CHAPTER VI

THE PRINCIPAL ECONOMIC SECTORS

1. MAIN DEVELOPMENTS

In 1983 real business sector product¹ rose by 4–5 percent, compared with only 2 percent in 1982.² Factor inputs (capital and labor) grew at a similar rate of 3–4 percent. Thus this year too factor productivity (whether product per man-hour or total productivity) remains in the doldrums (see Tables VI–1 and VI–A2).

Over the past decade or so, the growth of product per man-hour has declined in three distinct steps: from the 6 percent rate of the mid-1960s to 3.5 percent in 1972–79 and to 1.5 since then. The decline stems partly from the slowdown in business sector capital intensity (capital per man-hour). Other causes of the stagnation of productivity are accelerated inflation, the inconsistency of economic policy, as a result of which taxes and subsidies fluctuated violently, and short-run changes in product-mix as domestic demand was diverted to military commodities. These factors affect productivity directly; they also have an indirect effect inasmuch as they increase uncertainty, which in turn affects producers' expectations and plans; the consequence is inefficient factor utilization.

During the year, the picture does not appear to be uniform, with the growth rate of product rising in some industries and declining in others, the rapid growth that began in mid-1982 being arrested in the fourth quarter in most industries. Thus a combination of indicators for industry, trade, tourism, and construction shows rapid growth of business activity—some 5–6 percent—from the third quarter of 1982 to the third quarter of 1983.

The business sector was affected by the expansion of private consumption and the public sector's defense demand and by the fact that merchandise exports, which declined in 1982 after many years of rapid expansion, rose in 1983. In commerce and services product rose by 7 percent, and in transport by 6 percent, both above the average. On the other hand, construction output, which has been dropping since 1981, did so in 1983 too. Industrial and agricultural product rose at the average business sector rate (see Table VI–A1). These differential growth rates are

¹ In this chapter, business sector product is measured by various quantitative by-industry indicators (mostly data of the Central Bureau of Statistics). In the last few years the series show a different growth path when measured from the expenditure side (owing to errors and omissions). The expenditure side estimate gives a real growth rate of only 2 percent for 1983 (see also Chapter II).

 $^{^{2}}$ In the last two years, the growth rate of business sector product averaged $3\frac{1}{2}$ percent, little more than the 3.1 percent average for the last five years.

Table VI-1BUSINESS SECTOR INDICATORS, 1960-83

	1960– 1965	1966– 1972	1973– 1978	1979– 1983	1980	1981	1982	1983
Product ^a	8.9	9.2	3.7	3.1	-0.9	4.1	2.4	4.6
Labor input ^b	4.6	2.7	0.1	1.9	-1.2	2.4	0.2	3.2
Capital stock ^c	10.4	8.5	6.6	3.7	5.0	3.0	2.9	3.2
Labor productivity ^d	4.2	6.4	3.6	1.2	0.3	1.7	2.2	1.4
Capital intensity ^e	5.6	4.7	6.5	1.8	6.3	0.6	2.7	0.0
Total productivity ^f	1.9	4.5	0.8	0.5	-2.3	1.4	1.1	1.4
Exports			7.0	2.5	5.7	4.8	-3.7	1.6
Credit ^g				6.2	-2.0	4.8	34.4	-7.6
Coefficient of energy intensity ^h			70.3	66.8	65.3	64.0	68.0	67.8

(Annual average real change, percent)

^a GDP at factor cost.

^b Man-hours (labor force survey data).

^c Beginning of year stock.

^d Product per man-hour.

^e Capital stock per man-hour.

^f Product per unit of factor input (average weight of labor is 58 percent).

⁸ Medium and long term credit flows.

^h Ton oil equivalent per IS1000 of product at 1980 prices. The coefficient applies to the whole economy.

reflected in the composition of business sector product: the weight of transport and services continued to rise (it has done so since 1973), and the weight of construction—and its effect on the economy—to decline.

Industrial growth has in the last two years been founded chiefly on the public sector's purchases, the product induced by this demand rising by 14 percent in 1983, while product for exports rose by only 2 percent, mainly because of the contraction of exports of metals, machinery, and some electronics products (in which military exports are concentrated). It would appear that the economic difficulties of Israel's export customers combined with the shifting of domestic demand for military output (for restocking necessitated by the war in Lebanon). Another important factor has been the last two years' decline in the relative price of imports as the sheqel appreciated (for further details see Chapters III and VII).

