in a certain market.

The higher experience acquired in the export sphere was also reflected in the degree of concentration of exports. Insofar as investment policy aims at enabling the channelling of additional output to exports, investments must be chiefly concentrated in existing or planned branches where exports may be reasonably expected to expand. This implies increasing production capacity as regards commodities which the Israel economy can produce at a relative advantage.

The expansion of industrial production is in certain cases obstructed by the high direct production costs per unit of output (i.e., transportation costs, internal services and wages). In other branches, production is hampered by the existence of many small, unco-ordinated enterprises; this limits the possibilities of specialization, raises production costs and burdens a small number of production units with heavy overheads. Occasionally, the volume of exports is determined by

TABLE X-5
Exports of Industrial Commodities,^a 1957-1958
(thousands of U.S. dollars)

	1957	1958	Percentage increase or decrease (-) from 1957 to 1958
Preserves and juices	3,842	5,670	47.6
Wines	303	326	7.6
Accessories for motor vehicles	594	553	-7.0
Tires and inner tubes	4,728	5,800	22.7
Plywood	2,423	2,887	19.0
Plate glass	306	504	64.4
Souvenirs, religious articles and books	1,454	1,942	33.6
Potash	2,497	2,966	18.8
Clothing (except underwear)	2,006	2,900	44.5
Edible oils	1,559	817	-47.0
Motor cars	1,763	1,601	-9.2
Cocoa powder	727	313	-57.0
Cement	3,520	1,720	-51.0
Pencils	295	92	-69.0
Cardboard products	1,595	846	-47.0
Pharmaceuticals	2,484	763	-69.0
Paints and enamels	378	286	-24.4
Shoes and Sandals	341	435	27.6
Cloth	910	977	7.4
Combed wool yarn	2,632	1,997	-24.0
Knitwear and nylon stockings	677	1,200	77.0
Postage stamps	1,799	1,482	-17.6
Tricot and underwear	428	190	-54.5
Diamonds	35,500	34,320	-3.3
Steel pipes	892	57	-36.2
Razor blades	123	296	140.0
Refrigerators and air-conditioners	768	265	-65.5
Chemicals and insecticides	1,252	1,357	8.3
Other industrial commodities	8,248	10,830	31.4
<i>Total industrial exports</i>	<i>84,118</i>	<i>82,230</i>	<i>-2.2</i>

^a Differences between this table and Table III-3 are due to a different classification of the various items.

SOURCE: Ministry of Commerce and Industry.

production capacity, and in still other cases—by competition in the local market for commodities and factors of production. The policy of expanding production capacity can only overcome the last-mentioned handicap: Whenever the level of exports is limited by domestic output capacity or by the local supply of pro-

duction factors,—as in the case of citrus, tires, plywood and chemicals, or certain commodities not yet manufactured—additional investments may bring about a corresponding expansion of exports. But in many industrial branches, where export prospects could be bright, the major limitation is the organizational structure of production, and until this is improved, these branches will not be able to export, even if their output capacity is expanded.

Many producers are not particularly keen to export because outlays connected with exports may be regarded as fixed costs far too high in comparison with their volume of production. Others are unwilling to take chances in markets with which they are not familiar. These considerations prevent the medium and small producers from becoming exporters, as the prospects of penetrating foreign markets are not only determined by the level of direct production costs (which in the case of small producers may be relatively low), but also by the expenditure on export promotion. If the economy is interested in increasing the number of enterprises exporting their products, it must free the individual producers from the financial burden of export promotion in branches where this problem exists, and set up a central body, possessing the necessary know-how, connections and resources to deal with this matter.

With the liberalization of most imports, producers may now export their goods without having to import the required raw materials themselves or to earn the foreign currency necessary to produce for the local market. As a result, the link between imports and production has weakened. On the other hand, the creation of export companies weakened the organizational and financial connection between production and exports, which limits the number of exporters. During the past year, certain export companies began to operate—with Government assistance, but as they had little capital, their impact has to date been only slightly felt. The success of these companies depends not only on the acquiring of experience. Its first and foremost pre-requisite is the availability of sufficient funds to enable them to finance stocks of raw materials and current production, grant credit to clients abroad, and set up storage and marketing facilities in potential markets. Regardless of the size of his undertaking, the individual producer manufacturing for them would then be able to concentrate on production, without having to deal with foreign currency transactions connected with import or export. It would also become possible to divide work and specialize in the continuous production of a single commodity, thus lowering both overheads and direct production costs.

5. INDUSTRIAL CREDIT

In 1958, as in former years, most industrial branches felt a keen need for credit, which found expression in demands for the expansion of short-term bank credit. Short-term credit to industry was expanded by 24.2 per cent, rising from IL. 133.9 million in 1957 to IL. 166.3 million in 1958. This latter figure includes

short-term loans from the resources of the banking system and from Government funds earmarked for working capital, as well as loans for the payment of income tax, for the financing of imports within the framework of the U.S. Grant-in-Aid and the Reparations Agreement, and for acceptances. The rate of credit expansion was determined on the basis of overall economic policy by the Bank of Israel and other Government institutions. As it is easy to substitute one source of short-term credit for another, greater importance should be attached to the controlling of the overall volume of short-term credit rather than its individual suppliers. Though credit expanded more rapidly than production (which rose by 13 per cent), this was insufficient to satisfy the demand of industrial enterprises and organized industrial bodies at the prevailing rate of interest.

