CHAPTER XIV

TRANSPORTATION

THE REAL OUTPUT of the transportation sector rose by 7 per cent in 1963, reaching IL 930 million. This rate of growth was much lower than in 1962, when it amounted to 14 per cent, and lower than the average for the last six years. The deceleration was evident in land transport and the output of ports and civil aviation, especially the latter.

In civil aviation output grew by 5 per cent, as against 27 per cent in 1962. The major cause of this much lower rate was to be found on the supply side, payload capacity expanding to a lesser extent than in previous years. And even this limited increase was accompanied by a decline in the rate of utilization, which also contributed to the slower growth of output.

Moreover, there was a drop in El Al's share of traffic through Lod, from 59 per cent in 1962 to 56 per cent.

Table XIV-1

CHANGES IN REAL OUTPUT AND PRICES IN THE TRANSPORTATION SECTOR, 1962–63

(percentages)

Branch	Increase in output over previous year		Increase in prices over previous year		Weight in incremental output of sector in 1963
	1962[a]	1963	1962	1963	
Shipping	9	10[b]	59	5[b]	29
Civil aviation	27	5	38	—	7
Railway	18	9	8	2	6
Bus	5	4	12	9	13
Other road transport (mostly trucking)	17	9	10	2	40
Ports	9	3	21	—	5
All branches[c]	14	7	23	4	100

[a] Revised data.
[b] Provisional estimates.
[c] Weighted according to the Central Bureau of Statistics' estimate of value added in each branch.

The output of the land transport branches grew at about the same average rate as in recent years, but at a lower rate than in 1962. The railway's output in freight transport rose by 14 per cent, in contrast to a 1962 increase of 19 per cent, while the output of the trucking industry rose by 9 per cent as against 17 per cent the year before. The decline in the growth rate was apparently connected with the slower expansion of construction activity and of the volume of exports and imports passing through the country's ports.

In passenger transport, the output of the bus cooperatives was 4 per cent larger than in 1962, while the railway reported very little increase. The main reason for the latter was the fact that trains ran less frequently in the summer of 1963 than they had during the previous summer.

Output prices in the transportation sector rose to only a moderate degree in 1963, by an average of 4 per cent as compared with 23 per cent the year before. However, it should be emphasized that the 1962 increase was partly due to the devaluation, which had a particularly great impact on the prices of aviation and shipping services, where most transactions are carried out in foreign currency.

But the 1963 price rise was also more moderate than in 1960 and 1961. The major item pushing up the price level was bus fares, which were 9 per cent higher on the average than in 1962. The transport cooperatives thus increased their fares to a marked degree, in comparison with both the railway and taxis, for the fourth consecutive year.

Real investment in the transportation sector increased by 22 per cent, after having declined in 1962. Expenditure on equipment was 20 per cent higher, and that on buildings and roads, 23 per cent. The larger investment in equipment was the resultant of an even greater percentage increase in ships and commercial vehicles on the one hand, and no new investment in aircraft on the other. The larger outlay on construction was mainly due to the extension of the country's road network and the stepped-up pace of work on the new port of Ashdod.

1. Shipping[1]

Israel's merchant fleet received seven additional ships in 1963—five of them new—and disposed of three. Gross investment in ships reached IL 51 million at current prices—considerably more than in 1962.

The average carrying capacity of the cargo vessels (derived by multiplying the deadweight tonnage by the speed) was 14 per cent higher than in 1962. Output grew at a lower rate—approximately 10 per cent—so that there was a decline in the rate of utilization.

[1] This analysis is incomplete since a large part of the shipping companies had not completed their 1963 accounts at the time of this Report.

Table XIV-2

ISRAEL'S MERCHANT FLEET, BY TYPE OF SHIP, GROSS REGISTERED TONNAGE, AND DEADWEIGHT TONNAGE

Type of ship	Number of ships		Gross registered tonnage		Deadweight tonnage	
	1962	1963	1962	1963	1962	1963
Passenger	4	4	30,853	27,756	9,184	8,015
Mixed[a]	2	2	19,708	19,708	13,371	13,371
Tankers	8	7	130,747	121,674	203,006	190,258
Cargo	57	62	316,878	372,996	438,785	518,544
Total	71	75	498,146	542,134	664,346	730,188

[a] For both passenger and cargo traffic.

The average age of the ships remained almost the same as in 1962—about five and a half years.

The international shipping market made a marked recovery in the second half of 1963. Shipping rates rose steeply in the wake of the Soviet-U.S. wheat agreement. According to the index published by the United Kingdom Chamber of Shipping, average cargo rates for shipping on voyage charter[1] advanced by 22 per cent over 1962, and those for shipping on time charter[2] by 18 per cent.

