Chapter 4
Employment and Wages

1. MAIN DEVELOPMENTS

The recession of 1989 was characterized by a very slack labor market: employment failed to rise, there was a marked increase in unemployment, and the upward trend of real wages was halted, with an actual decline in some industries. The unemployment rate, which began to rise by the first quarter, rose steeply in the second, and stabilized at the high level of 9 percent during the rest of the year, with an average of 8.9 percent for the whole year. Real wages per employee post, which had been rising steadily since 1986, went down by some 1.4 percent in 1989, reflecting a decline of 1.8 percent in the business sector and a rise of 0.4 percent in public services. In the business sector, unit wages went down by 3½ percent.

The increased unemployment rate is the combined result of a substantial increase in the civilian labor force and the failure of employment to rise. The 3.2 percent increase in the labor force reflects such demographic factors as an increase in the population of working age and a change in its age distribution (an increase in the proportion aged 34–44, the group with the highest participation rate), as well as behavioral factors resulting from the recession itself, such as an increase in the participation rates of certain population groups, in particular women.

At the same time, employment of Israelis rose by only half of one percent, reflecting a rise of 2 percent in public services and weak business-sector demand for labor. However, the average business-sector employment figures conceal substantial inter-industry differences: employment continued to fall in industries producing mainly tradables (chiefly industry and agriculture), while in some services (mainly trade, personal services, and business services) employment continued to expand—despite moderate domestic demand, itself a direct result of the recession. The drop in industrial employment reflects the streamlining process which has led to redundancy lay-offs as well as a rise in labor productivity (gross value added per employed person) and the closure of enterprises unable to compete in the conditions created by the stabilization program, among them the fact that the government is much less willing to bail out such firms. The supply problems encountered by industry owing to lower profitability reduced the demand for labor in spite of the fact that world trade continued to expand.

Redundancies and the closure of noncompetitive plants in some industries (such as textiles, clothing, and leather) were not accompanied by a corresponding increase in

Table 4.1
Principal Labor Market Indicators, 1981–89[a]

	Average 1981–84	1985	1986	1987	1988	1989
Percent change over preceding year						
Permanent population	1.7	1.6	1.5	1.7	1.6	1.9
Migration balance, thousands	4.6	–5.3	–4.8	5.5	–0.6	11.7
Israeli employed persons	2.0	0.7	1.4	2.6	3.5	0.5
Business sector	2.0	0.3	1.7	3.9	3.2	0.0
Public services	2.0	1.7	0.7	–0.4	4.2	1.9
Labor input, business sector	3.9	0.1	2.2	3.8	0.3	1.4
Wages per employee post	3.8	–9.0	7.8	7.9	6.0	–1.4
Business sector	3.7	–6.4	9.1	8.1	4.7	–1.8
Public services	3.9	–14.3	4.4	7.1	9.6	0.4
Minimum wage	14.4	–26.3	18.4	24.9	14.2	2.4
Daily wage of residents of administered territories	1.1	0.4	28.8	15.7	10.8	–5.3
Unit labor cost, business sector	0.7	0.1	5.6	4.4	0.0	–3.6
Labor productivity, business sector	0.9	5.2	3.5	3.3	1.5	0.1
Ratio[b]						
Labor force participation rate	49.9	50.7	50.6	50.4	51.4	52.0
Unemployment rate	5.1	6.7	7.1	6.1	6.4	8.9

[a] Wages and labor cost are in real terms.

[b] Participation rate, percent of working-age population; unemployment rate, percent of labor force.

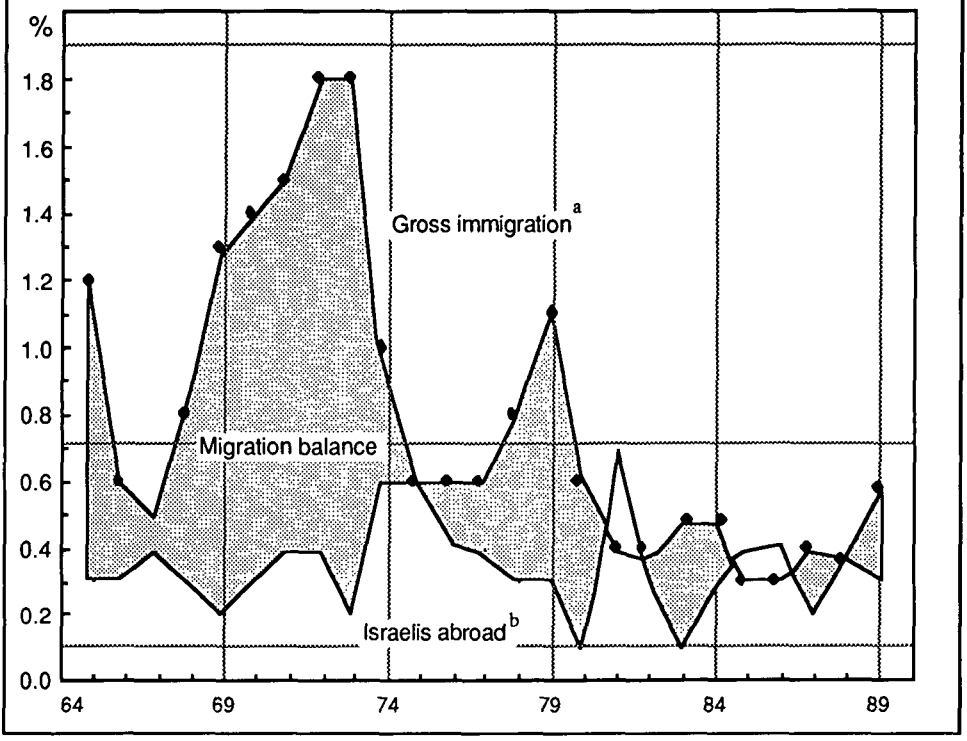
SOURCE: Based on data of the Central Bureau of Statistics.