TABLE X-6
Short-term Credit to Industry, by Source, 1957-1958
(millions of IL.)

<i>(End of period)</i>	<i>Source</i>	<i>1957</i>	<i>1958</i>
Banks and credit co-operatives		93.7	124.8
Bank of Israel (local and foreign currency)		14.2	5.6
Development budget		14.2	24.2
Acceptances		11.8	11.6
<i>Total</i>		133.9	166.3

SOURCE: Bank of Israel and Ministry of Commerce and Industry.

The reasons for the big demand for industrial short-term credit were, to a certain extent, similar to those underlying the general demand for credit in the economy. However, the tense liquidity situation of industry was rendered more acute in 1958 by certain trends specific to industrial development, particularly during the last few years.

The Government's policy of encouraging investment was expressed, as regards industry, mainly through the granting of long-term loans for the financing of basic investments in industrial enterprises. Usually, there is a lapse of time between the approval of a loan and its actual disbursement, while investors begin to implement their projects immediately upon these being approved, and sometimes even prior to receiving the approval. The Government has been making an increasing number of commitments, but the delays in their payment obliged industrial enterprises to resort to short-term credit from outside the banking system, as the banks seldom grant temporary credit—and even then only against numerous guarantees. When investment prices are rising, the delays reduce the value of the loans. Moreover, Government loans usually cover only 40-50 per

cent of the value of the investment, and the investor is required to supply the balance from his own means. Most investors are unable to do so or to obtain long-term loans for this purpose. A part of the basic investment, including working capital, is thus financed by short-term credit, and consequently not all the short-term credit available from banking and Government sources is channelled to the financing of current production. This problem is particularly acute in new enterprises established during the last few years, when the pace of industrial investment was accelerated. These enterprises met with difficulties on applying for credit from banking institutions, as the latter would have been unable to accommodate their older clients had they given much credit to new ones.

The effect of these trends over a number of years was cumulative. The situation, however, altered somewhat in 1958, mainly owing to changes in production and in the demand for industrial commodities. As production capacity expanded, the competition in the local market became more intense. As a result of agreements between producers and of the general anticipation of price increases, this competition found expression more in the credit terms offered to customers than in lower prices. Whenever a branch changed from a "sellers' market" into a "buyers' market", credit to customers was expanded. The most conspicuous example was cotton spinning: Whereas at the end of 1957 cash payments were customary in this branch, at the end of 1958 spinning mills extended credit to their customers for periods of 4-5 months. In the paper branch, where there is no competition for the local market because demand exceeds domestic production, customers have to pay advances to this day. The same thing has happened in some other cases. However, in 1958 there was a "buyers' market" in most industrial branches, and credit to customers became the factor most responsible for the tense liquidity situation in industry. It may be said that the amount of credit extended to customers serves as an indicator of the respective bargaining power of producers and clients. The stronger the bargaining position of the producers, the less credit is extended, and *vice versa*.

The monetary policy responsible for the channelling of credit to export industries—by financing raw material purchases, the production process, and even credits to foreign customers, improved the liquidity position of the branches which exported most of their output, relatively to those producing mainly for the local market. For instance, the situation was much better in the woollen yarn branch than in the cotton yarn branch. Quarrying companies received their export proceeds in cash, whereas enterprises selling on the local market were obliged to grant credit for up to 3 months, their clients also extending several months' credit to their own customers.

The basic weakness of the financial structure of the Israel industry cannot be remedied by supplying additional credit to cover its needs. The shortage of investment and working capital is of such an order of magnitude that its liquidation would only start a new inflationary spiral. The situation can

only be improved by the gradual reduction of credit to customers, the re-investment of profits, the careful financing of new investments—which provides in advance all the funds necessary for the smooth operating of the enterprise, and the elimination of inflationary expectations as a factor motivating investment.

Credit granted to industry for working capital purposes by the banking system and the Government varied from branch to branch: Branches which expanded their exports or increased their production of substitutes for imports, thus benefiting the national economy, were granted larger amounts of credit—either by the banking system, under Bank of Israel control, or from Development Budget funds.

Other branches obtained additional credit within the framework of the general credit channelling regulations, which left the banks considerable discretion to give loans to enterprises on the basis of long-standing business relations or commercial considerations.

TABLE X-7

*Short-term Credit to Industry from the Resources of the Banking System,
by Branch, 1957-1958*
(millions of IL.)

(End of period)

Branch	1957	1958	Percentage increase or decrease (-) from 1957 to 1958
Foodstuffs and tobacco	17.5	26.4	51.0
Textiles, clothing and leather	25.5	31.8	24.6
Wood, wood products and furniture	6.9	6.9	0.8
Paper and printing	7.7	8.1	5.2
Rubber and plastics	6.3	7.0	11.4
Chemicals	22.0	26.4	19.8
Non-metallic minerals	6.3	10.6	68.9
Diamonds	7.2	5.1	-29.6
Metals, machinery and electrical equipment	24.6	32.9	33.7
Miscellaneous	9.9	11.1	12.0
<i>Total</i>	133.9	166.3	24.2

SOURCE: Bank of Israel and Ministry of Commerce and Industry.