Table XIV-3

MARITIME FREIGHT TRAFFIC TO AND FROM ISRAEL,[a] BY FLAG, 1958-63

Year	Imports		Exports		Total	
	All flags	Percentage share of Israeli flag	All flags	Percentage share of Israeli flag	All flags	Percentage share of Israeli flag
1958	1,648	30	773	26	2,421	29
1959	1,882	39	1,092	22	2,974	33
1960	2,035	41	1,179	25	3,214	35
1961	2,155	43	1,064	31	3,219	39
1962	2,402	51	1,106	34	3,508	46
1963	2,288	56	1,314	30	3,602	47

[a] Excluding fuel.
SOURCE: Israel Ports Authority.

[1] Voyage charter index.
[2] Time charter index.

The improvement was felt in particular by companies engaging mainly in tramp shipping—whether on time or voyage charter. Companies plying regular routes benefited to a smaller degree, since their freight tariffs are fixed for a longer period and do not vary from voyage to voyage. On the other hand, they suffered less from the depression that hit the shipping industry in recent years.

The manpower shortage became even more accute in 1963. This is reflected by the rising percentage of foreign seamen on board Israeli ships. At the end of 1963 they represented 22 per cent of the total complement, as compared with 17 per cent at the end of 1962. The main reason for the growing dimensions of this problem is the rapid expansion of the merchant marine on the one hand, and an insufficiently extensive maritime training program on the other. The growing demand for workers in the economy as a whole aggravates the problem.

(a) *Cargo traffic*

The share of Israeli-flag ships in the transport of cargo to and from the country continued to rise in 1963, though at a more moderate rate. In fact, the entire increase occurred in import cargoes, while the share of Israeli ships in export cargoes dropped from 34 to 30 per cent. There was also an increase in the percentage of cargo carried between foreign ports out of the total volume transported by the Israeli fleet.

(b) *Passenger traffic*

The growth of maritime passenger traffic to and from Israel continued to slow down in 1963. The number of passengers went up by 13 per cent, as com-

Table XIV–4

PASSENGER TRAFFIC TO AND FROM ISRAEL BY SEA AND AIR, 1959–63

Year	Sea			Air			Total	Per cent increase over previous year
	No. of passengers	Per cent of total passengers	Per cent increase over previous year	No. of passengers	Per cent of total passengers	Per cent increase over previous year		
1959	77,280	32	—	167,700	68	25	244,980	16
1960	97,680	31	26	219,100	69	31	316,780	29
1961	137,985	33	41	285,970	67	31	423,955	34
1962	175,730	36	27	311,000	64	9	486,730	15
1963	195,850	34	11	387,350	66	25	583,200	20

SOURCE: Aviation and shipping companies.

pared with 27 per cent in 1962 and 41 per cent in 1961. The transport of passengers in chartered vessels showed an absolute decline. No outstanding changes occurred in the relative share of the various routes.

2. Civil Aviation

After several years during which international civil aviation expanded at a much higher rate than the transportation sector as a whole, 1963 saw a slowing down in the increase, real output growing by only 5 per cent as against 27 per cent in 1962 and 48 per cent in 1961. The growth rate in passenger transport was even lower—a mere 3 per cent—while there was a 15 per cent rise in the transport of cargo. Output in 1963 amounted to IL 117 million at current prices.

The considerable deceleration in the growth rate was partly due to demand factors, but mainly to factors on the supply side.

El Al did not expand its air fleet in 1963, whereas in the two preceding years it had renewed part of its equipment by introducing into service a number of Boeing jets. At the end of 1963 El Al owned four Britannias (two of them leased to foreign companies), three Boeing 707's, and two Boeing 720B's.

In addition, there was a further drop in the relative share of chartered planes in El Al's total operations. Out of a total of 195 million ton-kilometers[1] performed in 1963, only 2.7 per cent was accounted for by chartered planes, as compared with 7.3 per cent of 187 million ton-kilometers in 1962. Thus, the decrease was not only relative but also absolute. A similar decline marked the share of the chartered planes in the overall load factor[2] and passenger load factor.[3] The increase in the performance of El Al's own equipment therefore exceeded the average increase, being 11 per cent greater than in 1962.

Since there was scarcely any change in the average daily utilization of El Al's own planes, it can be assumed that their payload capacity increased at the same rate as their load factor.