employment elsewhere. The low level of investment in general and in industry in particular is holding up the process of structural change, while there are still no signs of growth or of additional workers being hired in industries which do have a growth potential.

As noted, business-sector wages (and the national average) fell in 1989 and public services wages remained unchanged. However, as with employment, there were considerable inter-industry differences within the business sector. Real wages per employee post in industry rose by half of one percent, while in services they went down by 3–6 percent. However, unit labor costs in the business sector (deflated by producer prices) went down by 3½ percent (3 percent in industry).[1]

[1] The wage data cited in this chapter are based mainly on National Insurance Institute statistics, and employment and man-hours on the Labour Force Surveys (LFS) of the Central Bureau of Statistics (CBS). This year there is a marked divergence between the LFS data and the CBS industry indexes. Thus the latter indicate a 4 percent rise in labor productivity, whereas the LFS data on labor input in industry show no change. Furthermore, the calculation of unit labor costs is at market prices; a factor-cost calculation shows a decline of only 1 percent. Labor input data from the industry indexes are apparently downward biased owing to poor (or belated) coverage of new establishments and because hiring through

Figure 4.1
Migration (percent of *de jure* population), 1965–89



[a] Immigrants, and persons entering for family reunion, etc.

[b] Israelis resident abroad for more than 12 months *less* returning residents, potential immigrants, and Israelis who have not returned from a visit to Jordan.

SOURCE: Central Bureau of Statistics.

In the labor market, 1989 followed three years during which real wages rose rapidly (although the rate of increase of nominal wages diminished), and the unemployment rate was relatively stable (an annual average of some 6½ percent). The substantial wage rises during the period following the stabilization program are related to the slowness of change of labor-market behavior patterns, as expectations were slow to adjust to the new level of inflation. This is in addition to organizational-institutional factors: the power of the unions in the bargaining process; the minimum wage law; and the effect of unem-

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personnel services is on the increase. People employed through these firms do not appear in the industry indexes, but they are classified under industry in the LFS data. We have no data on the extent of this practice, but it does not seem to be widespread yet. Absolute LFS data are therefore probably preferable, but the industry indexes can be used for ratios such as product per man-hours which are not biased by the defective coverage. Services productivity and hence unit labor costs were not calculated owing to the low reliability of the value added data for services.

ployment insurance. In this period wages were also forced up by both the high level of demand and expectations of devaluation. Employers were led to raise wages in anticipation of a devaluation which would correct the real exchange rate and relative prices. The supply of labor from the administered territories began to contract in early 1988 and some of it was replaced by Israelis; this too pushed up average wages, particularly in industries where a large part of the work force comes from the administered territories.

The movement of wages and prices differed between industries: in those producing mainly nontradables (chiefly services), wages rose substantially, as did employment, while prices also rose, maintaining profitability. In the tradables sector (chiefly industry) producers responded by raising wages (although less than in nontradables), in order to compete for labor with the expanding services. In view of the constraint on price rises in these industries, these wage rises drastically reduced profitability.

Table 4.2
Gross Hourly Wage (Business Sector), 1984-89[a]

(percent change over preceding period)

	1984	1985	1986	1987	1988	1989
CPI (1)	335.4	336.3	56.6	20.0	16.2	20.2
COLA as percent of CPI, (3) ÷ (1)	71.7	58.3	68.6	54.0	61.7	43.1
Change in wage due to						
COLA (2)	240.6	196.2	38.8	10.8	10.0	8.7
COLA and nationwide agreements (3)	295.7	226.7	42.0	16.6	10.6	8.7
Total gross wage (4)	322.8	293.6	66.1	30.9	22.0	14.9
Rate of actual to 'agreed' wage increase (line 3)[b]	6.8	20.5	17.0	12.3	10.3	5.7
Real change[c]						
Line (2)[d]	–21.9	–31.5	–12.4	–7.6	–5.3	–9.6
Line (3)[d]	–9.2	–24.5	–10.3	–2.8	–4.8	–9.6
Line (4)	–4.3	–9.4	6.3	9.1	3.8	–4.4

[a] Lines 1, 2, 3, 4 = geometric mean of: the change from month i in the preceding year to month i in the current year (i = 1, 2, ..., 12).

[b] $\{[100 + (4)] / [100 + (3)] - 1\}100$.

