

## CHAPTER XV

### TRANSPORTATION, COMMUNICATIONS, AND TOURISM

#### 1. MAIN DEVELOPMENTS

The growth rate of the transportation product accelerated by 6-7 percent in 1976. This growth, though it reached only half the annual average growth rate in the years 1969-1972, is outstanding in comparison with 1973-1975, as well as in comparison with the other economic sectors and the total product.

The main causes for this development were external, and unrelated to economic developments in Israel. The increase in tourism to Israel, after it had dropped following the war (which mainly affected aviation), as well as the considerable growth in the flow of crude oil (which affected the output of pipelines as well as shipping output), derive from the renewed economic growth in the industrial countries, which began in the second half of 1975. The effect of these factors on the expansion of this branch was greater than the negative effect of the economic activity in Israel. The developments in land transport derive generally from domestic economic development, since the demand for it is a derivative of demands in the various economic sectors.

The relative stagnation in the general product in 1976, which was accompanied by a decline in investments, especially in the building and earthwork branches, caused a drop in trucking branch output, which contributes over 23 percent of the branch product. The drop in real per capita income also affected the output from passenger transportation, which partially slowed and partially declined, together with the halt in the increase of private vehicles (and the level of motorization) for the second year in a row. This development was also affected by the restricted demand of the defense forces for transportation services, as reflected in special bus services and domestic civil aviation.

The support to the bus services increased considerably in 1976, due to severe liquidity difficulties. It appeared that the solution to the public transportation problem went beyond the framework of the branch, reflecting a general economic problem.

Communications product growth also slowed after deducting the output from services rendered to foreign factors. The communications product constitutes 29 percent of the transportation and communications sector. The real output of the shipping branch increased by over 4 percent in 1976. This increase resulted from a considerable growth in the transport of crude oil by Israeli shipping (most of it for transit purposes) as well as the continuing real growth in transport between foreign ports. The decline in real output stemming from both the transport of import goods, which dropped due to lower domestic demands, and leasing ships to foreigners, due to the liquidation of Maritime Fruit

TABLE XV-1  
 CHANGES IN REAL OUTPUT, PRODUCT, AND PRICES OF THE TRANSPORTATION AND  
 COMMUNICATIONS SECTOR, BY BRANCH, 1974-1976<sup>a</sup>  
 (percent)

	Estimated weight in GNP in 1975 (at 1978 prices)	Weight in revenue 1975	Output			Prices <sup>b</sup>			
			1969-1972 annual average	1974	1975	1976	1974	1975	1976
Domestic services	76.0	51.5	12.8	2.6	2.6	3.8	33.4	35.8	28.1
Land transport	40.4	31.3	8.4	-1.3	-1.9	-2.8	38.8	37.8	25.9
Buses and subway	12.1	9.1	6.4	-2.0	-1.2	-3.8	38.7	42.1	26.3
Taxis	4.3	3.6	4.6	-9.0	2.0	-2.0	42.8	36.6	36.0
Trucks	23.2	17.8	10.5	0.5	-3.0	-3.0	37.9	36.0	25.0
Railway	0.8	0.8	2.5	-1.2	-2.8	11.6	44.4	38.1	-
Other	35.6	20.2	22.3	9.3	10.1	14.1	25.1	32.7	30.9
Oil and gas pipelines	6.2	1.7	51.9	4.2	-17.5	27.2	25.5	48.6	31.8
Domestic air services	0.6	0.8	18.9	-4.9	10.9	-9.8	46.4	49.4	36.0
Posts and telecommunications	28.8	17.7	19.4	10.5	13.3	13.9	24.3	30.7	30.6
International services	24.0	48.5	12.1	9.6	-4.2	8.0	45.7	43.3	28.1
Shipping and ports	16.2	38.0	10.7	14.0	-2.1	3.0	50.2	41.8	25.9
Shipping	7.5	31.6	10.9	13.7	0.5	4.2	54.0	40.8	24.7
Ports	8.7	6.4	10.2	15.0	-13.8	-2.8	35.8	46.7	32.1
Civil aviation and airports	7.8	10.5	16.7	-1.6	-11.1	26.1	32.3	48.9	34.8
International aviation	6.4	9.7	16.5	-1.2	-11.8	25.8	33.2	48.3	34.4
Airports	1.4	0.8	20.8	-6.2	-1.6	28.3	21.3	56.4	39.6
Total output at market prices	100.0	100.0	12.7	5.8	-0.7	5.9	39.1	39.3	28.1
Estimated change in the sector's product, at fixed prices			13.4	4.3	-0.9	6.6			

<sup>a</sup> Revised data for previous years. Additional details regarding the calculations and sources for this table appear in the Appendix to this chapter, as well as in the chapter itself.

<sup>b</sup> Including the defense stamp duty on bus, railway, and postal services: excluding bus subsidies, the deficit of the railway, and the tax on air and sea travel. From 1976 these data include VAT collected from various subbranches.

Carriers, was partially offset by the increase in fuel transport and foreign interport activities.

The decline in the rate of port output slowed this year relative to 1975, due to a growth in export freights and the accelerated increase in container handling in imports. This increase did not suffice to offset the decrease in the quantities of conventional imported freight, and therefore total import freight quantities declined.

The real output of the aviation and airport branches showed impressive growth in 1976, mainly due to the increasing number of tourists arriving in Israel by air; 797 thousand tourists came to Israel in 1976 and converted \$ 292 million (according to conversion data of the banks only), an increase of 25 percent as compared with 1975. Direct income from tourism could apparently have been even higher, had the new incentive system for hotels been implemented prior to May 1976, or if another way to ensure a higher rate of exchange for tourists had been applied. Tourists tended to convert foreign currency on the black market when there was a considerable gap between the official rate of exchange and the black market rates. Direct income from tourism constituted 14-15 percent of total service exports in 1976.

The number of employees in the transportation, communications and storage sector also dropped in 1976 (data from manpower surveys); the slackening was distinct in land transport, mainly in freight. In contrast, the number of employees in the hotel branch increased at an average of 9.8 percent. Gross investment in the sector continued to show a real drop of 12 percent. A considerable part of investments in the sector is financed by the government, and the decline in investments reflects the policy to cut back on budgetary expenditure.