This year's industrial growth must be viewed in relation to the negligible growth of the preceding three years (in 1982 production was at the 1979 level). Since factor input has risen (labor in 1983 and capital throughout the period), it is clear that if there had been full factor utilization output would have grown faster than the 4 percent recorded for 1983.

The diversion of demand to imports reinforced the decline in demand for construction. The decline in residential investment has both demographic and economic causes: there has been a significant drop in immigration and the 25–34

age group (the principal source of demand for dwellings) is growing more slowly; and dwellings have become less attractive an investment, in view of their high price and low (relative to alternative assets) expected yield.

Although production of import substitutes suffered from the decline in relative import prices, the latter has increased the product of transport and services. Thus the marked increase in Israeli tourism abroad was one of the reasons for the large increase in aviation product (16 percent); and the large volume of imports, particularly durables, expanded product and employment in services (by 8–9 percent; see Table VI–A3).

Relative import prices began to drop in 1982; consumers and producers stepped up their purchases since the decline was not expected to continue; indeed some purchases were advanced, imports of producer durables being particularly heavy. These investments were made possible by the 34 percent increase in long and medium term credit in 1982 (in 1983 it declined by 8 percent). Furthermore, purchases of producer durables often call for expenditure on installation and (locally produced) complementary equipment; the product induced by this demand itself stimulated investment demand, and some of this appears to have made itself felt in 1983.

Tourism to and in Israel expanded this year in spite of the appreciation of the sheqel (foreign tourist arrivals fell off in 1982 because of the war in the Lebanon). The number of tourist bednights and total real output of hotels rose by 10 percent, an increase also reflected in aviation and inland transport services, in sales of tourist products and in the incomes of restaurants, cafes, and other tourist services. Nevertheless, this year's increase in the product of the tourist industry only restored the 1981 level, partly because the price of tourist services rose.

Since 1982, when the long-run rise in merchandise exports was interrupted, exports of several agricultural and industrial commodities have fallen off. As a result, real growth rates vary considerably this year too. Several industries and sub-industries were forced to contract production evidently because of export difficulties or because of import competition. Among them are textiles and clothing, leather, military goods, building materials, and citrus. In some of them, output contracted for the second year running. Other industries showed high growth rates: avocado (owing to natural conditions), chemical products (maturation of investment), optical and precision instruments (military demand and exports), and food (helped by subsidies). In view of the low factor mobility (including that of Israeli manpower), and in view of the difficulties of current planning and control under the conditions of uncertainty which characterized the economy in 1983, it is safe to say that efficiency and profitability declined. In any case, even if there were no institutional barriers preventing adjustment to changing demand conditions, the variability of the changes in factor prices and the practical difficulty of keeping track of developments would prevent full adjustment. The outcome of this situation is that productivity failed to rise (in spite of the growth of product) and that the share of capital in business sector product fell.

The share of business and public services has been rising for many years now, a trend whose origins lie in the steady rise of incomes, rapid technological development (computer services), and the stepping up of inflation.

The changing effects of inflation on the structure of production and employment in commerce and services are brought out clearly by Table VI–A3. The most striking feature is the increased share of financial services in product and employment, which reflects the enormous expansion of financial activity and the capital market; in 1975–83 the product of these services rose at an annual rate of 7–8 percent (this compares with 3 percent for total business sector product). In business and legal services³ employment rose at about the same rate as financial services employment, owing to the increased demand for the services of auditors, lawyers, and financial and economic advisers in a period of rapid inflation and frequent changes in fiscal policy. The situation caused by inflation and changes in tax structure can be illustrated by the law for taxation under inflationary conditions, which came into effect in 1983. Its operation turns out to be complex and it has resulted in an appreciable decline in tax revenue. To sum up—several financial and business services are likely to benefit from the very conditions of uncertainty which discourage other economic activity.

2. AGRICULTURE

Agricultural output (including agricultural intermediates) rose by 5–6 percent in 1983;⁴ This is somewhat less than last year but above the long-run growth rate (see Table VI–2).⁵ There was ample rainfall in 1983, which affects the volume of purchased inputs required as well as yields. Purchased inputs did indeed grow less than output, but there was a large increase in the output of agricultural intermediates; accordingly, gross agricultural product rose by 5 percent (compared with the preceding year's exceptional 13 percent). Among the more important features of agriculture in 1983 are the fact that the slowdown in output affected both crop and livestock branches (though it still grew at the high rate of 6 and 4 percent, respectively), that exports of crop branches failed to rise (the steep decline in citrus exports being accentuated and cotton exports continuing to rise), that the relative price of output improved after several years of deterioration, and that total income from agriculture (which is not the same as farmers' total income) rose

³ The product figures do not show as rapid an increase, possibly because these estimates are downward biased, since they are estimated on fixed 1977 input coefficients, so that the rise in the output of these (chiefly intermediate) services is not captured.

