

2. Manufacturing

The product of the manufacturing industry, which accounts for about one quarter of business-sector product, stabilized during 2003, after falling sharply in the two preceding years. The manufacturing production index, which reflects industrial output, dipped by 0.25 percentage points, reflecting a decline in production for the domestic market and rise in production for export. The trend data of the index of manufacturing production indicate that there was some recovery during the year, with a 6 percent rise, in annual terms, in 2003:IV, after a 3 percent increase in 2003:III and a decline of 1 and 2 percent in 2003:II and 2003:I respectively. Labor input in manufacturing continued to contract, and the number of hours worked fell by 2.7 percent, although regarding this, too, the trend data attest to a rise in the last third of the year.

There was a turnaround in manufacturing activity during the year, and it began to rise after declining sharply in the two preceding years.

Table 1.10
Manufacturing Industry, Main Indicators, 1990–2003

	(rate of change, percent)							
	1990–96	1997–99	2000	2001	2002	Total	2003	
							Jan–Jun	Jul–Dec
Manufacturing product	7.2	2.0	10.0	–5.0	–1.9	–0.3	–0.6	1.2
Domestic sales (volume)	6.3	–2.0	–1.0	–5.4	0.5	–1.6	–1.0	–0.2
Manufacturing exports (volume)	9.5	10.5	30.6	–4.2	–5.5	2.0	–0.1	3.5
Output of electronics industry	8.8	7.9	32.2	–11.9	–10.2	0.4	0.7	1.9
Output of traditional industries	6.5	–0.77	1.6	–4.8	–2.6	–3.2	–2.1	0.0
Output of mixed industries	7.0	1.9	4.2	2.1	7.3	3.8	0.8	2.1

SOURCE: Based on Central Bureau of Statistics data.

The rise in manufacturing product during the year derived first and foremost from the recovery of global demand for electronics products, causing Israel's electronics industry to rally in the second half of 2003. This occurred after two years of a global slump in this industry, and electronics production declined by an annual rate of over 10 percent, occasioning a sharp decline in all manufacturing production. The improvement in the exports of the electronics industry (which accounts for a third of total manufacturing exports), alongside the continued considerable expansion of exports in the mixed technology industries, led to a turnaround in manufacturing exports, which expanded in 2003. However, sales to the domestic market fell in 2003—after having risen in 2002—due to real exchange-rate developments. The real depreciation of 2002 raised the price of imports beyond that of manufacturing output, thereby serving to expand the market share of domestic manufacturers relative to imports. There was real appreciation (in import terms¹⁶) in 2003, which eroded part of the depreciation of 2002, and as a result the long-term trend of replacing imports with domestic production

The rise in manufacturing product during the year stemmed mainly from the recovery of global demand for high-tech products.

¹⁶ Import prices, excluding ships and aircraft, diamonds, and energy materials, rose by only 1 percent in 2003 (in dollar terms they rose by 5 percent, but the dollar depreciated by 4 percent); the price of manufacturing output (excluding fuel) for the domestic market rose by 5.3 percent, however.

persisted. The decline in sales to the domestic market moderated in the course of the year, however, in step with the recovery of domestic demand (despite the appreciation in 2003).

Israel's openness to international trade led to an ongoing decline in manufacturing production for the domestic market, and this was augmented by the slump in domestic demand.

Production for the domestic market, which accounts for 60 percent of manufacturing output, declined by 1.6 percent. Sales to the domestic market have fallen almost consistently in the last seven years (with the exception of 2002), reflecting primarily an increasing openness to world trade. The latter has led to growing specialization in the production of human-capital-intensive products intended for export and the neglect of production of labor-intensive import substitutes, in which Israel does not have a comparative advantage. In the last three years, during the recession, the decline in the sales of the traditional industries has accelerated, encompassing the less tradable traditional industries, such as food, printing, and publishing, as well as those producing for the construction industry.

The decline in domestic sales, in the context of stability in domestic demand, reflects the ongoing rise in the market share of competing imports at the expense of manufacturing sales to the domestic market.

The decline in sales to the domestic market affected a number of industries in 2003: domestic sales of textiles and clothing declined by 13.3 percent, while those of food, beverages, and tobacco dipped by 3.7 percent, even though domestic consumption of these goods rose slightly. The output of industries producing for construction, which accounts for 7 percent of manufacturing output, fell by 8 percent, while the output of the construction industry declined by a more moderate 4.6 percent. Domestic sales of the publishing and printing industry dipped by 3 percent, even though its product is destined primarily for private consumption and the business services industry, which expanded in 2003. Domestic sales of the paper and cardboard products industry declined by 6.1 percent, a steeper rate than that derived from the contraction in output of the printing and food industries, which are its main consumers. The fall in domestic sales also encompassed the metals, machinery and equipment, and plastics and rubber industries. In view of the stability in domestic demand, the contraction in domestic sales reflects the continued rise in the market share of competing imports at the expense of manufacturing sales to the domestic market, and this process was supported by real appreciation in 2003.

The increase in exports was due largely to the recovery of global demand.

Manufacturing exports expanded by 5.2 percent in dollar terms (a real 2.0 percent increase); the rise in exports stemmed largely from the recovery of global demand, as indicated by the growth in imports of Israel's principal trading partners. US imports rose by 8.5 percent in dollar terms, after only 1.7 percent in 2002, and EU imports, which in effect remained stable in euro terms, expanded by 18 percent in dollar terms (from July 2002 to July 2003, compared with the equivalent period in the preceding year). Each of those trading partners imports 30 percent of Israel's total goods exports. The increase in exports was also supported by internal factors: the recession, expressed in the decline in domestic demand and fall in demand for workers, freed factors of production—labor and capital. The shift of factors of production to production for export was bolstered by the real depreciation in export terms evident in 2002¹⁷ (the depreciation was eroded in 2003, whereas in 2001 prices of manufactured exports rose

¹⁷ According to preliminary findings in the study by Y. Lavi and A. Friedman, "Exports, Imports, and the Real Exchange Rate" (forthcoming, Hebrew), the effect of depreciation on exports is expressed with a five-quarter lag.

by 0.8 percent more than those of manufactured goods destined for the domestic market).

Despite the slump in domestic demand and real depreciation in 2002, the expansion of Israel's manufactured exports was not in line with the increase in imports of its main trading partners, and Israel's market share in the imports of the US and the EU even declined. This expressed the contraction in market share of the electronic components industry and rise in that of developing countries in global trade. Thus, for example, China, Mexico, and the eastern European countries are currently benefiting from improved trade agreements with the EU and the US and from a constant rise in their share of these countries' imports. In order to neutralize the effects of the developing countries and the electronic components industry, we compare the increase in Israel's exports with that in trade between the EU and the US. The results show that the rise in Israel's exports (excluding the electronic components industry) was similar to that in trade between the EU and the US. Notwithstanding, Israel's exports to the US and the EU together expanded by less than Israel's exports in general (by 0.5 percentage points), indicating that the market share of Israel's exports in the imports of the advanced economies has dipped slightly.

