

CHAPTER IX

POPULATION, LABOR FORCE, AND EMPLOYMENT

1. MAIN DEVELOPMENTS

THE PRINCIPAL developments in the manpower situation in 1967 were a fall in unemployment in the second half of the year and a rise in the number of employed, following a steady drop since early 1966; a precipitate decline in the labor force participation rate;¹ and the smallest growth of the population (excluding East Jerusalem) since the State was established. Despite the rise in employment in the second half of the year, the level for 1967 as a whole was still lower than in 1966.

The population at the end of 1967 numbered 2,775,000—4.4 percent more than at the end of the previous year. Of this increment, 56 percent was accounted for by East Jerusalem, 41 percent stemmed from natural increase, and the remaining 3 percent represented net immigration. Natural increase and net immigration together added 52,000, or 1.9 percent—the lowest recorded rate in the history of the State. This was mainly due to the contraction of immigration, a trend discernible since 1965. In 1967 net immigration totalled about 4,000. Natural increase, at 18.2 per thousand, was also at its lowest recorded level—continuing a long-run downward trend. The drop in the rate of natural increase applied both to Jews and to non-Jews.

In 1967 there was a steep fall in the percentage of persons belonging to the civilian labor force and even an absolute decline in its size. According to manpower surveys, the participation rate in 1967 was 50.4 percent,² compared with 52.6 percent in 1966 and an average of 53.1 percent in 1960–66 (annual fluctuations were small). It should be noted that the decline is probably overstated, as the manpower surveys and other indicators³ yield different estimates of the

¹ The labor force participation rate is defined as the proportion of persons aged 14 or over who are either employed or actively seeking employment, as recorded in the manpower surveys of the Central Bureau of Statistics.

² Excluding East Jerusalem, which is generally omitted from the data in this chapter unless otherwise stated.

³ These indicators are the number of wage earners recorded in National Insurance statistics and industrial wage earners as recorded in the production indexes, both of which show a smaller drop in the number of employees than do the manpower surveys. National Insurance data indicate a reduction of 1 percent, in contrast to 7 percent according to the manpower surveys. Industrial indexes show the drop in industrial wage earners as 5.4 percent, compared with 12.5 percent in the manpower surveys. According to the latter indicator, most of the

number of employed (the major component of the labor force). Several explanations may be suggested for this decline: some of the unemployed may have despaired of finding work, owing to the deepening of the recession, and withdrawn from the labor force; the general mobilization, the war, and the consequent atmosphere of uncertainty accentuated this tendency; the extension of National Service also worked in this direction.¹ The drop-out was most pronounced among the younger and older age groups and more moderate in the middle groups.

The rate of gainfully employed among the working-age population,² which had been moving steadily downward from the end of 1965, rose in the second half of 1967 as compared with the first half³ (see Table IX-4). The average number of employed in 1967 as a whole was below the 1966 average; even in the second half of the year the figure was smaller than in the same period of 1966.

Gainful employment in 1967 fell off by more than the number of labor force participants; as a consequence, unemployment increased to 96,200, or 38 percent more than in 1966. The average rate of unemployment reached 10.4 percent, compared with 7.4 percent the year before. The labor force participation rate, as stated, also drifted downward, presumably because the depressed state of the labor market caused some of those who had joined the labor force when the economy was booming to give up looking for work.

There was a significant fall in both the number and rate of unemployment in the second half of 1967, the rate moving down from 12.4 percent in the first quarter of the year to 8.8 percent in the last. Both the manpower surveys and National Employment Service data⁴ show a drop in unemployment. Even if those engaged on relief work are included with the unemployed, the number of jobless still declined in the second half of the year and continued downward in the early months of 1968.

The employment situation in the first half of 1967 represented a continuation

decline in the number of employed and in the civilian labor force occurred in the first quarter of 1967. Nevertheless, the discussion of the labor force and employment in this chapter is based primarily on manpower survey findings, as they are the only source for some of the data.

¹ Conscripts and those on regular service in the armed forces are not included in the civilian labor force.

² Aged 14 or over.

³ This is a gross measurement. It is customary to use a more specific rate, namely, the percentage of employed in the civilian labor force; but this measure is not relevant in a period of recession, when the civilian labor force is itself reduced compared with periods of full employment. It is therefore preferable to use the first measure which, although gross, permits long-run comparisons.

⁴ Manpower surveys are conducted quarterly by the Central Bureau of Statistics, and are based on a sample of some 6,000 families (15,000 adults). The principal findings are the number of employed and unemployed. National Employment Service data on unemployment are based on the number of persons registered with the labor exchanges.

Table
AVERAGE POPULATION AND LABOR
(thousands)

	Annual averages			
	1965	1966	1967	
			Excl. East Jeru- salem	Incl. East Jeru- salem ^a
	(1)	(2)	(3)	(4)
(1) Average population	2,562.6	2,629.2	2,681.6	2,714.5
(2) Working-age population	1,727.4	1,793.5	1,838.7	1,855.9
(3) Civilian labor force	912.4	943.4	926.9	932.2
(4) Percent of total population	35.6	35.9	34.6	34.3
(5) Percent of working-age population	52.8	52.6	50.4	50.2
(6) Gainfully employed	879.2	873.9	830.7	835.5
(7) Daily average of registered unemployed	4.4	10.0	15.8	—
(8) Unemployed according to manpower surveys	33.2	69.5	96.2	96.7
(9) Percent of civilian labor force	3.6	7.4	10.4	10.4

^a All East Jerusalem data, with the exception of total and working-age population, refer to males only. The number of females in the civilian labor force is small and hence can be ignored.

^b Excluding East Jerusalem.

of the previous year's trends. In the second half of 1965 demand for labor began to sag, mainly because of the decline in construction activity. On the other hand, the labor supply expanded further with the growth of the working-age population, so that unemployment increased. In the last quarter of 1965 unemployment amounted to about 4 percent of the civilian labor force, as against approximately 3.5 percent in 1961-64. Subsequently, the demand for labor fell off further as the recession spread to industries supplying construction inputs. This stage lasted until mid-1966. From then until mid-1967 the slackening of consumer demand affected all products as a result of the decline in income originating in construction and industries supplying it with inputs, and investment demand also dropped owing to the belief that output would not grow; as a consequence, unemployment spread throughout the economy. The rise of employment in export branches, which was sustained during the entire period, was not sufficient to keep unemployment from mounting.¹

¹ The effects of the initial stage of the recession on employment are discussed in the Bank of Israel Annual Report for 1966, pp. 224 ff.