⁴ Throughout this section, agricultural years (ending September 30 of stated year) are used.

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⁵ The 1982 and 1983 data are not strictly comparable with those for earlier years (see note a to Table VI-2). Note that all values cited in this section are at the prices of April of each year.

Table VI-2

INDICATORS OF GROWTH IN AGRICULTURE, 1973-83^a

(Real annual change, percent)

· · ·	1973–78	1979–81	1982	1983
Total output ^b	4.5	2.9	7.4	5.7
Purchased inputs	3.4	1.6	3.2	4.2
Gross product	6.3	4.8	12.7	5.0
Factor input				
Labor ^c	-1.6	-0.3	-7.0	1.1
Capital stock ^d	4.8	3.6	2.4	2.5
Capital-labor ratio ^e	6.5	3.9	10.0	1.1
Productivity				
Product-labor ratio ^e	8.0	5.1	21.2	3.9
Total productivity ^f	5.3	3.3	16.4	3.3
Total income from agriculture	3.7	5.8	3.5 ^g	11.2 ^g
Exports ^h	8.6	-0.1	15.5	-4.5
Citrus	2.3	-1.9	-4.6	-10.9
Other exports	17.9	1.6	29.6	-2.5
Terms of trade	·			
Output prices ⁱ	35	108.3	95.4	137.5
Purchased input prices ⁱ	38	112.0	103.3	128.3
Terms of trade ^k	-12 ¹	-3.0^{1}	-3.9	4.0
Rate of return on fixed capital (percent) ^m	28.5	24.6	••	• ••

^a Agricultural years ending September of stated year. The figures underlying the 1982 and 1983 calculations are at prices of April of each year. Owing to changes in methods of estimating product and prices introduced by the CBS (starting in 1982), the data for the last two years are not comparable to the earlier data.

^b Including inputs to agriculture.

^c Calculated from the data of the labor force surveys and the Judea-Samaria family survey (in millions of man-hours).

^d Gross capital stock (beginning-of-year figures).

^e Per man-hour.

^f Product per unit of factor input (the average weight of labor is 59 percent).

⁸ Deflated by the CPI for April of each year (see Table VI-A4).

^h Constant 1972 dollars (foreign trade statistics of the CBS).

ⁱ Income of farmers from agriculture *plus* interest and rent as percent of net capital stock (at current prices, provisional estimates).

^j Producer prices, excluding agricultural inputs.

^k Excludes depreciation.

¹ Percent change in index of relative prices (output ÷ input).

^m Total change over the period.

SOURCE: Central Bureau of Statistics and Bank of Israel calculations.

impressively. In view of this record, some discussion of the agricultural-crisis assertions heard in the last few years is in order. It must not be forgotten that agriculture is not homogeneous, and that the crop mix of farms varies considerably. Agricultural sub-branches differ considerably in profitability, the amount of protection they enjoy, the degree of government intervention in planning and price

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setting, and the percentage of output exported (and hence the competition encountered in the world market). Profitability and efficiency also vary within branches owing to differences in climate and soil quality; scale is another important element of variability: the larger the farm units and the greater the variety of products, the easier it is to spread risk. This is the principal difference between the kibbutzim with their comparatively large-scale mixed farming and the specialized smallholders of the moshavim. By the early 1970s it was clear that there was surplus capacity in agriculture and that the local market could not take up the entire output at prices guaranteeing a decent living to farmers. Agricultural development therefore turned to exports in the 1970s. Some of the export-oriented investments came to maturity in the early 1980s, just as a demand constraint made its appearance in the principal market, Europe. It turned out that--relative to the capacity of the European market to take up Israel's exports at profitable prices-there had been overinvestment in some export lines. This was accompanied by the problem of the weakening European currencies and the government's exchange-rate policy. As a result, agricultural export proceeds fell in spite of exchange-rate insurance. A good proportion of agricultural exports (vegetables and flowers) are produced by the specialized smallholdings (in moshavim); it follows that they were the hardest hit. The way in which the moshav is organized makes it difficult for it to adapt to structural changes in production. On top of this is the heavy financial load under which many of these farms are laboring because of past borrowing (for consumption as well as production). The emergence of a crisis in this sector is thus easily understood. The hardest hit were those moshav farmers whose opportunities to supplement their income is limited.