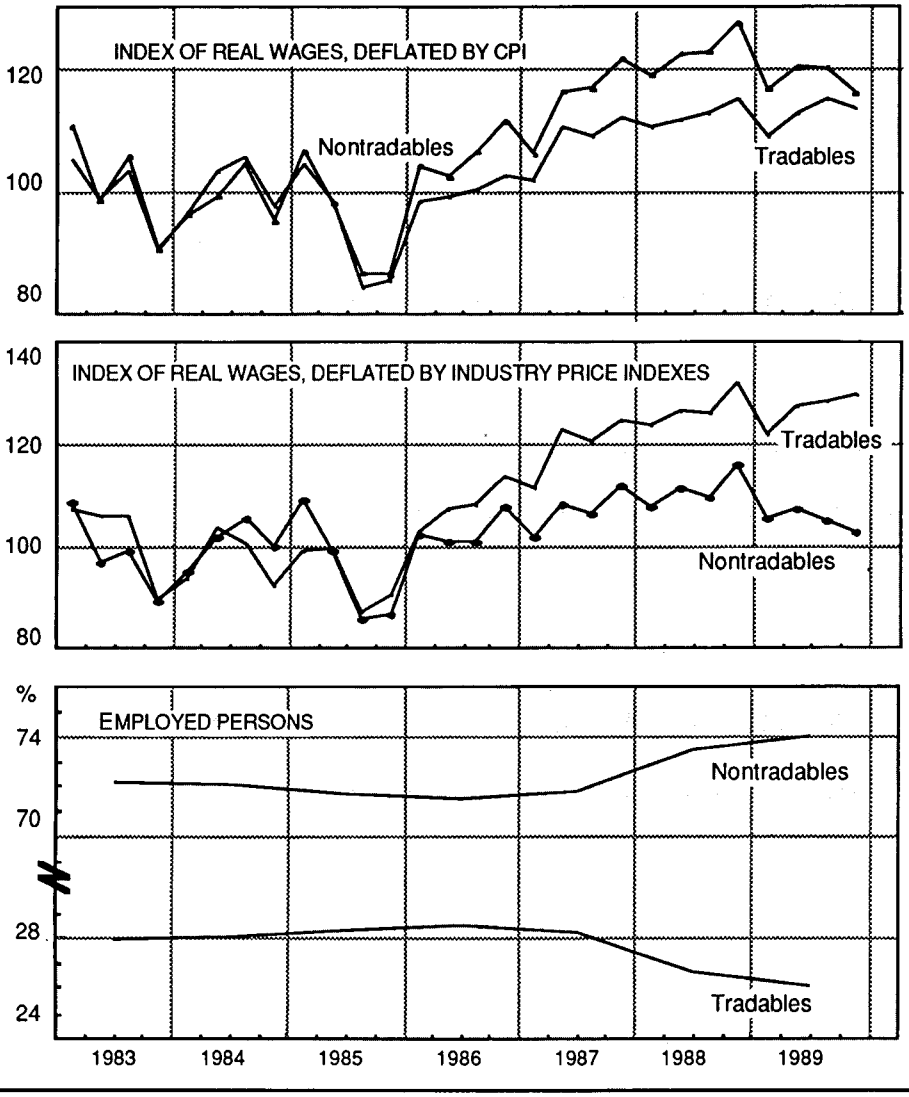
[c] Annual average of real monthly changes.

[d] Does not include the effect of changes in the minimum wage.

SOURCE: Data of the Institute for Economic and Social Research of the Histadrut.

In view of the last few years' labor-market developments, the 1989 wage picture raises two complementary questions. On the one hand, what happened to make a change in the upward wage trend possible, with the rise checked in some industries and reversed in others? This is something that failed to occur earlier even though unemployment rates had already gone up. On the other hand, why did wages react so slowly and to such a small extent, so that unemployment levelled off at the high rate of 9 percent?

Figure 4.2
Real Wages and Employed Persons in the Business Sector, 1983–89[a]



[a] For the tradables and nontradables classification, see note a, Table 4.A1.

SOURCE: Based on Central Bureau of Statistics data.

Following the excessive rise of wages since the stabilization program, the change in the wage trend arose principally from the slowdown in business activity. But the change was made possible by the increased flexibility of the wage system (itself to a large extent a result of market forces), and particularly by the wage agreement signed in August 1988

and the COLA agreement signed in February 1989. These agreements stipulated that there should be no national or industry-wide wage increases, and that the COLA should give only partial compensation for the price rises of 1988 and 1989. At the inflation rates then prevailing (and together with *ad hoc* agreements postponing part of the compensation), COLA in fact covered only about half of the price rises. (This is also true if we take into account automatic wage rises, resulting from seniority payments and promotion.) By allowing individual firms to link wage increments to profitability, these agreements gave the wage system greater flexibility.