An examination of the exports of the three-digit industries shows that in the last two years the exports of the electronic components and electronic communications equipment industries has lagged considerably behind the rise in US world trade. This is because the technology of the firms in these industries has become out-dated, and also because there is increasing competition in the electronic communications industry from the developing countries, as evinced by the fact that trade between the US and the EU in this industry plummeted in 2003, while trade between the US and the developing countries soared. Exports of the mixed technology industries (rubber and plastics, chemicals, fertilizers and pesticides), as well as of some electronics industries

The market share of imports from Israel in total US and EU imports declined in 2003.

Because electronic components plants in Israel have become technologically obsolete, and due to growing competition from the emerging markets in the electronic communications industry, the share of Israel's exports of these industries has fallen.

Table 1.11

Israel's Total Exports, US Total Trade, and US Trade with the EU, Selected Industries, 2002 and 2003

(rate of change, percent)

	Share of manufactured exports	2003			2002		
		Israel's total exports	US trade		Israel's total exports	US trade	
			EU	Total		EU	Total
Total manufactured exports	100.0	5.2	6.9	7.0	-6.5	-2.6	-1.0
<i>of which</i> electronic components	90.7	7.5	7.1	7.2	-3.7	-2.2	-0.6
Electronics (excl. electronic components)	23.3	7.4	7.6	5.1	-18.7	-3.1	-1.7
Total excl. electronics	67.4	7.6	7.1	7.3	2.9	-2.1	-0.4
Communications and control equipment	13.4	-3.0	-11.1	3.9	-26.1	-6.1	-1.1
Control and supervision, and medical and scientific equipment	9.8	21.5	13.1	9.7	-5.8	-2.2	-2.4
Electronic components	9.3	-17.9	-2.8	2.0	-27.2	-14.6	-9.0
Chemicals, fertilizers and pesticides	9.3	17.9	16.9	17.7	3.8	13.1	7.0
Pharmaceuticals	6.0	0.9	22.9	23.1	37.1	25.0	18.6
Rubber and plastics	5.9	18.5	7.6	7.6	0.8	-1.9	4.6
Textiles	4.3	2.8	2.7	5.0	1.3	-1.6	4.4

SOURCE: Based on Central Bureau of Statistics and US foreign trade data.

(monitoring and supervisory apparatus, and medical and scientific equipment), have risen in line with the increase in US and EU trade, and even beyond that, while exports of the pharmaceuticals industry lagged far behind, although in 2002 the rise in the exports of this industry from Israel outstripped that in US-EU trade in them.

Factors of production and profitability

In the last three years the number of persons employed in manufacturing has dipped by 9 percent, i.e., over 34,000 employee posts.

Input of hours worked in manufacturing continued to contract sharply: in 2003 it declined by 2.7 percent, after a similar fall in 2002 and a 4.9 percent reduction in 2001. In the last three years the number of employees in manufacturing has fallen by 9 percent, i.e., over 34,000 employee posts. The steep drop in employment encompassed most of the traditional manufacturing industries, including textiles, clothing, and leather, which were adversely affected by the exposure to imports from countries with cheap labor. The industries manufacturing for the construction industry—basic metals, non-ferrous minerals, and wood—were hit by the 14.2 percent drop in the output of the construction industry in the last three years. The industries manufacturing investment goods—machinery and equipment, electrical engines and equipment for the distribution of electricity, and metals—were affected by the decline in investment in the various industries. The communications and electronic components industries were hit by the global high-tech crisis. In each of these industries the number of employees has fallen by between 9 and 29 percent in the last three years.

The adjustment of manufacturing to the slump in demand in the last three years mainly involved reducing manpower rather than wages.

The nominal cost per hour worked in manufacturing rose by 2.1 percent in 2003 (partly because of the exceptional expansion of the transport vehicles industry). The increase in the cost per hour worked is surprising in view of the deep recession in the labor market, rise in unemployment, and 2.4 percent decline in the nominal wage per employee post in the business sector. However, this nominal increase was in fact a real decline (in terms of output prices), and was accompanied by a rise in labor productivity, so that the unit cost of labor fell in 2003. Unit labor cost is an index of the viability of employing workers. At the start of the slowdown, and because of it, unit labor costs soared; in response, labor input was slashed, and only later did cost per hour worked decline. Despite the reduction in cost per hour worked in the last two years, most of the adjustment process was implemented by reducing manpower rather than cutting wages; thus, in comparison with 2000, labor costs did not decline in 2003 (and even went up, by 4.6 percent), while labor inputs have since fallen by 10.3 percent—a steeper decline than that of GDP, leading to a 3.7 percent rise in product per hour worked and some improvement in manufacturers' profitability.

The deterioration in the terms of trade led to lower profitability for producers.

Despite the reduction in the unit cost of labor, profitability declined in 2003 because the price of imported inputs rose more steeply than that of output. The effect of this deterioration in the terms of trade, which served to reduce profitability, outstripped that of the real decline in labor cost (at output prices), which increased profitability. Hence, the overall cost of inputs (raw materials and labor) rose beyond that of manufacturing production (estimate based on the input/output tables for 1995), impairing profitability. Profitability is also affected by changes in TFP, but in 2003 this effect was neutral, as TFP, i.e., the ratio between the increase in output and the volume rise in factor inputs, hardly changed at all.

Table 1.12
Manufacturing Industry, Selected Indicators of Activity, 1990–2003

	(rate of change, percent)					
	1990–1996	1997–1999	2000	2001	2002	2003
Return on gross capital	13.0	17.5	15.9	12.0	11.9	11.5
Total	1.8	-0.2	5.8	-4.7	-1.8	-0.1
Input/output prices	0.2	-1.0	3.1	-0.6	0.8	1.3
Costs per hour worked (real, output prices)	2.5	2.6	7.4	8.3	-2.3	-1.2
Labor productivity	2.8	3.2	7.7	-0.1	1.3	2.5
Labor input (hours)	4.2	-1.2	2.2	-4.9	-3.1	-2.7
Gross capital stock (end-year)	6.8	6.7	6.9	4.6	3.6	2.9
Investment	4.5	2.2	4.8	-16.9	-8.2	-5.9

SOURCE: Based on Central Bureau of Statistics data.

The low rate of return on gross capital, high interest rates, and low capital utilization (indicated by low TFP) led to a continued decline in investment—albeit at a more moderate pace—in 2003. In the wake of the contraction of investment, the annual growth rate of capital stock has fallen to 3–3.5 percent in the last two years, compared with 7 percent in the 1990s. Detailed information about investment in imported machinery and equipment shows that investment by the mining and quarrying industry rose exceptionally, but plummeted in chemicals and transport vehicles. The sharp drop in investment in imported machinery in textiles and clothing and electronic communications equipment was checked in 2003: investment in textiles and clothing, which plunged by 53.8 percent in 2001 and more moderately in 2002, rose by 9 percent in 2003, while investment in the electronic communications equipment industry, which fell by 37 percent in 2002, rose by 17 percent in 2003.

In the last three years TFP in manufacturing has fallen steeply. Most of the decline was in the electronics and traditional industries, and reflected lower utilization of factors of production due to the drop in demand. Note that capital stock is measured indirectly by adding up past investments, but this estimate can be misleading as it is based on conservative assumptions about the lifespan of investments—as is customary in other countries. Thus, for example, the equipment capital stock of the electronics industry, which constitutes one quarter of equipment capital stock in manufacturing, is the sum of all investments made in the last twelve years, similar to investments in the traditional industries (13–15 years). The lifetime of equipment in the electronics industry may be far shorter than in other industries, however, as is the case with technology and products in that industry, so that the capital stock of the electronics industry is less than estimated, and its TFP is higher. A bias of this kind¹⁸ will affect indices of profitability as well as of productivity.

