Chapter 4
Employment and Wages

The unemployment rate rose from 7.7 percent in 1997 to 8.6 percent in 1998, but does not fully express the intensity of the slump in real business-sector activity because it was offset by a steep upturn in employment in the public services. Despite the easing of labor demand—the main factor in the increase in unemployment—real wages in the business sector climbed by 3 percent. Real wages in the public services also rose, but much more gently. The slack in labor demand occurred solely in the business sector and covered most industries at various degrees of intensity. Construction and related industries made the greatest contribution to the increase in unemployment. The slackening of labor demand was also manifested in a perceptible contraction of employment in unskilled-labor-intensive industries. As for the composition of employment, the number of foreign workers leveled off and the number of workers from the Autonomy and the administered areas increased.

1. MAIN DEVELOPMENTS

The average unemployment rate increased from 7.7 percent in 1997 to 8.6 percent in 1998. Unemployment climbed mainly because the economic slowdown attenuated the growth of labor demand while the civilian labor force continued to expand as it had in 1997. The average unemployment rate in 1998 does not fully reflect the intensity of the slackening in real business-sector activity, since a steep increase in public-service employment offset the increase in this rate by 0.8 percentage point. The easing of demand for labor focused entirely on the business sector and affected most of its industries. However, the main contribution to the upturn in unemployment was made by construction and related industries.

The average unemployment rate this year does not fully express the intensity of the slump in real business-sector activity because it was offset by a steep upturn in employment in the public services.

Average hours per employed person decreased by 1.2 percent in the business sector, after stability since 1995, and in the public services by 1.9 percent, after increases in previous years (both figures relative to the 1997 average). These declines reflected an increase in the share of part-time labor[1] and provide a further indication of the intensity and depth of unemployment, as many business-sector employers reduce employees' hours before making layoffs. Labor input in the business sector decreased by 1 percent and that of Israelis declined by 1.1 percent.

The decrease in average hours worked per employed person and in labor input in the business sector are indicative of the intensity and depth of unemployment.

[1] The growth in employment this year stems almost totally from a 6 percent increase in the number of part-time workers.

Table 4.1
Principal Labor Market Indicators, 1995–98

(percent change over previous year)

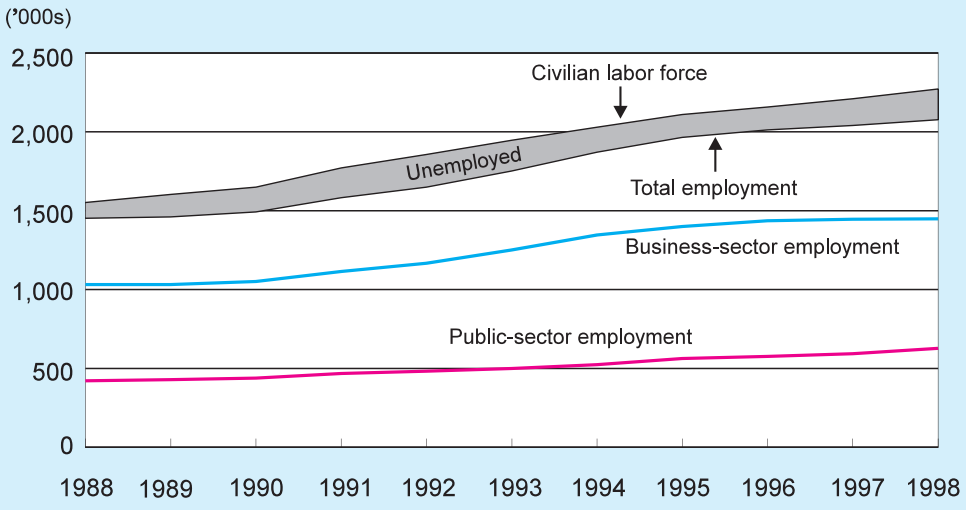
	1995	1996	1997	1998
Population (annual average)	2.7	2.5	2.5	2.4
Working-age population	3.0	3.0	2.7	2.7
Participation rate[a,b]	54.1	53.7	53.5	53.5
Civilian labor force	3.5	2.2	2.5	2.8
Total number of employed	6.4	3.5	1.8	1.7
Israeli	5.2	2.4	1.4	1.8
Non-Israeli	25.0	17.1	7.3	1.0
Public-sector employees	3.6	2.3	3.1	5.8
Business-sector employees	7.1	3.8	1.5	0.2
Israeli	5.4	2.4	0.8	0.2
Non-Israeli	25.9	16.9	7.5	0.5
Business-sector labor input	7.5	4.7	1.7	–1.0
Israeli	5.1	2.7	0.6	–1.1
Non-Israeli	33.3	21.7	9.5	0.0
Non-Israeli share of total	10.4	12.1	13.1	13.2
Real wage per employee post	2.2	1.6	2.4	2.2
Business sector	0.6	1.5	3.5	3.0
Public services	5.7	1.9	0.0	0.3
Minimum wage	2.3	2.5	6.1	5.4
Business-sector unit labor cost	0.9	2.3	2.2	–0.2
Net business-sector domestic product per man-hour	0.3	0.5	0.1	2.2
Unemployment rate[a,b]	6.9	6.7	7.7	8.6

[a] Actual levels.
[b] According to the new definitions and sample of the Central Bureau of Statistics, which came into effect in 1995. Thus, for purposes of comparison, according to the previous system the participation rate in 1995 was 53.8 percent, and unemployment was 6.3 percent.
SOURCE: Central Bureau of Statistics and National Insurance Institute data.

The development of unemployment in the past few years shows that after a steady decline from more than 11 percent in 1992 to 6.4 percent in the second quarter of 1996, the trend reversed and the unemployment rate climbed to 9.3 percent in the second quarter of 1998. It edged down in the second half of 1998 as part-time and public-service employment increased significantly.

The main reason for the rise in unemployment was, as stated, the easing of business-sector demand for labor because of the recession (see Chapter 2). The availability of foreign workers and those from the Autonomy and the administered areas, along with the structural change that the economy is experiencing, had a smaller effect on the unemployment rate. The substantial expansion of employment in the public services, tougher enforcement of the Unemployment Insurance Law by the employment bureaus (greater stringency in recording refusals of job offers), more referrals to vocational-training courses (participants in which are not recorded as jobless), and more vigorous demand for labor in schooling-intensive industries in the business sector helped offset some of the increase in the unemployment rate.

Figure 4.1
Employment in Public and Business Sectors, and the Unemployed, 1988-98



SOURCE: Central Bureau of Statistics

Much of the increase in the unemployment rate is due to the decline in labor demand in construction and construction-input industries (Table 4.A.10); the contraction of employment of Israelis in these industries—10 percent on average—explains over 1 percentage point of the total 0.9 percentage-point rise in the unemployment rate.