## 2. DOMESTIC TRANSPORT

### A. BUSES <sup>1</sup>

For the third consecutive year there was a downward trend in real output in bus services, at a rate of 3-4 percent. The real output deriving from passenger transport on regular lines, which constitutes about three-quarters of the branch output, continued to increase, but at a slower rate than in 1975; one percent, as against 3-4 percent. Due to free transport of soldiers on inter-urban lines, which began in June 1976 by government order, the comparison between 1975 and 1976 is unclear, since the government pays a fixed monthly sum for soldier transport. In general, the movement of passengers on regular lines continued to increase.

<sup>1</sup> The survey does not deal with tour bus companies, which are not connected with the cooperatives and are not included in the data of the Central Bureau of Statistics. However, the Dan Cooperative purchased the United Tours Bus Company (whose output was not previously included in transportation statistics), and has been operating since September 1976.

The standstill in economic activity and drop in real per capital income in 1976 have contradictory effects on the change in demand (and output) for transport services on regular lines. A decline in income does cause a drop in total demand for transport, but it also has a wider effect: different income flexibilities may effect the intensity of demand for bus services.

In spite of the rather limited elasticity of transport demand relative to price, the change in relative prices of transportation in 1976 apparently caused a growth in the use of bus services. Bus fares increased by 50 percent during the year, within the framework of the government policy to limit the subsidies on vital items and services<sup>2</sup>, but the average annual real price of bus services declined in 1976. In addition, bus fares also decreased in relation to taxi fares and the cost of private vehicles, in both urban and inter-urban services.

The output of passenger transport in special journeys and tours decreased by 20 percent in spite of the considerable increase in tourism. This development was apparently the result of the limiting of defense system demand for these services, and the propensity of enterprises to transport their employees by alternative, cheaper transport methods (such as vans and trucks). The number of workers in the branch was similar to the previous year, because of the decline in the number of cooperative members and an increase in the number of employees. Due to the financial (and social) situation of the bus cooperatives, there was a greater propensity to retire, and this was not offset by entrance of new members. In addition, the number of buses operated by the companies increased at the same rate as last year (see Table XV-1).

The input cost index for buses increased at a more moderate rate than in 1975, reaching 27 percent as compared with nearly 48 percent in 1975<sup>3</sup>.

In spite of the government economic policy to limit subsidies to services and products and the fare rise this year, subsidies actually paid to the bus cooperatives<sup>4</sup> more than doubled in 1976. Direct subsidies<sup>5</sup> actually paid to the cooperatives in 1976 totaled more than IL 560 million (IL 255 million in 1975); after deduction of defense levies and Value Added Tax (included in the fare, which was not increased with the imposition of VAT), net subsidies reached IL 475 million (IL 217 million in 1975). This means that

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<sup>2</sup> Fares were raised by 20 percent in March 1976, and by a further 25 percent in November.

<sup>3</sup> The rise in wages of the cooperatives' employees, as measured by the input cost index for buses, reached 32 percent in 1976. We are not in a position to compare it to the total employees in the economy. However, the average monthly wage per employee increased by 22 percent as against 32-33 percent in the economy and 23 percent to cooperative members.

<sup>4</sup> One must distinguish between the sum "due" to the cooperatives and that actually paid. We cannot distinguish between the various current subsidies and subsidies for covering past deficits.

<sup>5</sup> As opposed to the indirect subsidy through cheap credit, fuel prices, etc. Data on subsidies are from the Ministry of Transport.

the cooperatives' income from operating regular lines including net subsidies increased by over 45 percent, and the net subsidy constituted 34 percent of the total income of the cooperatives from these services, as against 22 percent in 1975. In spite of the considerable increase in subsidies, the cooperatives (especially Egged) faced severe liquidity difficulties which on several occasions threatened to stop transport, and they were in need of credit either directly from the government or with government guarantees.

According to the findings of the Golomb Committee, which examined ways to fix prices and the general financial situation of the public transport cooperatives, their cumulative deficit as of March 31 1976 was estimated at IL727.1 million, long-term liabilities amounted to IL 398.4 million, and short-term liabilities, IL 583.8 million.

In view of the volume of subsidies granted to the cooperatives and the scope of their accumulating deficits, it seems that the government must reexamine its policy regarding the total price and support of public transportation. Profit and loss of the various lines is not necessarily the exclusive criterion for granting support. In our opinion, the services entitled to be subsidized are those giving the economy extrinsic advantages, such as: shortening the duration of rides, reducing air pollution and accidents, saving on fuel and other inputs. Those are to be valued only in relation to the total transport system, examining the relative efficiency of the various transport means under different operating conditions (urban and inter-urban journeys, peak and nonpeak hours, etc.).

In 1976, as in 1975, there was only a moderate increase in the number of private vehicles compared with the rapid growth in the 60's and until 1974. The level of motorization also increased at a slow rate.<sup>6</sup> This is particularly noteworthy in view of the administrative prohibition on vehicle imports until September last year, and the increasing prices of vehicles in 1975.

## B. TAXIS<sup>7</sup>

The decline in total real output of the taxi branch is estimated at 2 percent for 1976, as against an increase at a similar rate in the previous year. Since the taxi supply grew by 6 percent (an addition of 275 taxis), the output per taxi dropped. The development throughout the year was not homogeneous: in the first half, the output increased (as compared with the parallel period in 1975), but in the second half of the year, and especially in the last quarter, there was a considerable decline in the branch. The output

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<sup>6</sup> The degree of motorization (in terms of private cars per 1000 people) amounted at the end of 1976 to 81.9 as compared with 80 in 1975, 78.2 in 1974, 70.1 in 1973, and 61.2 in 1972. In 1976 there was no change in the average distance traveled per private car, following a reduction of 11-12 percent in 1975 as compared with 1974.