FORCE CHARACTERISTICS, 1965-67

Percent average increase or decrease(-)			Half-yearly averages			Average Oct.- Dec. 1967 ^b	Percent increase or decrease(-) in half-yearly averages	
1965 to 1966	1966 to 1967 ^b	1961 to 1965	July- Dec. 1966	Jan.- June 1967	July- Dec. 1967 ^b		July- Dec. 1966 to Jan.- June 1967	Jan.- June 1967 ^a to July- Dec. 1967 ^b
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2.6	2.0	3.9	2,643.8	2,668.7	2,693.2	2,700.3	0.9	0.9
3.8	2.5	4.4	1,806.4	1,828.2	1,849.2	1,854.9	1.2	1.1
3.4	-1.8	4.5	951.0	926.5	927.3	926.5	-2.6	0.1
—	—	—	36.0	34.7	34.4	34.3	—	—
—	—	—	52.6	50.7	50.1	49.9	—	—
-0.6	-4.9	4.7	859.6	820.9	840.5	845.0	-4.5	2.4
127.3	58.0	-10.9	14.1	17.8	13.7	13.0	26.2	-23.0
109.3	38.4	-2.2	91.4	105.6	86.8	81.5	15.5	-17.8
—	—	—	9.6	11.4	9.4	8.8	—	—

SOURCE: Line (1)—*Statistical Bulletin of Israel*, Central Bureau of Statistics, January 1968; lines (2), (3), (6), and (8)—manpower surveys and census of East Jerusalem conducted in 1967; line (7)—National Employment Service.

In the second half of 1967 economic activity began to recover. There was a noticeable increase in the public sector's demand, mainly for defense needs, and it also stepped up its capital spending. This led to a growth of GNP and private sector income, and an even larger increase in private consumption.¹ These developments found expression in the growth of industrial production and a higher level of construction activity, and, together with the continued expansion of exports, led to the employment of more workers and a decline in unemployment.

During the recession unemployment spread to all parts of the country, whereas in 1960-65 it was found mainly in the development areas. Most affected were persons newly joining the labor force, partly because of the high cost involved in dismissing veteran workers and replacing them with newcomers, and also because of the constraints imposed by existing institutional arrangements. The slump hit skilled workers as well as unskilled workers; whereas the former had previously constituted 40 percent of the jobless, their proportion went up to as high as 50 percent. Toward the end of 1967 demand rose for certain categories of skilled

¹ The reasons for these developments are discussed in Chapter XIX, "Saving".

workers (mainly in industry and construction), reducing their share in total unemployment.

As in 1966, the main contribution of the Government to easing the unemployment situation was, in addition to fiscal and monetary measures, the stepping-up of relief work.

Output per gainfully employed increased in 1967, and that per man-day rose by 13 percent as a result of the steep drop in employment and a small rise in output. In this respect, 1967 differed from the previous year, when the annual level of both output and employment held steady. Changes in the branch composition of output should have depressed the level of employment in 1966, as output fell in labor-intensive industries (construction) and rose in those with a low labor/output ratio (e.g. diamonds), and this ignoring the increase in productivity which characterized the period 1961-65. Consequently, the stability of employment in 1966 reduced output per gainfully employed. This was apparently due to the lag in dismissing redundant workers. In 1967 the dismissals were carried out, bringing up output per gainfully employed.

A sectorial analysis of employment developments shows a conspicuous fall in industry and construction. These sectors had experienced rapid expansion during the boom period and were most severely hit by the recession, partly because their output is greatly affected by changes in the level of investment. In industry, the decline continued the trend of 1966, when the growth rate slowed down. In construction, the contraction was relatively smaller than in 1966. While the number of workers in transportation and communications rose in 1967, the number of hours per worker declined, so that the total labor input remained stable. Real agricultural output was hardly affected by the recession, and employment continued to fall off in line with the long-run trend. The relative immunity of agriculture to the recession is explained by the comparatively small share of investment in farm output and by the inelasticity of demand for farm products in relation to income.

2. POPULATION AND MANPOWER

The growth of the population slowed down in 1967, mainly because of smaller immigration.

At the end of 1967 the population numbered 2,775,000—4.4 percent more than at the end of the previous year. Excluding East Jerusalem, the increment came to 1.9 percent, the lowest rate since the establishment of the State. This compares with 2.2 percent in 1966 and an average of 4.2 percent in 1961-64. The decline in the growth rate, which began in 1965, was mainly due to the contraction of immigration.

Net immigration amounted to roughly 4,000 in 1967, about 7 percent of the population increment (excluding East Jerusalem). This is the smallest figure since 1953, and it can be attributed to a fall in gross immigration, which

Table IX-2

PERMANENT POPULATION AND SOURCES OF GROWTH, 1961-67

	1961-64	1965	1966	1967 ^a
	(1)	(2)	(3)	(4)
Thousands				
Population at end of period	2,526	2,598	2,657	2,709
Annual increase—in thousands	97	72	59	52
in percent	4.2	2.9	2.3	1.9
Percentages				
Total increase	100	100	100	100 ^b
Net immigration	53	31	14	7
Natural increase	47	69	86	93

^a Excluding the population of East Jerusalem (66,000).

^b Excluding the estimated number killed in the war.

SOURCE: *Statistical Bulletin of Israel*, Central Bureau of Statistics, January 1968.

also dipped to its lowest level since 1953; emigration,¹ on the other hand, was apparently about the same as in 1966.

The rate of natural increase in 1967 was 18.2 per thousand, as against 19.3 the year before. This is the lowest rate in the history of the State, and it was the outcome of a decline in the birth rate and an increase in the death rate among Jews and non-Jews alike. The birth rate for the Jewish population fell from 22.4 per thousand to 21.6, in conformity with the secular downward trend prevailing since statehood. The non-Jewish birth rate fell for the second successive year, from 49.6 per thousand in 1966 to 47.3.

(b) *Working-age population*

The number of persons of working age went up 2.5 percent, compared with 2.0 percent for the population as a whole. The uptrend in the population aged 14 or over, which has been maintained throughout the 1960's, reflects the continuous fall in the rate of natural increase.

As in the last few years, the share of the middle age group (25-54), which has the highest labor force participation rate, declined, while the proportions of the younger (aged 14-24) and older (aged 55+) groups rose.

¹ Emigration is estimated, according to the method used by the Central Bureau of Statistics, as the sum of declared emigrants and those who did not declare their intention of leaving for good but failed to return within one year of the date of their departure, less those who returned after staying abroad more than one year. This method yields a reasonably good estimate for 1967, as the number of nondeclared emigrants was roughly the same as in 1966, but the estimate for 1966 is biased downward, since it was based on the smaller number of departures in 1965. This accounts for the increase in recorded emigration in 1967, which actually was unchanged.