The combination of rising product and better "terms of trade" (output prices rose by 4 percent in relation to input prices) raised real income from agriculture by 11 percent. Real returns to hired labor rose by 2 percent; accordingly real returns to capital and own labor rose by 18–19 percent (see Table VI-A4).

Labor input rose by 1 percent in 1983, following a steep decline in 1982. The growth rate of the agricultural capital stock was more or less steady at $2\frac{1}{2}$ percent, and total productivity remained high. It should, however, be borne in mind that annual productivity measurement is not very meaningful because output and input are largely dependent on fluctuations in natural conditions.

3. INDUSTRY

Industrial product (excluding diamonds) rose by 3.5 percent this year, rather more than last year's minimal increase (1 percent) and than the annual average for 1978–82 (2 percent). Labor productivity (product per manday) rose by 2 percent, while there was no change to speak of in total productivity (up by 0.5 percent).

This year's growth stemmed chiefly from the public sector's defense purchases, with exports—which were the growth leader until 1981—failing to rise, because of

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Table VI-3

INDICATORS OF GROWTH IN INDUSTRY, 1968–83^a

	1968-72	1973–78	1979-82	1980	1981	1982	1983
Industrial production	15.1	4.9	2.2	-3.0	6.3	0.9	3.5
Labor input (mandays)	9.1	-0.1	1.0	-3.3	1.4	1.5	1.6
Number of employed	8.0	1.8	1.0	-3.9	2.6	2.0	1.7
Gross investment ^b	28.1	3.3	1.9	-13.8	4.9	23.0	17.6
Gross capital stock ^c	6.7	7.7	5.3	6.0	4.3	4.0	5.0
Industrial production per man-hour	5.5	5.0	1.2	0.3	4.8	-0.6	1.8
Total productivity	7.0	1.9	-0.5	-3.4	3.7	-1.6	0.5
Industrial exports	16.6	11.4	9.4	15.3	11.9	0.3	-0.7
Unit wagebill ^d	-4.2	-1.7	4.6	3.7	5.0	3.0	3.5
Input prices relative to output prices	1.0	0.5	-1.0	6.7	0.1	-8.7	-11.1

(Real annual change, percent)

^a Excluding diamonds. The labor input figures are from the industrial production indexes of the CBS. Industrial production (from the same source) is added value at fixed prices. The indexes for 1968–78 are adjusted for full-time equivalent labor input.

^b Including motor vehicles.

^c Beginning-of-year stock.

^d Deflated by index of output prices.

SOURCE: Central Bureau of Statistics and Bank of Israel calculations.

the steep drop in military exports. Moreover, the fact that the IS exchange rate lagged behind domestic prices and the depreciation of European currencies against the dollar undoubtedly held back many export lines.

Production of consumer and investment goods went up by 1 and 7 percent respectively. As in the preceding two years, imports of consumer and investment goods rose much faster than the output of domestic products because of the steady decline, stemming from the slow-devaluation policy, in the relative price of imports. In 1980, 25 and 68 percent of industrial consumer and capital goods respectively were imported; by 1983, the corresponding figures had risen to 36 and 76 percent.

The decline in construction reduced the product of industries producing building materials; on the other hand, product originating in machinery and equipment rose by 18 percent.

Profitability

Unit wages⁶ haven risen steadily at an annual average rate of 4.6 percent since 1979; this is the result of two factors at work together during the period—an annual

⁶ Wage bill per unit of industrial production, deflated by industrial output prices (calculated from the respective industrial indexes of the CBS).





^a Index of input prices + index of output prices.

rise of 6.9 percent in real labor costs per manday⁷ and a marked slowdown in labor productivity (only 1.2 percent annually). The striking difference between 1979–83 and earlier years is shown in Figure VI-1: in 1966–74 unit wages declined steadily and in 1975–79 they were fairly stable.

The rise in unit wages has presumably helped to slow down the growth of industrial product, and one would have expected industry's demand for labor to decline, or even some dismissals. However, a compensatory factor has also been at work, at least in the last two years—the terms of trade of industry have improved, with a decline in the relative price of (imported and locally produced) inputs.

Industry has been undergoing a structural change in the last ten years, the fruit of specialization in export lines that may be called "advanced" since they are human-capital intensive. The share of these industries (see Table VI-A8) in industrial capital stock rose from 33 to 51 percent in 1970–83, at the expense of the other ("traditional") industries.

The bulk of industrial R & D is concentrated in the advanced industries. In 1981, for example, they accounted for 90 percent of civilian R & D expenditures.