<sup>7</sup> Excluding tourist taxis, independent car rentals, and vehicles operated by tourist agents and hotels. The estimates of changes in output are not obtained directly, but are within the limits of estimates of partial reports received from the branch and data on the situation of taxis from the Central Bureau of Statistics.

of inter-urban services increased at an annual average of 2-3 percent, apparently due to the income tax reform, which intensified the use of taxis by part of the public, as against traveling in private cars. The addition of taxis is not related to any increase or decrease in the profitability of the branch since the concession for a taxi is not granted against any financial investment, and furthermore, it entitles its owner to an annuity. The drop in short-term profitability in the taxi branch does not necessarily lead to the conclusion that addition of taxis has no economic logic, since it is possible that for certain uses taxis have a relative advantage over subsidized bus services.

### C. ROAD HAULAGE<sup>8</sup>

Output of the trucking branch dropped by 3-4 percent in 1976 following a similar drop in 1975. This resulted directly from the decline in the activity of the construction branch and domestic investments, which worsened this year. The construction and site-work branches, and the secondary industrial branches which directly serve the construction branch, have considerable weight in transport in the trucking branch (20-25 percent), and hence the sensitivity of trucking output to developments of those branches. Changes in industrial branch demand affected the trucking branch differently: the food branches, plywood industries, paper and printing, rubber and plastics, where the demand for transportation services increased; and in the opposite direction the nonmetal mineral branches, cement and cement products, metal pipelines and machinery where demand for transportation services decreased in comparison with 1975. Transportation of the agricultural branches, which constitutes over 18 percent of the total output of trucking, dropped by 2 percent this year, as against 7 percent in 1975. There was a moderation of the decline in the movement of freights in the country's ports.

Since the Yom Kippur War the trucking branch has been harmed by lessened demand in the economy and by over-capacity of the various kinds of trucks, which is the result of the policy to encourage imports of these vehicles. The special financing terms for trucks ceased in 1976, and for the first time there was a decline of 5 percent in the number of trucks.<sup>9</sup> The decline resulted from scrapping vehicles and the rise in prices of new vehicles, especially large vehicles, in the last two years, which deterred the transporters, in view of the slump in transportation and the uncertainty as to the prospects of recovery of economic activity.<sup>10</sup>

<sup>8</sup> Changes in branch output are not measured directly, but by indicators such as the industrial production index, the agricultural market, investment in construction, site-works, etc. thus estimates of output changes must be considered with caution. The definition of the branch covers all trucks, including self-owned trucks of factories and farms. This definition is different from the customary one in national accounting.

<sup>9</sup> Trucks allowed to carry over 2.5 tons; their number reached 15.7 thousand in 1976.

<sup>10</sup> The demand for locally assembled vehicles (Leyland Ashdod) also dropped sharply and reached a level which puts in doubt the future of the plant.

In addition to the lowering of investments and employment in the branch,<sup>11</sup> competition among the transporters intensified for the second year in a row, and was expressed in price increases which were actually lower than those approved by the government. Annual average prices increased by 24-25 percent, as did the average for all types of transportation. The full tariff rise was realized by the transporters in 1975 and 1976 only in organized places of work such as government and public institutions, citrus transportation, etc.; even in tenders prices decreased, mainly in siteworks and road building. In other fields, price rises were relatively moderate, and in most cases did not correspond with the increase in operational expenditures. In view of this, overloading conditions developed, because some of the vehicles were laid off and the rest overloaded, against manufacturers' instructions and contrary to traffic regulations. This creates a short-term rise in profitability, but in the long run it causes accelerated depreciation of both the vehicles and the road system.<sup>12</sup>

In order to halt the harmful effects on the branch and its profitability, the transporters demanded obligatory minimum prices, licensing of entry into the branch, and the layoff of some trucks within an unemployment insurance agreement.

#### D. RAIL TRANSPORT

The real output of the railroad<sup>13</sup> increased by 11-12 percent in 1976 which is an outstanding rise as compared with previous years, even if it is slightly overestimated. The increase was especially distinct in freight transport, whereas output deriving from passenger transport declined.

The growth in freight transport derives mainly from the recovery from the 1975 slump, not directly related to the domestic market, in such areas as the transport of phosphates and potash for export, which increased at a rate of over 10 percent in 1976. There was also an accelerated rise in container transport to and from Haifa port, due both to the accelerated transition to handling export and import freight in containers, and to the complete standstill of the container terminal in Ashdod owing to labor disputes. The extensive use of containers, which gave preference to the railroad over trucks, was accompanied by severe price competition between these two branches.<sup>14</sup>

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<sup>11</sup>This can be learned from manpower surveys on employees in land transport.

<sup>12</sup>Even a restriction of this phenomenon will require a considerable rise in tariffs. It seems that from the general economic point of view the supply surplus in the branch should be utilized in order to enforce the law and prevent negative effects.

<sup>13</sup>Output is defined as revenues in fixed prices. There is apparently an underestimate in the price index which already overestimates the projected changes in real output at a rate of 2-3 percent.

<sup>14</sup>In spite of an average decline of 4-5 percent in the number of workers, railroad expenditures increased by 47 percent, as against an increase in income of 12 percent, excluding government support. The total deficit of the railroad in 1976 amounted to IL 111 million (not including activities in the Gaza Strip).

TABLE XV-2  
TELEPHONE SERVICES, 1972-1976

End of year	Direct subscriber lines connected <sup>a</sup>	No. of installations	No. of applications	Applications outstanding <sup>b</sup>	No. of telephone calls	Percent annual change			
						Installations	Applications	Applications outstanding	No. of calls
		(thousands)			(millions)		(percent)		
1972	444.1	48.6	94.2	127.0	1,609.9	13.6	20.9	46.0	16.1
1973	494.2	54.5	77.3	144.1	1,786.2	12.1	-18.0	13.5	11.0
1974	533.2	45.3	74.8	166.9	1,936.4	-16.9	-3.2	15.8	8.4
1975	583.6	54.0	75.6	179.6	2,220.2	19.2	1.1	7.6	13.6
1976	627.0	52.3	66.5	185.1	2,555.8	-3.1	-12.0	3.1	16.2

<sup>a</sup> A direct subscriber line is defined as a connection from a central exchange to a subscriber (a subscriber may have more than one direct line).