In spite of this, and in spite of the marked rise in the unemployment rate in 1989 and of wages since the stabilization program, real wages eroded much less in most industries than envisaged by the general agreements. This may be explained on several levels. The first explanation lies in the effects of the streamlining process and the redundancies entailed by it on the structure of the employed labor force: it is generally the more recently hired workers, whose wages are relatively low, who are fired; in addition, many of the closures were in industries where wages (and labor productivity) are low. On the other hand, new employees were hired mainly by firms with relatively high wages and labor productivity. These processes raised the average wage (although not necessarily unit wages) in both reorganized firms and the entire economy. Secondly, the minimum wage law apparently moderated the erosion of low (including above-minimum) wages, and thus mainly affected industries which have a high concentration of low earners. The third and perhaps most important explanation concerns institutional factors. The unions have a decisive influence on the determination of wages, and the bargaining process is distinctly biased in favor of the employed at the expense of the unemployed. Since wages are determined in negotiations between employer and union, and not between employer and prospective employee, the influence of the unemployed is severely limited. Thus increased unemployment can do little to bring down wages. Moreover, although they have gradually weakened since the stabilization program, wage-linkages between industries and occupations and agreements for automatic seniority increments and promotion still constrain the ability of wages to respond to market forces. Furthermore, the comprehensive unemployment insurance law has also helped to weaken the downward pressure of unemployment on wages. The new conditions required a change in labor-market behavior patterns, a necessarily lengthy process, and it may well be that uncertainty regarding the duration and depth of the recession delayed the response of wages, which presupposes such a change.

As can be seen in Table 4.A1, wages fell and employment rose in the nontradable sectors, whereas in the tradable sectors wages rose and employment declined. This pattern accords with the difference in the degree of unionization between the two. The services, with relatively little unionization, respond to the wage-reducing pressures of unemployment to a greater extent than industry, where the unions are more powerful and where the proportion of Histadrut or public sector firms is high.

2. EMPLOYMENT AND LABOR INPUT

The number of employed Israelis rose in 1989 by half of one percent, with employment unchanged in the business sector and up by 2 percent in the public services. The number of employed persons from the administered territories fell by 4 percent. During the year, employment fell in the second quarter and rose slightly in the third, remaining unchanged in the first and last quarters.

Table 4.3
Industrial Composition of Employment, 1980–89[a]

(percent)

	1980–84	1986–87	1988–89
Tradables			
Industry	23.2	23.6	22.0
Agriculture	4.4	3.8	3.5
Shipping and aviation	1.3	1.1	1.1
Total	**28.9**	**28.5**	**26.6**
Nontradables			
Trade, restaurants, hotels	12.2	13.5	14.4
Financial and business services	9.0	9.7	10.1
Water and electricity	1.0	1.0	1.0
Construction	6.2	4.7	5.0
Transport, storage, communications	5.4	5.4	5.4
Personal and other services	6.1	6.4	7.0
Public services	29.7	29.4	29.4
Agriculture	1.4	1.4	1.1
Total	**71.1**	**71.5**	**73.4**

[a] *Owing to data limitations, the tradable/nontradable classification is only a rough one. In particular,* agriculture includes subindustries belonging to both categories, while trade, restaurants & hotels, and financial & business services include tradable elements.

SOURCE: Based on Central Bureau of Statistics data.

Industrial employment fell steeply in the second quarter, following a slight rise in the first, and made a moderate recovery in the second half of the year; in personal services, on the other hand, employment rose at the beginning of the year and stabilized in the second half. Public services showed a slight fall in the first half of the year and a marked rise in the second half. An increase in public services employment during a recession is nothing new. In the past, the public services have taken on more employees during recessions, thereby containing the rise in the unemployment rate. However, such a policy has its dangers: once the recession is over, it is generally difficult to dismiss the extra workers in pursuit of the declared policy of reducing public services employment. Moreover, it is likely to moderate the downward pressure of unemployment on business-sector wages, and may therefore delay revival of business-sector demand for labor.

Table 4.4
Incremental Employment, by Sector, 1970–89[a]

(annual average increase, thousands)

	1970–1973	1973–1976	1977–1979	1982	1983	1984	1985	1986	1987	1988	1989
Total population											
Total increment	**53.6**	**15.0**	**39.1**	**22.3**	**44.1**	**43.9**	**21.9**	**31.8**	**33.1**	**59.2**	**45.8**
Business sector[b]	44.9	–1.7	24.3	16.2	46.2	15.9	–0.1	23.3	46.7	33.3	–5.6
Public services, employees	11.7	12.5	16.8	6.3	3.1	5.9	8.3	0.8	0.6	16.4	8.8
Israeli unemployed	–2.9	4.2	–1.9	–0.2	–5.2	22.1	13.7	7.7	–14.2	9.5	42.6
Men	**35.1**	**3.9**	**17.0**	**13.0**	**26.7**	**18.6**	**10.8**	**16.1**	**16.9**	**30.2**	**12.9**
Business sector[b]	34.1	–1.3	14.2	10.2	33.4	6.8	–4.2	14.8	28.2	22.3	–11.5
Public services, employees	2.9	3.3	4.3	1.9	–4.0	0.4	3.6	–1.3	0.2	2.1	2.1
Israeli unemployed	–1.9	1.9	–1.5	0.9	–2.7	11.4	11.4	2.6	–11.5	5.8	22.3
Women	**18.5**	**11.1**	**22.1**	**9.3**	**17.4**	**25.3**	**11.1**	**15.7**	**16.2**	**29.5**	**33.0**
Business sector[b]	10.8	–0.4	10.0	6.0	12.8	9.1	4.1	8.5	18.5	11.1	6.1
Public services, employees	8.8	9.2	12.5	4.4	7.1	5.5	4.7	2.1	0.4	14.3	6.7
Israeli unemployed	–1.0	2.3	–0.4	–1.1	–2.5	10.7	2.3	5.1	–2.7	4.1	20.2

[a] Figures may not add owing to rounding.
[b] Includes self-employed in public services.