6. INDUSTRIAL BRANCHES

(a) The food industry

The output of the food industry expanded by 18.4 per cent—rising from IL 305.9 million to IL 362.2 million. This expansion was mainly due to the larger supplies of agricultural raw materials, following the increase in agricultural production. The bigger output of milk, meat and sugar beet, and the greater quantities of inferior quality citrus fruit, increased the volume of manufactures

based on these products. As regards milk and citrus fruit, industrial processing permitted the utilization of such extra supplies of these commodities as could not be marketed fresh either locally or abroad. On the other hand, branches not limited by the availability of raw materials, whose level of production is determined by local demand, expanded more slowly. The smallest increase took place in the output of flour products, owing to changes in the pattern of consumption, which caused a shift from commodities generally consumed by low income groups to "richer" foods. The same factors were responsible for the smaller increase in the output of ice, resulting from the more widespread use of electric refrigerators.

On the other hand, the small increase in tobacco production was due to the shift from expensive to cheaper cigarettes, following the imposition of higher excise duties on better brands, while the tax on popular brands was lowered.

The expansion in the output of bakeries occurred exclusively in the largest and most modern undertakings. Smaller bakeries were either amalgamated or closed down altogether. This process is still going on. The percentage of output capacity utilized declined in many branches during 1958, as new investments were made,—e.g., in the chocolate and sweets industry.

No significant changes occurred in the prices of the food industry's input and output. The decline in international prices affected imported wheat, oilseeds and sugar. The prices of local input changed somewhat, as a result of the agricultural price policies enforced (see Chapter IX—"Agriculture").

TABLE X-8
Output of the Food Industry, by Subsidiary Branches
(current prices), 1957-1958
(millions of IL.)

Subsidiary branch	1957	1958	Percentage increase from 1957 to 1958
Meat and fish	15.2	20.7	37.0
Dairy products*	72.9	90.0	27.6
Tinned and preserved fruit and vegetables	27.6	35.3	27.8
Margarine and oil products	16.9	19.2	13.6
Corn and Flour mills ^b	12.0	15.0	24.8
Bakeries and dough products	65.6	70.9	8.1
Sugar, chocolate and sweets	26.6	31.8	20.0
Wine, alcohol and beer	17.2	20.2	17.4
Ice, tobacco and other foodstuffs	51.9	59.6	14.8
<i>Total</i>	305.9	362.2	18.4

* This item includes the value of bottled milk.

^b Data re flour mills are estimates of the price of milling and do not correspond to the estimates appearing in the 1957 Report, which referred to the value of flour.

SOURCE: Central Bureau of Statistics and Bank of Israel.

(b) *Textiles and clothing*

The most conspicuous development in this branch took place in the cotton spinning industry, where production capacity was considerably expanded. The number of spindles increased from 90,000 at the end of 1957 to 120,000 at the end of 1958, with the erection of new spinning mills and the expansion of existing undertakings. However, the larger production capacity did not lead to a corresponding increase in output, owing to difficulties during the running-in of the plants, and a certain decline in the rate of utilization, caused by the limited local demand. There was, however, a significant increase in the output of the thinner and more expensive yarns, the production of which began only recently. All the additional output was channelled to the local market, the keen competition between producers causing a certain decline in prices and changes in terms of payment. Whereas in 1957 spinning mills used to demand advance payment before supplying orders, in 1958 they began to extend credit to their customers. As a result, the terms of payment were also altered in the cotton weaving branch, though there the change in the scope of production was much smaller.

The spinning of woollen yarns declined owing to the contraction of exports, which in former years had chiefly been sent to trade agreement countries. This caused prices to fall slightly, as well as worsening terms of payment and influencing the prices of woollen cloth. However, yarn prices fell considerably less than the prices of imported raw wool (which declined by 25 per cent). The price of raw cotton remained stable. No serious expansion took place in the production capacity of the wool branch.

TABLE X-9

*Output of the Textile and Clothing Industries, by Subsidiary Branches
(current prices), 1957-1958
(millions of IL.)*

<i>Subsidiary branch</i>	<i>1957</i>	<i>1958</i>	<i>Percentage increase or decrease (-) from 1957 to 1958</i>
Cotton spinning	29.1	35.6	22.3
Woollen and synthetic yarn spinning	26.9	24.5	-8.9
Cloth weaving	107.2	117.5	9.6
Dying, bleaching and finishing	15.2	19.5	28.4
Knitting of tricot, tricotage and other textile products	25.4	26.4	3.9
<i>All textiles</i>	<i>203.8</i>	<i>223.7</i>	<i>9.8</i>
Clothing	146.5	167.0	14.0

SOURCE: Central Bureau of Statistics and Bank of Israel.

The production of tricot and tricotage knitwear, partly intended for export, increased considerably, despite the decline in world prices. This was made possible by the higher quality of the manufactured articles and by better equipment (which also helped to reduce production costs), as well as by lower prices of imported raw materials.

The expansion of the clothing industry is connected with larger exports,—especially of raincoats and outer clothing.

(c) *Wood and furniture*

Output in this branch rose by about 6 per cent—from IL. 91.1 million to IL. 96.9 million. The rate of increase was mainly determined by the level of domestic demand. The demand for local carpentry articles was relatively stable, while Israel's basic wood industry—panels and plywood—expanded by some 10.3 per cent. Most of the additional production was exported. However, the carpentry branch is still manufacturing almost exclusively for the local market.