<sup>b</sup> Applications outstanding is defined as the number of applications still pending from previous years and installations in process at the end of the year. Data for previous years has been adjusted.

SOURCE: Ministry of Communications data and Central Bureau of Statistics.

### 3. PIPELINE, DOMESTIC AIR SERVICES AND TELECOMMUNICATIONS

#### A. PIPELINES

Following the economic recovery of the industrial countries in 1976, the world demand for crude oil increased. Maritime commerce in crude oil, which fell by 7-8 percent in 1975, increased this year by more than 12 percent. This development had a positive effect on the Eilat-Ashdod crude oil pipeline as well, and 20 million tons of crude oil for transit flowed through it – an increase of nearly 54 percent as compared with 1975. In contrast flow to the domestic market – for consumption, storage and refining for export<sup>15</sup> – declined. The total flow of crude oil in the pipelines, including the flow from Ashkelon to Haifa, amounted to 26.8 tons in 1976, as against 20.2 tons in 1975. The growth in the flow of fuel in transit was enabled apparently, because of the changes in flow terms, which ensured a more efficient utilization of the tankers serving it. The flow of crude oil was especially accelerated in the last months of 1976, in view of world fears that OPEC would increase the prices of crude oil at the beginning of 1977.

The flow of distillates and gas in the pipelines decreased in 1976. Total real output of the branch (revenue at fixed prices) increased by 28 percent, after a decline of 17.5 percent in 1975.

#### B. DOMESTIC AIR SERVICES

The real output of this branch dropped by 10 percent in 1976, due to the decrease in the number of passengers flying with "Arkia" in the second half of the year. The annual averages of regular flights did increase, but parallel to that the number of passengers on special flights, mainly from the defense system, declined by a third.

A slowdown in regular flights (and the decrease in the second half of the year) occurred in spite of the growth in tourist traffic to Israel<sup>16</sup> because of a drop in the number of vacationers flying to Eilat, the cutback in the number of flights of Eilat residents (which was affected by the closing down of the Timna enterprise), the rise in tariffs, and the canceling of discounts, as well as the diversion of passengers from domestic flights (Lod-Eilat) to international lines (from Europe direct to Eilat). All these caused a decline in the utilization of the aircraft and their occupancy.

#### C. TELECOMMUNICATIONS<sup>17</sup>

The weight of the telecommunications branch in the total product of transportation and communications was over 30 percent in 1976 and has been in an upward trend in

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<sup>15</sup> After the return of the Abu-Rodeis oil fields, the imported oil supply structure changed, as did its quality.

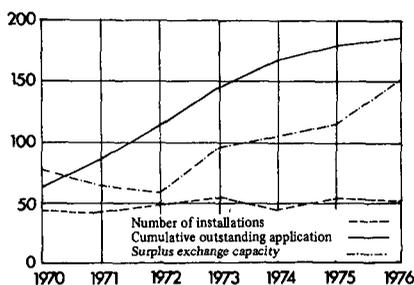
<sup>16</sup> Those constitute over a quarter of the regular passengers of Arkia.

<sup>17</sup> Not including postal bank activities.

recent years. The growth rate of the branch real output did not change significantly, but after deduction of output deriving from services rendered to external factors (including the defense system), output increased by 10 percent, as compared with 15-16 percent in 1975.<sup>18</sup> Real output in telephone services in 1975 and 1976 increased by 16 and 13 percent respectively (see Table XV-2).

The fall in real per capita income, the decline in the number of new flats, and a 40 percent increase in installation fees,<sup>19</sup> all caused a 12 percent drop in the number of new telephone lines. The number of installations also dropped, and during the year 52,300

FIGURE XV-1  
TELEPHONE LINES: NUMBER OF INSTALLATIONS AND DEMAND SURPLUS  
(in thousands)



SOURCE: Bank of Israel computations based on Ministry of Communications data.

new telephones were installed. (The average cost per telephone line amounted to IL 18–20 thousand.) The decline in the number of installations is explained by relatively more line transfers, organizational changes in the Ministry of Communications, and a few months delay in installations prior to the rise in tariffs, and also because of labor disputes. Following this, the demand surplus slowed down, reaching 185 thousand at the end of the year (see Table XV-2 and Figure XV-1). There is no doubt that part of the pending applications are inactive, deriving from long waiting periods and the fact that applicants are not required to pay any fee upon filing the application.

<sup>18</sup> The measured changes of annual output must be regarded with caution, due to irregularity in the registration of collections for services rendered to external factors, especially the defense system. Physical indicators, which are generally reliable as to the division of activities over the years, were confused at the end of 1975 and the beginning of 1976 because of labor disputes, which prevented meter readings for telephones and collection of fees for services rendered. Too much importance should not be attributed to the rate of growth in real output in the years 1975 and 1976.

<sup>19</sup> As from August 1976 the installation fee was raised to IL 1,500 with an advanced payment for the first 3,000 meter pulses.

The current consumption of telephone services accelerated in 1976, apparently because of the drop in the relative price of communications, as compared with the general price index and passenger transport services, with which there is a certain degree of substitution. The share of households in the total lines installed exceeds 75 percent (the public sector, 8 percent) whereas in income their weight constitutes only 23 percent (the public sector, 35 percent).

IL 930 million were invested in telecommunication services in 1976-77, as against IL 568 million in 1975-76. Out of this amount 58 percent was invested in telephone exchanges. In view of the 19-20 percent unutilized capacity of exchanges, one can draw the conclusion that in the short term at least there was an overinvestment in exchanges in relation to national network development. This phenomenon derived from the general budget cutback, preventing complementing investments, as well as undertakings towards the local electronics industry, which suffers from a production capacity surplus in view of the present rate of installations.<sup>20</sup>

According to Ministry of Communications data, the real per line return is 9-10 percent; if we add to that the extrinsic advantages provided by this branch to the economy, one should apply criteria of investment profitability in communications, when intending to cut back on the budget of the Ministry of Communications.<sup>21</sup>

In view of the budgetary restrictions, which prevent a balanced development of the telephone system the reduction of manpower in the branch (an average decline of 2-3 percent in 1976), and wage problems, the suggestion to form an independent telephone company, enjoying more freedom in recruiting manpower and financing resources, was raised again.<sup>22</sup>

#### 4. INTERNATIONAL TRANSPORT SERVICES

##### A. SHIPPING<sup>23</sup>

The real output of Israeli shipping increased in 1976 by more than 4 percent, following a standstill in 1975. Total output prices (in foreign currency) did not change significantly, for the second year in a row, whereas freight transport prices slowed down dis-

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<sup>20</sup> The capacity surplus of exchanges derives from lack of investment division, and the necessity for each exchange to have a reserve of vacant lines.