(c) *Civilian labor force*

The labor force participation rate fell in 1967, after several years of virtual stability. The decline was relatively greater among females.

In 1967 the participation rate was 50.4 percent, compared with 52.6 percent the year before and an average of 53.1 percent in 1960–66 (deviations from the average were small). The change in the age structure accounts for only 0.2 percent of the decrease; the extension of the period of national service should also have reduced the participation rate somewhat.

The stability of the rate up to 1966 was the resultant of two opposite movements—an increase in the rate of females and a drop in that of males. These are long-run trends determined mainly by social patterns. Short-run fluctuations are of a cyclical nature, being influenced also by the demand for labor.

With the deepening of the recession and decline in employment (which measures the demand for labor), some of the unemployed despaired of finding

Table IX-3
LABOR FORCE PARTICIPATION RATES, BY SEX, 1959-67
(percentages)

Year	Percentage of working-age population participating in labor force			Percentage of females in civilian labor force
	Total	Males	Females	
	(1)	(2)	(3)	
1959	52.8	79.1	26.1	24.6
1960	52.9	78.1	27.3	25.7
1961	53.5	79.0	27.6	25.6
1962	54.1	78.7	29.2	26.9
1963 ^a	52.7	77.0	28.1	26.4
1964	53.4	77.3	29.2	27.2
1965	52.8	76.1	29.4	27.7
1966	52.6	74.7	30.3	28.7
1967	50.4	72.1	28.6	28.3
Half-yearly averages				
1966				
Jan.-June	52.6	74.9	30.0	28.5
July-Dec.	52.6	74.5	30.7	29.0
1967				
Jan.-June	50.7	72.6	28.5	28.1
July-Dec.	50.1	71.5	28.6	28.5

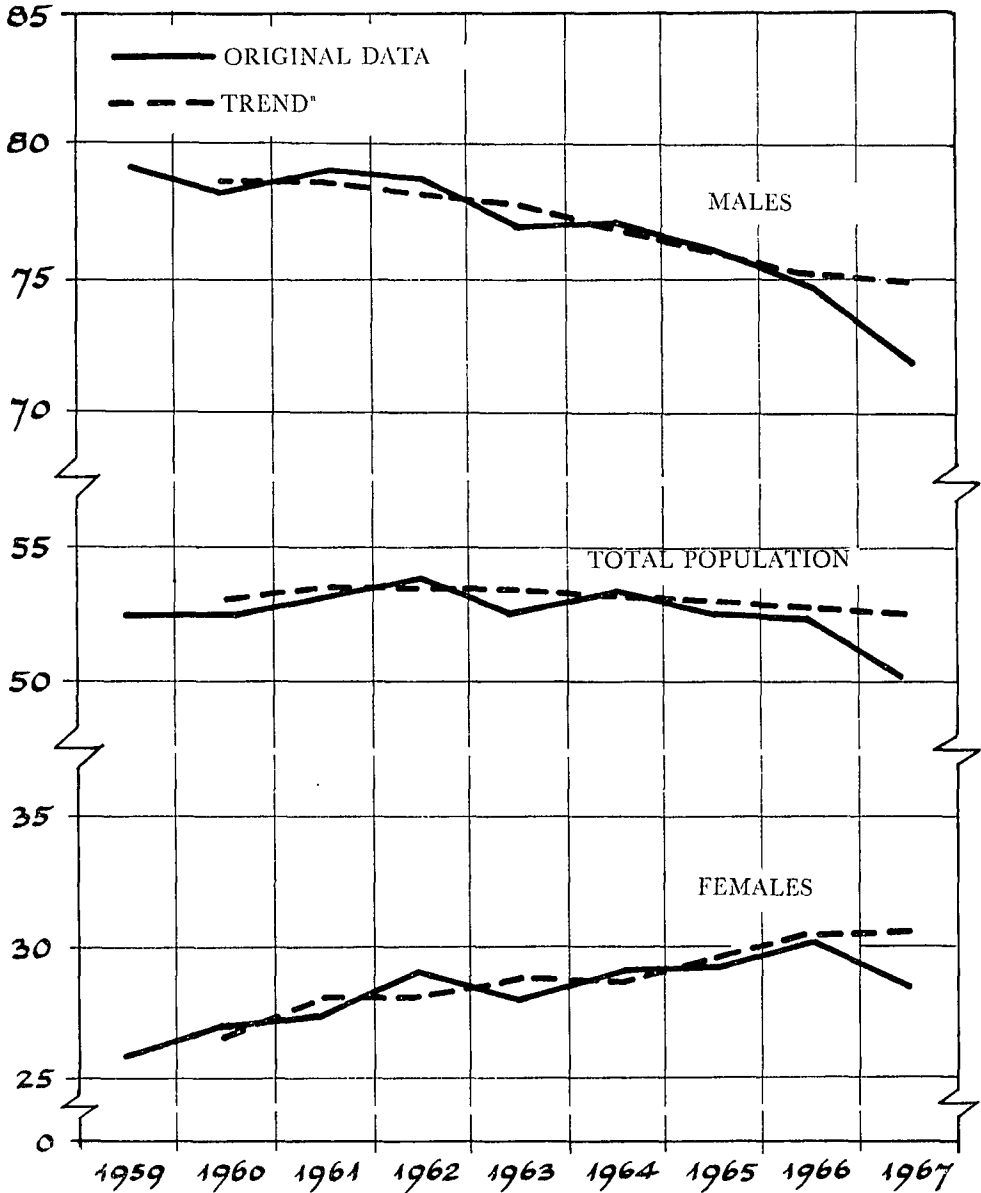
^a As from this year, manpower survey data are calculated according to a slightly different weighting system. This change corrects an upward bias in the participation rates up to 1963. Under the former system, the rates for that year would have been: total—53.0 percent; males—no change; females—28.6 percent.

SOURCE: Central Bureau of Statistics manpower surveys.

Diagram IX-1

LABOR FORCE PARTICIPATION RATES, BY SEX, 1959-67

(percentages)



^a The trend for 1960-65 has been calculated from moving three-year averages; that for 1966-67 has been extrapolated from this trend.
SOURCE: Table IX-3.