TABLE X-10

*Output of the Wood and Furniture Industries, by Subsidiary Branches
(current prices), 1957-1958
(millions of IL.)*

Subsidiary branch	1957	1958	Percentage increase from 1957 to 1958
Basic wood industries	19.0	21.0	10.3
Wood and cork products (excluding furniture)	10.4	12.6	21.0
Carpentry, furniture and upholstery	61.7	63.3	2.6
<i>Total</i>	<i>91.1</i>	<i>96.9</i>	<i>6.4</i>

SOURCE: Central Bureau of Statistics.

(d) *Paper and printing*

The rapid expansion of the basic paper industry was partly due to the increased production capacity of existing paper mills. However, there is still a shortage of capacity, some of the paper requirements of the country being imported, so that the local market does not constitute a limiting factor. Existing paper mills have expanded their output and are now also manufacturing more kinds of paper. Although prices were controlled, in fact they were determined by the volume of imports. Insofar as imported paper was not released from harbour, internal prices rose and the profits of producers and middlemen increased. The prices of imported raw materials declined, but additional duties did not permit

this to be reflected in production costs. The level of domestic demand prompted enterprises to expand their investments in the final stages of manufacture as well as in the local production of the main raw material required in this branch—wood pulp. The economic desirability of producing pulp in Israel is still doubtful, the price of the dollar saved being high owing to the use of expensive raw materials and water,—two important items within its production costs.

Exports of paper and cardboard products declined, due to difficulties in trade agreement markets,—previously the main outlet for these commodities. However, their production for the local market continued to expand, since they were in increased demand for packing purposes.

The output of the printing branch increased considerably, both owing to increased demand and to greater output capacity. The modern equipment installed in 1957 permitted the more extensive use of "offset" printing by existing, as well as new, printing presses. As a result, there was a shift to this type of printing, leading to increased production and employment. On the other hand, the zincography branch contracted somewhat. Printing prices were raised by 10 per cent in 1958; however, owing to competition between printers, they fluctuated, being subject to commercial and seasonal influences.

TABLE X-11
*Output of the Paper and Printing Industries, by Subsidiary Branches
 (current prices), 1957-1958
 (millions of IL.)*

Subsidiary branch	1957	1958	Percentage increase from 1957 to 1958
Basic paper and cardboard industries	11.5	13.9	21.1
Paper and cardboard products	22.8	26.3	15.5
Printing and binding	39.8	46.3	16.3
<i>Total</i>	74.1	86.5	16.7

SOURCE: Central Bureau of Statistics and Bank of Israel.

(e) *Leather and footwear*

This branch expanded by only 5 per cent,—the value of production rising from IL.67.7 million in 1957 to IL.71.0 million in 1958. This was due to stable demand. As shoe exports still constitute a minor proportion of total production, additional investments in this branch over the past few years increased competition on the local market between the numerous producers. Hence, many large tanneries, unable to compete with the small producers whose production costs

are lower, found themselves in financial difficulties. They therefore reduced their production, remaining with an excessive percentage of unexploited production capacity, which was one of the main reasons for the stable prices in this branch—despite the 2 to 3 per cent rise in the cost of leather.

TABLE X-12
*Output of the Leather Industry, By Subsidiary Branches
 (current prices), 1957-1958
 (millions of IL.)*

<i>Subsidiary branch</i>	<i>1957</i>	<i>1958</i>	<i>Percentage increase from 1957 to 1958</i>
Tanneries	15.7	15.9	1.5
Footwear and leather products	52.0	55.1	6.0
<i>Total</i>	<i>67.7</i>	<i>71.0</i>	<i>4.9</i>

SOURCE: Central Bureau of Statistics and Bank of Israel.

(f) *Rubber and plastics*

The 13.3 per cent increase in the output of rubber and plastic products (from IL. 40.4 million in 1957 to IL. 45.9 million in 1958) was mainly concentrated in the tire industry, which works chiefly for export. The output of plastics increased more slowly. Competition between producers was responsible for the great variety of manufactures and for the changes in the structure of production,

TABLE X-13
*Output of the Rubber and Plastics Industries, by Subsidiary Branches
 (current prices), 1957-1958
 (millions of IL.)*

<i>Subsidiary branch</i>	<i>1957</i>	<i>1958</i>	<i>Percentage increase from 1957 to 1958</i>
Manufacture and vulcanizing of tires	19.4	22.7	16.9
Other rubber products	13.9	15.4	11.1
Plastics	7.2	7.7	7.9
<i>Total</i>	<i>40.4</i>	<i>45.9</i>	<i>13.3</i>

SOURCE: Central Bureau of Statistics and Bank of Israel.

particularly in the rubber branch. The decline in the world prices of raw materials had a stabilizing effect on domestic prices and even reduced the prices of certain commodities. The large and continually increasing number of competing small enterprises—especially in the plastics branch—also helped to keep prices steady. Apart from a limited number of big concerns, almost all producers in this branch manufacture exclusively for the local market, which therefore determined the volume of production. The export of these commodities is prevented by the technological backwardness of most plants as compared with similar foreign enterprises.