The main contribution to the increase in the unemployment rate was made by the construction and construction-input industries.

The intensity of the slowdown in labor demand, which varied between industries, also attests to the continuation of trends of change that have been evident for several years: the first is an uptrend in the share of commerce and services in employment, manifested mainly in increased employment in business services and commerce. The second is the ongoing contraction of employment in unskilled-labor-intensive industries—traditional manufacturing industries in particular—as against rapid expansion of employment in schooling-intensive manufacturing and high-tech industries.

Real wages increased by 2.2 percent on average, mainly because real business-sector wages climbed by 3 percent on average after a 3.5 percent upturn in 1997. Real wages in the public services rose slightly after stability in 1997 and steep increases in 1994–1996. The decrease in hours worked per employed person in the business sector caused the increase in real wages per hour worked in this sector to accelerate from 3.5 percent in 1997 to 4.3 percent in 1998.

Real wages rose by 2.2 percent on average.

The increase of real wages amidst protracted rising unemployment rates corresponds to the structure of the labor market in terms of unions and institutional players and the nature of wage accords in the business sector. Since most wage agreements in this sector were concluded for one- or two-year terms, and in many workplaces agreements were signed before the rate and intensity of unemployment became clear. Furthermore, trade unions, by nature, contribute to setting higher wage levels than those that would

prevail in a situation of competitive equilibrium; this also explains some of the increase in real wages.

The average increase in real business-sector wages was composed of rapid growth in the first eight months of the year and a slowdown from October to year's end. The turnaround traces in part to a double inflationary surprise. Some wage agreements that stipulated nominal wage levels were signed amidst expectations of a higher inflation rate than occurred in the first half of the year; accordingly, the real wage increase during those months was higher than planned. Unexpected price increases in September–November 1998 offset some of this upturn.

Unit labor cost in the business sector decreased slightly in 1998 after having risen uninterruptedly in the last few years.

Unit labor cost in the business sector decreased by 0.2 percent in 1998 after having risen continuously in the past few years. This decrease was made possible by the decline in import prices, which prompted an increase in the ratio of product prices (to the producer) to prices of private consumption (those of relevance to workers).

The partial and provisional wage accord that the Histadrut (General Federation of Labor) and the large public-sector employers signed in September 1998 expired on December 31, 1998. The agreement awarded persons employed by these entities or included in the accord a nonrecurrent wage increase of 30 percent of pensionable wage. Most other issues were set aside for further negotiations. The Histadrut undertook to refrain from sanctions until December 31, 1998. An additional dispute concerns the Cost-of-Living Allowance (COLA) owed to workers for the unexpected price increases since September 1998—increases not covered by the COLA agreement concluded in August,[2] when inflation expectations were low. This issue and other matters were still being debated at year's end.

In view of the recession and the consequent increase in unemployment, an important target for policy is the creation of conditions that will steer the economy back to sustainable growth path powered by the business sector. This is especially crucial in view of the social and economic cost of unemployment, which will climb the longer the unemployment lasts.

The creation of conditions that will steer the economy back to a sustainable growth path, powered by the business sector, is an essential condition for lowering unemployment.

In this context, it is especially important to adjust budget expenditures by increasing the share of growth-supportive expenditure and lowering the tax burden. The macroeconomic policy should be accompanied by structural and institutional measures—pertaining to the economy at large and the labor market in particular—that will mitigate friction and improve the correspondence between demand for and supply of labor. Enhancement of infrastructure, especially in transport (which will make employment centers more accessible) and education, and improvement of students' access to credit, may in the long term mitigate the mismatch between the characteristics of labor demand and workers' qualifications. Making vocational training more extensive, more thorough, and better attuned to the economy's needs will enable the unemployed and new members of the labor force to more easily find work in Israel's expanding industries. Strict enforcement of labor laws and restrictions on the number of foreign workers will help make Israeli workers as cost-competitive as non-Israeli workers and reduce the effect of the latter on employment and unemployment.

[2] See reference to the COLA agreement in the section on wages.

2. ISRAELI LABOR SUPPLY

The civilian labor force expanded by 2.8 percent this year and the average participation rate was unchanged.

The average working-age population grew this year by 2.7 percent relative to 1997, a rate that reflects the stabilization of the growth rate due to a decrease in the share of immigrants in the past few years. The civilian labor force expanded by 2.8 percent and the average participation rate was unchanged at 53.5 percent. The average participation rate of women rose (by 0.5 percentage point) after a slight increase in 1997, whereas the participation rate of men has declined gently since 1994.

Some 57,000 immigrants reached in Israel in 1998, 14 percent fewer than in 1997.

Some 57,000 immigrants reached Israel in the course of 1998, including 42,000 of working age. The growth rate of immigration slowed this year, and the immigrants' average tenure in Israel increased. The immigrants' average labor-force participation rate, 53.9 percent, fell short of the rate in 1997 but surpassed that of the established population. The decline in immigration and the immigrants' participation rate, notwithstanding their lengthening average stay in the country, stems among other things from an increase in the immigrants' unemployment rate together with the widening gap between this rate among immigrants and in the established population.

The share of poorly schooled persons in the labor force and among the employed continued to decline, reflecting a change in their share in the population and a long-term downtrend in participation rates among persons with fewer than ten years of schooling. In contrast, the share of persons with post-secondary schooling in the civilian labor force and among the employed has been rising—as has their share in the population—and their average participation rate has been stable. The greater share of persons with post-secondary schooling in the population originates in an increase in schooling levels among the established population (because of an increase among the young) and the high proportion of immigrants with higher education.

3. LABOR DEMAND AND EMPLOYMENT IN THE PRINCIPAL INDUSTRIES[3]

The average number of employed persons grew by 1.7 percent in 1998, a rate that lagged far behind the growth of the civilian labor force. Almost all the upturn in employment stems from increased hiring in the public services.

The average number of employed persons[4] grew by 1.7 percent in 1998. Almost all the increase stems from a steep 5.8 percent upturn in public-service employment while business-sector employment expanded by only 0.2 percent. This marks the continuation

[3] The classification of industries in the labor force data is problematical, and any analysis of changes in it should therefore be approached with caution.. According to the classification by labor force surveys and National Insurance data, all workers in education and health are included in public services, even when supplied privately. An additional problem is sorting workers in personnel companies or contractual work. Recently there has been a great increase in employment in the firms that supply services to other companies (cleaning, security, computer etc.). Labor in these firms is sometimes ascribed by labor force surveys to the business-services industry and at other times to the industries of the service provided (principal industry or public sector). National Insurance and industry data, which are based on employers' accounts, classify these workers with the companies that employ them, i.e., in business services.

[4] The employment data in this section pertain to total employment, including foreign workers and those from the Autonomy and the administered areas.