<sup>21</sup> Income of the communications branch in 1976 amounted to IL 3 billion, out of which IL 2.3 billion come from telephone services.

<sup>22</sup> At the end of 1976 the Ministerial Committee for Economic Matters decided to examine the suggestion.

<sup>23</sup> The activities of shipping firms are surveyed here. From 1974 the activity of the Citrus Marketing Board is included in the shipping branch. As to oil, the output data include income of companies operating tankers, no matter whether they own or lease them.

TABLE XV-3

ISRAELI SHIPPING REVENUE AND OUTPUT GROWTH, 1974-1976<sup>a</sup>

	1974	1975	1976	Distribution of revenue			Annual change in real output	
				1974	1975	1976	1975	1976
	(IL million)			(percent)				
Cargo (incl. fuel) <sup>b</sup>	2,321.2	3,268.3	4,380.8	90.2	89.8	92.6	1.4	6.9
Imports	( 590.5)	(1,440.7)	(1,691.2)	(36.9)	(39.6)	(35.7)	..	..
Exports	( 239.5)	(410.9)	(503.6)	(9.3)	(11.3)	(10.7)	..	..
Between foreign ports	(1,131.3)	(1,416.7)	(2,186.0)	(44.0)	(38.9)	(46.2)	..	..
Charter leasing <sup>c</sup>	199.5	321.6	312.8	7.8	8.8	6.6	0.7	-17.7
Miscellaneous	52.0	51.7	38.8	2.0	1.4	0.8	-36.0	-40.2
Total revenue	2,573.3	3,641.6	4,732.4	100.0	100.0	100.0	0.5	4.2

<sup>a</sup> 1976 data are provisional. 1975 data have been corrected.

<sup>b</sup> Including oil in transit. The change in real output resulting from transport of fuel (for import and in transit) from 1975 to 1976 was 46.4 percent.

<sup>c</sup> Revenue from chartering vessels between Israeli companies amounted to IL 258 million in 1974, IL 475 million in 1975, and IL 538 million in 1976.

tinctly as compared with 1975.<sup>24</sup> After deducting the changes derived from crude oil transports in tankers, especially oil for transit, the volume of which is not influenced by the Israeli economy, we learn that output dropped 5-6 percent, as compared with a similar increase in 1975.

Several important factors affected the development of Israeli shipping in 1976. The considerable real growth in crude oil transport, especially for transit purposes to the Eilat-Ashkelon pipeline, had been a negative factor in 1975, though less intense. The quantity of crude oil for the Israeli economy declined somewhat, but due to the change in oil resources (after the retreat from Abu-Rodeis) the transported ton/kilometers increased considerably, and this is the determining variable in shipping output.

The quantity of import freight to Israel declined in 1976 following the slowdown in economic activity. Also, the share of the shipping branch in imports dropped, following the American companies' demand to participate in transport to Israel, as provided by regulations concerning transport of goods supplied through American aid.<sup>25</sup>

Parallel to that, total export transport also declined, in spite of the doubling of the growth rate of general freight transport (most of it industrial exports).<sup>26</sup> Following this development, some unemployment appeared on lines to and from Israel, and the surplus capacity of the Mediterranean transport lines was distinctive. Another reason for this surplus was the objection of the Zim seamen to the sale of a number of old ships. Transport between foreign ports accelerated in 1976, and in sum, it appears that 53 percent of Israeli shipping income derived from activity not directly connected with the Israeli economy (as against 48 percent in 1975 and 52 percent in 1974), namely from transport of freights and oil, and leasing ships to foreigners (see Table XV-3).

Net profits of the Zim company in 1976 amounted to IL 29.1 million, compared to IL 77.5 million in 1975.

Output deriving from leasing ships decreased in real terms in 1976, mainly due to the events that caused the liquidation of Maritime Fruit Carriers. The collapse of this

<sup>24</sup> The estimated price change in shipping is calculated by weighting the price change in freight transport, oil and leasing fees. In measuring the price changes for freight transport (on the Zim lines), a fixed basket of total freight according to lines was taken into account. Since the change in revenue per freight-ton in each line serves as an indicator of price changes, the price index will be deflected when the freight composition on the line differs, and consequently the output index in fixed prices will be deflected. One should therefore be careful when comparing the output of the two. The tariff rise at the beginning of 1976 was only partially realized, and the tariffs designated in English pounds dropped in dollar terms, due to the weakening of the pound sterling during 1976. The total increase of freight transport on the various lines (in foreign currency) was one percent, as against over 10 percent in 1975.

<sup>25</sup> The drop in the quantity of imported general freight halted in 1976. In the last month of the year it even recovered. The part of the Israeli shipping in imports was 62.9 percent as against 69.7 percent in 1975.

<sup>26</sup> The share of Israeli shipping in Israeli exports was 54.7 percent in 1976, as against 57.9 percent in 1975.