The last decade's trend of export specialization can be examined by looking at inter-industry differences in real export growth rates. It emerges that the advanced

 $^{^7}$ Wage bill per manday deflated by industrial output prices and calculated from the relevant industrial indexes.

industries did better than the traditional. In 1982 and 1983 this trend becomes blurred, with exports contracting in several advanced industries.

4. TRANSPORT AND COMMUNICATIONS

Total output and total product (both at market prices) rose by 5–6 percent in 1983. Output for private consumption (about one quarter of total output)⁸ rose by 10 percent: real disposable income did not change this year, but there was a sharp drop in the relative price of this final category and this explains most of the rise. Exported output (about half the total),⁹ rose by 6 percent owing to the rise in the number of tourists to Israel. The remaining quarter of the industry's output is the supply of intermediate services (chiefly road haulage) to other industries; this category rose by 2 percent in 1983.

Real transport and communications investment rose by 19 percent in 1983, compared with 22 percent in 1982; in both years this reflects mainly a large increase in motor vehicles. Investment in roads went up by 8 percent in 1983 but was still 6 percent below the 1980 figure. The stock of highways grew by 8 percent from 1980 to 1983, during which period the stock of motor vehicles (buses, taxis, private passenger cars, and trucks) rose by over 30 percent. Capital stock other than highways has hardly changed at all since 1980, since discards have more or less equalled investment.

Employment (in terms of either employed persons or man-hours) was down slightly compared with 1982 (and with 1980). In view of the smallness of the change in factor input, this year's rise in product reflects a considerable increase in factor utilization. Product has grown by 10 percent over the last three years, reflecting an annual average rate of about 3 percent in productivity.

5. CONSTRUCTION

Construction output declined by 1 percent in 1983, as in 1982. Residential investment dropped by 7 percent (mainly because of the steep decline in public sector construction), while nondwelling construction and earthworks rose by 4 percent, an increase that is consistent with the considerable rise in investment in machinery and equipment and which signals a change of the downward trend prevailing since 1974. The turning point came in 1981 when nondwelling building starts expanded markedly. A further increase (15 percent) in starts this year will increase construction activity in the next few years (see Table VI–5).

This year's decline in output was accompanied by an exceptionally high increase

⁹ Mainly air passenger transport and shipping.

⁸ Mainly scheduled bus services, communications, and air passenger transport.

	Percent	Percent change over preceding year									
	Product ^b	Revenue		Real output				Price			
·	1982	1982	1979	1980	1981	1982	1983	1980	1981	1982	1983
Land transport	35	33	2.3	-5.5	3.8	2.1	-0.1	165	120	122	131
Buses	11	9 ·	-0.6	~11.3	5.6	7.7	-3.5	200	91	119	120
Taxis	4	3	2.0	-5.0	4.0	0.0	-3.0	147	109	115	120
Trucks	18	20	3.5	-3.6	3.4	-0.3	1.7	154	136	125	138
Railways	2	1	7.7	8.2	-4.3	6.5	3.5	127	156	104	120
Other domestic services	28	19	6.1	5.7	12.2	3.4	11.5	141	81	110	108
Oil pipe lines	1	0	69.0	25.0	-8.7	0.0	0.0	97	136	110	109
Communications	27	19	12.2	5.3	12.6	3.5	11.5	142	80	110	108
Shipping and ports	24	33	8.2	-4.3	-0.2-	-1.9	2.5	121	133	111	122
Shipping	18	28	6.1	-2.2	-0.9	-3.0	2.2	125	131	110	113
Ports	6	5	19.1	-14.2	4.0	3.9	4.0	101	147	115	174
Civil aviation and airports	13	15	13.8	-10.2	3.6	-5.4	16.5	147	123	96	126
Aviation	11	13	14.0	-11.2	2.7	-5.7	16.8	150	119	95	123
Airports	3	3	11.4	0.0	11.6	-2.6	14.7	121	153	99	143
Total output		100	7.2	-3.7	4.1	-0.3	5.4	141	117	112	123
Total gross output	100		5.9	-3.9	4.7	0.4	5.9				

Table VI-4 OUTPUT OF TRANSPORT AND COMMUNICATIONS BY SUB-BRANCH, 1979-83ª

^a Output and product are at market prices. The product estimate is based on the 1972/73 input-output table; annual changes in output in each branch were applied to the benchmark figure. The figures for 1979-82 are revised, and the 1983 figures are provisional. All calculations were done with less rounded figures. ^b At 1972/73 prices.