Table 4.2
Principal Labor Market Indicators, 1996–98

(thousands, annual averages)

			Change over previous year		
	1997	1998	1996	1997	1998
Working-age population	4,129.3	4,242.2	116.6	109.4	112.9
Civilian labor force	2,210.1	2,271.6	46.8	53.2	61.5
Unemployed	169.8	195.0	–0.9	25.7	25.2
Total number of unemployed	2,231.3	2,269.7	74.1	40.1	38.4
Israeli	2,040.3	2,076.6	47.7	27.5	36.3
Non-Israeli	191.0	193.1	26.4	12.6	2.1
The Autonomy[a]	48.0	53.0	–19.0	7.0	5.0
Foreign workers	143.0	140.2	45.4	5.6	–2.8
Public-sector employees	599.5	634.3	14.0	17.0	34.8
Business-sector employees	1,631.8	1,635.4	60.2	23.0	3.6

[a] The Palestinian Autonomy and administered areas.
SOURCE: Central Bureau of Statistics.

of a trend evident since the second half of 1996: accelerated expansion of employment in the public services, coupled with a perceptible slowdown of employment growth in the business sector. Public-service employment also increased during previous recessions until the 1985 Economic Stabilization Program (ESP) and during the unemployment surge that followed the recent mass immigration. In the recessions that occurred until the ESP, the government also intervened directly in the business sector (by helping struggling enterprises and subsidizing employment), so that the slackening of employment in the business sector is also under-expressed. Nevertheless, it should be borne in mind that in the public-service industries that showed the strongest increases in employment the government operates alongside nongovernmental agencies (Table 4.A.5).

The decrease in business-sector labor input reflects a steep decline in input by Israelis and an increase in input by labor from the Autonomy and the administered areas.

The decrease in business-sector labor input—by 1 percent on average—is an important indicator of the intensity of the slowdown in real activity. The average decrease in labor input expresses a 1.1 percent decrease in labor input of Israeli workers, and is a result of the decline in the average work week per employed person in all the principal industries, in both the business sector (1.2 percent) and the public services (1.9 percent) (Table 4.3). The decrease in the average work week per employed person reflects a substantial upturn in the share of part-time employees. This may indicate a strong likelihood of a further increase in unemployment, since most (business-sector) employers in a slumping economy reduce their employees' labor hours first and resort to layoffs only afterwards.

The slackening in business-sector labor demand covered most industries and was especially intense in those intensive in unskilled labor, in which employment declined (Table 4.3). The contraction of employment in construction and in construction-input industries made the largest contribution to the increase in the unemployment rate this year (Table 4.A.10)—more than 1 percentage point. The trend in construction employment is partly the result of the steep decrease in building starts. Furthermore, the availability of foreign workers and those from the Autonomy and the administered

Table 4.3
Employment and Labor Input in the Business Sector, by Industry, 1996–98

	Employment					Labor input				
	Thousands		Rate of change			thousands		Rate of change		
	1997	1998	1996	1997	1998	1997	1998	1996	1997	1998
Total business sector[a]	1,632	1,635	3.9	1.4	0.2	67,100	66,459	4.7	1.7	–1.0
Construction	247	233	5.5	0.0	–5.6	11,017	10,227	6.7	1.4	–7.2
Manufacturing	406	402	3.0	–1.9	–0.9	16,830	16,558	2.6	–1.9	–1.6
Agriculture	73	73	–5.2	0.3	0.3	3,191	3,170	–3.3	0.8	–0.7
Commerce and repairs	263	271	2.7	3.1	3.0	10,813	11,001	3.2	2.1	1.7
Catering services	97	102	5.0	1.0	4.9	3,938	4,027	8.0	0.1	2.3
Banking, insurance, finance	78	78	–0.1	8.7	–0.1	2,985	2,987	–0.9	8.7	0.1
Business services	212	223	14.1	6.2	5.1	8,445	8,725	16.0	6.7	3.3

[a] Figures may not add due to omission of ‘miscellaneous’.

SOURCE: Central Bureau of Statistics.

areas, and their comparative advantage in cost to employers, had a stronger effect on employment in construction than in other industries because non-Israeli workers account for 41 percent of employment in this industry.

In unskilled-labor-intensive industries, employment of Israelis slumped by 8.6 percent on average. The contraction of employment in textiles (12.1 percent) was especially conspicuous because it came on the heels of considerable cutbacks in previous years. The textile industry was especially affected by the increase in the minimum wage, which, by reducing production profitability, was one of the reasons for the diversion of some production to neighboring countries. The downturn in textile employment was even more salient in view of the perceptible increase in textile exports in 1998 (5.5 percent) and the upturn in production (1 percent). Much of the decrease in employment traces to the transfer of some production abroad; another portion may stem from an increase in the intensity of capital and technology in production processes.

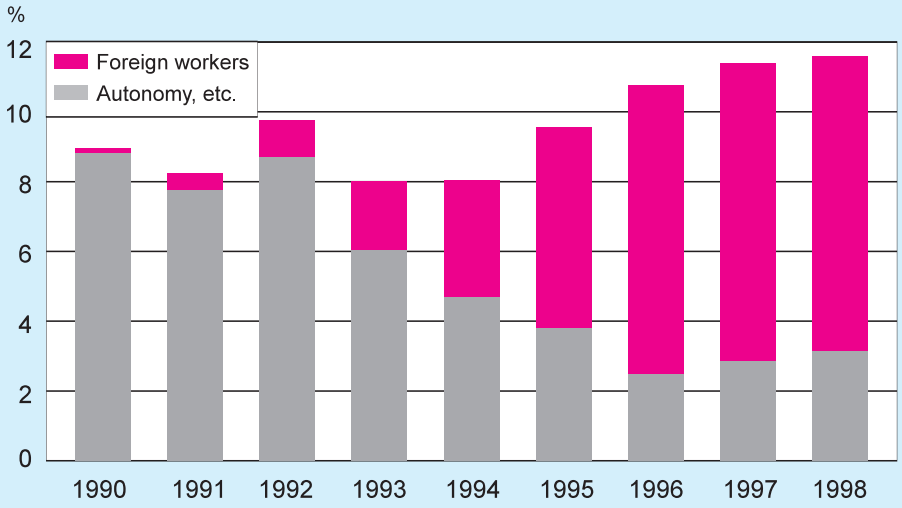
Employment in schooling-intensive industries continued to rise in 1998.

Concurrent with the decrease in employment in unskilled-labor-intensive industries, the uptrend in schooling-intensive industries (especially high-tech) continued, employment expanding far faster than the civilian labor force.

The trend in the composition of employment by industries in 1998 reflects the slackening of domestic demand, the composition of world trade (which is high-tech-oriented), the ongoing globalization of the Israeli economy, and the liberalization of imports. These factors have caused a protracted erosion of profitability in industries that are intensive in unskilled labor, especially in traditional manufacturing industries.