The average daily utilization of El Al aircraft in 1963 was 8.8 flying hours, as against 8.9 in 1962. For Boeing 707's the figure was 7.5, as compared with 7.7 for Boeing 720B's. As in 1962, average daily utilization went up during the peak season and dropped in the off-season.

Among the factors on the supply side responsible for the slower growth of output in 1963 was the strike of air crews in March.

The influence of demand on the slower growth of output is reflected in the drop in the passenger load factor during the year, the rise in seat-kilometers sold being smaller than that in seat-kilometers performed. The load factor was

[1] Cargo and passenger alike.

[2] Ratio of total revenue load carried to capacity provided.

[3] Ratio of passenger-kilometers flown to available seat-kilometers.

Table XIV–5

OPERATIONAL DATA OF EL AL, 1959–63[a]

Year	No. of flights	Hours flown	Km. flown (thousands)	Average kilometrage per passenger[b]	Index of payload capacity[c]	Per cent of capacity exploited[d]
1959	1,750	16,950	7,507	3,714	100.0	59.6
1960	2,065	18,899	8,509	3,709	118.8	63.3
1961	3,025	23,450	11,602	3,760	190.1	58.6
1962	2,978	20,317	12,357	4,062	250.0	56.1
1963	2,996	19,075[e]	12,365	3,749	264.0	54.6

[a] Including scheduled and special flights.
[b] Excluding special flights.
[c] Measured according to available seat-km.
[d] Passenger-km. flown as compared with seat-km.
[e] The decline in 1963 was due to the changeover to jet aircraft.
SOURCE: El Al.

54.2 per cent in 1963, as compared with 55.8 per cent in 1962. The decrease took place entirely on the North Atlantic line, where the rate dropped from 58.9 per cent to 49.1 per cent, while the European and South African lines registered a gain.

The fall in the passenger load factor was offset by a rise in the amount of cargo flown, and consequently the overall load factor scarcely changed in 1963.

Final figures on El Al's financial position in 1963 were not available at the time of this Report. Provisional indicators point to a deterioration—its deficit grew, amounting to some IL 6 million. The entire deficit was apparently caused by losses incurred in the first quarter of the year (mainly in March, the month of the strike), while in subsequent months the company even made a profit.[1]

El Al's deficit does not mean that the company does not benefit the economy. Aviation services are a distinct export item, and all income therefrom is converted at the rate of IL 3/$ 1, while branches producing for the local market enjoy high protective tariffs which sometimes raise their effective exchange rate considerably beyond IL 3/$ 1. Preliminary examination indicates that each dollar of value added costs El Al no more than IL 4. This does not exceed the usual cost in other branches, and is even less than in most of them.

In April the new IATA agreement came into effect. It abolished charter flights to Israel, introducing group flights in their place. In view of the effect that this is likely to have on the development of tourism, an increasingly important source of foreign currency, this decision is of great significance.

[1] Figures for the fiscal year 1963/64 (March 1963 to April 1964) received after the publication of the Hebrew edition of this Report show that El Al finished the year with a profit.

El Al's active support had a great deal to do with its adoption. The fares on charter flights are considerably lower than on regular flights, and a rise in the relative share of charter flights in the company's total operations reduces the average revenue per passenger. At the same time, charter flights tend to increase costs, since the company has to provide a special plane for each flight.

The major differences between charter and group flights are as follows:

1. In the case of charter flights, there must be some affinity between the passengers, such as membership in the same organization, but this condition does not apply to group flights.
2. Charter flights cannot be advertised, while group flights can be advertised through all the usual media.
3. Charter flights must be made in a special plane, while group flights can be incorporated with regularly scheduled flights.

The advantages of group flights as reflected in (1) and (2) are important in encouraging tourism; the use of advertising and the easing of restrictions on the group make-up will facilitate the organization of group tours to Israel.

The third difference represents an advantage primarily to the aviation companies: it permits them to attach groups to regular flights, thereby increasing the utilization ratio and reducing costs. However, group flights more closely resemble regular flights than charter flights, and hence are a better substitute for them. As a result, passengers may shift from regular to group flights, bringing down the average revenue per passenger-kilometer.

Despite the introduction of group flights, there was no improvement in 1963 in the passenger load factor. Even in the period between April and December, when the group flight arrangement was already in force, the load factor on the North Atlantic line fell off appreciably. This may reflect the fact that there had been a very high utilization ratio in the case of charter flights. There was a rise in the ratio on the European lines and on the South African line (where charter flights are not prohibited).