TABLE XV-4  
ISRAEL'S MERCHANT FLEET, BY TYPE OF SHIP AND TONNAGE, 1973-1976

Type of ship	Number of ships				Tonnage at end of year				Annual change in carrying capacity <sup>a</sup>			
	1973	1974	1975	1976	1973	1974	1975	1976	1973	1974	1975	1976
					(thousands deadweight tons)				(percent)			
General	55	53	53	55	527.7	525.7	527.7	557.5	29.6	20.3	1.1	1.3
Refrigerated	8	8	9	3 <sup>c</sup>	77.7	77.7	79.4	6.7 <sup>d</sup>	-6.6	-6.1	0.2	-46.8
Bulk carriers	19	19	18	19	913.6	889.8	889.8	946.1	-0.9	-0.4	-2.6	1.0
Total dry cargo <sup>b</sup>	82	82	80	77	1,519.0	1,493.2	1,496.9	1,510.3	7.0	6.1	-1.0	-1.9
Tankers <sup>c</sup>	23	23	27	26	2,372.5	2,981.9	2,986.2	2,943.9	12.3	20.1	16.7	-1.0
Total cargo ships	105	105	107	103	3,891.5	4,475.1	4,483.1	4,454.2	10.1	14.4	10.0	-1.3

<sup>a</sup> The carrying capacity of cargo ships is calculated as the product of the tonnage, speed, and percentage of the year during which the vessel was Israeli-owned. Data from previous years have been corrected.

<sup>b</sup> Excluding tankers.

<sup>c</sup> Excluding tankers belonging to Maritime Fruit Carriers, which sailed under a foreign flag and hence are not treated as Israeli-owned shipping; revenue from their operation is not included in Israeli shipping revenue. Only part of the tanker fleet of another company is included in the number of Israeli tankers, but the company's total income from the transport of oil is included in the revenue data.

<sup>d</sup> Beginning from July 1976 this does not include ships owned by Maritime Fruit Carriers, even though not all of the ships were formally removed from Israeli registration.

SOURCE: Based on data of the Central Bureau of Statistics and of the Shipping and Ports Division of the Ministry of Transport.

company in 1976, which was followed by the sale or foreclosure of refrigerated ships under the Israeli flag, was due to financial difficulties facing the company, which had already begun in 1974, and worsened in 1975. The difficulties were caused by financial obligations which the company undertook in 1972 to finance construction of tankers; expectations of profits were not realized because of the severe slump that affected the oil transport market after the Yom Kippur War.<sup>27</sup>

The transport capacity of the Israeli commercial fleet decreased in 1976, while at the same time the slow modernization process of the cargo fleet continued (see Table XV-4); \$ 53 million was invested in new ships in 1976.<sup>28</sup>

World shipping started recovering following the recovery of the industrial countries from the slump of 1974-1975 and the rise in world trade. Total world maritime trade increased by 8 percent in 1976 (about 10 percent in ton/kilometers); the increase in quantity of crude oil transported was substantial, whereas the volume of other goods increased by 5 percent, in contrast to a similar decline in 1975. The number of idle ships in the world declines by a third this year, transport prices stabilized generally at the 1975 level, and maritime transport tariffs increased at a slower rate, following the drop in the inflation rate in the West.

## B. PORTS

The declining rate of real output of the ports slowed from 14 percent in 1975 to 3 percent this year. This change reflects a moderate drop in total freight passing through the country's ports: import freights, which are responsible for 84 percent of the ports' income, dropped more moderately than last year - 4.4 percent as compared with 14.4 percent. The halt of the decline in general freight quantities and the doubled growth rate of freight conveyed in containers which increased by 23.3 percent (about a quarter of the ports' income) were most outstanding.

The quantity of export freights, which dropped in 1975, increased in 1976 by more than 5 percent, the outstanding increase being in quantities of phosphates and container freight (see Table XV-3). The stability in freight quantities and the accelerated transition to handling in containers permitted the continued reduction in the number of workers; the number of employees, which fell by 9.5 percent in 1975, continued to drop at an average of 7 percent in 1976.

The share of Haifa port in output increased in 1976 at the expense of Ashdod port, due to labor disputes which shut down the container terminal as well as the bulk cargo

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<sup>27</sup> These developments express the long-term advantages in developing the Israeli fleet, which is based on risk dispersal, by acting on various lines, some of which are unconnected with the Israeli economy, and by entering medium- and long-term lease contracts that reduce harmful effects on shipping under conditions of conjunctural changes.

<sup>28</sup> Parallel to that, ships were sold for \$ 39 million (including the sale of the passenger liner Dan, and three of the eight refrigerated ships belonging to Maritime Fruit Carriers).

installation. This has economic implications beyond the ports: transport lines to and from Haifa are longer, and the use of one port instead of two caused an overloading on the lines. Besides the immediate distortion which the labor disputes caused in Ashdod port, they also caused a significant increase in the cost of transport to the economy, and an inefficient utilization of investments in the ports.

### C. INTERNATIONAL AVIATION

In 1976, international aviation came to a turning point after the slump in traffic in 1974–1975. Operating costs increased sharply in these years, mainly because of the increase in fuel prices and slackened demand for aviation services. The number of passengers increased only slightly on regular international flights, at an annual average of 5–6 percent, whereas in 1976 air traffic increased by 9–10 percent (according to preliminary estimates). This enabled the airlines to increase utilization of their aircraft, and some of them even managed to make operational profits, after years of heavy losses. On the North Atlantic route, which is the largest and most important international aviation route and where El Al also operates, traffic grew by 12 percent as against a drop of 6 percent in 1975.

These developments in world aviation also caused a considerable growth in the operations of El Al: total passenger-kilometers sold by El Al in 1976 increased by 34 percent, after a decrease of 14 percent in 1975 (see Table XV-5), on the North Atlantic route the increase in the number of El Al passengers was even more outstanding: 40 percent, compared with a drop of 22 percent in 1975. The considerable growth in the number of tourists arriving in Israel by air in 1976 (32 percent, see Table XV-4) caused a 22 percent increase in passenger traffic by air. Parallel to the growth in demand, El Al increased its seat-kilometer supply by operating its fourth Boeing 747 in April 1976. (This aircraft can also be used for freight transport.) The passenger occupancy of aircraft also increased, and the share of El Al in total passenger traffic at Ben Gurion Airport increased from 50.3 percent in 1975 to 53.5 percent in 1976, similar to 1974<sup>29</sup>. Real output deriving from passenger transport, and measured as revenue in fixed prices, decreased by 28.5 percent in 1976, and air fares increased by 35 percent on the average (including the influence of the devaluation of the Israeli pound). Price increases in foreign currency were smaller in 1976 than in the previous two years<sup>30</sup>.

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<sup>29</sup> In 1975 the share of El Al in the traffic of this airport decreased partly because of labor disputes.