¹⁸ A similar bias could be evident in the capital stock of the traditional industries, because globalization and openness to trade has led to accelerated scrapping of machinery and equipment that is suitable for labor-intensive production. Thus, for example, labor-intensive plants were closed and production lines canceled in the clothing, metals, and wood products industries.

Despite the rally in economic activity, investment continued to decline in 2003, and the growth rate of capital stock slowed.

In the last three years the productivity of the electronics and traditional industries has plummeted.

Electronics

Exports of electronic components and electronic communications equipment, which contracted by 50 percent in the last three years, soared in the second half of 2003.

The electronics industry currently accounts for one quarter of business-sector product and one third of manufacturing exports. The global crisis in the electronics industry in the last three years has had a serious effect on the industry's exports, especially electronic components and communications and electronic equipment. The exports of each of these industries fell to about half their level in 2000, after expanding rapidly (by an annual average of 18.4 percent) for almost ten years, becoming one of the main engines of growth in Israel (alongside information services, which are also part of the ICT industry). During 2003 there was a turnaround in this industry, and exports of electronic communications equipment soared in the second half of the year, as did those of electronic components, after declining in the first half. Exports of industrial monitoring and supervisory equipment and of medical and surgical equipment expanded by 18.7 percent in 2003. The increase reflected a surge in exports of medical and surgical equipment, while exports of measurement and navigational apparatus, as well as of optical and photographic instruments (connected in part with the security industry) fell.

Table 1.13
Volume Change in Exports of Electronics Industry, 1990–2003

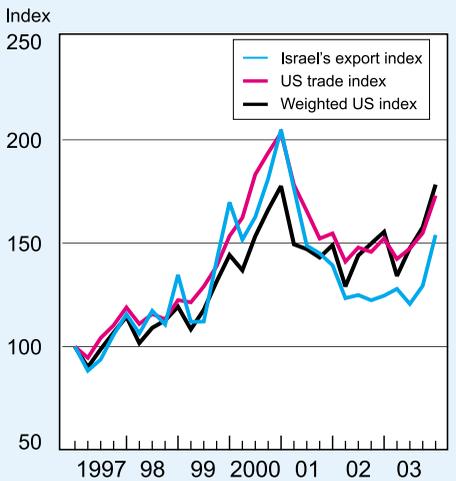
	(percent change)						
	1990–99	2000	2001	2002	2003		
					Total	Jan–Jul	Jul–Dec
Total electronics	18.4	69.7	–12.8	–20.3	–1.9	–6.1	12.1
Electronic communications equipment	28.0	49.7	–17.3	–25.3	–2.2	–8.0	15.8
Control and supervision, and medical and scientific equipment	10.8	21.5	1.2	–5.5	18.7	13.0	10.7
Electronic components	16.3	226.4	–15.9	–25.8	–24.1	–24.5	7.7

SOURCE: Based on Central Bureau of Statistics data.

Many indicators attest to the recovery of global demand for high-tech products.

The improvement in exports of the electronics industry is consistent with the recovery of global demand for the products of this industry, and several indicators attested to this: first, imports of electronics goods by the US, which fell steeply in 2001, stabilized in 2002 and rose slightly in 2003; second, the US index of manufacturing production computers and electronics industry has also improved—the production of computers and electronic products rose by 14 percent in 2003, after increasing by less than 4 percent in 2002. The downward trend in the index of production of electronic equipment and components that has been evident since the crisis in the industry began reversed, and in the second half of 2003 it began to rise moderately. Capital utilization in the electronic components industry, which had fallen to 62 percent at the beginning of 2002, recovered steadily, and reached 77 percent at the end of 2003. In addition, the sharp rise in the technology stocks index in 2003 attests to more positive expectations on the part of investors than in the past.

Figure 1.14
The Electronics Industry
(excl. Electronic Components):
Israeli Exports and US Trade,
December 1997–2003



SOURCE: Israel: Based on Central Bureau of Statistics data; US: United States, International Trade Commission.

The steep decline in Israel's electronics exports in the last two years was due not only to the global crisis and fall in world demand, but also to the contraction of Israel's market share in the manufacture of electronic products. This assertion is based on an examination of US trade figures.¹⁹ For the purposes of the examination a trade index was constructed on the basis of US import and export data weighted in accordance with Israel's exports, so that the development of US trade in the products in which Israel specializes (e.g., telecommunications products) will have a strong influence on the index, and the development of imports of electronic products in which Israel does not specialize (e.g., consumer goods) will have only a slight effect on it. Figure 1.14 shows the development of the US trade index alongside that of Israel's exports of

The steep decline in Israel's electronics exports in the last two years was due to the contraction of the country's market share as well as to the global crisis.

electronics goods (excluding electronic components), indicating that in 2002 a gap developed between the two, and this was not closed in 2003; thus, Israel's market share was smaller in 2003 than in 2001.

The contraction of the share of Israel's exports in US imports in the last two years encompassed both the electronic components industry and the electronic communications equipment industry, which lost 42 percent of its market share in the US in that period. Israel's electronic communications exports fell by 3 percent in 2003, while US exports of communications equipment (weighted by the shares of Israel's exports) rallied and rose by 13.2 percent. The decline in market share in 2003 continues the steep downward trend evident in 2002, when Israel's exports contracted by 26.1 percent even though US imports (weighted by the share of Israel's exports) declined by only 14.5 percent. A close examination of the communications industry by product groups shows that most exports to the US (85 percent) were concentrated in four main product groups, and that in the last two years the market share of three of them fell sharply—by between 30 and 55 percent. Alongside the steep drop in Israel's market share, the share of the advanced economies in these product groups also plummeted. The market share of the developing countries in US imports of telephone components for fixed lines and exchanges (accounting for one third of exports to the US of Israel's communications industry) soared from 11.6 percent in 2001 to 38.5 percent in 2003.

Increasing competition from the emerging markets in the electronic communications industry has had a deleterious effect on Israel's exports.

¹⁹ It would have been better to use world trade figures, but since these are not available for the electronic products industry, we have used those for the US as a sufficient indicator of their development.

The share of the advanced economies declined in the same period from 81.7 to only 58.5 percent, and Israel's share fell from 6.6 to 3 percent. Although the decline in Israel's market share was far steeper than that of the advanced economies, for domestic reasons, there is notable competition from the developing economies in this industry, which is especially human-capital and R&D-intensive. This attests to a split between the development and production processes, and the shift of production lines from the advanced to developing economies.

As a result of the loss of Intel Kiryat Gat's technological lead, Israel's market share of the electronic components market has declined.