Another advantage of group flights is that they may help reduce the sharp seasonal fluctuations in tourism to Israel. Travel agents are usually reluctant to risk chartering a whole plane during the off-season because of the difficulty of gathering together a sufficient number of passengers; with group flights the minimum number of passengers required under IATA regulations is less, and thus the degree of risk assumed by the agent is smaller.

Obviously the contribution to tourism of group flights must be balanced against the fact that, though they are considerably cheaper than regular flights, they are somewhat more expensive than charter flights. And since the fare constitutes a large percentage of the total outlay of the average tourist coming to Israel, the increased expense may in itself cause a reduction in the number of tourists, or at least slow down the expansion of tourism.

As far as the economy is concerned, the aim must be to augment overall

income from both aviation and tourism. It should be noted that there is 60 to 70 per cent value added in income from tourism, while in the case of aviation it is below 20 per cent. Therefore, if the proposed solution involves a growth in income from aviation services while reducing that from tourism, forgoing one dollar gross income from tourism must be balanced by an increase of over three dollars from aviation if the economy's net income is not to be reduced.

The statistics so far available do not permit an unequivocal answer as to the best solution. In 1963, when group flights were first introduced, there was a marked advance in the number of tourists reaching Israel by plane—23 per cent more than in 1962, as against a 10 per cent rise the year before. However, it should be remembered that the low 1962 growth rate was a departure from the trend of preceding years, and thus the big increase in 1963 represents a return to this trend. It should also be noted that the IATA has made a number of exceptions to the ban on charter flights, permitting certain groups to be flown at special rates actually equivalent to those of charter flights. These groups include pilgrims and members of various clubs, such as the Club Méditerranée. The greater the number of exceptions, the less likely it will be that the shift to group flights will raise the effective price, and this may serve as a spur to tourism.

3. Ports

The real output of Israel's ports advanced 3 per cent in 1963, as compared with 9 per cent in 1962. The volume of cargo handled rose from 3,508,000 tons to 3,602,000. The slower growth rate was entirely due to an absolute decline in import cargoes. At the same time, there was a considerable increase in the volume of exports passing through the ports, thus checking the downtrend in the relative share of such cargoes. In 1963 exports accounted for 36.5 per cent of the total volume handled, as against 31.5 per cent in 1962.

The decrease in imports, which reached 5 per cent, occurred in general cargoes, while grain shipments, which accounted for a larger percentage of total imports, were 6 per cent larger then in 1962.

Export cargoes increased to the marked extent of 19 per cent. The increment was accounted for by Haifa and Jaffa Ports, while Tel Aviv showed no change and Eilat registered a lower figure. The main rise was in citrus exports, up 31 per cent, and in minerals, up 55 per cent.

There were no significant changes in the relative proportion of cargo handled by the various ports. The percentage going through Haifa and Jaffa increased slightly, and that going through Tel Aviv and Eilat decreased slightly.

The average level of port charges remained the same in 1963—following a steep rise in 1962, which was partly due to devaluation (this caused an automatic rise of 67 per cent in charges collectible in foreign currency) and partly to the raising of certain rates.

Table XIV-6

CARGO TRAFFIC THROUGH ISRAEL'S PORTS, 1962-63

Port	Unloading			Loading			All cargoes		
	1962	1963	Per cent increase or decrease (-)	1962	1963	Per cent increase or decrease (-)	1962	1963	Per cent increase or decrease (-)
				Thousands of tons					
Haifa	2,025	1,934	-4	903	1,125	25	2,928	3,059	4
Tel Aviv	204	167	-18	1	—	—	205	167	-19
Jaffa	122	128	5	63	78	24	185	206	11
Eilat	51	59	16	139	111	-20	190	170	-11
All ports	2,402	2,288	-5	1,106	1,314	19	3,508	3,602	3
				Percentages					
Haifa	84	85		82	86		84	85	
Tel Aviv	9	7		—	—		6	5	
Jaffa	5	6		6	6		5	6	
Eilat	2	2		12	8		5	4	
All ports	100	100		100	100		100	100	

SOURCE: Israel Ports Authority.

Investment in ports rose considerably in 1963, by 22 per cent, and totalled IL 28 million. The major increase was in the development of Ashdod Port. Investments were also made in the ports of Haifa and Eilat.

In view of the substantial expansion of import and export cargoes anticipated in the coming years, the congestion in Haifa Port presents an increasingly grave problem. The completion of Ashdod Port on schedule is a must if bottlenecks are to be avoided at Haifa, with their resultant increase in demurrage charges and considerable losses to the economy.