Table IX-4

GAINFULLY EMPLOYED, CIVILIAN LABOR FORCE, AND WORKING-AGE POPULATION, 1965-67^a

(thousands)

	Annual averages			Half-yearly averages				Average Oct.- Dec., 1967
	1965	1966	1967	1966		1967		
				Jan.- June	July- Dec.	Jan.- June	July- Dec.	
Working-age population	1,727.4	1,793.5	1,838.7	1,780.6	1,806.4	1,828.2	1,849.2	1,854.9
Civilian labor force	912.4	943.4	926.9	935.9	951.0	926.5	927.3	926.5
Gainfully employed	879.2	873.9	830.7	888.2	859.6	820.9	840.5	845.0
Gainfully employed as a percentage of civilian labor force	96.4	92.6	89.6	94.9	90.4	88.6	90.6	91.2
Gainfully employed as a percentage of working-age population	50.9	48.7	45.2	49.9	47.6	44.9	45.5	45.6

^a Excluding East Jerusalem.

SOURCE: Central Bureau of Statistics manpower surveys.

work and gave up the search (the "discouraged worker" effect), thus depressing the labor force participation rate.¹

This phenomenon is also apparent in Israel, but with an important difference. As a rule, the participation rate starts falling at the start of a depression. In Israel, while demand for labor began to subside in the second half of 1965 and declined even more in 1966, the participation rate dropped only at the start of 1967 (partly because of the atmosphere of uncertainty created by the prewar tension and hostilities.) This lag may be partly explained by the expectations of a speedy end to the recession, which prevailed in 1966 and dissolved in the first half of 1967, when unemployment reached a peak.

The participation rate fell in 1967 among both males and females; comparison with the long-run trends (see Diagram IX-1) shows a relatively larger drop in the case of the latter. The decline was steep in the younger (14-24) and older (55+) age groups, and moderate in the middle (25-54) groups. This pattern is also characteristic of other countries undergoing a recession. The participation rates of the younger and older groups and of females are highly elastic relative to the level of employment. A decrease in the number of employed does not produce a corresponding rise in the number of jobless, as some members withdraw from the labor force, particularly in the three above-mentioned groups.²

3. EMPLOYMENT

As regards employment, 1967 falls into two periods. In the first half of the year gainful employment continued downward in line with the trend which started at the beginning of 1966; in the second half both employment and the percentage of employed in the working-age population turned upward.

Despite the improvement in the second half of the year, the average level of employment, and even that in the second half, were lower in 1967 than in the previous year.

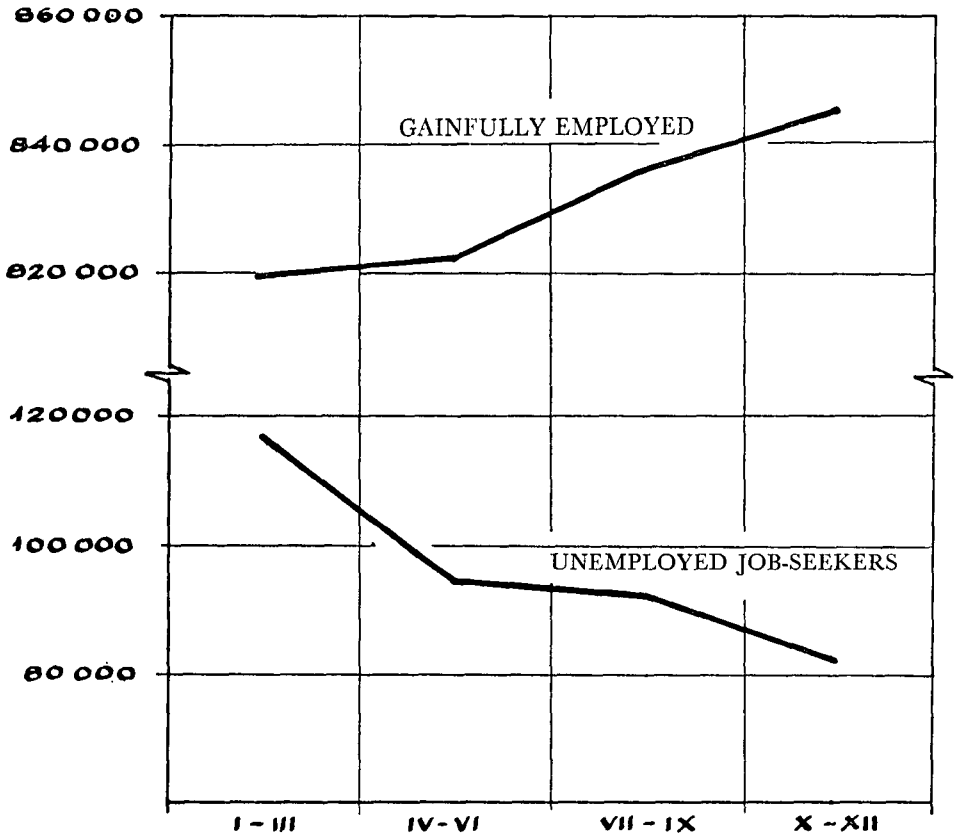
The average number employed in 1967 was down 4.9 percent from 1966. In the second half of the year, when the labor market began to revive, gainful employment rose 2.4 percent above the first-half level but was still 2.2 percent lower than in the second half of 1966. The decline was most pronounced among wage earners, who constituted some three-quarters of the total. The self-employed reduced their operations, but showed only a slight drop in number.

¹ The literature also mentions an opposite effect: increased pressure on members of the unemployed person's family, who in periods of buoyant economic activity normally do not belong to the labor force, to look for work (the "additional worker" effect). Studies made in other countries indicate that the first effect is stronger, so that the net outcome is a drop in the participation rate during a recession.

² In a study carried out in the U.S. (Dernburg and Strand, "Hidden Unemployment", A.E.R., March 1966), the elasticities of labor force participation were calculated for age and sex groups. These elasticities go far to explain the findings for Israel in 1967.

Diagram IX-2

GAINFULLY EMPLOYED AND UNEMPLOYED JOB-SEEKERS, 1967



SOURCE: Central Bureau of Statistics manpower surveys.

The employment data, as already noted, are from manpower surveys. Other indicators show a more moderate decline in employment.¹

Since the average number of hours worked per employee declined 3.5 percent in 1967, the labor input contracted more sharply than is indicated by the employment statistics—by 8.2 percent.

The subsiding of demand for labor as from the second half of 1965 was initially confined primarily to the construction industry—the result of the contraction of immigration, the completion of a number of big projects, mainly in the public sector, and the creation of a surplus of dwellings in 1963 and 1964. In the next stage (mainly the first half of 1966), branches supplying construction inputs were also affected—inland transport and some industrial branches. In

¹ See note ³ on p. 222.

the third stage (roughly the second half of 1966 and the first half of 1967), the demand for labor weakened in most sectors of the economy, owing to the fall in consumer demand following the reduction of incomes in the earlier stages and the decline in investment demand because of an anticipated slowdown in the growth of output. Employment rose only in the export branches, since demand for their goods in the world market is little affected by demand conditions in the home market. The supply of export goods, which might have been expected to expand more rapidly with the easing of demand pressure in the domestic market, continued to grow only at its customary rate of recent years. The larger number of workers taken on for export production was therefore insufficient to offset the contraction in branches working predominantly for the home market.