<sup>30</sup> Air fares are fixed in local currencies, and therefore incomes change in dollar terms according to the fluctuations of the exchange rates in relation to the dollar. The income of El Al and other airlines operating in Europe were harmed in the first half of 1976 due to the noncoordination of air fares in Britain, France and Italy as required by changes in the exchange rates in relation to the dollar. This distortion was used by passengers in neighboring countries who found in this a way to reduce the air fare.

TABLE XV-5

**OUTPUT OF EL AL AIRCRAFT, 1973-1976<sup>a</sup>**  
(in owned and leased aircraft)

	1973	1974	1975	1976	Percent annual change		
					1974	1975	1976
1. Available seat-km. (million)	5,430	5,425	4,992	6,531	-0.1	-8.0	30.8
2. Revenue passenger-km. (million)	3,491	3,769	3,243	4,339	8.0	-14.0	33.8
Passenger load factor (2/1) (percent)	64.3	69.5	65.0	66.4			
3. Available ton-km., passengers and freight (million) <sup>d</sup>	809	777 <sup>c</sup>	728	892 <sup>b</sup>	-	-	22.5
4. Revenue ton-km. (million)	508	495 <sup>c</sup>	411	552 <sup>b</sup>	-	-	25.2
Ton-km. load factor (5/4) (percent)	62.8	-	60.6	61.0			

<sup>a</sup> 1975 data are corrected.

<sup>b</sup> Not including equipment leased to CAL.

<sup>c</sup> 1974 data on freight are only partial.

<sup>d</sup> For passengers, based on average weight of passenger.

SOURCE: El Al Airlines.

At the beginning of the winter of 1976, a new aviation policy concerning charter flights came into force, and permits for chartered flights within a controlled experiment were extended, after the government accepted the recommendations of a committee which examined the aviation policy; because of the short time the policy has been in effect, it is not yet possible to assess the results of that policy. Charter flights brought 36,300 tourists to Israel in 1976 (an increase of 64 percent), among them tourists who flew directly to Eilat, which especially benefited from this traffic. Transport of freight by air also accelerated in 1976, as compared with a drop in output in 1975. The growth in output<sup>31</sup>, including that deriving from the activity of CAL (Cargo Airlines) which began operating in November 1976, amounted to 17 percent.

<sup>31</sup> Measured in revenue at fixed prices.



The El Al convertible Boeing 747 aircraft was put into the service of CAL for transport of agricultural export freight and return freight. This means transport prices of agricultural exports prevailing when El Al operated the 707 aircraft prior to the incorporation of CAL could be cut in half. This change will no doubt have a far reaching effect on the possibilities of agricultural export. CAL flies what are clearly sea-freights (as return freight) at low marginal prices which are competitive with maritime transport, but the total profitability of its activity will be examinable only over a longer period<sup>32</sup>.

The total output of the branch increased by 25.8 percent. In spite of the considerable increase in output, El Al expects only to break even in 1976–77, following a loss of IL 19 million in 1975–76, as reflected in the company's books<sup>33</sup>. The average wage per employee in El Al increased by 45 percent (as compared with 32 percent in the economy). This increase derives partly from the fact that a part of air crew wages is paid in foreign currency.

#### D. AIRPORTS

The real output of the branch (measured in revenue at fixed prices), which reflects the activities in passenger and freight services and other ancillary services, increased by 22 percent, and freight movement by 34 percent<sup>34</sup>.

### 5. TOURISM<sup>35</sup>

Tourist traffic to Israel increased by 29 percent in 1976 as compared with 1975, which is 9.5 percent more than 1972, which was the previous peak year of tourism to Israel. The number of tourists coming by air showed an even more considerable increase – 32 percent (see Table XV-4). The total number of tourists who came to Israel in 1976 was 797 thousand<sup>36</sup>.

The recovery in tourism to Israel began in the second half of 1975, after a drop in 1973 and 1974 (see Figure XV-2). This development combined with the developments in world tourism, which recovered following renewed economic growth in most European countries and the United States. According to preliminary estimates, world tourism increased by 5–7 percent in 1976. However, the growth rate in traffic to Israel was outstanding, and only few countries can compare. We have no complete explanation for this development, and besides the world recovery, we can only assume a few other

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<sup>32</sup> El Al intends to form a subsidiary for charter flights of passengers and freight.

<sup>33</sup> The loss before "special items".

<sup>34</sup> In 1976, 18,500 tons of imports and 40,500 tons of exports were conveyed.

<sup>35</sup> Only foreign tourism to Israel is discussed here, and not internal tourism or Israeli tourism abroad.

<sup>36</sup> Not including 12,000 tourists coming from Arab countries to the administered areas.

TABLE XV-7  
HOTEL ROOMS, OCCUPANCY, AND EMPLOYMENT, 1972-1976

	1972	1973	1974	1975a	1976b	Annual change					1976
						1972	1973	1974	1975	1976	compared 1972
(percent)											
Number of hotel rooms (annual average)	20,629	22,366	22,372	23,606	24,196	4.8	8.4	-	5.5	2.5	17.3
In hotels recommended for tourists	17.124	18,755	19,681	20,656	21,474	8.9	9.5	4.9	5.0	4.0	35.4
In hotels of the two highest ratings	(7,071)	(8,700)	(9,875)	(11,172)	(11,560)	(17.5)	(23.0)	(13.5)	(13.1)	(3.4)	(63.5)
Occupancy ratio in hotels recom- mended for tourists (local and foreign)	59.3	48.5	47.6	44.2	51.1	-1.8	-18.2	-1.9	-7.1	15.6	-13.8
In hotels of the two highest ratings	(66.5)	(50.0)	(49.5)	(45.2)	(54.1)	(-5.9)	(-24.8)	(-1.0)	(-8.7)	(19.7)	(-18.6)
Number of employees in recom- mended hotels (annual average)	11,275	-	11,270	12,316	13,588	6.3	-	-	9.8	9.8	20.5

a 440 hotel rooms not rated in 1974 were graded 4-5 stars in 1975, grading of hotels with 446 rooms were changed.

b At the end of 1976 there were 21,625 rooms in recommended hotels, and a total of 24,197 rooms. Of these, 11,523 were rated either 4 or 5 stars (53 percent).