4. LAND TRANSPORT

Internal land transport includes the railway and motor transport. In the conveyance of passengers and freight, motor transport accounts for by far the larger proportion of the market—more than 90 per cent in respect of passengers and 80 per cent in respect of freight.

Real output in the transport of passengers rose by 3 per cent in 1963, reaching IL 210 million. The increase in freight haulage came to about 10 per cent. The railway's limited role in land transport is mainly due to technical reasons: the more homogeneous the cargo, the bigger its bulk, and the longer the distance.

the more advantageous it is to ship by rail than by truck. And conversely, the more heterogenous the cargo and the greater the geographical dispersion between points of origin and destination, the bigger the advantage of motor transport over the railway.

While real output in passenger transport has generally expanded at a steady rate, there have been considerable fluctuations from year to year in the real output of freight haulage. This is because the conveyance of passengers is influenced by factors which change only to a relatively limited extent: the size, income, and geographical distribution of the population. On the other hand, cargo volume depends on developments in other sectors: changes in the volume and geographical distribution of construction activities, for example, are calculated to cause fluctuations in the volume of freight carried. The construction of Ashdod Port, to take a specific case, has increased demand for transport services for the haulage of stone, chiefly benefiting the railway. An exceptional expansion of import and export cargoes, such as the large citrus exports during the 1962/63 season, also results in a much greater demand for transport services.

Investment in land transport reached IL 206 million in 1963, 43 per cent more than during the previous year. Most of the money was spent on commercial vehicles and roads, and only a small proportion on the railway.

In 1963 as well there was a relatively bigger investment in vehicles than in roads. This trend, which began several years ago, becomes even more pronounced if we take into account the conspicuous rise in the number of private vehicles, which are a consumption rather than investment item. The ever-widening gap between the number of vehicles in the country and investment in roads has resulted in greater road congestion, slower speeds, and a rise in traffic accidents.

A French company has undertaken a national transport survey, and when it completes its work, toward the end of 1964, it will recommend measures to improve the transport system, paying special heed to the choice between rail and motor transport.

(a) *Rail transport*

The railway reported a real increase of 9 per cent in output in 1963. Most of it was in the transport of freight, up 14 per cent, while passenger traffic was only about 1 per cent higher.

The rise in real inputs was lower than that in real output, amounting to only 5 per cent. This was due to improvements in the utilization of equipment, which permitted an increase in output without a corresponding increase in equipment. This underscores the fact that most of the railway's freight transport costs are fixed, with variable costs accounting for only a small proportion of the total.

Despite the fact that the growth in real inputs was less than that in output, the railway's financial position worsened still further in 1963. This was reflected

both in its operating and in its total deficit. The main reason for this was the rise in input prices, mainly wages, in contrast to the relative stability of output prices.

There was little change in the volume of railway investment, which totalled IL 3.5 million at 1963 prices. Part of it was for the laying of a track to Dimona, and part for the purchase of equipment, mainly coaches.

The transport of passengers, which constituted some 35 per cent of the railway's output, remained almost static, as already noted. In the early part of the year output was higher than in the corresponding months of 1962, but in the summer the figure fell below that for the previous year. That there was no advance over 1962 was due to the decrease in the number of trains following the retirement of obsolescent coaches.

Railway fares were not raised in 1963, but the average fare was 1.5 per cent higher than in 1962. However, since bus fares rose by 11 per cent at the beginning of the year, the relative price of railway journeys declined. This alone should have led to an increase in railway output, but, as already stated, this was prevented by a reduction in the number of daily trains.

Table XIV-7

RAILWAY SERVICES, 1958–63

Year	Ton-km. (million)	Per cent increase or decrease(–) as against previous year	Passenger-km. (million)	Per cent increase or decrease (–) as against previous year
1958	203.0	11.9	348.6	4.0
1959	218.4	7.6	364.4	–4.5
1960	227.4	4.1	362.8	–0.4
1961	226.0	–0.6	364.8	0.6
1962	277.7	22.9	405.2	11.1
1963	317.5	14.4	411.9	1.6

SOURCE: Reports of Israel Railways.

The 14 per cent real growth in freight output was less than in 1962, but higher than the average of recent years as well as the increase in the output of the trucking industry.

Of the total rise in ton-kilometers hauled, 57 per cent resulted from the transport of stone and gravel for the construction of Ashdod Port. There was also a considerable gain in the transport of phosphates and potash. On the other hand, grain and cement shipments declined. The year 1963 was the first in which stone and gravel were the relatively most important items carried by the railway. After them came grain and fuel.