As already noted, the economy began to recover in the second half of 1967, with the main thrust coming from public sector consumption (due to defense requirements) and investment. The resulting increase in incomes and the brighter postwar expectations caused private consumption to rise as well. The liquidity injected into the economy in the first half of the year also began to leave its mark. Employment started to rise, the upswing taking in most sectors of the economy. There is thus a dissimilarity between the emergence of the economy from the recession and its onset. The slowdown began in a single sector, whereas its termination was associated with recovery in several final demands—on the one hand, public consumption and investment as a result of Government policies and increased defense requirements; and on the other hand, private consumption in the wake of larger incomes and a brighter business outlook.

Employment in the year reviewed was affected more by wage developments in 1966 than in 1967, which showed only slight changes in all factor costs, whereas big wage hikes had been awarded at the beginning of 1966. In view of the slackening of aggregate demand at the end of 1966 and even more so in early 1967, as well as the diminished demand for labor, wages might have been expected to decline. But because of the rigidity of this productive factor toward a downward movement, the smaller demand was entirely reflected by the dismissal of workers.

(a) *Employment, by economic sector*

During the boom years employment rose at an above-average rate in construction, transportation and communications, industry, and commerce and finance, and these sectors (apart from commerce and finance) were the ones most severely hit by the recession.

The rapid expansion of employment in construction and industry and the sharp impact of the recession on these sectors can also be explained by the relatively large share of investment in the final uses of their output. Investment grew faster than other final uses in the first half of the 1960's, and slowed down much more in the two recession years.

Table IX-5

**GAINFULLY EMPLOYED IN 1967, BY ECONOMIC SECTOR,
AND RATES OF CHANGE, 1961-67**

	Gainfully employed, 1967 (%)	Average annual increase or decrease (-)				1961 to 1965 (%)
		From 1965 to 1966		From 1966 to 1967		
		'000	%	'000	%	
Agriculture	12.6	-6.9	-6.0	-3.5	-3.2	-2.7
Industry and crafts	24.6	4.7	2.1	-24.0	-10.5	5.9
Construction	7.6	-16.3	-17.7	-12.8	-16.9	7.9
Electricity and water	2.2	2.2	14.2	0.8	4.5	4.1
Commerce and finance	13.5	3.0	2.7	-1.9	-1.7	5.8
Transportation and communications	7.3	-2.7	-4.5	3.6	6.2	6.0
Public and business services	24.1	4.7	2.4	-2.8	-1.4	3.9
Personal services	8.1	5.9	9.2	-2.8	-4.0	4.6
Total	100.0	-5.3	-0.6	-43.2	-4.9	4.2

SOURCE: Central Bureau of Statistics manpower surveys.

Industrial employment fell off by 10.5 percent in 1967, and the labor input by 14.3 percent due to the drop in the average number of hours per employed.¹ Industrial output declined by about 3 percent, so that output per employed rose. In the second half of the year employment began to pick up.

Construction showed a precipitate decline in employment in 1967—by 16.9 percent, about the same as in the previous year. Taking the two years together, employment contracted by 32 percent. The number of man-hours fell more sharply in 1967—by 21 percent. The construction industry also showed some signs of recovery in the second half of the year, but to a fairly modest degree.

Employment in transportation and communications was up 6.2 percent. This may seem surprising, as inland goods transport, which accounts for the bulk of the sector's output, is a function of the level of economic activity and hence is one of the first branches to be affected by a slump (employment here did in fact fall in 1966). But an examination of the total labor input shows no change from the previous year, as workers averaged fewer hours per week. This stability can be attributed to the increased carriage of exports. Output edged up 1 percent, so that there was a small rise in output per man-hour.

¹ These figures are from manpower surveys. The industrial production indexes show a drop of only 9 percent in the number of standard man-days, a datum proportional to the number of hours worked.

Table IX-6
OUTPUT, BY FINAL USE AND ECONOMIC SECTOR, 1966
(percentages)

	Total output	Investment (incl. inventories)	Export	Private con- sumption	Public con- sumption
Agriculture	100.0	3.9	23.3	72.6	0.2
Industry and crafts	100.0	16.4	26.9	51.4	5.3
Construction	100.0	90.4	0.3	6.6	2.7
Electricity and water	100.0	6.2	15.7	74.4	3.7
Transportation and communications	100.0	7.8	40.7	43.3	8.2
Commerce and services	100.0	7.0	22.9	63.0	7.1
Total	100.0	18.2	24.3	52.1	5.4

NOTE: The sectors have been defined here according to the input-output classification of the Bank of Israel.

SOURCE: Bank of Israel input-output calculations.

The number of gainful agricultural workers dropped 3.2 percent. This continued a long-run trend resulting from mechanization, increased productivity, and the sluggish growth of demand owing to the low income-elasticity of demand for farm products. In 1967 output advanced 13 percent, so that there was a large increase in output per worker.

Employment in commerce and finance was affected less than most other sectors by the recession (a drop of 1.7 percent); however, the labor input fell 6.2 percent.

In the public and business services sector, a large part of which is not affected by economic forces, both employment and labor input were relatively stable in 1967. The number of persons working in personal services also held fairly steady during the recession, since the majority are self-employed and continued to work.

(b) *Employment, by final uses*

Employment, as measured by the number of standard man-days,¹ declined by more than 8 percent in 1967, following a drop of 1 percent in 1966.² This compares with an annual growth of nearly 5 percent in 1960-64.

If the economic sectors are divided into two groups, one where output is

¹ Details of the method of calculation and analysis, as well as qualifications, are given in the appendix to this Report (in Hebrew only).

² The number of standard man-days is taken from the manpower surveys; this datum is therefore subject to the same reservations cited in note ³ on p. 222 in relation to employment.

determined by market forces, and the other where it is governed mainly by other factors (e.g. the Government and nonprofit institutions), we find that the fall in employment during the two slump years was sharpest in the first group. In 1967 employment here fell by 10 percent, and in the second group by only 5 percent. In 1966 it showed a decline of 1 percent and an increase of 2 percent, respectively. The discussion here will concentrate on that part of the economy where output is determined by market forces, and which accounts for 80 percent of total employment.¹

Table IX-7
ANNUAL CHANGE IN MAN-DAYS PER UNIT OF OUTPUT, 1966-67^a
(percentages)

	1966	1967
Change in gross output ^b	-1.2	2.6
Anticipated change in man-days ^c	-2.1	2.2
Actual change in man-days	-1.2	-9.7
Change in man-days per unit of output	0.9	-11.6

^a Excluding the public sector. Data for 1967 exclude inventory investment, which in 1966 constituted less than 0.5 percent of total final uses.