There are two reasons for the decline in Israel's exports of electronic components in the last two years: the global crisis and the technological obsolescence of Intel's plant in Kiryat Gat, expressed in the contraction of the industry's market share. The plant in Kiryat Gat, which was opened in 2000, caused the industry's exports to surge almost threefold, from \$ 0.9 billion to \$ 2.7 billion, increasing Israel's market share of the microchip industry. But while it was formerly at the forefront of global technology, the plant now has to compete with others producing faster and stronger microchips (0.09 micron, compared with Kiryat Gat's 0.18 micron), and as a result of losing its technological advantage, its share of the world market has fallen. In the last two years the industry's exports have fallen by 40 percent, while US imports of electronic components have declined by only 18 percent. In November Intel announced its intention of upgrading the plant to a more advanced technology (0.09 micron), with an investment of \$ 600 million, but according to the company this depends on receiving additional benefits from the government.

The product of the electronic components industry fell by 1.4 percent in 2000, but most of the product—\$ 1.2 billion—constituted return on foreign capital, and only a small part—\$ 182 million—constituted return on labor.

The rapid expansion of exports of electronic components in 2000 and the decline in the subsequent three years has had a marked effect on manufacturing exports and domestic production, but a much weaker one on manufacturing national product. In 2000 manufacturing exports expanded by 1.8 percent, constituting over 10 percent of entire manufacturing exports, and the industry's product also rose by an impressive \$ 1.4 billion, accounting for 10 percent of total manufacturing product. Most of this product—\$ 1.2 billion—was return on foreign capital, however, and only 13 percent of it constituted return on labor, as wages in the industry rose by only \$ 182 million that year. Wage payments, which constitute most of the industry's national product, have neither risen nor fallen in line with manufacturing output. From 2001 to 2003 exports of electronic components fell by 50 percent (in dollar terms), while return to labor in the industry dipped by only 10 percent (in dollar terms). In 2003, despite the contraction of exports, the industry's index of manufacturing production rose because of the increase in labor inputs and fall in output prices (as measured in the US market).

Growing competition with the advanced economies, and Israel's exposure to imports from cheap-labor-intensive countries, have diverted manufacturing towards human-capital-intensive products, reducing production of labor-intensive products.

Long-term trends in manufacturing

Israel's exposure to imports from cheap-labor-intensive countries in the 1990s reduced the market share of the traditional industries in the domestic market and increased that of competing imports. Similar processes occurred in other advanced economies, which also reduced their import tariffs, thereby helping emerging markets to increase their market share. This was achieved at the expense of domestic producers (trade creation) and of inefficient exporters in advanced economies (trade diversion), among them Israeli exporters, who had benefited from free trade agreements with the US and the

EU. Increasing competition with emerging markets diverted manufacturing to human-capital-intensive products, such as electronics and pharmaceuticals, and reduced the production of labor-intensive products, such as textiles, clothing, and footwear.

The structural change in manufacturing was reflected in a rise in human- and physical-capital-intensity: the number of engineers and practical engineers rose (from 38,000 in 1995 to 52,000 in 2002), whereas the number of other (less skilled) workers declined (from 268,000 in 1995 to 223,000 in 2002). In addition, equipment capital stock rose steeply (by 62 percent in 1995–2002). The structural change in manufacturing was also expressed in its geographical distribution, as most labor-intensive industries, which were affected by competition with developing countries, are located in the periphery. These industries shifted part of their activities to developing countries, where wages are lower, and more advanced industries were established in the periphery, so that the total number of persons employed in industries in the periphery did not decline.

Production for the domestic market in 1995–2001

Production for the domestic market rose by only 2.3 percent in 1995–2001 (the analysis here refers to the manufacturing industry, excluding electronics, most of whose output is intended for export). The moderate rise in production for the domestic market had a marked effect on manufacturing production in general, as 60 percent of it is intended for the domestic market. In order to examine the causes of this moderate rise and quantify its effect on imports, which have crowded out domestic manufacturing, we use CBS data, which define manufacturing imports as competing, i.e., imports of similar products to those made in Israel, and complementary, i.e., products not made in Israel. The combination of competing imports and manufacturing for the domestic market makes it possible to calculate total domestic uses in manufacturing in 1995–2001.

In 1995–2001 the domestic market expanded by 12 percent,²⁰ and the share of domestic manufacturing in total manufacturing uses by the domestic market fell from 72 percent in 1995 to 66 percent in 2001. This means that the rise in the market share of competing imports led to a loss of 9 percent of manufacturing production (excluding electronics) for the domestic market. In effect, the decline in domestic production following the increased market share of imported goods is greater still, since the calculation above expresses only the direct effect, and does not incorporate the indirect effects of industries producing basic commodities. Thus, for example, the sharp contraction of the market share of the domestic clothing industry also had an indirect effect on the extent of demand for basic commodities, such as fabric and thread, which are produced by the domestic textile industry. Its indirect effect, which has not been measured, is hence a decline in domestic uses of basic commodities, such as textiles, leather, wood, and metal, because of the rise in imports of end-products such as clothing, footwear, and furniture.

Some of the slowdown in sales to the domestic market may be attributed to the relatively moderate rise in domestic demand for all manufactured products, whether

Production for the domestic market rose by only 2.3 percent in 1995–2001, although the extent of domestic uses grew by 21 percent in that period.

The growth in the market share of competing imports in 1995–2001 caused manufacturing production (except electronics) to lose 9 percent of the domestic market.

²⁰ Imports rose by 83 percent (estimate based on the price index of manufacturing for the domestic market).

Most of the expansion of demand was in the services industries, while demand for manufacturing and construction products rose relatively moderately.

domestically-produced or imported. Domestic uses in the manufacture of either domestically-produced or imported products rose by only 12 percent, while total uses (consumption and investment) rose by 21 percent in the same period (1995–2001). The relatively moderate growth rate of demand for manufactured goods derived from a change in the composition of GDP. In recent years the share of goods industries, which are characterized by extensive demand for manufacturing inputs, has declined, while that of services industries, whose demand for manufactured inputs is negligible, has risen. The share of the construction industry, whose demand for manufactured products is particularly great, has contracted markedly, while the share of business and other services has risen. According to the input/output tables it may be assessed that as a result of the change in the composition of business-sector product, demand for manufacturing output contracted by 2.1 percent in 1995–2001. The mirror-image of this is obtained when the change in the composition of uses is examined: the rise in uses derives wholly from the increase in consumption, while investment in equipment and structures, which is intensive in its use of manufactured inputs, did not expand at all. Within consumption, too, the share of manufactured products has fallen and that of the services has risen. Household expenditure on purchasing manufactured goods—food, beverages, tobacco, clothing, footwear, personal items, furniture, and household equipment—fell from 35 percent of total expenditure in 1995 to 30 percent in 2001. By contrast, the share of expenditure on transport, communications, health, household maintenance, and consumption abroad rose. This development reflects a widespread trend: demand for manufactured goods grows more slowly than income.

Table 1.14
Market Share of Competing Imports, Selected Industries, 1995–2001

	(percent)		
	Share in sales to domestic market in 1995	Market share of competing imports	
		1995	2001
Textiles	3	42	54
Clothing	3	31	46
Footwear, leather & its products	1	51	71
Wood & its products (excl. furniture)	2	15	21
Paper, cardboard & its products	4	24	27
Printing & publishing	6	3	6
Chemicals	6	37	46
Plastics & rubber	5	31	32
Non-metallic minerals	8	21	24
Basic metals	4	25	25
Metal products (excl. machinery & equipment)	9	18	17
Machinery & equipment	5	53	66
Electric motors & electric distribution apparatus	4	49	75
Transport equipment	2	48	69
Furniture	3	21	27
Miscellaneous	1	51	56
Total manufacturing industry excl. electronics	93	28	34

SOURCE: Based on Central Bureau of Statistics data.

