

Chapter 4

Employment and Wages

The average unemployment rate fell to 7.8 percent in 1994, lower than the rate in 1989—before the influx of immigrants began. The decline in unemployment reflects a steep rise in the employment of Israelis in the public and business sectors, together with a marked increase in the labor supply. The expansion of employment in the public sector was accompanied by a sharp increase in wages in the public services, in the wake of wage agreements. The marked expansion of business-sector employment was due to economic growth, together with a decline in labor productivity and rise in real labor costs, while real wages declined slightly. Frequent disruptions caused by the inability of workers from the administered areas to get to work led to an increase in the number of permits for foreign workers, who replaced some of the former.

1. MAIN DEVELOPMENTS

The unemployment rate plummeted to 7.8 percent in 1994, continuing the decline evident in 1993, despite the steep rise (4.3 percent) in the civilian labor force, due to the notable increase (6.9 percent) in the number of Israelis employed. Alongside this considerable increase, hours worked also rose, so that labor input in both the public and the business sectors soared (by 6.1 and 8.6 percent respectively). Public-sector employment increased together with a steep rise in wages in the wake of wage agreements in this sector. Although the original purpose of these agreements was to correct inequities in certain segments, they were rapidly extended to all the public services. In tandem with the increase in labor inputs in the business sector, real labor costs (from the employer's point of view) rose and real wages (from the employee's point of view) fell slightly.

The rate of expansion of business-sector employment slightly exceeded that of product, and labor productivity declined somewhat, continuing the trend evident in 1992 and 1993. The high rate of labor-force entrants, whose initial productivity is low, is partly responsible for the decline in labor productivity since 1992. The large proportion of immigrants among labor-force entrants, and the need to adapt their skills to Israel's needs, also contributed to this decline.

Between 1988 and 1992 the unemployment rate rose continuously, by 4.8 percentage points, and reached 11.2 percent. A high unemployment rate was evident as early as 1989, due to the recession of the late 1980s and dismissals due to restructuring. The steep rise in the labor supply that followed the entry of the immigrants into the labor

market was largely responsible for the continued rise in the unemployment rate after 1989. The notable expansion of the employment of Israelis in 1993 and 1994 (some 220,000 employed persons) caused the unemployment rate to drop. The rapid growth of employment in those years was fueled by a high level of economic activity and expectations that it would continue. The closure of the administered areas, causing the substitution of Israelis for workers from the areas, as well as administrative steps intended to reduce unemployment (lowering employment taxes, initiating relief work projects, and increasing the stringency of the criteria of eligibility for unemployment benefit and their application), also contributed to this. The 1994 unemployment rate was lower than that of 1989, before the mass immigration started. In the context of mass immigration, the reduction of the unemployment rate since 1993 is an achievement.

Table 4.1

Principal Labor-Market Indicators, 1981-94^a

	Average		1990	1991	1992	1993	1994
	1981-85	1986-89					
<i>Percent change over preceding year</i>							
Permanent population	1.7	1.7	5.7	4.9	2.7	2.5	2.5
Migration balance, thousands	2.6	2.7	187.5	163.3	60.4	52.5	— ^b
Israeli employed persons	1.8	1.6	2.1	6.1	4.2	6.1	6.9
Business sector	1.7	2.2	2.0	5.9	4.7	7.2	7.7
Public services	1.9	1.6	2.3	6.6	3.2	3.5	4.8
Labor input, business sector	3.6	1.9	2.3	4.7	8.7	5.1	8.6
Wages per employe ^c post	1.1	5.0	-1.0	-1.7 ^c	1.3	0.5	2.6
Business sector	1.6	4.9	-1.6	-3.4 ^c	1.7	0.3	-0.5
Public services	0.1	5.3	0.2	1.6	-0.4	1.1	9.9
Minimum wage	2.9	13.0	-0.9	-0.9	-4.0	-1.7	1.6
Unit labor costs, business sector ^d	1.2	2.6	-2.5	-5.8	-0.3	1.8	1.9
Labor productivity, business sector ^e	1.6	2.6	6.3	3.1	-0.5	-1.4	-0.9
<i>Ratio^f</i>							
Labor-force participation rate	49.8	51.0	51.5	51.7	52.0	52.9	53.6
Unemployment rate	5.3	7.0	9.6	10.6	11.2	10.0	7.8

^a Wages and labor cost are in real terms.

^b Data not yet published by CBS at time of publication.

^c The wage data for 1991 do not include residents of the administered areas. The share of residents of the administered areas rose as a result of the registration obligation introduced in 1991, so that the wages of Israelis (including residents of the administered areas) are biased downwards in relation to former years.

^d Based on net product at factor cost.

^e Based on by-industry net product.

^f Participation rate, percent of working-age population; unemployment rate, percent of labor force.

SOURCE: Based on Central Bureau of Statistics data.