^b Gross output is the total market value of final goods and services produced, including the value of intermediate products.

^c The anticipated change in man-days compared with actual man-days in the previous year. The anticipated number of man-days has been calculated according to the employment-output coefficients of the previous year.

SOURCE: Bank of Israel input-output calculations (see also the appendix—in Hebrew only).

The factors influencing employment in 1967 were very different from those in 1966. The change in gross output (assuming constant input-output coefficients) in itself should have resulted in a 2 percent drop in total man-days in 1966 and a 2 percent increase in 1967. In actual fact, the decline in 1966 was more moderate (1 percent), and in 1967 sharper (nearly 10 percent). In other words, output per man-day fell in 1966 but rose appreciably in 1967.

One possible explanation of this is a lag in dismissing workers. In 1966 employers apparently expected an early end to the recession and refrained from cutting their work force even when output growth slowed down. At the end of 1966 and the first half of 1967, when the slump was at its worst, they began to lay off redundant employees.

¹ The analysis was made with the help of a 30-branch input-output table. The output required to maintain a given level of each of the final uses was calculated by means of an inverse table of coefficients. The volume of employment required directly and indirectly to maintain the final uses each year was estimated on the strength of the input-output coefficients of the previous year, assuming the constancy of the coefficients. Additional details will be found in the appendix to this chapter (in Hebrew only).

It should be noted that over the two years 1966-67 output per man-day went up by about 6 percent per annum, the same level as in the earlier boom years.

Average annual gross output in the two recession years was similar to that of 1965. Assuming the constancy of output per man-day, the number of man-days should also have remained unchanged. The decline that actually occurred therefore reflects a corresponding increase in output per man-day.

This stability of employment, which was to be expected if the influence of the change in output per man-day is discounted, was the resultant of two factors operating in opposite directions. The most important was the curtailment of in-

Table IX-8

ANNUAL CHANGES IN OUTPUT AND ANTICIPATED CHANGES IN STANDARD MAN-DAYS, ACCORDING TO FINAL USE, 1966-67^a

(Output in IL million at 1963 prices; standard man-days in millions)

Final uses	From 1965 to 1966		From 1966 to 1967			
	Change in output	Anticipated change in man-days ^b	Change in output	Anticipated change in man-days ^b		
Absolute terms						
1. Investment (incl. inventory) ^c	-789.4	-10.9	-597.4	-6.5		
2. Export	+308.3	+3.1	+504.2	+5.4		
3. Public sector purchases from other sectors	-11.1	+0.1	+464.5	+5.4		
4. Private consumption	+305.2	+3.9	+33.4	-0.3		
Total	-187.0	-3.8	+404.7	+4.0		
Percentages						
	As a percent of man-days required			As a percent of man-days required		
		For each final use	For all final uses		For each final use	For all final uses
1. Investment (incl. inventory) ^c	-22.1	-22.9	-6.0	-21.4	-18.1	-3.6
2. Export	+9.1	+9.4	+1.7	+13.6	+15.1	+3.0
3. Public sector purchases from other sectors	-1.3	+1.1	+0.1	+56.9	+56.2	+3.0
4. Private consumption	+4.0	+4.2	+2.1	+0.4	-0.3	-0.2
Total	-1.2	-2.1	-2.1	+2.6	+2.2	+2.2

^a Excluding the public sector.

^b Change in number of man-days due to a change in output, assuming the constancy of the employment-output ratio of the previous year.

^c Excluding 1967, as no data were available on inventory investment. In 1966 such investment amounted to less than 0.5 percent of total final uses (see also the appendix—in Hebrew only).

SOURCE: Bank of Israel input-output calculations.

vestment. This in itself should have reduced employment by about 6 percent (10.9 million man-days) in 1966 (assuming a constant output per man-day), and by 3.6 percent (6.5 million man-days) in 1967.

Exports, which expanded during the two recession years at roughly the same pace as in the preceding boom years, should have accounted for an increase of 1.7 percent (3.1 million man-days) in 1966 and 1.0 percent (5.4 million man-days) in 1967.

The change in public sector purchases in the domestic market in 1966 should have involved a 0.1 percent rise in man-days (this reflects the Government's contribution to the moderation of domestic demand under the economic slow-down policy). In 1967 the increase in the sector's spending—mainly for security purposes in the second half of the year—should have led to a rise of 3.0 percent in the total number of man-days in the economy and about 56 percent in the number of man-days invested to meet the public sector's demand.

The changes in these three final uses, which are more or less autonomous, affected the most important component—private consumption. Changes in private consumption should have entailed a 2.1 percent increase in man-days in 1966 and a drop of 0.2 percent in 1967.¹

4. UNEMPLOYMENT

The average number of jobless was much higher in 1967 than in the previous year. However, the number fell in the course of the year, so that at year's end it was noticeably smaller than at the end of 1966.