Table 1.14 presents the market share of competing imports in 1995 and 2001. As the table shows, the market share of domestic manufacturing has contracted for all industries, excluding basic metals. The decline is particularly notable in the traditional industries, which were exposed to imports from countries with plentiful cheap labor in the 1990s. In the framework of that program tariffs were reduced on a series of imports of traditional manufactures from third countries with which Israel has no free trade agreements. A partial list includes textile products, clothing, footwear, wood, iron, steel, glass, leather, furniture, and cosmetics. In addition, free trade agreements were signed with several countries with plentiful cheap labor, such as Mexico, Poland, Hungary, and Turkey, and economic ties with China and India were strengthened. These measures revealed the uncompetitive nature of Israel's manufacturing industry regarding labor-intensive products, leading to the rapid expansion of competing imports and the decline of domestic production in several traditional industries. Note that the increase in the market share of competing imports to products manufactured by the traditional industries did not come to an end with the conclusion of the process of reducing tariffs in 2000. In 2001–2003 the market share of these countries regarding the products of traditional industries excluding food grew by 7 percentage points (Table 1.15), almost half of it due to the rise in imports from three countries where wages are particularly low—India, China, and Turkey.

The market share of the emerging markets in imports of products of the traditional industries continued to rise after the conclusion of the tariff-reduction process, persisting in 2001–2003, too.

Table 1.15
Market Share of Third Countries in Imports of Traditional and Mixed Manufacturing Industries in Israel, 1995, 2001, 2003

	Share in imports	(percent change)				
		Third countries			India, China, Turkey	
		1995	2001	2003	2001	2003
Products of chemicals and allied industries	11	17	19	25	5	6
Simple metals	7	29	40	43	16	18
Textiles and their products	5	25	57	64	34	40
Plastics, rubber & their products	5	18	24	29	6	9
Wood pulp, scrap paper & cardboard	2	12	21	22	4	6
Stone, plaster, cement, asbestos, ceramic, & glass products	2	11	32	39	23	30
Wood, footwear, hides & their products	2	25	42	51	17	26
Total	33	21	32	37	13	16

SOURCE: Based on Central Bureau of Statistics data.

Textiles and clothing

The development of the textiles and clothing industry is an outstanding example of the result of free trade policy and growing ability of emerging economies to produce, leading to a steep rise in imports from those countries and the crowding out of domestic industries. The number of persons employed in this industry in Israel has fallen dramatically in recent years, from 43,000 in 1995 to 22,000 in 2003, i.e., by 50 percent. The decline in employment was due to the exposure of the industry to imports from countries with plentiful cheap labor in the 1990s (Tables 1.14 and 1.15), as well as to the transfer of plants to low-wage countries in the 2000s.

The number of persons employed in the textile and clothing industry fell from 43,000 in 1995 to 22,000 in 2003.

In the wake of the exposure of the economy to imports from cheap-labor-intensive countries, the extent of labor-intensive activity in such industries as tailoring, weaving, and knitwear has plummeted.

In recent years exports of knitwear and outerwear has fallen drastically, because of the loss of the advantage embodied in Israel's free trade agreements with the US and the EU.

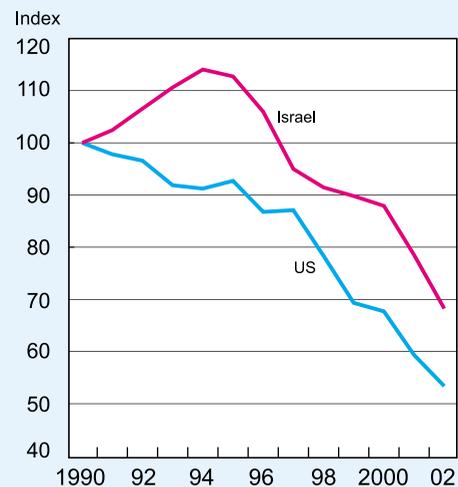
The opening of the US market to imports from developing countries such as China and Mexico led to the decline of the US textile and clothing industry and the diversion of its imports from Israel to the developing countries.

The number of employees fell by 23 percent in 1995–2000, while product declined by only 4.4 percent. The decline in product and rise in labor productivity stemmed from the cessation of labor-intensive and unskilled activities, such as tailoring, weaving, and knitwear, which were unable to compete with the exposure to imports from countries with plentiful cheap labor. Thus, for example, the number of small plants with 5–14 employees plunged from 1,230 in 1994 to only 500 in 2000. The increase in labor productivity was also due to the rise in capital intensity, as the industry specialized in exports of upmarket goods to the US and UK markets from plants using modern equipment—mainly knitwear (part of the textile industry), which is relatively capital-intensive. The effect of the exposure program was reflected in the 12 percent drop in production for the domestic market (1995–2000), most of which was offset by the increase in exports. The impact of the aforementioned specialization in those years was reflected in the rise in the share of exports in total revenues—up from 38 percent in 1995 to 51 percent in 2000.

In 2000–2003 the decline in employment accelerated, and the number of persons employed fell by 34 percent. The industry's output contracted by a notable 15 percent (according to the index of manufacturing production). The exports of the two main export industries plummeted: knitwear, which accounted for 41 percent of the exports of the industry in 2000, declined by 63 percent, while exports of outerwear, which accounted for 13 percent of the exports of the industry in 2000, were down by 50 percent (in dollar terms). Investment in the textiles and clothing industry has also fallen: in the last three years the average annual level of investment has been 60 percent below that in 1999 and 2000. These developments stemmed from the transfer of Israeli plants to countries where wages are lower.

The advantage that sustained exports of Israeli textiles and clothing in the past lay in the free trade agreements with the US and the EU; these agreements were very important, because the high tariffs then in force protected their domestic industry. Israel had an advantage over industries in the developed countries—the US and Europe—in having lower wages in addition to its advantage over developing countries in tariff-free access to the EU and the US. The reduction of tariffs throughout the world in the framework of the GATT agreement, the free-trade agreement between the US and Mexico, and the opening of the US market to imports from China brought tariff barriers down, causing US imports from developing countries to rise, and domestic

Figure 1.15
Index of Employment in Textile and Clothing Industry, Israel and the US, 1990–2003



SOURCE: Israel, based on Central Bureau of Statistics data; US, based on STAN, OECD Structural Analysis Industrial Database.

industries in the US to decline. Between 1994 and 2002 the number of persons employed in the US textiles and clothing industry fell by 42 percent (Figure 1.15), production of textiles, clothing, and leather in the US declined by 22 percent (1995–2001), imports soared, and developing countries' share in them amounted to 90 percent (this includes Mexico, Korea, and Turkey, which are considered developing countries). The abandonment of the protective tariff policy, which had shielded US manufacturers from competition, impacted not only on them but also on Israeli exporters, as the advantage they had previously had over developing countries was eroded.