SOURCE: Central Bureau of Statistics and Bank of Israel estimates.

(6 percent) in the number of employed persons and labor input. In 1979–83, labor productivity dropped by 1 percent annually. The last few years' decline stems from, among other things, a sharp contraction of activity in certain districts which was not accompanied by the movement of labor to other districts. In 1983, labor productivity dropped sharply; this can be explained by the rise in the share of jobs in the later stages of completion, which are more labor intensive than the earlier stages.

The housing market continued slack in 1983. The weakening of demand for housing is not a short-run cyclical phenomenon—the developments of the last few years have chiefly long-run determinants. Demand for housing is determined mainly by the growth of population, permanent income, and the availability of mortgages. In the last three years, the population aged 25–34 (the chief source of demand for housing) rose by only 1 percent per annum compared with a rate of 5.7 percent in 1972–80. Together with the contraction of net immigration, this is probably the central explanation of the slack demand.

The second factor is permanent income, and to some extent, current disposable income. The latter, which rose by 15 percent in 1981 and declined by 2 percent in 1982, rose by 1 percent this year. Private consumption grew much faster, and it

Figure VI-2 RESIDENTIAL BUILDING STARTS BY INITIATING SECTOR, 1976–83



(Thousands of dwelling units, quarterly data)

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,,,,,,	Absolute	e figures		ŀ	Annual char	nge, perce	nt	
	1982	1983	196772	1973–78	1979–83	1981	1982	1983
Output (millions of 1980 IS)								
Total	19,752	19,479	20.0	-2.7	2.1	1.6	-1.4	-1.4
Residential	9,445	8,778	30.1	-5.6	2.1	1.8	-3.5	-7.1
Nonresidential	4,440	4,634	11.2	-2.3	-3.5	-4.3	-0.5	4.4
Other ^b	5,867	6,067	11.1	4.6	8.2	6.6	1.4	3.4
Starts and completions								
Starts (million m. sq.)	4,720	4,740	25.8	-8.0	-2.4	17.2	-18.3	0.4
Residential	3,540	3,380	31.0	-9.8	-1.0	15.2	-18.1	-4.5
Nonresidential	1,180	1,360	15.7	-3.8	-5.6	23.7	-19.2	15.3
Dwelling units (thousands)								
Starts	28.8	26.3	28.5	-12.5	-3.1	14.4	-23.1	-8.4
Completions	33.4	30.7	11.2	-5.2	-2.8	8.7	-0.1	-8.0
Employed persons (thousands)			· .					
Total	121.6	129.3	15.2	-2.0	2.8	2.2	3.8	6.3
Israelis	79.8	86.2	9.7	-3.4	1.4	-0.9	1.7	8.0
From Judea-Samaria and Gaza Area	41.8	43.1		2.6	6.1	9.0	8.0	3.1
Stock of construction equipment (millions of 1980 IS) ^c	3,849	3,774	2.3	4.8	1.7	2.1	-1.8	-2.0
Price index of residential construction inputs			8.7	36.4	119.0	131.7	117.0	134.7

Table VI-5 **INDICATORS OF CONSTRUCTION, 1967–83^a**

 ^a Calculations are from less rounded figures.
^b Defense construction and revised Bank of Israel data on maintenance and renovations (these estimates are based on the 1977/78 input-output table and on capital stock data on the real value and age of buildings).

1

^c Beginning-of-year stock.

SOURCE: Central Bureau of Statistics and Bank of Israel calculations.

2

Figure VI-3 DWELLINGS: BUILDING STARTS AND RELATIVE PRICE, "1960-82

(Index, 1960 = 100)



^a Dwelling price index ÷ CPI.

appears that in the last two years demand was for imported consumer durables because of the decline in their relative price, rather than for dwellings which ceased to be an attractive investment once their relative prices, which rose rapidly for several years, steadied. Subsidies on mortgage credit have declined in the last few years, and this too reduced the investment component of the demand for dwellings.

The rate of government mortgage financing for young couples' housing declined this year, chiefly in the last two quarters. It is updated at irregular intervals and by amounts not known in advance. As a result, there is uncertainty about the demand, with fluctuations in sales.

On the supply side, note that private-sector building starts dropped by 16 percent in 1982; this is an inadequate response to the 30 percent drop in sales that year. As a result, the proportion unsold dwellings rose. In 1983, private sector starts fell by a further 6 percent.