(g) *Chemicals*

The rapid expansion of this industry, whose output was valued in 1958 at IL. 154.2 million, as against IL. 128.9 million in the preceding year, may be attributed primarily to the increased production of basic chemicals and pharmaceuticals. Other subsidiary branches, producing commodities such as oil, soap, detergents and cosmetics for local consumption, expanded at a slower rate. Plants producing basic chemicals were able to accelerate production, since their output capacity was expanded as they entered the stage of full production and extended their installations. These enterprises—and particularly the largest of them, "Fertilizers and Chemicals Ltd."—are working at full capacity, the latter being the sole factor determining their volume of output. "Fertilizers and Chemicals Ltd." today supplies the entire local demand for fertilizers. Its continued expansion will depend on the increase in local demand for its present products and for new by-products, as well as on its ability to penetrate export markets. The concern now produces potassium sulphate (mainly for export), the output of which has increased considerably. However, exports of ammonium sulphate surpluses have declined steeply, in view of rising local demand. In 1958, production in this branch was "deepened" and expanded: Additional products were manufactured and new installations were erected to deal with primary processing.

The output of pharmaceuticals expanded more slowly, owing to reduced exports. The latter had been particularly large in 1957 due to exceptionally favorable marketing conditions. The increase in production was mainly reflected in the greater variety of manufactures.

The prices of imported raw materials fell by 5 to 10 per cent, somewhat affecting domestic prices. The producer prices of "Fertilizers and Chemicals Ltd." remained high, due to the high cost of local raw materials. These materials are of mediocre quality, and have to be transported from the Negev at considerable cost. As the Government fixes low controlled prices for the products used by local agriculture, in an effort to keep down agricultural production costs, "Fertilizers and Chemicals Ltd." cannot raise its prices of such products. However, it benefits from Government subsidies, which totalled about IL. 3 million in 1958—less than in 1957, as output expanded and production costs per unit were lower.

TABLE X-14

*Output of the Chemical Industries, by Subsidiary Branches
(current prices), 1957-1958
(millions of IL.)*

Subsidiary branch	1957	1958	Percentage increase from 1957 to 1958
Basic chemicals	20.2	29.9	48.3
Pharmaceuticals and insecticides	20.7	25.4	22.7
Edible oil, soap, detergents and cosmetics	63.0	71.0	12.9
Paints and enamels	7.2	7.9	10.3
Other chemical products and crude oil			
refining ^a	17.8	20.0	12.4
Total	128.9	154.2	19.6

^a Data include the value of crude oil—not of refined oil.

SOURCE: Central Bureau of Statistics and Bank of Israel.

(h) Non-metallic minerals (building materials)

The 1 per cent decline in the output of this branch (from IL. 103.8 million to IL. 102.7 million) was due to the lower cement production, caused by smaller exports to Turkey and the stability in the local real estate market. There was even an accumulation of stocks. Other subsidiary branches expanded their production, also changing the structure of output by shifting to newer commodities, such as pre-stressed concrete, powdered lime and ytong. However, the use of silicate bricks and cement blocks declined.

The ceramics industry continued to expand rapidly, especially as regards the output of sanitary ware and electrical ceramics used in the final stages of building. The output of glass and glass products likewise increased, and was partly exported. Glass production was "deepened" and expanded with the enlargement of the "Phoenicia" plant, which will enable imports of special glass products to be restricted, while permitting a further expansion of exports—particularly of sheet glass and security glass.

The competition on the local market between factories manufacturing the same products, as well as between various commodities which can be substituted for each other, was instrumental in stabilizing the prices of such items and encouraging new investments in the branch. There was no significant change in raw material prices.

TABLE X-15

*Output of the Non-Metallic Mineral Industries, by Subsidiary Branches
(current prices), 1957-1958
(millions of IL.)*

<i>Subsidiary branch</i>	<i>1957</i>	<i>1958</i>	<i>Percentage increase or decrease (-) from 1957 to 1958</i>
Glass and glass products	11.4	12.7	11.8
Ceramics	7.9	9.6	22.2
Cement and cement products	64.2	57.5	-10.5
Lime and clay products	6.1	6.7	9.8
Various non-metallic minerals	14.1	15.9	13.0
<i>Total</i>	<i>103.8</i>	<i>102.7</i>	<i>- 1.1</i>

SOURCE: Central Bureau of Statistics and Bank of Israel.

(i) *Diamonds*

The 4 per cent decline in the value of the diamond production (from IL. 68.9 million to IL. 66.2 million) was due to world market trends affecting both finished products and raw materials. The American recession was responsible for the smaller exports to this market, while exports to Canada and Belgium likewise declined. On the other hand, there was a rise in the prices of raw materials for ornamental diamonds, used by the Israel diamond industry.

The value of imports fell from \$28.6 million to \$25.5 million. The decline was particularly marked in the first half of the year, local stocks of raw materials contracting somewhat, so that the input of raw materials decreased less steeply than imports.

The bigger proportion of small stones, the added value of which is higher, increased the added value of Israel's diamond exports by 6.7 per cent—from \$6.6 million to \$7.0 million—though gross takings declined.