As for the composition of business-sector employment, the growth in foreign workers

Figure 4.2
The Share of Workers from the Autonomy and the Administered Areas, and Foreign Workers,[a] in the Business Sector, 1990-98



[a] Reported and unreported workers, as estimated by the Central Bureau of Statistics.
SOURCE: Central Bureau of Statistics.

halted in 1998: the number of reported foreign workers decreased by 7.6 percent to 70,200 and that of unreported foreign workers climbed by 3.2 percent to 65,000.[5] In contrast, the number of workers from the Autonomy and the administered areas continued to mount rapidly and came to 52,000 on annual average, a 10.6 percent increase over 1997. In all, 11.4 percent of persons employed in the business sector were non-Israeli (as in 1997) and they contributed 13.2 percent of total business-sector labor input (as against 13.1 percent in 1997).

The permits to employ foreign workers that were issued in the early 1990s were intended to counter a temporary shortage of labor in construction and agriculture.[6] In the early years of this authorization (1993–96), the number of foreign workers climbed rapidly and steadily and the number of Autonomy and administered-areas workers decreased (Figure 4.2). Foreign workers are also found in industries that had not employed large numbers of workers from the Autonomy and the administered areas, such as personal services. Since 1997, as the number of foreign-worker permits has been scaled back and enforcement of laws concerning the employment of nonresidents has been toughened, the proportional growth of foreign labor in total employment has slowed perceptibly but the share of Autonomy and administered-areas workers has risen.

4. UNEMPLOYMENT

The unemployment rate declined in the second half of 1998 because of an upturn in employment in the public services and in part-time jobs.

The increase in unemployment that began in the third quarter of 1996 continued in 1998, as the unemployment rate climbed to 8.6 percent on annual average—195,000 jobless. The seasonally adjusted unemployment rate peaked at 9.3 percent in the second quarter of the year and dipped in the second half to 8.2 percent in the fourth quarter. The second-half decrease is attributable to a steep upturn in employment in the public services (7 percent relative to the corresponding period in 1997) and in the number of part-time workers (12.6 percent relative to the corresponding period in 1997), and does not seem to be indicative of a long-term improvement in labor demand.

Data from the Employment Service point to a 9.2 percent increase in the average number of jobseekers in 1998 versus 1997.[7] According to National Insurance Institute figures, the number of applications for unemployment compensation climbed by 12.2 percent relative to 1997, a substantially lower rate than the 14.8 percent increase in the number of unemployed. These data evidently reflect tougher enforcement of the

[5] The number of foreign workers is based on estimates by the Central Bureau of Statistics. Note that estimates acceptable to different government players vary widely.

[6] The security events in the early 1990s and the resulting quarantines in the administered areas made it difficult for workers from these areas to reach jobs within Israel, and mass immigration caused demand for housing services to expand considerably.

[7] The Employment Service data are indicative of the unemployment trend and have the advantage of being released earlier than the quarterly unemployment data. However, these figures are strongly affected by Employment Service policies (e.g., the number of referrals to vocational-training courses and the recording of refusals).

Table 4.4
Contribution to Change in Unemployment Rate,[a] 1996–98

(year-on-year change, percentage points)

	1996	1997	1998
Total	**–0.2**	**1.0**	**0.9**
Business sector	–0.2	1.1	1.7
High-skill industries[b]	–0.4	–0.4	–0.2
of which Nontradables	–0.2	–0.4	0.1
Manufacturing	–0.1	0.1	0.0
Computer services	–0.2	–0.1	–0.3
Unskilled-labor-intensive industries[c]	0.5	0.7	1.4
of which Manufacturing	0.5	0.4	0.7
Textile and clothing	0.2	0.3	0.2
Construction	–0.3	0.3	0.9
Catering and hotel services	0.3	0.1	–0.2
Other industries (not classified)[d]	–0.2	0.7	0.5
of which Manufacturing	–0.1	0.3	0.2
Public sector	0.0	–0.1	–0.8

[a] The contribution to the rise in unemployment was calculated as the difference between the number of Israelis who would be employed if employment had expanded in line with the growth of the civilian labor force and its actual expansion (for by-industry breakdown, see Table 4.A.10).

[b] High-skill industries include some manufacturing, computer services, banking, insurance, financial institutions, and other business activities.

[c] Unskilled-labor-intensive industries include some manufacturing, construction, commerce and repairs, and catering and hotel services.

[d] Other industries (not classified) include agriculture, water and electricity, transport, storage and communications, hiring equipment, employment agencies, security and cleaning, entertainment, and other personal services.

SOURCE: Based on Labor Force Surveys of the Central Bureau of Statistics.

Unemployment Compensation Law on the part of the Employment Service: the number of refusals recorded in 1998 surpassed the 1997 figure by 51 percent[8]—in contrast with previous years, when the number of unemployment compensation claims usually exceeded the increase in number of unemployed.

The main cause of the increase in unemployment was the slackening of labor demand in the business sector, prompted by the recession. The contraction of employment in unskilled-labor-intensive industries, which made the largest contribution to the growth of unemployment this year, also stems from a change in the composition of demand (which depressed the level of activity in these industries) and a change in production processes, in which the intensity of capital and technology has been rising. The increase in the minimum wage and the availability of foreign and Autonomy and administered-areas workers, who offer employers a comparative cost advantage, had an additional downward effect on demand for labor—especially for the poorly schooled—and an upward effect on the unemployment rate. Furthermore, it has become possible over the

[8] Unemployed persons who turn down 'suitable' job referrals are registered as 'refusers' and lose their eligibility for unemployment benefits. Importantly, despite the increase in refusals this year, refusers made up a small proportion of jobseekers.

past few years to move a rising share of production that uses a large proportion of unskilled labor to neighboring countries with which Israel has established diplomatic relations, and where labor is cheap. The excess in labor demand in schooling-intensive industries, which offset a small portion (0.3 percentage point) of the increase in the average unemployment rate, does not offer a solution to the unemployment problem, since few workers ousted from 'sunset' industries can find jobs in expanding industries because they cannot meet the latter industries' schooling requirements.

The main cause of the increase in unemployment was the slackening of labor demand in the business sector, prompted by the recession.

The unemployment rate and the numbers of unemployed increased at all levels of schooling but especially among those with ten years of education or less. The gap in unemployment rates among the schooling cohorts continued to widen, even though participation rates in the poorly schooled groups (secondary education and less) have been declining for some time and the participation rates of those with post-secondary schooling have been stable on average. These trends also reflect the trajectory in demand for labor—vigorous growth in demand for workers who have acquired technological and other higher schooling and contraction in demand for poorly schooled workers.

The gap in unemployment rates among different schooling cohorts continued to widen despite declining participation rates among people with secondary education or less.