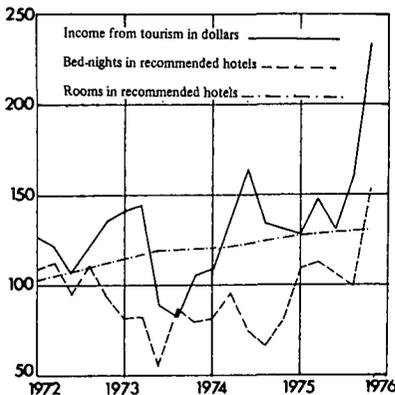
SOURCE: Central Bureau of Statistics.

causes; the lessened military tensions in the area since the separation agreements and the length of time since the 1973 war both had a positive effect. The special growth of tourism to Israel may also be an expression of delayed demand from 1974 and 1975. The weakening demand for traditional tourist markets such as Spain, Italy, Portugal and Lebanon also seem to have benefited Israel. The non-Jewish tourist regards Israel as a new tourist destination. The relative large supply of unutilized hotel services in Israel assists the marketing of tourist services abroad. The effect of the change in aviation policy (the extension of charter flights from October–November) had only a marginal affect on 1976 developments. It seems that the change is not related to the change of relative prices (as compared with other countries), since in spite of the devaluation, it has not been to the advantage of Israel<sup>37</sup>.

Income from tourism in foreign currency increased by 25 percent in 1976, while the average conversion per tourist declined (see Table XV–6). Comparison of the seasonally adjusted data (in this table) reveals a turnabout in the average conversion per tourist since June 1976<sup>38</sup>. The change is explained by the fact that as of May 1976, any tourist paying in Israeli currency for hotel services is subject to an additional payment of 28 percent on bills calculated in dollars. On the other hand, since mid-May, hotels have been

FIGURE XV-2

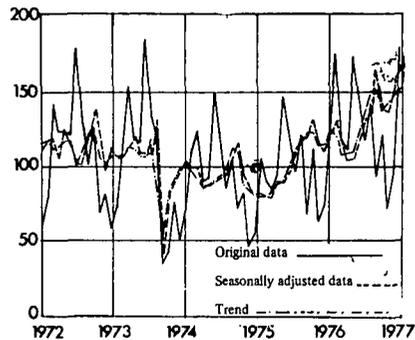
INDEX OF TOURIST BED-NIGHTS, INCOME FROM TOURISM, AND ROOMS IN RECOMMENDED HOTELS 1972–1976  
(Base: average 1972=100)



SOURCE: Central Bureau of Statistics and Ministry of Tourism.

FIGURE XV-3

INDEX OF MONTHLY TOURIST ARRIVALS, 1973–1975  
(Base: average, 1971=100)



SOURCE: Bank of Israel computations based on Central Bureau of Statistics data.

<sup>37</sup> The change in average output per hotel bed-night, which occasionally serves as a gross indication of price changes for tourists, shows an increase of 9–11 percent (in dollar terms), which is higher than European tourist countries. Hotel costs are estimated at 40 percent of tourist expenses in Israel.

<sup>38</sup> Regarding the overestimate in average conversion per tourist in 1975, see the Bank of Israel Annual Report 1975.

given incentives<sup>39</sup> according to actual conversion of foreign currency, and not according to income from calculated tourism incomes as was the rule up to that date. Until then, various causes influenced the decline in average conversion per tourist: the gap between the official rate of exchange and the black market rate, though that gap narrowed in 1976; the growth in the relative share of tourists from Europe (see Table XV-5) to 52 percent (excluding visitors on cruise ships); and a slight decline in the average stay per tourist. Because of the increase in price of services sold to tourists, they tended to buy more limited "package deals", limited their further purchases, and acquired more services outside the hotels, where the conversion rate in banks is lower. Comparison of conversion data between years 1975 and 1976, during June-December, revealed that tens of millions of dollars were not converted through the banks in the first half of 1976, and apparently in the second half of 1975 as well, when from the point of view of the tourist there was a negative incentive in conversion through banks. This is also the reason for underestimating the weight of tourist service exports, as indicated in the balance of payments. The share of direct income from tourism within total exports of services in 1976 was 14-15 percent (and even more in the export added value), as against 13 percent in 1975, and it amounted to \$ 292 million in 1976. It can be assumed, that a policy change allowing the tourist a higher rate of exchange not only for hotel services would ensure a much higher rate of conversion.

The number of bed/nights per tourist – which constitutes an adequate measure for the demand for tourist service output – increased in 1976 at a rate of 5.6 percent showing a growth of 5.2 percent as compared with 1972<sup>40</sup>. As to the hotel room supply, the freeze on hotel construction continued in 1976, and the entire addition of rooms, 400, was in projects being completed: in 4-5 star hotels no rooms were added during the period December 1975-1976<sup>41</sup>. The occupancy rate of rooms increased considerably due to the growth in demand and relative stability in supply and it reached 51.1 percent on the average (see Table XV-7).

The number of employees in tourist hotels increased at an average similar to that of 1975 – 9.8 percent. Their number ranged between 15,900 at the height of season in 1976, and 11,500 during the seasonal slump, the average being 13,600 workers.

The hotel-input price index increased by 34 percent in 1976, but the price increase in hotels – which is measured as revenues for bed/night (excluding the incentive) was higher than the growth rate of input prices. This ratio is contrary to that of 1975, due to the growing demand for hotel services in 1976, which restricted discounts.

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<sup>39</sup> Those change with the devaluations. At the beginning of 1976 the incentive rate per dollar of hotel income was a third of the incentive given to the highest value added group in industry, whereas at the end of 1976 it increased to 57 percent.

<sup>40</sup> The number of bed/nights of local residents decreased by 3-4 percent.

<sup>41</sup> Investments in tourism bases amounted to IL 248 million in 1976 (IL 204 million in 1975). Out of this, IL 162 million was invested in hotels (IL 157 million in 1975). These data indicate a real decrease in investments, continuing the recent trend.