The expansion of local production capacity through the training of new workers and the erection of diamond manufacturing establishments (mainly in development areas) was chiefly financed by Government loans. The Government also entered this branch by directly supplying raw materials to new diamond manufacturing establishments. The expansion of the branch continues and with the changes in the structure of production—i.e., the larger share of smaller stones—the added value of this branch has risen. Increasing and vertically extending diamond production is vital from the viewpoint of the national economy, as all the output is exported and the price of the dollar added value, as well as the investment required per worker, are low. Nevertheless, expansion may meet with difficulties as regards raw material supplies and marketing: Already today, Israel constitutes an

important factor in the diamond market, accounting for some 20 per cent of the total value of the world's polished diamond output (which aggregated \$180 million). Any further expansion of production will necessitate the penetration of new markets in Asia and the Far East, as well as larger exports to Western Europe and the American Continent. The competitive ability of the Israel diamond industry is determined by its low wage level relatively to its skill, as well as by the high rate of raw material utilization and technical improvements in production processes.

(j) *Metals and Machinery*

The output of the metal industries was influenced by contradictory trends. Its value increased by 19.3 per cent—from IL 173.2 million to IL 206.7 million. The rise in the production of consumer commodities was generally moderate, chiefly because the local market was saturated with durable goods, such as electric refrigerators. The basic metal industries expanded considerably, mainly due to the opening of the smelting plant in April 1958. Other branches also increased the total value of their production, and improved the quality of their products. The manufacture of heating and cooking appliances was greatly expanded owing to the more extensive utilization of gas ranges and heating stoves made by some enterprises. The production of kitchen-ware declined, following the closing down of the "Palalum" factory.

The expansion of the machinery industries reflects the vertical development of production, the manufacturing of new items and the growth of the spare parts branch. Here, however, development has been somewhat checked by imports of equipment effected at lower prices and on easy credit terms, with which local producers—who cannot extend credit for such long periods—find it difficult to compete. This has, in some cases, led the Government to finance credits granted by manufacturers of equipment, once these had "deepened" production and acquired professional "know-how". This branch tended to specialize in the manufacture of certain commodities, such as agricultural machinery and pumps. However, exports—particularly to trade agreement countries—declined. As already pointed out, the production of household appliances was stable, due to the saturation of the local market with electric refrigerators. An effort was made to extend demand by producing a greater number of types.

Owing to the large proportion of small and medium-sized plants and inadequate specialization, the entire production of this branch was channelled to the local market. The erection of big new enterprises, with a production capacity exceeding local demand, better quality, and the initiation of export organizations may, however, enable the export of locally manufactured machinery in the future. This would be particularly desirable in view of the high added value of such exports, and the large share of skilled manpower input in the value of the final products.

The imposition of import duties on raw materials required in this branch caused a certain rise in prices, which were also pushed up by the considerably higher outlays on wages (partly due to the greater number of skilled workers and engineers). The prices of certain products rose by 2 to 4 per cent.

TABLE X-16
*Output of the Metal and Machinery Industries, by Subsidiary Branches
 (current prices), 1957-1958*
(millions of IL.)

Subsidiary branch	1957	1958	Percentage increase from 1957 to 1958
Casting, rolling and other basic metal industries	18.0	25.5	41.7
Metal pipes	13.6	15.7	15.1
Armature, tin and metal products	22.1	26.2	21.7
Wire and wire products	14.9	18.0	20.8
Heating and cooking appliances, kitchenware, cutlery and tools	16.0	19.7	23.1
Metal products for building and miscellaneous products	53.2	62.7	17.7
<i>Total metal industry</i>	137.8	167.8	21.8
Pumps and machinery for agriculture, industry and building construction	14.8	17.7	19.6
Household equipment and appliances	20.6	21.2	3.0
<i>Total machinery industry</i>	35.4	38.9	9.9

SOURCE: Central Bureau of Statistics and Bank of Israel.

(k) *Electrical appliances and transport equipment*

The electrical appliances branch expanded rapidly, by 18.3 per cent, the value of production rising from IL. 33 million to IL. 39 million. This was due to the substitution of imports and increased production of electrical appliances for household use, following the greater number of building completions and the abolition of restrictions on electricity consumption, which had been in force in 1957.

A particularly marked increase occurred in the production of heavy electrical equipment previously imported. The increase in the output of wireless sets and gramophones was slight, despite the greater number of gramophones manufactured, as the local radio market was saturated.

The motor vehicle industry in 1958 expanded its production and assembling of small passenger cars and scooters, while manufacturing 21 per cent more

buses, chassis and trucks. The production of spare parts was also expanded, following large new investments in this branch. The volume of vehicle repairs (including trains, aeroplanes, ships and small boats) increased only slightly, being determined by the local demand for these services.

In all these branches, the production capacity was not fully exploited. Their export prospects—particularly as regards electrical equipment—depend first and foremost on specialization in the manufacture of specific products able to compete with the mass-produced items of industrially developed countries.

The cost of imported raw materials to the producers declined somewhat, following the drop in international prices. On the other hand, wages rose. The prices of local products remained virtually unchanged.

TABLE X-17

*Output of Electrical Equipment and Vehicles, by Subsidiary Branches,
(current prices), 1957-1958
(millions of IL.)*

Subsidiary branch	1957	1958	Percentage increase from 1957 to 1958
Motors, transformers and batteries	9.8	11.5	17.6
Electrical installation	9.9	12.4	25.4
Electrical household appliances	3.3	4.3	30.1
Wireless sets, gramophones and accessories	7.5	8.1	7.8
<i>Total electrical equipment*</i>	33.0	39.0	18.3
Manufacture of motor cars, motorcycles and spare parts	19.7	23.8	20.5
Building and repair of trains, aircraft and ships	11.7	12.3	5.1
Other transport vehicles	3.7	4.6	25.6
<i>Total vehicles</i>	35.0	40.6	15.8

* Including products which cannot be classified according to subsidiary branches.