The weakening of labor demand and its concomitant, a rising unemployment rate, occurred in all parts of the country and were most salient in peripheral areas. Most pockets of unemployment (localities with unemployment rates exceeding 10 percent) are located in the south and in the Arab sector. However, the gap in unemployment rates between the Southern District and the countrywide level narrowed, as the rate in the south decreased slightly. During the year, various authorities introduced programs to combat unemployment that focused on peripheral areas and unemployment pockets. However, the decrease in the unemployment rate in the Southern District is chiefly the result of the decline in participation rates, not of growth in employment. Furthermore, many residents of development towns, the Arab sector, and other peripheral areas rely for their livelihood on a small number of enterprises that provide jobs for large proportions of the population. The development of roads and transport infrastructure that will improve access to central or regional employment centers may contribute more to a long-term solution to the unemployment problem in peripheral areas than subsidies for unprofitable plants.

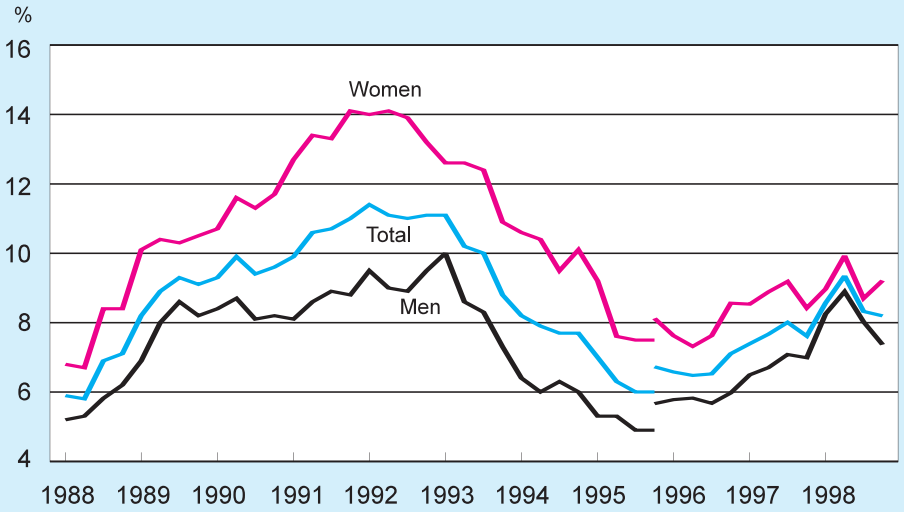
Table 4.5
Unemployment Rate, by Years of Education, 1995–98

(percent)

	1995	1996	1997	1998
Total	**6.9**	**6.7**	**7.7**	**8.6**
Years of education				
0–8	7.4	8.1	10.0	13.0
9–12	8.0	8.2	9.4	10.0
13–15	5.2	5.7	6.5	7.2
16+	3.3	3.7	4.1	4.2

SOURCE: Based on Labor Force Surveys of the Central Bureau of Statistics.

Figure 4.3
The Unemployment Rate,[a] 1988-98



[a] Quarterly data, seasonally adjusted; the Central Bureau of Statistics definition was changed in 1995.
SOURCE: Central Bureau of Statistics.

The gap between men's and women's unemployment rates continued to narrow.

In terms of the characteristics of unemployment, joblessness was less prevalent in 1998 among men (8.1 percent on average) than among women (9.2 percent on average). These rates reflect a steeper increase in men's unemployment than women's,[9] even though the participation rate of women rose and that of men declined. The difference between the unemployment rates of men and of women continued to contract.

The unemployment rate among immigrants soared in 1998 after a gentler upturn in 1997 and a steady decline between 1990 and 1996. Concurrently, the number of immigrants decreased this year. As immigrants' stay in the country lengthens, their unemployment rate declines. However, although their average stay lengthened in 1998, the gap between the unemployment rates of immigrants (11.7 percent on average) and the established population widened. This development, which reflects a worsening in the immigrants' relative situation, may have occurred partly because various programs that subsidized immigrants' labor have come to an end.

In 1998, as in 1997, the increase in joblessness was accompanied by a rise in the depth of unemployment (Table 4.A.7). The share of unemployed persons who have been seeking work for a long time—more than half a year—climbed from 20.5 percent in 1997 to 24.1 percent in 1998. This increase was composed of a sharp upturn in the share of persons seeking work for six months to one year and an increase in the share of unemployed persons for more than one year. The contraction of employment in various industries was manifested in an increase in the share of layoffs among

[9] In the fourth quarter, however, unemployment increased sharply among women and decreased among men.

unemployed persons who had worked in the previous year—from 33.4 percent on average in 1997 to 37.8 percent on average in 1998.

According to various indicators, the extent and depth of unemployment continued to rise, especially in disadvantaged groups among which unemployment rates were high to begin with. Protracted high unemployment rates have economic and social implications in both the short and the long terms. They may aggravate the depth of joblessness and expand the hard core of unemployed persons who have little likelihood of finding employment in the future. A lengthy stay outside the job cycle dissipates the human capital of the unemployed, mitigates their ability to utilize prior work experience as evidence of their qualifications, and, for this reason, impinges on their ability to find work in the future and raises the natural unemployment rate (see Box 4.1). Sustained high unemployment rates also inspire the long-term jobless to leave the labor force in despair. The substantial and protracted decline in the participation rates of poorly schooled persons (those with up to ten years of education) may attest to this phenomenon, known as the 'discouraged-worker effect.'

Box 4.1: The Natural Unemployment Rate

Israel's unemployment rate has been following an upward trend since 1973. Although the rate occasionally declines in accordance with the business cycle, the long-term trend continues to rise. This development, similar to that in several European countries in the past few decades, may point to the existence of structural and other factors that trace some of the increase in joblessness to non-cyclical causes.

The 'natural unemployment rate,' a concept developed by Friedman and Phelps,[1] relates to the unemployment rate that would prevail if all markets were in equilibrium. Accordingly, it reflects the full aggregation of labor- and product-market characteristics.

One component of 'natural' unemployment is frictional unemployment, which results from the amount of time needed to find the right job or the right worker. The frictional unemployment rate depends on various parameters, including the 'reservation wage'—the minimum wage at which a worker is willing to accept a job. The reservation wage is affected mainly by household income, the accessibility of the capital market, and the level of and the qualifying criteria for unemployment compensation. In Israel, the share of unemployment-compensation recipients among the unemployed climbed from 23 percent in the late 1980s to 60 percent in 1997, and the level of compensation paid out has

[1] M. Friedman, (1968), 'The Role of Monetary Policy,' *The American Economic Review*, 58;1–17; E. S. Phelps, (1968), 'Money, Wage Dynamics and Labor Market Equilibrium,' *Journal of Political Economy*, 76 (August), Part 2, 678–711.

risen over the past two decades more vigorously than the national average wage.[2] However, an international comparison shows that the criteria in Israel for obtaining unemployment compensation and the substitution rate (the ratio of compensation to the most recent wage) do not differ widely from accepted western levels.