The US market takes about half of Israel's exports, and the changes which have taken place there have impelled the major Israeli exporters of clothing, including Polgat and Delta Galil, to move some of their production lines to countries with plentiful cheap labor, such as Egypt, Turkey, Portugal, and primarily Jordan. Israel's trade agreement with the US was made more flexible to allow the labor-intensive sewing stage to be done in a third country while enabling the finished product to benefit from Israel's tax-free status. An agreement was also signed between the US, Jordan, and Israel, by which joint Israel-Jordan-produced merchandise can be exported to the US without a tariff. The shift to production abroad, particularly in Jordan, has led to a 20 percent reduction in the market share of Israeli clothing exports in the US market within three years, and Israel's value added in these exports is constantly declining. Concurrently, Jordan's market share in the US, which scarcely existed in 2000, has soared, and is currently greater than Israel's.

Structure of the labor force in Israel and the advanced economies

The decline in the proportion of persons employed in manufacturing—and especially in labor-intensive industries—in total employment in Israel is typical of advanced economies. In this respect Israel has much in common with the developed countries: this ratio currently stands at 15 percent—a third lower than in 1971. The decline in Israel, as in the advanced economies, was concentrated in the traditional tradable industries—textiles, clothing, wood, non-metallic minerals, and metals—where the proportion of persons employed has fallen by 50 percent in the last thirty years. The proportion of persons employed in Israel's food industry is relatively high, and the decline in this industry has been relatively moderate; this is due to an increase in labor productivity rather than a rise in imports, as transportation costs, tariffs, and the preference of some consumers for kosher food (i.e., food that meets Jewish dietary requirements) still protect Israeli producers.

Geographical distribution of persons employed in manufacturing

In 2000 25 percent of all persons employed in the southern and northern regions (henceforth the periphery) were in manufacturing, compared with only 15 percent in the rest of Israel (henceforth the central region). In the last few years the proportion of persons employed in manufacturing has declined, from 20.7 percent in 1995 to 16.7 percent in 2002, while the proportion employed in the business services, which are concentrated mainly in the central region, has risen. Nonetheless, the proportion of

The proportion of persons employed in the traditional industries in Israel, and its trend over time, resembles that of other advanced economies.

A large proportion of persons employed in the periphery work in manufacturing, whereas in the central region manufacturing employees constitute only a small proportion of employees.

persons employed in manufacturing in the periphery has not declined, and their number has even risen, by 8,900, while the number of persons employed in manufacturing in the central region has fallen by 11,800.

The decline in the number of persons employed in manufacturing was concentrated in the central region, while the number of persons employed in manufacturing in the periphery rose.

The expansion of employment in manufacturing in the periphery and its contraction in the central region is surprising, particularly since the traditional industries which employ a large share of workers in the periphery were in crisis in the 1990s, while the advanced industries, which are concentrated in the central region, enjoyed unprecedented success at that time. In 1995 most of the manufacturing employees who live in the periphery (60 percent of them) were employed in industries which are not human-capital-intensive, i.e., mining and quarrying, textiles, plastics, rubber, chemicals, metals, and basic metals, and only a minority of the workers (38 percent) in the central region were employed in those industries. In the wake of the crisis which afflicted some of these industries, the total number of persons employed in them fell by 9 percent between 1995 and 2000, but the entire decline was among persons employed in the central region, while the number employed in the periphery remained unchanged. In 1995 the electronics and transport vehicles industries employed 23 percent of all persons employed in manufacturing in the central region, but only 14 percent of all persons employed in manufacturing in the periphery. As stated, these industries increased employment, mainly in the periphery (8,100 employee posts), and only partly in the central region (5,100 posts). Most of the expansion of employment in the periphery stemmed from the establishment of plants manufacturing electronic components, which benefited from government grants extended under the Encouragement of Capital Investments Law. The grants provided in this framework, which involves diverting capital stock and plants to the periphery, could explain the increase in the share of persons employed in the periphery.

Table 1.16
Share of Persons Employed in Selected Industries in Total Employment, Israel and Advanced Economies,^a 1971, 1990, 2000

	(percent)					
	Share in employment in advanced economies			Share in employment in Israel		
	1971	1990	2000	1971	1990	2000
Total manufacturing	23.0	20.1	15.6	24.2	18.5	15.3
Textiles, clothing, footwear & leather	4.8	3.3	1.6	4.0	2.2	1.3
Wood & its products	1.1	0.8	0.6	1.0	0.7	0.6
Non-metallic minerals	1.0	0.6	0.5	1.1	0.7	0.6
Metal and basic metals	3.1	2.9	2.1	3.4	2.3	1.9
Food, beverages, tobacco	3.3	3.1	2.5	2.4	1.9	1.7
Paper, printing & publishing	1.3	1.5	1.3	2.0	1.9	1.6
Chemicals, oil, plastic & rubber	2.0	2.3	1.9	2.0	1.7	1.5
Electronics, machines & equipment	2.9	3.6	3.5	4.8	4.4	3.7
Transport equipment	1.9	1.2	0.7	2.0	1.7	1.4

^a The countries that were included were US, Japan, France, Italy, Canada, Sweden, Norway, the Netherlands, Finland, Denmark, & Belgium.

SOURCE: Israel, based on data from the Central Bureau of Statistics; other countries, based on data from STAN, the OECD Structural Analysis Industrial Database.

According to capital stock per worker in the periphery, the rise in employment in the southern region and Jerusalem could be explained by the contribution of the Encouragement of Capital Investments Law to the increase in capital stock there, but it cannot explain the rise in the proportion of persons employed in manufacturing in the northern region, where the share of capital stock has not risen. Capital stock per worker in the southern region is 70 percent higher than in manufacturing as a whole, and did not decline in the 1990s, despite the marked rise in the number of persons employed in that decade. The northern region, on the other hand, which in the past has been characterized by slightly higher capital stock per worker than the average in manufacturing, is now characterized by a lower than average ratio. The proportion of employees in the northern region in total manufacturing employees increased by 3.5 percentage points in the 1990s, while its share in total manufacturing capital stock remained unchanged. Hence, capital stock per worker in the northern region has risen by less than in the central region (29 percent compared with 54 percent). Note that the most rapid rise in capital stock per worker in the 1990s was in the Jerusalem region, which is considered a national priority region even though it cannot strictly be defined as periphery.²¹

The capital stock per worker ratio is high in manufacturing in the southern region, and the situation of employees is better there than in the north, where the ratio is lower. The wages of manufacturing workers in the south are 6 percent higher than the average wage in manufacturing, while those in the north are 22 percent below the industry average. The differences between the two regions in labor productivity are greater still: product per worker in the southern region is 52 percent above the industry average, while in the north it is 21 percent lower. These distinctions derive only in part from the discrepancy in capital stock per worker, and for the most part can be attributed to differences in industry structure. Several industries with particularly high labor

Despite the rise in the number of persons employed in the southern region in the 1990s, a very high level of capital stock per worker has been maintained; this is in contrast with the northern region, where there has been relatively little investment.

The wages of manufacturing employees in the southern region are 6 percent higher than the industry average, whereas those of manufacturing employees in the northern region are 22 percent below the average.