Private sector sales (in 24 towns) declined by 6 percent—after dropping by 30 percent in 1982. This year supply also contracted and so, therefore, did the stock of unsold units. The proportion unsold (out of the supply of units in the final stages of construction) declined from 70 to 68 percent. But this is still a high figure and reflects partial adjustment of supply to demand.

The real price of dwellings rose by 2 percent this year (deflated by the CPI). Real housing prices have been more or less steady for three years and roughly at the relatively high 1974 level (see Figure VI-3).

6. TOURISM¹⁰

Tourist arrivals, which declined by 14 percent in 1982, rose by 16 percent in 1983, to reach the 1981 level. Other indicators also show that real output rose: total tourist days¹¹ rose by 9 percent (down by 16 percent in 1982); the real output of hotels (which includes also local tourists) rose by 10 percent (-5 percent in 1982); export proceeds for tourist services (which do not include fares) came to \$1,029 million in 1983 (compared with \$894 million in 1982 and \$977 million in 1981; see Tables VI-6 and VI-A12).

The background of these fluctuations was the war in the Lebanon, which reduced tourism in 1982; the long El Al strike in 1981, and the United States' rapid recovery from recession in 1983. About one third of the increment reflects the opening of the frontier with the Lebanon. The length of stay of Lebanese tourists, however, is very short, so that they do not contribute much to product or output. If they are excluded, tourist arrivals are still below the 1981 figure.

The picture that emerges of the last few years is thus one of stagnation, due presumably mainly to two factors—the real appreciation of the IS, which has made visits to Israel substantially more expensive (especially for European tourists) and the world recession with its corollary of stagnation in world tourism. In spite of some recovery (mainly in the United States), tourism has not returned to the previous level, since in the meantime other equally attractive countries have become more competitive—the purchasing power of the dollar rose appreciably in Spain, Morocco, and other Mediterranean countries. In Israel, however, hotel prices rose steadily since 1979—not only because of the appreciation of the IS, but in dollars as well.

Product originating in tourist services has been about 6 percent of total business sector product in the last few years; it consists of the value added of tourist services exports (5.2 percent of total in 1981 and 4.6 percent in 1983), and an estimate for local tourism. The principal tourist services are hotels, other tourist accommodation, catering, tours and other transport, sales of souvenirs and similar products; the 1983 increase appears to have been spread over all of them. As far as can be gathered from available information, Israel has a very high ratio of tourist value added to GDP, compared with the OECD countries.

The number of hotel bednights of Israelis rose steeply in the last three years, while the number of tourist bednights fell, owing in part to the appreciation of the IS; this has also boosted travel of Israelis abroad, but income and private consumption increased fast enough for hotel bednights in Israel to rise too. Total hotel bednights rose by 14 percent in 1983.

 $^{^{10}}$ This section is concerned mainly with tourists to Israel, that is, with exports of tourist services. It should be borne in mind that there is no "tourist industry" as such, and that tourist expenditures are included in hotels, catering, trade, transport, etc.

¹¹ Aggregate number of days of tourists remaining in Israel for less than a month; the assumption is that visitors who stay longer have an entirely different expenditure pattern (such visitors include, for example, volunteers).

	Thousands Percent annual chang				nge ^a	
	1982	1983	1980-83	1981	1982	1983
Tourist arrivals (excl. cruises) ^b	899	1,043	0.8	-2.4	-13.6	15.9
By mode of travel						
Air	788	852	-2.1	-3.6	-14.5	8.2
Charter flights Scheduled flights	168 620	167 685	2.9 -3.1	-5.1 -3.1	-25.3 -11.0	-0.6 10.6
Land (by country of entry)	97	171	26.5	10.1	-6.3	76.5
Lebanon Jordan Egypt	19 45 33	66 64 41	 0.0 23.0	-7.0 82.7	 -36.2 0.9	247.4 42.2 24.2
Sea	15	20	3.7	-4.9	-5.1	35.1
By selected countries of residence						
Asia and Africa	79	136	16.9	-22.0	27.4	72.4
Lebanon Jordan Egypt	18 10 4	65 12 4	 -3.7 19.9	-1.2 28.0	 -28.7 52.4	255.7 26.6 6.1
United States and Canada	264	334	3.8	-1.5	-3.7	26.4
Europe	510	522	-3.1	-0.7	-20.5	2.4
United Kingdom France West Germany Scandinavia	105 121 96 51	109 118 102 44	0.0 0.2 -3.1 -11.2	0.7 6.5 1.0 5.5	-13.9 -12.9 -28.3 -21.5	3.8 -1.9 6.1 -13.6
Cruise travelers	98	124 ^c	-1.2	-12.1	1.0	26.3

Table VI-6 TOURISM TO ISRAEL, 1980-83

^a Calculated from less rounded data.