SOURCE: Central Bureau of Statistics and Bank of Israel.

(1) Mines and Quarries

The 10.8 per cent expansion of output in this branch (from IL 33.4 million to IL 37 million) was due to various developments. In the stone and gravel branches the increase was only 6.7 per cent, owing to the stable level of building construction. But the output of minerals, salt and oil rose by 24.6 per cent.

The larger output of minerals was due to increases in the production capacity of plants in this branch. Dead Sea Works Ltd. worked at almost full capacity, producing 105,700 tons of potash, their maximum capacity being 135,000 tons.

Between 1957 and 1958, potash production rose by 34.2 per cent, while the output of Negev Phosphates Ltd. increased from 140,000 tons to 200,000 tons—i.e., by 43.3 per cent. The output of clay and glass sand rose by 26.7 per cent whilst that of brome was doubled, reaching 1,426 tons. This was due to the termination of the running-in period of the brome extraction plant, which during the last months of the year operated at its full capacity of 2,000 tons per annum. The Copper Works at Timna began their running-in production towards the end of 1958.

As the existing plants approached their full output capacity, costs per unit of production declined and the profitability of most companies rose. The decline in costs, expressed in the price of the dollar saved or in added value, was also the result of smaller overheads per unit of output.

In the year under review, most of these enterprises attained regular production. This, however, was not yet reflected in returns on the capital invested, owing to the heavy burden of interest payments and depreciation charges, which considerably exceeded the original estimates, and in the case of the Potash Works were not even fully reflected by real assets. As most of the capital of these companies consists of loans, only a small proportion being own capital, the companies were under a great financial strain. In order to alleviate this situation, the possibility of converting these liabilities, most of which are owed to the Government, into deferred debts and share capital is now under discussion. With the completion of this stage of expansion, investments in these enterprises were reduced. However, their larger income enabled the enterprises to finance most of their equipment replacements themselves, through allocations to their depreciation funds.

TABLE X-18
*Output of the Mining and Quarrying Industries, by Subsidiary Branches
 (current prices), 1957-1958*
(millions of IL.)

Subsidiary branch	1957	1958	Percentage increase from 1957 to 1958
Quarrying, stone crushing and gravel and sand production	20.4	20.8	6.7
Minerals, salts and oil	13.0	16.2	24.6
<i>Total</i>	<i>33.4</i>	<i>37.0</i>	<i>10.8</i>

SOURCE: Central Bureau of Statistics and Bank of Israel.

Basic economic conditions, such as the uneven quality of available raw materials, considerably influenced the real profitability of the enterprises. Dead

Sea Works Ltd., which have at their disposal first-rate, highly-concentrated raw materials are able to produce at a comparatively low cost and export their products at competitive prices. Negev Phosphates Ltd., on the other hand, quarries rock with a relatively low phosphorus content and its scale of activity is restricted, which increases its average costs. Inland transportation costs to Haifa also reduce the profitability of this enterprise. Though not affecting the income of the Phosphates Company (which obtains from Fertilizers and Chemicals Ltd. a price covering all its costs), the high domestic price of this commodity is reflected in the production costs of "Chemicals and Fertilizers" and in the Government subsidies granted to consumers through this company, as well as in the relatively high cost of the added value dollar obtained from phosphate exports. In order to save on the high production and transportation costs, it is now planned to set up enterprises which will process and concentrate the extracted raw materials at the quarry site. The weight of transportation costs within the price of the finished product will thus be reduced. The Brome Company is likewise operating at a certain deficit, owing to high production costs caused by its limited volume of output and the high prices of auxiliary materials. As a result, the cost of one dollar of added value is higher than in the case of most other export commodities. This problem can be solved only if the conditions of production are radically changed, its scope expanded, and the prices of auxiliary materials reduced, not through disguised subsidies but through genuinely lower production costs.

(m) *Oil*

In 1958, the oil output amounted to 90,000 tons (as against 62,500 tons in 1957) representing some 6 per cent of domestic crude oil consumption. The entire output was yielded by the Heletz oilfield. The discovery of oil in the Bror-6 drillings extended the area of this oilfield further south. The number of oil wells exploited rose during the year from 17 to 23.

Most of the drillings made in other areas (apart from Heletz and Bror-Hayil) did not lead to the discovery of oil, though signs of it were encountered. However, natural gas was found in the Rosh Zohar drillings. The estimated daily output of the Rosh Zohar wells is some half a million cubic feet of gas, with a calorific content equal to 100 barrels of crude oil, this being the average yield of a Heletz oil well. There are indications that it will be possible to drill a number of new wells with a similar gas output in the Zohar field.

As most experimental drillings met with little success, their number was reduced; and there was a shift from deep drillings, aimed at the immediate discovery of oil, to experimental and research drillings, which in the long run will reduce the number of dry borings. Seven drillings were abandoned during the year under review. Expenditure on oil drilling amounted to IL. 11 million, as compared with IL. 14.3 million in 1957.