The frictional unemployment rate is also affected by the degree of correspondence between labor demand (employers' requests) and labor supply (workers' qualifications, geographical location, etc.). In the past two decades Israel and other countries have experienced far-reaching technological improvements and structural changes that have weakened the correlation between labor demand and supply and, accordingly, have aggravated friction. Furthermore, advanced vocations and occupations—which are claiming a rising share in employment—are usually typified by high variance of worker qualifications and job requirements, thereby creating another source of greater friction. The rising average level of schooling and the growing incidence of post-secondary and technological education in the labor force has reduced the frictional element and helped offset some of the impact of the technological improvements and structural changes. However, the widening of the gap in average years of study between employed persons and the labor force at large only partly reflects the effect of the structural changes and technological improvements on frictional unemployment, since this figure fails to take two matters into account: the distribution of schooling and occupations in the labor force and in employment, and the obsolescence of knowledge.

The effect of the geographical factor on frictional unemployment may be manifested in a gap between unemployment rates in peripheral areas, where most unemployment pockets are located, and rates in areas near major cities and other employment centers. The disparity between unemployment rates in Israel's south and center is widening, whereas it is difficult to pinpoint any trend in the difference in unemployment rates between other peripheral areas and the center.

The mass immigration of the early 1990s initially aggravated friction because the immigrants' job qualifications did not mesh with the requirements of domestic employers. Friction began to decrease gradually as the immigrants' average stay in the country lengthened, as shown in the increase in participation rates and the decline in unemployment rates among immigrant groups as they became longer-tenured. The high proportion of immigrants with higher and technological schooling, which has helped elevate the average schooling level, may in the medium term improve the correspondence between labor supply and demand.

[2] Unemployment compensation reduces the cost of jobseeking from the point of view of the unemployed individual, and thus helps raise the wage and extend the duration of the job hunt. However, the proportion of unemployment-compensation recipients among total unemployed persons and the level of compensation relative to the average wage may also reflect a change in the composition and depth of unemployment.

Labor Market Indicators Affecting the Natural Unemployment Rate,[a] 1973–97

(percent)

	1973–79	1980–84	1985–89	1990–93	1994–96	1997
GDP growth rate	3.8	2.9	3.8	5.5	6.1	2.4
Unemployment rate	3.2	5.1	7.2	10.4	7.1	7.6
Rate of unemployed receiving unemployment benefit	26.2	16.3	22.0	37.5	51.0	58.9
Unemployment benefit/average wage ratio	36.8	37.2	42.5	44.7	45.3	49.5
Participation rate of women	32.6	36.4	39.3	42.2	45.3	45.8
Share of foreign workers and Palestinians in total employment	7.1	7.6	8.8	8.7	9.5	11.4
Education gap[a] (years)	1.1	1.2	1.3	1.3	1.3	1.4
Unemployment gap[c]	1.6	1.5	2.7	2.4	4.3	4.2
Firm wage agreements[d]	22.6	7.6	30.4	44.8	54.9	69.3
Minimum wage[e]	36.5	35.0	35.1	40.7	40.8	42.3

[a] The indicators in this table provide only a partial characterization of the labor market and the factors affecting the natural unemployment rate. Other important factors are not given here, or are shown only partially, because of the difficulty of quantifying them.
[b] The gap between average years of schooling of employed persons and of the civilian labor force.
[c] The gap between the unemployment rates in the south and the center of Israel (percentage points).
[d] Share of increase in average wage due to agreement at level of firm.
[e] Ratio of minimum wage to average business-sector wage.

Another cause of friction is the availability of foreign and Autonomy and administered-areas workers, who work for lower wages than similarly qualified Israelis and usually represent an alternative production factor to poorly schooled Israelis. Their availability makes labor demand more elastic at times of economic upturn but crowds out poorly schooled workers and aggravates friction during slowdowns. The proportion of non-Israeli workers in employment has been rising steadily (see table above).

The increase in the unemployment rate may itself help boost the natural employment rate (as happened in many European countries), since a lengthy stay outside the employ-ment cycle makes the unemployed less able to utilize their work experience as evidence of their qualifications, depletes their human capital, and, for this reason, adversely affects their ability to find work in the future (an effect known as ‘hysteresis’).

Wage rigidities also contribute to the natural unemployment rate by helping set wages at a higher level than competitive equilibrium would sustain—in the aftermath of company-level wage accords that are strongly affected by the sides’ bargaining power or as a result of government intervention in the wage-setting mechanism and the existence of collective wage agreements.

Major developments in the Israeli labor market in the past decade include structural changes that made company-level accords more important and gave

firms greater ability to link wage increases to their profitability and the state of the labor market.[3] The impact of general and industry-level labor unions on the wage-setting mechanism has diminished as the share of employees hired on personal contract or through private employment agencies has risen. Since 1988 country-wide and industry-wide wage increases have not been awarded except through the mechanisms of COLA and the minimum wage, and the COLA agreements were amended to give workers less than full compensation for price increases. These and other changes weakened the correlation between wage trends in the private and the public sectors and reduced the natural unemployment rate. In contrast, the Minimum Wage Law and the linkage of the minimum wage to the national average wage have reduced elasticity and reinforced dependencies among wage accords in different sectors and industries.[4]

[3] These changes are reflected in the greater share of the wage-increment originating in company-level accords (see table).

[4] As reflected in the increase in the minimum wage relative to the average wage (see table).

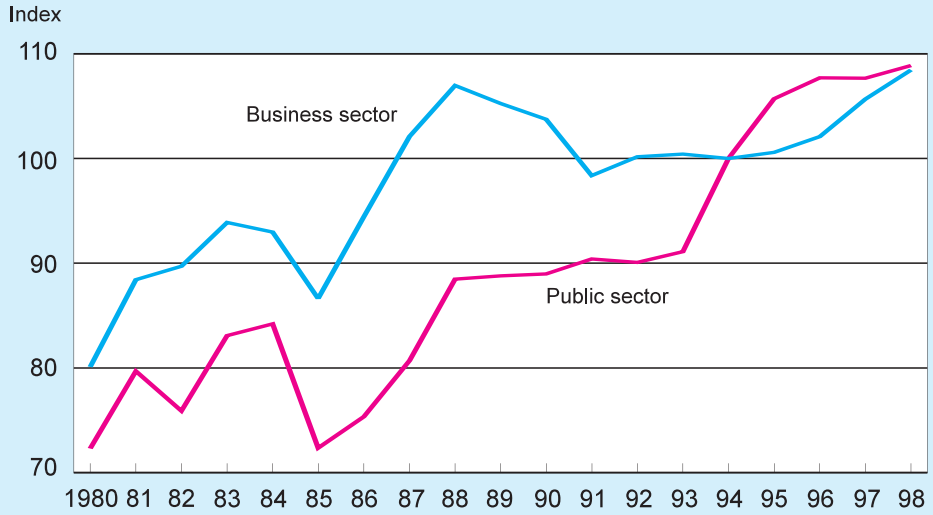
5. WAGES[10]

The nominal wage per employee post increased in 1998 by 7.7 percent on average—8.6 percent in the business sector and 5.7 percent in the public services. These nominal increases translate into a 2.2 percent increase in real wages (from workers' point of view)—3 percent in the business sector and 0.3 percent in the public services (Figure 4.4). From the standpoint of employers (labor cost deflated relative to the GDP deflator and the increase in per-worker product), unit cost of labor in the business sector declined by 0.2 percent after rising by 2.2 percent in 1997 and 2.3 percent in 1996.