SOURCE: Based on Central Bureau of Statistics data.

The composition of public-services employment shows that about half the increase is concentrated in education services, which were substantially cut back during the 1980s. The restoration of some of the cuts in teaching hours, together with the natural increase of the school population, is thus reflected in a substantial increase in employment. However, there was also an increase in administrative employment in the central government and the local authorities, and such increases depart from the declared policy of reducing the size of the public sector.

Table 4.5
Employment and Labor Input, by Sector, 1984–89

(percent change over preceding year)

	Absolute figures 1989	1984	1985	1986	1987	1988	1989
Employed persons (thousands)							
Israelis	1,460.8	1.5	0.7	1.4	2.6	3.5	0.5
From administered territories	104.8	2.9	–1.3	5.8	11.9	0.3	–4.1
Public services	434.9	1.7	1.7	0.7	–0.1	4.0	1.9
Business sector[a]	1,130.7	1.5	0.1	2.1	4.5	3.0	–0.4
Total	1,565	1.6	0.6	1.7	3.2	3.3	0.2
Labor input (mill. man-hours)							
Israelis	52.9	1.7	0.7	0.8	2.3	3.5	1.7
From administered territories	3.8	1.7	–1.1	7.7	9.7	–24.1	1.9
Public services	13.6	0.5	2.0	–1.2	0.2	3.8	2.4
Business sector[a]	43.1	2.1	0.1	2.2	3.8	0.3	1.4
Total	56.6	1.7	0.5	1.4	2.9	1.1	1.7

[a] Calculated as total *less* public services.

SOURCE: Based on Central Bureau of Statistics data.

Within the business sector, there were large inter-industry differences: employment fell for the second year running in industry, while it continued to rise in services, particularly in trade, catering, and other personal services. Agriculture, which declined in 1988, rose by 1 percent and financial & business services employment, with a marked increase in 1988, was up by 2 percent. In sum, when we examine the structural change in the economy as reflected in the industrial composition of employment during 1988 and 1989, we find a marked fall in the employment share of the tradables sector (industry and agriculture), and a corresponding rise in that of services (trade, catering, financial & business services, and other personal services). Public services employment remained stable throughout 1986–89 (Table 4.3).

Within industry, all sub-industries participated in the contraction of employment, which was particularly noticeable in textiles, clothing, leather & leather products, wood & wood products, machinery, and basic metals. A more moderate fall was recorded in

Table 4.6
Business Sector Employment and Labor Input, by Industry, 1984–89[a]

(percent change over preceding year)

	Absolute figures							
	1988	1989	1984	1985	1986	1987	1988	1989
Employed persons (thousands)								
Business sector	1,135.6	1,130.7	1.5	0.1	2.1	4.5	3.0	–0.4
Construction	127.8	127.6	–5.2	–6.6	–6.1	7.3	8.9	–0.2
Industry	338.2	327.4	2.6	0.4	4.2	2.7	–2.8	–3.2
Agriculture	83.4	81.8	0.9	8.1	–1.4	2.8	–5.0	–1.9
Transport	94.8	93.1	3.0	–3.6	0.5	5.7	3.5	–1.8
Trade, personal services, business services[b]	402.6	415.7	4.3	2.2	3.8	6.7	8.3	3.3
Financial services	64.8	62.7	–2.8	–2.1	0.3	–2.3	3.2	–3.2
Public utilities	14.5	14.4	0.8	–8.6	5.1	9.7	6.6	–0.7
Not known	9.4	8.2						
Labor input (mill. man-hours)								
Business sector[c]	42.5	43.1	2.1	0.1	2.2	3.8	0.3	1.4
Construction	4.7	4.9	–6.0	–5.6	–6.5	7.7	–4.6	5.1
Industry	12.9	12.8	3.7	0.3	4.8	1.5	–4.3	–0.5
Agriculture	3.2	3.2	2.7	10.6	–2.2	1.9	–8.4	–1.0
Transport	3.7	3.6	4.3	–4.8	0.5	7.5	1.4	–2.3
Trade, personal services, business services[b]	14.6	15.4	5.2	1.7	4.8	6.0	6.8	5.1
Financial services	2.3	2.3	–2.3	–0.2	0.3	–3.7	2.9	–1.4
Public utilities	0.6	0.6	–2.9	–8.4	10.4	0.4	14.5	–1.4

[a] Employment figures are annual averages; labor input figures are weekly averages.

[b] Industries 50–59, 90–99, 73; includes 'other employees from administered territories' except for those employed in public services.

[c] Includes 'not known'.