Table 1.17
Employment, and Capital Stock in Manufacturing, by Region, 1991–2000

	(percent)							
	Distribution of employment in manufacturing			Distribution of capital stock in manufacturing			Growth rate of capital stock per worker	
	1971	1990	2000	1971	1990	2000	1995–2000	1991–2000
Jerusalem	5	5	6	5	5	8	83	138
North	17	19	20	19	18	19	29	29
Haifa	16	14	13	18	17	15	33	67
Center	25	25	26	22	21	20	27	38
Tel-Aviv	24	24	21	17	16	15	42	58
South	11	12	13	19	20	22	39	51
Judea & Samaria	1	2	1	1	1	1	100	42

SOURCE: Based on Central Bureau of Statistics data.

²¹ The national priority areas are the Jerusalem, northern, and southern regions.

productivity are located in the southern region, among them mining, quarrying and salt extraction, industrial chemicals, fertilizers (which are found in the region), and electronic components (whose location in the region is the result of government decision). While the high level of labor productivity in these industries is either because the region is rich in natural resources (the Dead Sea area), or foreign firms possess unique technology (electronic components), and is not because of the workers' human capital, the high level of labor productivity there is also reflected in high wages. A comparison of by-industry wages in the northern and southern regions shows that there is no regional distinction in the food and beverages and tobacco industries and that in both of them wages are 8 percent higher than in the rest of the country (Table 1.17). In the textiles and clothing industry, however, wages in the northern region are 8 percent lower than in the rest of the country (including the south). This is because there are still many tailoring factories in the northern region, where capital stock per worker is low, as are labor productivity and wages.

Table 1.18
Factor Inputs, Productivity, and Cost Per Hour Worked
in Electronics, 1990–2003

	(rate of change, percent)					
	1990–1996	1997–1999	2000	2001	2002	2003
Production	8.8	7.9	32.2	-11.9	-10.2	0.4
Exports	18.4	18.8	69.7	-12.8	-20.3	-1.9
Cost per hour worked	4.3	5.4	14.9	8.0	-4.7	0.1
Labor productivity	2.9	3.6	18.5	-7.2	-5.8	3.0
Hours worked	5.6	4.2	11.6	-5.1	-4.7	-2.5
Capital stock	9.6	16.5	17.5	10.8	7.3	5.8
Multi-factor productivity	1.6	-0.6	15.1	-14.2	-10.9	-0.6
Investment	12.0	16.7	1.7	-23.6	-19.3	-7.7
Share in production (%)	19.9	23.7	30.1	27.9	25.5	25.6
Share in exports (%)	24.7	34.3	43.6	39.7	33.4	32.4

SOURCE: Based on Central Bureau of Statistics data.

In most industries, and especially human-capital-intensive ones, productivity in plants in the central region is higher than in the periphery.

We compared labor productivity in the periphery and the central region for all the three-digit manufacturing industries, in order to neutralize the discrepancies in productivity due to the different by-industry distribution. For the purposes of the examination the periphery was defined in accordance with the map of national priority areas. We found that in most industries labor productivity in national priority areas was lower than in the rest of the country. In some of the traditional industries labor productivity was in fact higher in national priority areas. In all the other industries, especially those that are human-capital-intensive, productivity was higher in plants located in the central region. This indicates that the gap in wages and labor productivity

between the various industries expresses differences in the quality of human capital rather than the high transportation costs of plants situated in the periphery or discrepancies in capital stock per worker. The differences in labor productivity and wages within the advanced industries stem from the tendency of human-capital-intensive firms to be situated in the central region. This means that the likelihood that an electronics firm will be located in the periphery declines as the quality of the human capital it requires rises. In the electronic communications equipment and electrical components industries twice as many workers with university or technical college qualification are employed in the central region as in equivalent firms (in the same industry) in the periphery. The difference is smaller in the medical and scientific equipment industry. Thus, the difference in the quality of human capital between the center and the periphery explains the gaps in labor productivity and wages in the advanced industries.

Table 1.19
Factor Inputs, Productivity, and Cost Per Hour Worked
in Mixed Industries, 1990–2003

	(rate of change, percent)					
	1990–1996	1997–1999	2000	2001	2002	2003
Production	7.0	1.9	4.2	2.1	7.3	3.8
Real labor cost to employer	2.0	0.1	–0.3	8.3	–0.9	–2.5
Labor productivity	3.2	3.6	1.8	3.2	7.5	4.3
Hours worked	3.7	–1.6	2.4	–1.1	–0.2	–0.7
Capital stock	7.2	6.8	3.9	3.3	2.9	3.4
Multi-factor productivity	1.8	0.1	0.8	1.1	6.0	2.8
Investment	–7.1	5.6	–7.0	–6.0	–3.6	13.7

SOURCE: Based on Central Bureau of Statistics data.

Table 1.20
Factor Inputs, Productivity, and Cost Per Hour Worked
in Traditional Industries, 1990–2003

	(rate of change, percent)					
	1990–1996	1997–1999	2000	2001	2002	2003
Production	6.5	–0.7	1.6	–4.8	–2.6	–3.2
Real labor cost to employer	2.4	1.0	5.7	6.3	–1.5	–1.1
Labor productivity	2.2	1.6	2.2	1.9	1.3	0.6
Hours worked	4.2	–2.2	–0.6	–6.6	–3.9	–3.8
Capital stock	5.8	4.0	4.4	2.5	2.1	0.6
Multi-factor productivity	1.6	–1.0	0.7	–2.6	–1.3	–1.8
Investment	–4.3	–3.0	18.2	–17.3	–1.7	–18.7

SOURCE: Based on Central Bureau of Statistics data.

Box 1.3**Examination of Changes in the Encouragement of Capital Investments Law and their Effect on Employment**

The Ministry of Finance's proposed amendment to the Encouragement of Capital Investments Law included in the 2004 National Budget involves making the approval of investment projects contingent on exporting at least 50 percent of their output.

- Determining a threshold of 50 percent of sales as exports as a precondition for a grant, as proposed in the 2004 budget, will restrict the application of the Encouragement of Capital Investments Law by almost a half. According to the survey of manufacturing, firms which do not meet that export criterion currently employ 60 percent of all workers in the national priority regions, and firms that export at least 25 percent of their output employ 53 percent of the workers in those regions.
- The proposed change reduces the application of the law to manufacturing and blocks its application to most industries that produce import substitutes for the domestic market—food, beverages, footwear, wood, furniture, paper, publishing and printing, non-metallic minerals, and basic metals. These industries, which employ about a third of manufacturing employees in the periphery, possess the same potential to increase production and employment as exporting firms.
- Restricting the applicability of the law is inefficient. Granting capital subsidies only to exporting firms, preferring them to firms producing for the domestic market, distorts the allocation of resources.
- The encouragement of employment in the periphery by subsidizing capital investment only, as is currently the case, is inefficient, as it encourages the excessive and wasteful utilization of capital and the under-utilization of labor. It is preferable to stimulate employment by providing grants for firms' wage payments rather than for their capital investments.

Export firms that meet the criteria fall into four main categories:

1. High-tech firms (telecommunications, computer networks, monitoring and supervisory equipment, medical and scientific equipment, measurement and navigating apparatus, optical instruments, photographic equipment, and aircraft construction) have a comparative advantage in skilled manpower and advanced technology. The law does not affect these firms, as most of them are located in the central region. Some 38,000 persons work in export firms in the central region, compared with only 5,400 in national priority areas.
2. The salt-extraction industry and part of the chemicals industry (production of phosphates, potash, bromides, and fertilizers) are situated in the southern region because that is where the raw materials they use are to be found, rather than because of the Encouragement of Capital Investments Law. Little

benefit is derived from subsidizing the capital of these firms, because their labor productivity is one of the highest in manufacturing, and they will continue to exist and invest even without subsidization.