7. ELECTRICITY

Electricity production rose from 1,416 million kwh in 1957 to 1,768 million kwh in 1958—an increase of 24.8 per cent. The following evaluation and the comprehensive data cited below are based on figures of electricity consumption supplied by the Palestine Electric Corporation, the main supplier of electricity to all industrial branches. The future development of electric power for industry will be carried out by this company, enterprises producing their own electricity being also connected to the network. Of the total electricity consumption, 1,411 million kwh were supplied directly by the P.E.C., as against 1,112 million kwh in 1957—an increase of 26.8 per cent. (Between 1956 and 1957 electricity consumption declined by 2.6 per cent). The recent rise, however, does not reflect a basic change in demand, but merely the normal rate of expansion during the last few years, which was checked in 1957 by the restrictions imposed on households and commercial enterprises. Hence, electricity consumption rose chiefly in branches which had shown a decline in 1957. The larger consumption of electric power for irrigation in 1958 was due to the drought, which necessitated extensive irrigation during the winter months.

TABLE X-19
Electricity Consumption, by Type of Consumer, 1956-1958
(millions of kwh)

<i>Type of consumption</i>	1956	1957	1958	<i>Percentage increase or decrease</i>	
				<i>from 1956 to 1957</i>	<i>from 1957 to 1958</i>
Households	325.5	250.7	334.9	-23.0	23.5
Commerce, public institutions, etc.	135.1	124.7	154.7	-7.7	24.1
Industry	339.7	387.4	447.6	14.0	15.5
Water pumping	342.2	350.1	473.4	2.3	35.2
<i>Total</i>	<i>1,142.5</i>	<i>1,112.9</i>	<i>1,410.9</i>	<i>-2.6</i>	<i>26.8</i>

SOURCE: Palestine Electric Corporation.

The fact that the increase in consumption was but the continuation of a trend temporarily interrupted in 1957, is further endorsed by the rise in the number of consumers, which during the two preceding years had been relatively small.

The production of electricity increased with the entry into service of two units (of 50,000 kw each) in the new Sukreir power station. By the end of 1958, these had raised the installed capacity of the Electric Corporation to 360,800 kw, as against 266,000 kw at the end of 1957. The higher consumption of households and commercial enterprises was mainly due to building activity,

TABLE X-20
The Number of Electricity Consumers, by Type, 1956-1958
(thousands)

<i>Type of consumer</i>	<i>1956</i>	<i>1957</i>	<i>1958</i>	<i>Percentage increase</i>	
				<i>from 1956 to 1957</i>	<i>from 1957 to 1958</i>
Households and commerce	386.5	423.3	464.6	9.5	9.8
Industry	11.9	12.6	13.4	5.7	6.3
Water pumping	2.4	2.5	2.6	4.1	4.0
<i>Total</i>	<i>400.9</i>	<i>438.4</i>	<i>480.7</i>	<i>9.4</i>	<i>9.6</i>

SOURCE: Palestine Electric Corporation.

which increases the number of consumers. The abolition of restrictions imposed on households also caused consumption to expand, albeit more slowly, since there had meanwhile been a shift from electrical cooking and heating appliances to gas ranges and oil stoves. The average household and commercial electricity consumption per consumer was still lower in 1958 than in 1956.

The industrial demand for electricity expanded rapidly, mainly as a result of the larger investments in enterprises where the electricity input constitutes a big proportion of production costs. This was especially evident in heavy industries, where electricity consumption is very high and has been expanding rapidly during the last decade, as the following table shows:

TABLE X-21
Installed Load at Peak Hours, by Type of Consumption, 1949, 1958
(thousands of kw)

<i>Type of consumption</i>	<i>1949</i>	<i>1958</i>	<i>Average annual increase (per cent)</i>
Households and commerce	16	45	12.1
Light and medium industry	30	105	14.9
Heavy industry	2	28	34.0
Water pumping	35	142	16.9
<i>Total</i>	<i>83</i>	<i>320</i>	<i>16.2</i>

SOURCE: Palestine Electric Corporation.

The electricity consumption of heavy industries increased especially quickly during the last few years, with the maturing of the investments actually implemented. When the existing enterprises now producing their own electricity are

connected to the general network, the share of heavy industry will become even greater.

The bigger investments in enterprises with a high electricity consumption may reduce the profitability of the Electric Corporation at the prevailing tariff system. The electricity tariffs for industry are at present low relatively to production costs. Industry and water pumping pay only the marginal cost of electricity. The burden of overheads and profits is entirely carried by household and commercial consumers. The low average price of electricity is determined by the low present prices of equipment and fuel relatively to other production factors. Thus, the production cost of electricity to its producers is lowered at the expense of the economy as a whole. The special low tariffs for heavy industry and irrigation further decrease the price of industrial and agricultural electricity to the consumer and encourage the increased use of electricity in industry.

Investments in the Palestine Electric Corporation in 1958 totalled IL. 50 million, as compared with IL. 45 million in the preceding year. Of this amount, IL. 33.9 million were invested in the Sukreir power station and in the acquisition of imported equipment for the new stations. Investments in transformer stations and in tension cables totalled IL. 10.5 million. The balance was invested in existing power stations and in meters.

There was a gradual improvement in the financial position of the Electric Corporation in 1958, its income rising due to the significant increase in household electricity consumption. Operating costs per kwh fell as the number of workers contracted, the new power stations—which consume less fuel per unit of production—increased their production, and local fuel prices declined as a result of the drop in international fuel prices and the direct purchases of the P.E.C.