The increase in real wages in the business sector in 1998 follows a 3.5 percent increase in 1997 and a gentler upturn in 1996, despite the steady and rapid increase in the unemployment rate. The wage trend in 1998 indicates that although the wage system has become more elastic in the past decade, wages have responded to the unemployment level only partly and, for the most part, belatedly. To explain this, one must consider the mechanism in which wages are set and its attendant rigidities—some derived from the nature of the employer-employee relationship and others stemming from institutional and structural rigidities.

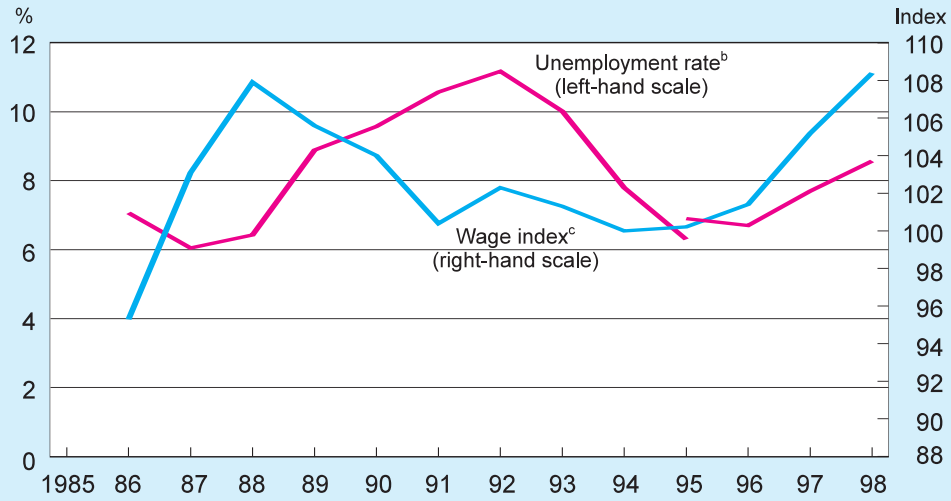
[10] Wage per employee post is calculated as total wage payments *divided by* the total number of employed persons (irrespective of whether they are employed full- or part-time). Consequently, part of the change in wages is technical, arising from changes in the extent of the job, the number of days worked per employee, the rate of labor mobility between workplaces, the composition of their human capital, etc. Additionally, due to the problems in recording wages paid to foreign workers and workers from the Autonomy and the administered areas, and in view of their high share in the labor force, the wage data are skewed.

Figure 4.4
Indices of Real Wage per Employee Post in Business and Public Sectors, 1980-98



SOURCE: Central Bureau of Statistics.

Figure 4.5
Index of Real Wage per Employee Post in Business Sector,[a] and Unemployment Rate, 1986-98



[a] Excluding workers from the Autonomy and the administered areas.
[b] The Central Bureau of Statistics definition was changed in 1995.
[c] Base: 1994=100.

SOURCE: Central Bureau of Statistics.

Real wages are set in nominal wage agreements that are concluded periodically between labor and management (or their representatives) and reflect the rate of wage-eroding price increases. Wages may also be affected by laws and collective arrangements (such as the minimum wage or the COLA), including wage indexations among sectors and occupations. The presence of labor unions, which usually represent the interests of workers and not of the unemployed, also limits the responsiveness of wages to the level of unemployment and the state of the economy in general.

Wages usually respond to the unemployment level only partly and belatedly.

Various events and situations usually have a belated effect on wages. Most business-sector wage accords are signed for one- or two-year terms and cannot be modified in the short term. Most events that occur during the term of the agreement are not mani-fested in the wages paid to workers under the agreement but are reflected with a lag in the agreements that follow the lapse of the current ones. Some business-sector wage agreements that were in effect in 1998 may have been concluded before the unemploy-ment trend changed direction or before the intensity of the change became clear. The decrease in unit labor cost suggests that a larger portion of the new labor accords—those signed during the year and those still being debated—reflect the (partial) internal-ization of the relatively low inflation environment and the high level of unemployment.

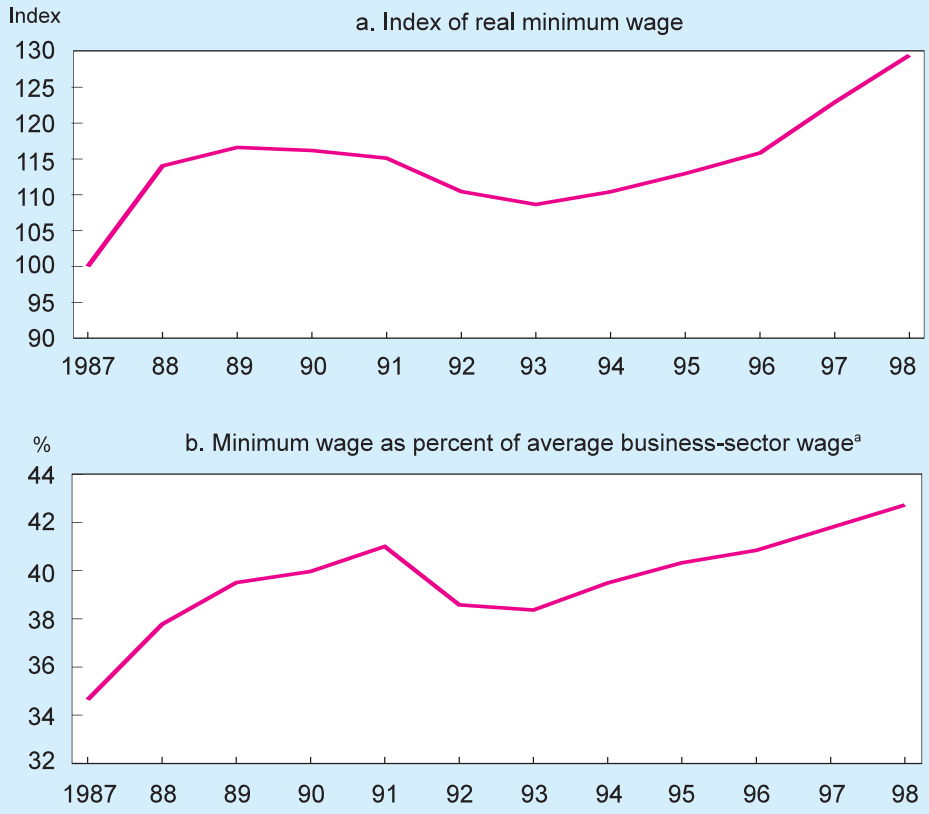
The nominal wage as set takes account of expected inflation during the agreement term and the extent of wage erosion that this inflation will cause, incorporating current or expected COLA arrangements. The price trend in 1998 contained a double surprise: the rate of price increases between January and August fell far short of expectations when the wage accords were concluded; accordingly, the first eight months witnessed a real average wage increase of 3.5 percent all told and 5 percent in the business sector (relative to the first eight months of 1997). The unexpected local-currency depreciation in October and the price increases that followed it offset much of this real wage increase, keeping the real increase during the year below that in 1997. For the year all told, the price trend contributed no more than half a percentage point to the real wage increase.