There was only a moderate rise of 2 per cent in average railway freight charges during the year reviewed.

The railway's financial position worsened significantly: after a decline in 1962, the operating deficit again rose appreciably in 1963, totalling IL 2.7 million as against IL 1.6 million the year before.

Income was up 11 per cent, but current expenses increased by 16 per cent and total expenses by 15 per cent. Consequently, both the operating and the total deficit rose not only absolutely, but also relative to income.

The rise in expenses was mainly caused by higher input prices, and only to a limited degree by a real growth in inputs. Wages (including pensions) advanced by more than 16 per cent, while the number of hours worked did not rise at all. Even if that part of the increase that was due to wage drift is regarded as reflecting an improvement in the quality of the work force, the bigger wage bill still resulted primarily from a rise in wage rates.

The increase in depreciation and interest expense reached 12 per cent, or some IL 600,000. While the absolute change reflects the real rise in capital costs, the relative change has an upward bias since the total of interest and depreciation is underestimated, being based on the historical cost of the capital assets. Hence the total deficit is also understated, and a calculation based on replacement costs would increase it considerably.

Table XIV–8

INCOME AND EXPENSES OF ISRAEL RAILWAYS, 1961–63

	Income				Expenses			Deficit	
	Passengers	Freight	Other	Total	Operational[a]	Depreciation and interest	Total	Operational	Total
					IL thousand				
1961	4,877	6,869	515	12,261	14,290	4,104	18,394	2,029	6,133
1962	5,852	9,033	789	15,674	17,273	4,881	22,154	1,599	6,480
1963	6,031	10,423	946	17,400	20,100	5,488	25,548	2,700	8,148
					Per cent increase or decrease (–) as against previous year				
1962	20	32	53	28	21	19	20	–21	6
1963	3	15	20	11	16	12	15	69	26

[a] Including allocations for pensions.
SOURCE: Reports of Israel Railways.

In estimating the railway's actual operating deficit, the real rather than recorded income and expenses must be taken into account. The deficit would be much bigger if depreciation and interest were calculated according to replacement rather than historical costs. On the income side, one must take into considera-

tion the alternative cost involved if other means of transport were used to carry the goods presently hauled by the railway.

Several factors contributed to the railway's operating deficit:

1. The turnround time of freight cars (i.e. the time that elapses between the loading of a car and its return for reloading). This is higher in Israel than in other countries, and if it were lower output could be expanded without a parallel rise in the number of freight cars, i.e. without additional capital costs.
2. The marked seasonal fluctuations, primarily due to the transport of a large quantity of citrus within a relatively short period of time. If the railway would forgo hauling part of the citrus crop, this may permit it to reduce the amount of productive factors required, thereby probably improving its overall position.
3. Some of the railway's operations, such as the Haifa-Nahariya line, are run at a loss.

In addition, a change in the railway's tariff structure would probably improve its financial position. The present rates sometimes serve as a form of selective subsidy to various branches requiring rail services. This has two results:

1. Distortion of the financial position of both the railway and the enterprises using its services, generally to the detriment of the railway.
2. Distorted factor allocation between motor and rail transport, owing to the fact that the subsidies are not given directly to the enterprises but in the form of less expensive rail services.

(b) *Trucks*

The real output of the trucking industry grew by 9 per cent in 1963, reaching IL 315 million. Road haulage rates were not raised during the year, but they were 2 per cent higher on the average than in 1962. Output expanded at a much slower pace than in 1962, when the increment came to 17 per cent. This was due to the slower growth of construction activity and of import and export cargoes passing through Israel's ports (3 per cent as against 9 per cent).

The truck fleet at the end of March 1963 was 11 per cent larger than a year previously, and since the authorized cargo per vehicle remained unchanged (3.1 tons), total authorized cargo also increased by 11 per cent. The number of trucks went up 9 per cent during 1963, and if we assume that their average size did not change, the increase in capacity was equal to the increase in real output.

The unweighted average age of the trucks remained very high. The diesel trucks are not as old as those run on gasoline, and on the average they are much larger (9.1 tons of authorized cargo as against 1.6 tons for the others), so that the heavier trucks are newer than the lighter ones. Hence the average age of the trucks weighted according to their size would be lower than the unweighted average.