3. Export firms in the traditional textile and clothing industries employ 9,700 persons in the periphery, and only 4,000 in the central region. The comparative advantage of this industry, which is based in part on low labor costs, is being eroded, and the industry is not expected to resume growth, providing additional jobs for workers in the periphery.

4. Mixed-technology industries in electronic components, metals, plastics, and rubber have expanded in recent years and possess the potential to provide additional jobs in the periphery. The Encouragement of Capital Investments Law has had considerable influence on the location of these firms. Export firms in these industries in the periphery employ about 22,000 persons, while those in the central region employ only about 6,000.

In conclusion, the Encouragement of Capital Investments Law should constitute an instrument for stimulating employment in the periphery, rather than for encouraging exports. Consequently, the law should provide an incentive for increasing employment via the direct subsidization of wage payments, rather than by subsidizing capital, as is currently the case, and should do so without discriminating between export and other firms. The export criterion will hamper the law's ability to expand the employment of unskilled workers in the periphery, because Israel's exports are high-tech and human-capital-intensive. Thus, the potential of the export industries to

Table 1
Employment in Manufacturing and in Export Plants, by National Priority Region

('000)

	Israel, total			Priority regions A&B		
	Total manufacturing	Export plants	For domestic market ^a	Total manufacturing	Export plants	For domestic market ^a
Total ^b	346	109	237	132	51	81
Electronics & transport vehicles	59	43	16	9	5	4
Textiles & clothing	33	14	19	17	10	7
Electronic components, metals & plastics	84	28	57	44	22	23
Chemicals, mining & quarrying	27	12	15	8	5	3
Traditional/domestic industries	113	6	107	41	5	36

^a Plants producing for the domestic market are defined as those 50 percent of whose output is destined for the domestic market.

^b Machines and equipment and office machines, electric motors and electric distribution apparatus are included in the total but not in the by-industry decomposition.

^c Food, beverages, tobacco, footwear, wood and furniture, paper, publishing & printing, non-metallic minerals, and basic metals.

SOURCE: Based on Central Bureau of Statistics data.

shift to the periphery is not great and they are unlikely to employ unskilled workers. Furthermore, there should be no discrimination between exports and production for the domestic market, whether by means of the Encouragement of Capital Investments Law or any other measures, as this distorts the allocation of resources and harms profitability.

Table 2
Participation and Unemployment Rates, by Gender and National Priority Region, 25–54 Age-Group

		(percent)			
		Men		Women	
	Region	Participation rate	Unemployment rate	Participation rate	Unemployment rate
High school	Center	87.4	7.8	72.4	11.5
	Periphery	84.9	10.2	62.4	15.5
Matriculation	Center	86.3	8.8	79.4	10.1
	Periphery	82.5	9.8	66.8	14.2

SOURCE: Based on Central Bureau of Statistics data.

Table 1.21
Traditional Industries: Production, Exports, Domestic Sales, and Labor Input, 2003

(rate of change, percent)						
	Share in manufacturing product (%)	Production	Share of domestic sales (%)	Production for domestic market	Hours worked	Capital stock
Traditional industries	40.2	-3.2	83.8	-3.4	-3.8	0.6
Food, beverages, tobacco	11.1	-2.4	94.1	-3.7	0.1	3.1
Textiles & clothing	3.8	-8.8	53.4	-13.3	-7.5	-1.5
Footwear, leather & its products	0.3	3.8	85.7	5.9	4.9	-5.3
Wood & its products (incl. furniture)	2.9	-0.7	88.7	-2.7	-6.1	0.4
Paper & its products	1.7	-3.8	89.5	-6.1	-3.9	1.1
Printing & publishing	4.4	-3.2	97.3	-3.0	-4.1	-1.3
Non-metallic minerals	2.2	-6.8	94.8	-7.6	-7.5	-1.2
Basic metals	1.5	-11.1	81.7	-12.1	-1.6	1.9
Metal products	10.1	-1.2	74.2	-1.0	-4.2	-0.1
Motors & electric distribution apparatus	2.1	0.5	71.0	8.8	-6.9	-0.9

SOURCE: Based on Central Bureau of Statistics data.

Table 1.22
Mixed Industries: Production, Exports, Domestic Sales, and Labor Input, 2003

	(rate of change, percent)						
	Share in manufacturing product (%)	Production	Real increase in exports	Share of domestic sales	Production for domestic market	Hours worked	Capital stock
Mixed manufacturing	34.2	3.5	5.9	54.0	1.5	-0.7	3.4
Chemicals and oil	13.3	5.6	4.2	59.2	6.6	4.3	1.0
Transport equipment	6.3	3.0	5.1	26.1	-2.8	-8.8	-1.6
Plastics and rubber	6.9	6.3	16.7	60.8	-0.4	7.0	3.3
Machines and equipment	3.4	-2.8	1.2	65.5	-4.9	-6.4	3.7
Mining and quarrying	2.7	-2.9	36.4	48.6	-36.5	-3.5	14.6
Jewelry & objets d'art	0.6	-7.0	-11.6	8.8	39.8	0.0	-2.8
Miscellaneous	0.9	11.3	16.3	63.8	8.4	-6.9	-2.8

SOURCE: Based on Central Bureau of Statistics data.

3. Agriculture²²

2003 was a bad year for both agriculture and farmers. The industry's product plummeted by some 11 percent (Table 1.23), while exports rose; agricultural output declined by 4.1 percent, the industry's share of business-sector product fell to 2.3 percent, and employment in it dipped by 2.4 percent.

Exports rose in volume terms by 8.4 percent in 2003. Most agricultural exports consist of field crops, which are naturally subject to wide fluctuations. In 2003, however, most of the increase in exports was due to local-currency depreciation against the euro, improving export terms to the eurozone, the destination of most agricultural exports. This went counter to the long-term decline in citrus exports, which intensified in 2003 due to the intensive uprooting of orchards. The latter trend is intensifying for various reasons—higher alternative yield on land in the Sharon region, the rise in the price of water, and the decline in prices.

In contrast with the long-term trend, agriculture's 'terms of trade' improved in 2003 (Figure 1.16). The price of agricultural input rose by less than that of its output, due to local-currency depreciation against the euro. The price of agricultural input rose mainly because of the marked increase in the price of water for farming; capital input was up by 0.3 percent.

As regards the composition of employment, the long-term upward trend in the share of foreign workers in agriculture persisted, and reached 38 percent—23,300 workers—while the proportion of Israelis declined. The share of self-employed farmers dipped slightly, while the number of Israelis employed fell by 8 percent and their share

2003 was a bad year for agriculture and farmers. Agricultural product plunged by 11 percent, while exports rose; agricultural output declined by 4.1 percent, and employment dipped by 2.4 percent.

In contrast with the long-term trend, the industry's 'terms of trade' improved in 2003.

²² The figures for agricultural product are based on a preliminary estimate; the industry's actual product may be very different.