The COLA accord signed on August 20, 1998, provides only partial compensation for wage erosion between August and December.

On December 31, 1997, the COLA accord for the period between February 1, 1996, and December 31, 1997 expired. The new COLA agreement, signed on August 20, 1998, pertains to the period between August 1, 1998, and December 31, 2001. In accordance with the new agreement, a 0.5 percent COLA was paid effective August 1, 1998. The agreement also stipulated that if the rate of CPI increase between July 1998 and December 1998 exceeds 2 percent, an advance of 0.25 percent on account of the COLA shall be paid starting on January 1, 1999; that this advance would be subtracted from the COLA to be paid on January 1, 2000; and that no compensation other than this advance would be given. The provisions of the agreement indicate that, in the estimation of labor's representatives, the price increases between August and December 1998 would not exceed 2 percent. As it turned out, prices rose during that time by 5.85 percent, for which workers received compensation of only 0.25 percent.[11] For 1999

[11] The unexpected erosion of real wages occasioned by the price shock may be estimated at 3 percent. The COLA arrangement concluded in August 1998 may reflect a partial adjustment of labor-market arrangements for disinflation, but in the second half of 1998 it did not fulfill one of COLA's main goals—protecting workers from unexpected erosion of real wages.

Figure 4.6
The Minimum Wage, 1987-98



[a] Excluding workers from the Autonomy and the administered areas.
SOURCE: Central Bureau of Statistics.

and 2000 it was agreed that compensation would be paid each year for 90 percent of the increase in consumer prices beyond a threshold of 4.25 percent, and the dates and conditions for remittance of advances on account of this COLA were worked out. At the present writing (March 1999), the Histadrut and the organizations of employers are continuing to discuss the compensation that workers should receive for the wage erosion that occurred in August-November 1998. At various stages of the negotiations, the employers expressed their consent to partial compensation for the unexpected real wage erosion occasioned by the sudden depreciation and the rapid price increases that followed. Notwithstanding their consent in principle, the level of compensation is still being discussed.

The minimum wage and its indexation to the national average wage have a considerable effect on wages in unskilled-labor-intensive industries.

The minimum-wage increase in April 1998 (8.5 percent) had a negligible direct effect on the overall increase in real wages because of the small fraction of minimum-wage earners in employment and the low level of compliance. However, it strongly

Table 4.6
Change in Real Wage per Employee Post,[a] by Industry, 1995–98

(percent)

	1995	1996	1997	1998
Public services	**5.7**	**1.9**	**0.0**	**0.3**
Business sector	**0.6**	**1.5**	**3.5**	**3.0**
of which Agriculture	5.5	4.1	3.5	3.4
Manufacturing	3.9	2.2	6.2	5.1
Water and electricity	5.7	3.5	2.6	0.3
Construction	0.0	–3.3	3.7	2.7
Commerce	1.1	1.9	1.6	2.5
Catering services	–1.1	1.1	1.4	–0.3
Transport and communications	0.2	–1.5	2.9	1.6
Financial services	–4.3	5.6	8.3	–2.1
Business services	0.2	4.7	4.2	4.2
Total	**2.2**	**1.6**	**2.4**	**2.2**

[a] Including workers from the Palestinian Autonomy and administered areas, and reported foreign workers.

SOURCE: Central Bureau of Statistics.

affected wage increases in unskilled-labor-intensive industries by inflating the cost of such labor and—because of formal and informal indexations in wage scales—by boosting the wages of employees who earned above the minimum. Since the minimum wage is indexed to the national average wage by law, any event that raises the national average wage does the same to the minimum wage, even if the event is confined to a specific sector or occupation.

Additional factors that push wages upward even during a slump stem from the way the average wage is computed. Because the growth of employment slowed, the share of newly hired workers, who in most cases join their employers at a beginning-wage level, decreased for the second year. Moreover, since most layoffs are made among low-productivity, low-wage employees, they reduce the share of such employees in total employment and boost the average levels of productivity and wages. The structural change that the economy has been undergoing in the past three years has reduced the share of traditional industries, in which employment has been falling, and has raised the share of the expanding high-tech industries which, on average, pay higher wages. This change may explain another portion of the real wage increase (about 0.4 percentage points of the increase in the business sector and 1 percentage point of the upturn in industry).

The real wage increase encompassed most industries in the business sector.

The real wage increase encompassed most industries in the business sector (Table 4.6), foremost among them agriculture, business services, and manufacturing. Real wages in construction rose by 2.7 percent while employment contracted by 10 percent, following a hefty wage increase in 1997. Much of this increase traces to the change in the composition of employment in construction; the decrease in building starts raised

the share of workers who specialize in the completion phases of construction and are better paid. The ranks of low-wage construction workers were drawn down by layoffs. Another factor in the wage increase was the depreciation of the NIS against the dollar, which pushed up the dollar-denominated wages of foreign workers.

In the public services, wages rose by 0.3 percent after climbing by a startling 20 percent between 1993 and 1996 and leveling off in 1997. This trajectory reflects the application of wage accords concluded in late 1993, in which public-service employees received large wage increases that, in greater part, were paid out early in the term of the agreements.

Most agreements in the public services expired in late 1997; some lapsed even earlier, in late 1996. In the course of 1998, agreements were concluded with labor at the Israel Electric Corporation, the Airports Authority, and university and school-teachers. In September 1998, after a lengthy strike, unions affiliated with the Histadrut, the central government, and large public-service employers (the Union of Local Authorities, the three largest cities, institutions of higher education, and Hadassah) signed a partial wage accord. The agreement, which remained in effect from the expiration of the previous accords until December 31, 1998, gave workers a nonrecurrent wage increase set at 30 percent of pensionable wage, with no change in wage tables. The accord marked the beginning of wage negotiations in which the Histadrut undertook to refrain from sanctions until the talks end or until January 1, 1999, whichever comes first.