Table XIV-9

TRUCK FLEET, BY AUTHORIZED CARGO, 1961-63

Authorized cargo (tons)	No. of trucks at end of March			Per cent increase or decrease (-) as against previous year	
	1961	1962	1963	1962	1963
Up to 2.4	13,734	15,323	17,348	11.6	13.2
2.5–4.9	5,394	5,457	5,551	1.2	1.7
5.0–7.9	2,660	3,058	3,393	14.6	11.0
8.0–14.9	864	912	1,092	5.6	19.7
15.0–19.9	127	108	110	-15.0	1.9
20.0 and over	469	473	514	0.9	8.7
All trucks	23,248	25,331	28,008	9.0	10.6

SOURCE: Central Bureau of Statistics.

One of the drawbacks in operating old trucks is the creation of road bottlenecks because of their slowness. This represents a real cost to the economy, though it does not enter into the cost calculations of the truck owners.

The divergent utilization patterns of the two categories of trucks are reflected in the following ways: on loaded trips the rate of exploitation of the authorized cargo is higher in the case of heavy trucks. However, the percentage of empty trips is lower in the case of light trucks. This is explained by the differences in the character of their operations. The small trucks are generally owned by individuals or partnerships, and are mostly employed on urban and short inter-urban hauls. There is sharp competition between these operators, and they are ready to take on jobs covering only their current costs—a situation that does not entail the full exploitation of the authorized cargo. On the other hand, most of the heavier trucks are owned by cooperatives and companies, which divide the routes among themselves to a certain extent. Therefore, on loaded trips the authorized cargo of the heavy trucks is exploited almost completely, and sometimes even exceeded. Overloaded trucks also cause losses to the economy which are not felt by the owners: they damage roads, slow down traffic, and cause accidents. At the same time, it is not unusual for heavy trucks to return empty, and this accounts for the higher percentage of empty journeys.

There are undoubtedly routes on which trucks cannot avoid travelling empty in one direction (e.g. the haulage of minerals from Sdom to Eilat usually involves an empty return trip). However, sometimes trucks return empty because of pooling arrangements whereby different companies carry goods on the same route but not in the same direction. This results in the use of more equipment than is necessary for the efficient operation of transport services, causing wasteful factor utilization. This distorted factor allocation stems from the organizational

structure of the branch, which suffers from the disadvantages of a free market but does not enjoy its advantages.

From the aforesaid it is obvious that freight rates are higher than they should be if the factors of production were efficiently exploited. Moreover, the profitability of the branch is apparently high. No exact statistics are available, but several facts indicate that this is so: (1) Entry into the branch is not completely free. Import licenses from the Ministry of Transport are subject to various limitations, and licenses for certain types of trucks are sold on the market at quite a high price. (2) In order to advance the delivery date of a truck ordered from the Leyland factory in Ashdod by several months, it was necessary in 1963 to pay a premium of IL 3–4,000.

These facts show that the branch is very profitable, and hence it is hard to find any justification for the Government's supporting the Truck Fleet Renewal Fund by providing low-interest credits. Some maintain that truck owners set aside insufficient funds to cover depreciation and are therefore unable to pay for new vehicles. But if the branch is really so profitable, it is obvious that the truckers fail to provide for depreciation not because they are unable to do so, but because of negligence; and at a time when outside investors are willing to finance the purchase of the necessary equipment, there is no justification for Government aid.

Tighter controls to prevent overloading—which are now being drawn up by the Ministry of Transport (though even today overloading is a clear violation of the law)—need not entail higher freight rates. Even if the banning of overloading involves a certain rise in transport costs, this does not mean that truckers should be entitled to compensation; such an approach would simply perpetuate the existing profitability level.

Greater coordination between the various truckers would facilitate an increase in factor utilization by reducing to an absolute minimum the number of empty trips. This could be accomplished by the establishment of regional transport offices which would serve as a sort of clearing house for the trucking firms and prevent unnecessary trips. Greater efficiency would insure greater output in the branch without a corresponding increase in inputs.

(c) *Buses*

The real output of the bus cooperatives went up 4 per cent in 1963, a lower percentage than in previous years, and totalled IL 136 million. The rise in the number of private cars with the growth of incomes may be one of the reasons for the slower rate of increase during the year reviewed.

Bus fares were on the average of 9 per cent higher than in 1962. This was the fourth consecutive year in which they showed a marked rise, especially in comparison with other passenger facilities—the railway and taxis. The major factor appears to be the method of setting fares, which leads to a rise every

Table XIV–10

INDICES OF NO. OF BUSES, EXPENDITURE ON BUS SERVICE, NO. OF SEATS, AND KILOMETRAGE, 1958–63

(1958 = 100)

Year	No. of buses	Expenditure on bus service	No. of seats	Income per seat	Annual kilometrage	Revenue per km.
1959	106.8	110.1	108.9	101.1	115.6	94.2
1960	109.5	116.6	115.0	101.4	123.7	94.2
1961	113.9	122.7	120.4	101.9	132.4	90.1
1962	118.8	129.9	128.1	101.4	143.3	88.2
1963	126.3	134.5	137.9	97.5	153.0	84.9

SOURCE: Ministry of Transport and Communications.

time the cooperatives succeed in proving that their costs have gone up. This system is economically unsound, since it perpetuates existing distortions in the fare structure.