SOURCE: Based on Central Bureau of Statistics data.

electronics, mineral products, and transport equipment.[2] This may in some cases be explained by the failure to rise of both defense expenditure and domestic demand in general, and in others by the manner in which the production process is being restructured. In textiles, clothing, leather, and wood, where wages are relatively low (about two thirds of the average for the whole of industry), the fall in employment may be explained by the relatively large proportion of employees at the minimum wage level. Updating of the minimum wage thus raised labor costs substantially, and this increased the number of lay-offs. In the food industry, where the average wage is also relatively low, a steep drop in employment might have been prevented by the extensive protection

[2] Details on employment in the sub-industries are based on data from the industry indexes of the CBS.

enjoyed by this industry and its high degree of concentration, which allow it to pass on increased labor costs to the consumer. The difficulties of the traditional industries were increased by the *intifada*, which led to irregular absenteeism of workers from the administered territories, with perhaps some of the shortfall made up by higher-paid Israeli workers. Furthermore, these industries, which are intensive in cheap labor everywhere, find it difficult to compete with countries where wages are substantially lower than in Israel—something that would be true even if there were no minimum wage. Thus, unless their product-mix shifts from standard products to specialities with a higher profit margin, cut-backs are inevitable.

Data on entry of labor into expanding and new enterprises and on exits from those cutting back or closing down give a similar picture.[3] Most of the mobility (defined as the sum of exits and entries) was between firms which had survived the recession, only a small part was from plants which closed down as a result of it or into new ones. In the majority of the industries in which employment decreased, about two thirds of lay-offs were from plants reducing employment and about one third were due to closures. Most entries were also into established plants, with only a few in new ones. At the same time, there was noticeably high mobility in some of the industries which cut back employment sharply. Thus in textiles, clothing, wood & wood products, leather & leather products, and basic metals, where many workers were laid off, a large number of new employees were also hired. This high mobility in industries which (except for basic metals) are fairly competitive and use mainly unskilled labor, might be explained both by the structural change that appears to be under way (for example, firms producing high-quality, speciality products may be expanding at the expense of firms producing standard products) and by their relatively low human-capital intensity, making their labor force more mobile. Plant-level data also show that plants which reduced employment have relatively low labor productivity, while those which increased employment have relatively high labor productivity.

Average hours worked per week rose by some 1.5 percent for the entire economy, and by 1.8 and 0.5 percent in the business sector and the public services respectively. Applying these rates to the employment data, we get that labor input grew by 1.4 and 2.4 percent respectively. Although the working week was reduced from 43½ to 42½ hours in the public services, average hours worked increased because of a decline in the number of part-time positions.

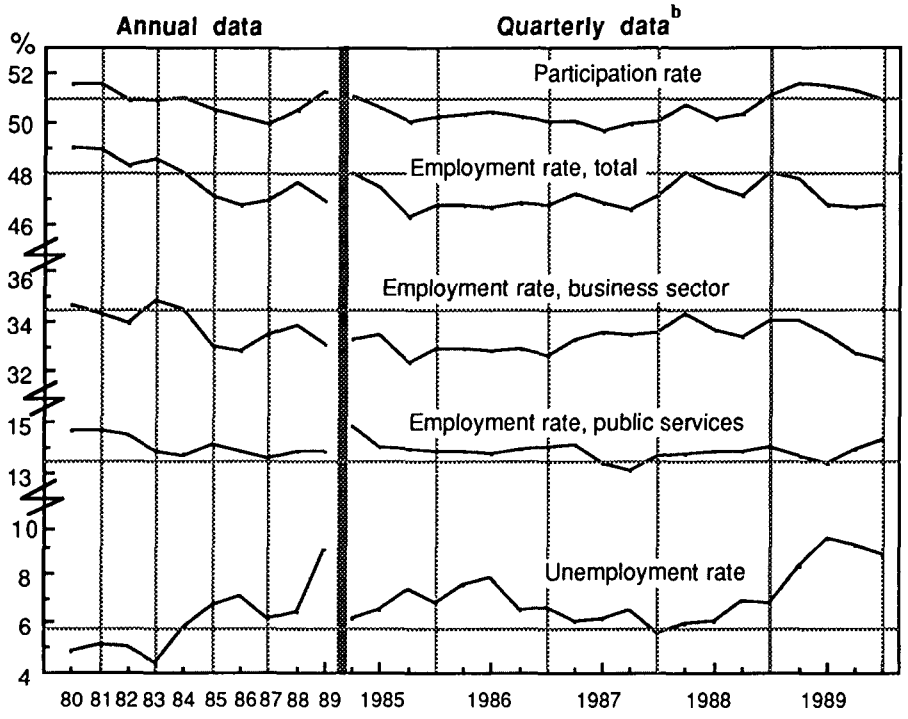
As regards the business sector, the increase in average hours worked per week, which occurred mainly during the second half of the year, suggests that at this stage employers preferred longer working hours to hiring additional workers. That is, although there are indeed signs of recovery, there is still considerable uncertainty about its extent. The fact that the rise in hours worked coincided with the halt in the decline in employment (both in the second half of the year), tends to confirm this conjecture.