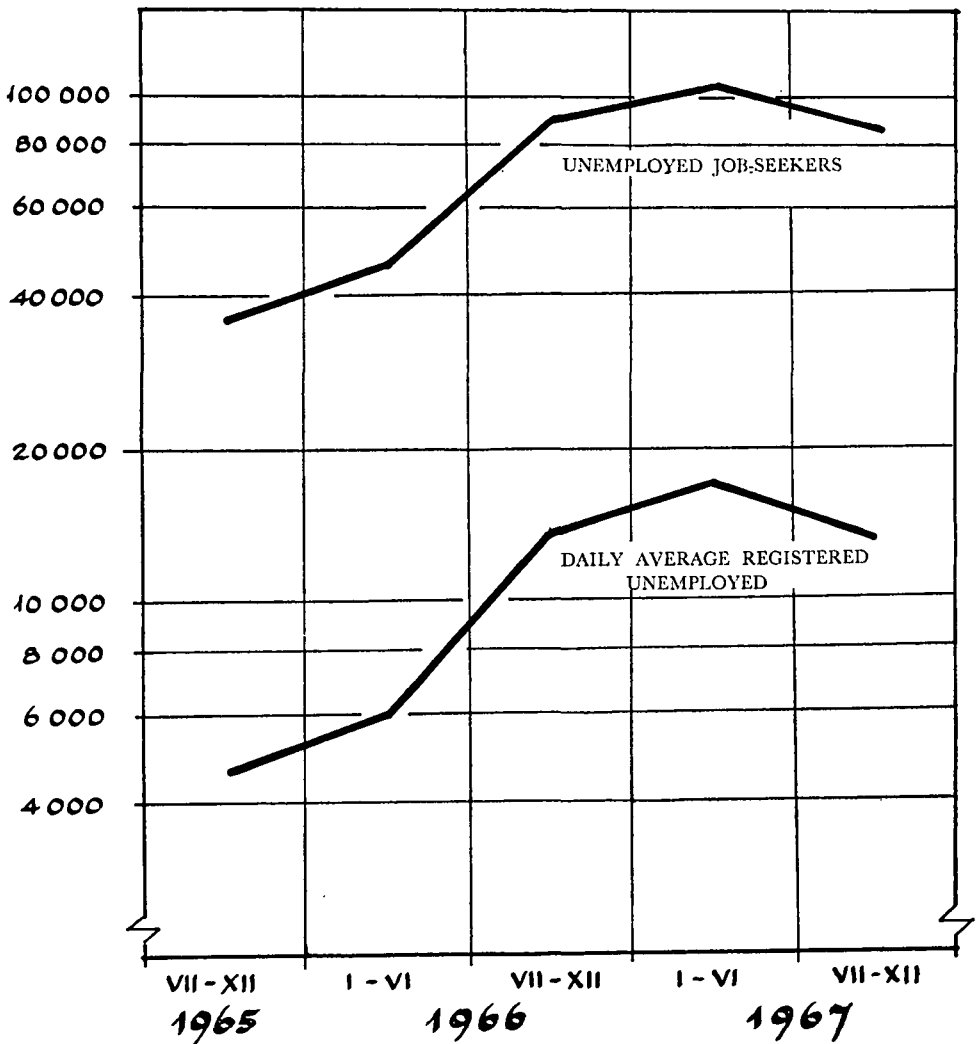
Two different direct measures of unemployment are used in Israel: the average daily number of unemployed registered at the labor exchanges of the National Employment Service, and unemployed job-seekers as recorded in the manpower surveys of the Central Bureau of Statistics. The two series yield widely disparate findings, reflecting the different definitions of unemployment and differences in data-collecting methods and in the population covered.² Nevertheless, there is a high correlation between the two measures, both of which show a decline in unemployment.

¹ The disparity between changes in output and the expected changes in labor input stem from changes in the composition of final uses.

² The National Employment Service defines an unemployed person as one who sought work by registering at a labor exchange and did not work even one day during the month concerned. According to the manpower surveys, an unemployed is one who actively sought employment but did not work even for one hour in the week preceding the survey. The number of unemployed according to the National Employment Service is obtained from the application lists of the labor exchanges. Manpower survey findings are based on a quarterly sample of some 6,000 families. The former exclude university graduates, seamen, domestic help, and students. The manpower surveys cover the entire working-age population (aged 14 or over).

Diagram IX-3

INDICATORS OF UNEMPLOYMENT: DAILY AVERAGE OF REGISTERED
UNEMPLOYED AND UNEMPLOYED JOB-SEEKERS, 1965-67



Semi-logarithmic scale.

SOURCE: Daily average of registered unemployment—National Employment Service data;
unemployed job-seekers—Central Bureau of Statistics manpower surveys.

In order to alleviate the social distress caused by the high level of unemployment, the Government stepped up its relief work program during the recession and instituted unemployment grants. During the recession the number employed on relief work increased more rapidly than the number of unemployed. In 1966

Table IX-9
REGISTERED UNEMPLOYMENT, 1963-67

	Daily average of unemployed adults	Daily average of unemployed youth	Daily average of all unemployed (1) + (2)	Daily average on relief work ^a
	(1)	(2)	(3)	(4)
Absolute numbers				
Annual averages				
1963	4,032	1,389	5,421	2,711
1964	3,397	1,229	4,626	2,318
1965	3,200	1,207	4,407	2,296
1966	7,930	2,063	9,993	3,830
1967	13,548	2,213	15,761	12,635
Half-yearly averages				
1966 Jan.-June	4,978	1,090	6,068	2,656
July-Dec.	10,882	3,036	13,918	5,002
1967 Jan.-June	15,734	2,030	17,764	11,746
July-Dec.	11,361	2,396	13,757	13,524
Oct-Dec. (4th quarter)	10,559	2,425	12,984	12,691
Percent increase or decrease (-)				
Average 1966 as against average 1965	147.8	70.9	126.8	66.8
Average 1967 as against average 1966	70.8	7.3	57.7	229.9
Second half of 1967 as against first half	-27.8	18.0	-22.6	15.1

^a Able-bodied persons

SOURCE: Unemployment—National Employment Service; relief work—Central Bureau of Statistics.

the average daily number employed on relief work rose less rapidly than the daily average of unemployed, but in 1967 the opposite was true.

This lag in providing relief work occurred mainly in the more developed areas, where it was necessary to re-establish an administrative apparatus to deal with this, after several years in which no such machinery existed (see Tables IX-9 and IX-11).

If those engaged on relief work are regarded as job-seekers, then in view of the rapid growth in their numbers in 1967 and their inclusion as employed in the manpower surveys, the 1967 survey data significantly underestimate the number of unemployed job-seekers.

The first half of the 1960's was marked by full- and even overemployment. Unemployment in those years was frictional or structural. Frictional unemployment, caused by changing jobs, existed throughout the country. Structural unemployment, arising from the existence of different categories of labor, was also to be found in most districts; there was excess demand for skilled labor and an

Table IX-10

DAILY AVERAGE OF REGISTERED UNEMPLOYED, BY SKILL LEVEL, 1964-67

(percentages)

	Total	Unskilled	Skilled					Liberal professions and services
			Total	Con-struction	Industry and crafts	Trans- portation and com- munications	Clerical	
Annual averages								
1964	100.0	63.0	37.0	4.6	7.5	3.5	18.0	3.4
1965	100.0	57.2	42.8	4.3	7.8	4.8	21.8	4.1
1966	100.0	49.7	50.3	9.9	12.2	5.4	18.8	4.0
1967	100.0	51.3	48.7	11.1	11.7	4.8	17.0	4.1
Half-yearly averages, 1967								
Jan.–June	100.0	51.6	48.4	12.5	12.7	4.7	14.7	3.8
July–Dec.	100.0	50.9	49.1	9.2	10.2	4.9	20.2	4.6
Oct.–Dec. (4th quarter)	100.0	50.0	50.0	8.8	9.3	5.3	21.5	5.1

SOURCE: National Employment Service.

excess supply of unskilled. Both types of unemployment were of relatively small dimensions. Much of the unemployment in those years, which amounted to 3.5 percent of the civilian labor force, is ascribable to the geographical immobility of labor—there was excess demand for labor in the more settled regions and excess supply in the development areas.