^b Excludes persons arriving from Lebanon without a tourist visa (residents of Southern Lebanon, U.N. military personnel, and diplomats), foreign tourists in transit to Judea-Samaria and the Gaza District, and visits by holders of Israeli passports residing abroad.

^c Includes 21,000 naval personnel on a courtesy visit.

SOURCE: Central Bureau of Statistics.

Although foreign demand for tourist services was steady in the last three years, factor input rose, the number of employed rising by 11 percent or to 19,000 (compared with 17,000 in 1980). The stock of hotels also rose, while the number of rooms in tourist hotels has grown at an average annual rate of 4 percent since the mid-1970s. The increase in the capital stock is accompanied by a decline in the occupancy rate from an average of 53.3 percent in 1976-81 to 48.9 percent in 1983. There will be a further increase in the number of hotel rooms in 1984 (according to data on hotel construction in progress). This development is due to the subsidization of investment on the one hand, and the very rapid increase in local demand for tourist services (see Table VI-A12).

Hotel investment is subsidized by grants and cheap credit under the Encouragement of Capital Investment Law; about 30 percent of total hotel investment is financed by government loans, a rate that has been steady since 1970,

although the rate of subsidy of loans to hotels has declined in the last few years. The supply of hotels is still growing, because the investment process takes several years; in any case, investors continue to make use of government grants. In addition, the Government Tourist Corporation's infrastructure investment accounts for 7–9 percent of total hotel investment.

The rise in the price of tourist services has been the main obstacle to export development in the last few years, coupled with the exchange-rate policy. Tourists convert their foreign currency at the official rate (plus exemption from VAT in hotels), whereas industrial and agricultural exports, and indeed hotels, too, enjoy higher proceeds through exchange-rate insurance or directed credit. In other words, the tourist industry gets lower proceeds per dollar value added than do other exporters. The solution—for the tourist industry and for the economy—is to set a uniform exchange rate for all exports.

Table VI-7

	1978	1979	1980	1981	1982	1983
Value and dollar price						
\$ million						
Total	774.9	1,406.2	2,116.4	2,043.2	1,914.2	1,607.7
Crude oil	761.6	1,243.4	1,798.9	1,685.0	1,789.5	1,460.0
Annual change in \$ price						
Total		62.1	44.6	2.9	-12.9	-8.6
Crude oil		62.0	50.7	3.7	-12.7	-8.7
Real annual change						
Total		11.9	4.1	-6.2	7.6	-8.1
Crude oil		0.8	-4.0	-9.7	22.1	-10.6
Indicators of change in domestic price of crude oil						
At official exchange rate						
Absolute		136.1	205.6	129.1	85.5	111.5
Relative (to CPI)		32.4	32.3	5.7	-15.8	-13.9
At effective exchange rate ^b						
Absolute		139.9	197.8	130.0	93.6	116.0
Relative (to CPI)		34.0	28.9	6.1	-12.2	-12.0
Quantity ('000 tons)						
Crude oil	7,974.5	7,927.2	7,398.0	6,887.3	8,265.5	7,325.7
Petroleum products	,203.9	941.7	1,561.3	1,571.4	330.3	88.8
Coal ^c	_			361.4	990.4	2,136.1
Import/consumption ratio, percent ^d	97.8	97.7	96.7	96.6	97.3	97.1

MINERAL FUEL IMPORTS-SELECTED INDICATORS, 1978-83^a.

^a All changes are percent changes over preceding year.

^b Effective exchange rate of imports.

^c One ton coal is roughly equivalent to 0.6 ton crude oil.

^d Both imports and consumption of energy are measured in ton oil equivalent. The denominator includes solar energy (about $1\frac{1}{2}$ percent of the total).

SOURCE: Central Bureau of Statistics and Bank of Israel calculations.

7. ENERGY

In 1983 there were again no significant signs of energy saving, and gasoline consumption again rose, as it has since 1980. However, energy per unit of GDP fell somewhat, but is still at the 1978 level.

The relative price of energy products (relative to the CPI) dropped by 13 percent, the price of imports of crude oil and mineral fuel dropping by a similar percentage.¹²

The tax rate on energy declined slightly in 1983, but in both 1982 and 1983 was higher than in the preceding three years.

 12 If coal is considered to be a perfect substitute for crude oil, the large increase in coal imports implies a further decline in the price (see Table VI-7).