[3] Data on labor mobility are based on the panel of 2,200 industrial enterprises used for the industry surveys between 1979 and 1988. The data were collected and collated by Mr Haim Regev of the CBS.

3. UNEMPLOYMENT

The combination of a substantial increase in the civilian labor force with a much more moderate rise in employment of Israelis resulted in appreciably higher unemployment in 1989, with the rate rising from 6.4 percent in 1988 to 8.9 percent in 1989. The specific rates show that unemployment was particularly high among women (10.4 percent) and in development areas (13 percent); both of these, however, are groups whose unemployment rate is generally above average. In addition, almost half the unemployed had not worked for at least 12 months (i.e., they are mostly labor-force entrants). In contrast, the proportion of unemployed aged 14–24, which was unchanged in 1988, fell slightly.

Figure 4.3
Labor Force Participation, Employment, and Unemployment, 1980–89[a]



[a] Employment and unemployment rates with age, sex, and schooling held constant. Horizontal lines show 1984 levels.

[b] *Seasonally adjusted.*

In this context it is particularly interesting to compare the unemployment statistics of 1989 with those of 1966–67, when the rate was similar (7.4 percent in 1966 and 10.4

percent in 1967). Since the two periods differ in the pre-recession unemployment rate, we base the comparison on the average unemployment rate in the five years preceding each recession, namely 3½ percent in 1961–65 and 6 percent in 1983–87 (if the four years preceding the stabilization program, 1980–84, are used instead, the base unemployment rate would be 5.1 percent). These figures indicate that the full-employment level of unemployment rose by 2½ percentage points.[4] This is at least partly due to the introduction of unemployment insurance (which could also have made the rise in unemployment rates irreversible).[5] During the recession of 1966–67, unemployment was dominated by the 'discouraged worker' effect—there is a substantial fall in participation rates as people who give up the search for work leave the labor force. In 1989, on the other hand, unemployment was dominated by the the 'added worker' effect evidenced by the substantial rise in participation rates, particularly of women. In 1989 there are no signs of the discouraged worker effect, and this may be connected with unemployment benefit, which is conditional on registration at a labor exchange.

Another manifestation of the difference between the participation rates of the two recessions—falling in 1966–67 and rising in 1989—is the proportion of unemployed persons who had not worked for at least 12 months: in 1966–67 it came to no more than a quarter, indicating that most unemployment was due to lay-offs; in 1989 the proportion was close to half, reflecting the large number of labor-force entrants.

A prominent feature of the 1966–67 recession was the marked increase in the number of young people in the labor force and the particularly high unemployment rate of the 14–17 age group. In 1989 this group had an extremely low participation rate (apparently because secondary education is now free), so that its contribution to the unemployment rate is negligible.

Another way in which the two recessions differ is in the depth of unemployment: the average monthly number of days unemployed was 15 in 1989, as against 7 in 1966–67. This too may be due to unemployment insurance, which did not exist in 1966–67 (however, unemployment insurance enables the unemployed to spend more time looking for suitable work and thus makes for better matching). Another possibility is that unemployment relief works reduced the average duration of unemployment in 1966–67.

Although the 1989 unemployment is more severe in terms of depth the unemployment of 1966–67 was in two respects more severe: first, the unemployment rate was at that time higher relative to the full-employment rate of the period; second, in 1966–67 the discouraged worker effect was dominant, whereas in 1989 the added worker effect was to the fore: this suggests that in 1966–67 the proportion of employed persons who lost their jobs was higher than in 1989. Furthermore, in 1989 the loss of income is mitigated by unemployment benefit.

[4] There was also a substantial increase in the natural rate in most of Europe and in the United States.

[5] During the recession of 1966–67 some unemployed persons received welfare payments (which are very similar to the assistance given by the National Insurance Institute today). However the size of the welfare payments was not linked to the unemployed person's previous earnings and eligibility criteria were relatively strict, while being on welfare carried a social stigma.

Although the unemployment of 1989 is accompanied by very high participation rates, we cannot assume that emergence from the recession will necessarily reduce participation. The entry of secondary earners into the labor force during a recession may be largely irreversible: new participants tend to remain in the labor market even after a recession. This is especially true of women, whose participation rates have in any case been rising, and have risen faster because of the recession. We can therefore expect that participation rates will remain high, and that unemployment rates will remain higher than in the past even if there is a substantial increase in employment once the recession is over.

Table 4.A1
Real Wages per Employee Post, 1985–89[a]

(percent change)