Investment in buses expanded appreciably in 1963, by 42 per cent, and totalled some IL 22 million. This enabled the cooperatives to enlarge their carrying capacity, while at the same time continuing to standardize and modernize their equipment.

The growing number of vehicles on the road continued to aggravate the traffic situation in the major cities, particularly in Tel Aviv and environs. This slowed down the buses and necessitated the adding of buses in order to carry the same volume of passengers.

A survey of passenger traffic movement is now being made in Tel Aviv, and its findings will serve as the basis for the adoption of appropriate measures to ameliorate the situation.

5. INVESTMENT IN TRANSPORTATION[1]

Gross real investment in transportation grew by 22 per cent in 1963, reaching IL 293 million. This rate is higher than the average for the last six years, and is particularly noteworthy in view of the decline that occurred in 1962. It is also much higher than the average growth of total domestic investment in 1963, a fact which resulted in a rise in the relative share of the transportation sector to 13 per cent.

The increase occurred in both equipment and buildings, the rate being a little higher in the former—23 per cent as against 20 per cent for buildings.

[1] Excluding the Post Office and oil pipelines.

Table XIV–11

INVESTMENT IN TRANSPORTATION, BY BRANCH AND TYPE OF ASSET, 1962–63

(IL million, at 1963 prices)

	1962			1963		
	Buildings	Equipment	Total	Buildings	Equipment	Total
Land transport						
Railway	0.5	3.1	3.6	1.4	2.1	3.5
Buses	—	15.2	15.2	—	21.6	21.6
Other vehicles	—	89.5	89.5	—	139.0	139.0
Transportation services of local authorities	0.2	—	0.2	0.2	0.1	0.3
Roads	35.8	—	35.8	42.0	—	42.0
Total land transport	36.5	107.8	144.3	43.6	162.8	206.3
Other branches						
Airfields	3.8	3.0	6.8	2.7	5.2	7.9
Ports	20.4	2.2	22.6	26.5	1.1	27.6
Ships	—	16.1	16.1	—	51.0	51.0
Aircraft	—	49.9	49.9	—	0.2	0.2
Total	24.2	71.2	95.4	29.2	57.5	86.7
Grand total	60.7	179.0	239.7	72.8	220.3	293.1

Investment prices in the transportation sector rose to a moderate extent in 1963—3 per cent as compared with a 6 per cent increase for the economy as a whole. This difference reflects the high import component in transportation investment, especially as regards ships and vehicles, where the rise was less than 3 per cent. The proportion of transportation investment financed from public funds remained almost the same during the year—32 per cent.

Most of the incremental investment was in land transport, where the total figure came to IL 206 million at current prices. In other branches expenditure amounted to IL 87 million.

A much greater sum was invested in all land transport branches, except the railway. The amount spent on vehicles of all types came to IL 160 million, including IL 93 million on trucks, IL 22 million on buses, and IL 45 million on small passenger vehicles.[1] The increased gross investment in trucks was con-

[1] The investment in small passenger vehicles is estimated as a certain percentage of total private vehicle purchases. In 1963 most vehicles were presumably bought for private use, so that the estimated investment has an upward bias.

nected with the need to replace obsolescent vehicles and to enlarge the truck fleet parallel to the expansion of economic activity.

Investment in roads totalled IL 42 million, 55 per cent more than in 1962. The money was used to widen existing roads and pave new ones.

In all other transport branches taken together, investment was lower than in 1962; that in ports and ships was much higher, but there was no new investment whatever in aircraft.

The increased investment in ports was mainly connected with the construction of a deep-water port at Ashdod. The investment in ships was part of a general merchant shipping expansion plan. The relatively large growth in such investment in 1963 has no special significance in itself: the fluctuations from year to year are largely of a random nature, reflecting time variances in the delivery of ships built in foreign shipyards.

As indicated, there was no investment in flying equipment. Three Boeings were purchased in 1962 at a cost of IL 50 million. At the moment there are no plans for the further expansion of El Al's fleet. Large-scale investments may be made in another few years, however, when supersonic planes are introduced.