At the end of 1965 and early 1966 unemployment began to mount. This was largely structural in nature in that it was concentrated in certain branches of the economy—at first in construction and then in industries supplying it with inputs. However, it was also the outcome of a decline in aggregate demand, since the demand for labor did not increase sufficiently in other branches to offset the reduced demand in the aforementioned branches. In the second half of 1966 and early 1967 the unemployment situation was aggravated because of the further weakening of aggregate demand. The recovery in the second half of 1967 was due in most branches to an increase in such demand.

As mentioned above, unemployment in the first half of the 1960's was concentrated among the unskilled and in the development areas. In 1964—a typical boom year—more than 60 percent of the unemployed were unskilled. Although the unskilled category is not sharply defined, it can nevertheless be safely estimated that the proportion of unskilled in total employment was lower.¹

In the two recession years, 1966 and 1967, unemployment affected skilled and unskilled workers alike. There was a higher proportion of skilled than of unskilled among the newly unemployed, so that the share of skilled workers increased in 1966–67 to more than half of all jobless. The rise was most pronounced in construction and industry: in the former from 4.6 percent in 1964 to 12.5 percent in the first half of 1967, and in industry from 7.5 to 12.7 percent.

If those employed on relief work are included with the unemployed, the increase in the proportion of skilled workers presumably would be lower. Although there is no information on the skill level of those doing relief work, it can be assumed that the unskilled are relatively more numerous than the others.

The proportion of unemployed skilled workers did not drop in the second half of 1967, but this was due to the increased dismissal of clerical workers. Demand pressure began to build up for certain types of skilled personnel, particularly in construction and industry, where the relative share of unemployed skilled workers dropped significantly in the second half of 1967.

A geographical analysis shows that during the two recession years unemployment spread throughout the country, whereas previously it had been largely confined to the Northern and Southern Districts; and while before there had been mostly isolated pockets of unemployment, in the course of the recession it grew more general (“Keynesian unemployment”).

¹ See Manpower Planning Authority, “Demand for the Years 1964–69”, Table 1, p. 6, which indicates that roughly 60 percent of all gainfully employed were skilled.

Table IX-11

DAILY AVERAGE OF REGISTERED UNEMPLOYED AND RELIEF PROJECTS EMPLOYMENT, BY DISTRICT, 1964-67

	All districts	Northern	Haifa	Central	Tel Aviv	Jerusalem	Southern	Relative standard error ^a
Daily average of registered unemployed								
1964	1.4	2.7	1.2	1.2	0.6	1.6	2.4	0.54
1965	1.3	2.1	1.4	1.1	0.6	1.3	1.8	0.38
1966	3.1	3.3	3.5	3.3	2.2	2.4	4.4	0.24
1967	5.1	6.2	6.7	4.8	4.3	3.9	4.4	0.20
Average Oct.-Dec. 1967	3.9	5.0	5.1	3.7	3.0	3.7	4.0	0.19
Daily average employed on relief projects								
1964	1.0	5.0	0.1	—	—	0.2	1.5	1.72
1965	0.9	4.7	0.1	—	—	0.1	1.5	1.82
1966	1.5	5.4	0.5	0.6	0.1	0.3	3.7	1.37
1967	4.8	10.2	4.4	4.1	1.9	2.4	8.4	0.64
Average Oct.-Dec. 1967	4.8	11.0	4.3	4.1	1.7	3.0	7.6	0.66
Daily average of registered unemployed and relief projects unemployment								
1964	2.4	7.7	1.3	1.2	0.6	1.8	3.9	1.03
1965	2.2	6.8	1.5	1.1	0.6	1.4	3.3	0.97
1966	4.6	8.7	4.0	3.9	2.3	2.7	8.1	0.55
1967	9.9	16.4	11.1	8.9	6.2	6.3	12.8	0.37
Average Oct.-Dec. 1967	8.7	16.0	9.4	7.8	4.7	6.7	11.6	0.43

^a Standard error divided by the average.

SOURCE: Daily average unemployed—National Employment Service; relief work—Central Bureau of Statistics, *Statistical Bulletin*, No. 2, 1968; population by districts—Central Bureau of Statistics, *Statistical Abstract of Israel*.

Table IX-12

**DEPTH OF UNEMPLOYMENT—REGISTERED JOB-SEEKERS,^a BY NUMBER OF
UNEMPLOYED DAYS PER MONTH, 1962-67**

(percentages)

Unemployed days per month	Total	1-6	7-12	13-18	19+	Average unemployed days per job-seeker per month
Annual average						
1962	100.0	75	14	6	5	5.0
1963	100.0	78	13	5	4	4.5
1964	100.0	81	12	4	3	4.0
1965	100.0	82	11	4	3	4.0
1966	100.0	65	17	9	9	6.6
1967	100.0	62	18	9	11	7.1
Quarterly averages, 1967						
I	100.0	51	21	12	16	9.0
II	100.0	62	18	10	10	7.0
III	100.0	69	15	7	9	6.3
IV	100.0	70	15	6	9	6.1
December 1967	100.0	69	16	6	9	6.2

^a Adults only.

SOURCE: National Employment Service.

When unemployment began to shrink at the end of 1967, the decline was relatively more rapid in the Tel Aviv, Haifa, and Central Districts.

In 1967 the average number of unemployed days per month (the depth of unemployment) came to 7.1 per job-seeker, compared with 6.6 in 1966 and 4.0 in 1965. The level at the end of the year reviewed was lower than at the beginning.

During the recession, and also in 1967, the growth in unemployment was lower among those who had previously worked in Israel than among those who had not yet done so.¹ This indicates that those newly joining the labor force were more affected by the recession than were veteran workers; this can apparently be attributed to the cost involved in replacing veterans by newcomers as well as to institutional obstacles.

The picture at the end of 1967 therefore shows a significant but declining volume of unemployment. In the last quarter of the year 8.8 percent of the

¹ In 1966 the description "previously worked in Israel" was changed to "had worked in Israel during the preceding twelve months".

civilian labor force were jobless—roughly the same level as in the third quarter of 1966 and two and a half times that during the boom period. According to the daily average of registered unemployed, the downward movement carried over into the first months of 1968.

While unemployment still exists among both skilled and unskilled workers and in all districts, there is a growing shortage of skilled workers, while unemployment is disappearing in the more developed areas.