	Over preceding year					1985–1987	1988–1989	1985–1989
	1985	1986	1987	1988	1989			
Deflated by CPI								
Nontradables	–4.3	12.3	8.6	6.6	–3.8	16.7	2.7	19.7
Tradables	–7.6	7.5	8.2	3.9	0.0	7.5	4.0	11.7
Public services	–14.2	4.8	7.3	10.0	0.8	–3.5	10.9	7.0
Deflated by producer prices								
Nontradables	–5.5	8.2	4.2	3.8	–5.4	6.4	–1.8	4.6
Tradables	–3.6	14.7	11.0	6.0	0.0	22.8	6.0	30.1
Industry	–3.2	15.6	10.2	3.6	–2.0	23.4	1.6	25.3
Agriculture	–13.8	–1.4	7.4	5.0	13.1	–8.7	18.8	8.5
Water & electricity	–13.9	13.1	22.6	9.5	–3.6	19.4	5.5	25.9
Construction	–7.2	34.8	19.9	1.5	–12.7	49.9	–11.4	32.9
Trade, restaurants, hotels	5.0	11.9	0.9	0.3	–2.4	18.6	–2.2	16.0
Transport etc.[b]	–21.5	10.1	13.2	10.9	–3.8	–2.2	6.6	4.3
Financial & business services	–4.0	–8.7	–6.2	2.5	7.7	–17.8	–5.4	–22.2
Personal & other services	0.5	–4.1	–7.0	–1.2	–3.1	–10.4	–4.3	–14.3

[a] Tradable industries comprise industry, part of agriculture, and shipping & aviation.
[b] Transport, storage & communications.

SOURCE: Based on Central Bureau of Statistics data.

Table 4.A2
Israeli Labor Force, Selected Data, 1979–89

(annual change, percent)

	Absolute figures 1989	1979–85	1985	1986	1987	1988	1989
Total							
Thousands							
Mean population	4,518.6	1.9	1.8	1.6	1.6	1.7	1.7
Working-age population	3,082.2	2.1	2.2	1.9	1.9	2.0	2.0
Civilian labor force	1,603.0	2.3	1.6	1.8	1.5	3.9	3.2
Employed persons	1460.8	1.6	0.7	1.4	2.6	3.5	0.5
Unemployed	142.5						
Percent							
Participation rate	52.0						
Standardized participation rate[a]	51.2						
Unemployment rate	8.9						
Employment rate[b]	46.9						
Men							
Thousands							
Working-age population	1,516.4	2.1	2.2	1.9	1.9	2.0	2.1
Civilian labor force	956.0	1.7	1.3	1.2	0.6	3.3	1.9
Employed persons	880.3	1.0	0.1	1.0	2.0	2.8	-0.6
Unemployed	75.7						
Percent							
Participation rate	63.0						
Unemployment rate	7.9						
Women							
Thousands							
Working-age population	1,566.4	2.1	2.2	1.9	1.9	2.1	2.0
Civilian labor force	647.7	3.3	2.0	2.8	2.8	5.0	5.4
Employed persons	580.9	2.7	1.7	2.0	3.6	4.7	2.3
Unemployed	66.8						
Percent							
Participation rate	41.3						
Unemployment rate	10.3						
Employed from administered territories (thousands)	104.8	3.1	–1.3	5.8	11.9	0.3	–4.1

[a] Age and schooling held constant (1984).

[b] Employment as percent of working-age population; age, sex, and schooling held constant (1984).

SOURCE: Central Bureau of Statistics, labour force surveys and family expenditure surveys in the administered territories.

Table 4.A3
Sources of Growth of Labor Force, 1970–89[a]

(annual average increase, thousands)

	1970–1973	1973–1976	1977–1979	1982	1983	1984	1985	1986	1987	1988	1989
Israelis											
Total increment	38.8	15.1	36.0	18.1	35.9	41.3	23.1	26.3	21.6	58.9	50.3
Population growth[b]	34.5	26.4	26.4	23.5	27.9	31.4	32.2	27.6	28.0	29.8	31.3
Change in age and schooling distribution	7.2	3.6	9.8	9.7	9.2	8.3	9.2	5.4	3.3	11.2	8.0
Change in specific[c] participation rates	–2.9	–14.9	–0.2	–15.1	–0.8	1.6	–18.2	–6.7	–9.7	18.2	10.8
Men											
Total increment	20.3	4.0	13.9	8.8	18.5	16.0	12.0	10.8	5.4	29.9	17.4
Population growth[b]	23.4	17.4	17.0	14.2	17.4	19.9	20.0	16.9	17.2	17.9	19.4
Change in age and schooling distribution	0.0	–1.9	1.8	3.1	2.0	1.4	0.3	–2.1	–1.2	3.0	2.5
Change in specific[c] participation rates	–3.1	–11.5	–4.8	–8.5	–0.9	–5.3	–8.3	–4.0	–10.6	9.0	–4.5
Women											
Total increment	18.5	11.1	22.1	9.3	17.4	25.3	11.1	15.5	16.2	29.5	33.0
Population growth[b]	11.1	9.0	9.5	9.3	10.1	11.4	12.2	10.7	10.8	12.1	12.2
Change in age and schooling distribution	7.2	5.5	9.0	6.6	7.2	6.9	8.9	7.5	4.5	8.2	5.5
Change in specific[c] participation rates	0.2	–3.4	4.7	–6.6	–0.1	6.9	–10.0	–2.7	0.9	9.2	15.3
Residents of administered territories											
Incremental employment, total	14.8	–0.1	3.1	4.2	8.2	2.6	–1.2	5.3	11.5	0.3	–4.5

[a] Figures may not add owing to rounding.
[b] Assuming the preceding year's average participation rates.
[c] Age and schooling specific.

SOURCE: Based on Central Bureau of Statistics data.