Table 4.2
Labor-Market Indicators, 1989-94

	(thousands, annual average)											
	1989	1990	1991	1992	1993	1994	Change over preceding year					Cumulative
							1990	1991	1992	1993	1994	change 1989-94
Working-age population	3,082	3,202	3,427	3,574	3,682	3,789	120	225	147	108	107	707
Civilian labor force	1,603	1,650	1,770	1,858	1,946	2,030	47	120	88	88	84	427
Established population			1,674	1,704	1,751	1,801			30	47	50	197
Immigrants ^c			96	154	195	229			58	41	34	229 ^d
Israelis unemployed	143	158	187	208	195	159	15	29	21	-13	-36	16
Employed persons	1,566	1,600	1,681	1,766	1,851	1,968	34	81	85	85	117	402
Established population			1,524	1,541	1,596	1,673			17	55	77	241
Immigrants			59	109	155	198			50	46	43	197
From administered areas ^a	105	108	98	116	84	69	3	-10	18	-32	-15	-36
Foreign workers ^a					16	28						
Public services	429	439	468	483	500	524	10	29	15	17	24	95
Business sector ^b	1,137	1,160	1,213	1,283	1,351	1,444	23	53	70	68	93	307

^a Ministry of Labour data for 1993 and 1994 indicate even greater replacement of employees from the administered areas by Israelis.

^b Including employees from the administered areas.

SOURCE: Central Bureau of Statistics.

Real wages per employee post rose by some 10 percent in the public services and declined by about 0.5 percent in the business sector. The latter reflects a rise of about 2 percent in the number of hours worked and a 2.1 percent reduction in the real hourly wage. On the other hand, because of the gap between the rise in the implicit price index of business-sector product and that of the CPI, real hourly labor costs in the business sector rose by more than one percent.

The 2.1 percent decline in the real hourly wage in the business sector came in the wake of a 10.4 percent fall in 1989–93—*inter alia* in response to the high unemployment rate. Several factors exerted upward pressure on wages in 1994, foremost among them the steep decline in the unemployment rate (which almost amounted to a labor shortage in some professions), as well as exceptional wage increases and the expansion of employment in the public services. The rise in the proportion of Israelis among the total number of employed persons also served to increase the average wage, as their relative wage is high. On the other hand, the large proportion of labor-force entrants, most of whom start out at low wage levels, especially in industries where the relative wage is low, helped to depress the average wage. The decline in profitability in recent years, the cessation of subsidies for incremental employment (some workers were still employed on the basis of subsidies in 1994, but no new ones will benefit from them), and the faster than expected rise of prices—some (nominal) wage-agreements were signed when inflation expectations were lower—also operated in the same direction.

The immoderate public-services wage increases could create additional pressure on wages from those groups of public-services employees who did not gain as much as others, as well as in the business sector. The moderation of wages in recent years, especially in the business sector, has contributed greatly to the decline of unemployment since 1993. If wage increases spill over to the business sector, without a commensurate rise in productivity, the outcome might be impaired profitability, slow growth, and higher unemployment.

Some 80,000 immigrants reached Israel in 1994, similar to the numbers in 1992 and 1993. Their integration in the labor market indicates a substantial rise in their employment rate and a sharp decline in their unemployment rate. Although they appear to have been upwardly mobile as regards professions, a high proportion of them have turned to occupations that are lower down the scale than their original ones, even three years after immigrating. This rate of occupational change is high in comparison with earlier influxes of immigrants with similar characteristics to the present one.

2. THE POPULATION AND THE CIVILIAN LABOR FORCE

The mean population increased by 2.6 percent in 1994, similar to the rate in 1993 (Table 4.3). Although this growth rate is higher than that in the 1980s (1.7 percent), it is significantly lower than at the beginning of the 1990s, when the influx of immigrants

		(annual change, percent)									
		<u>Absolute figures</u>		1985/1980	1989/1985	1994/1989	1990	1991	1992	1993	1994
		1993	1994								
Total (thousands)											
Mean population		5,259	5,384	1.8	1.6	3.6	3.1	6.1	3.5	2.6	2.6
Working-age population		3,682	3,789	2.0	2.0	4.2	3.9	7.1	4.3	3.0	2.9
Civilian labor force		1,946	2,030	2.2	2.6	4.8	2.9	7.3	4.9	4.8	4.3
Employed		1,751	1,871	1.8	2.0	5.1	2.1	6.1	4.2	6.1	6.9
Unemployed		195	159	9.1	10.2	2.2	10.9	18.5	10.9	-6.1	-18.7
<i>Percent</i>											
Participation rate		53	54								
Unemployment rate		10	8								
Men (thousands)											
Working-age population		1,799	1,849	2.0	2.0	4.1	3.7	6.7	4.1	2.9	2.8
Civilian labor force		1,129	1,162	1.7	1.7	4.0	2.5	6.4	3.7	4.5	2.9
Employed		1,033	1,090	1.2	1.3	4.4	2.0	6.1	3.0	5.3	5.5
Unemployed		96	72	10.8	7.6	-1.1	8.6	9.4	10.9	-3.5	-25.5
<i>Percent</i>											
Participation rate		63	63								
Unemployment rate		9	6								
Women (thousands)											
Working-age population		1,883	1,940	2.0	2.0	4.4	3.9	7.4	4.4	3.1	3.0
Civilian labor force		817	868	3.0	4.0	6.0	3.4	8.7	6.7	5.2	6.2
Employed		718	781	2.8	3.1	6.1	2.2	6.2	6.1	7.4	8.8
Unemployed		99	87	7.1	13.6	5.3	13.3	28.8	10.6	-8.4	-12.3
<i>Percent</i>											
Participation rate		43	45								
Unemployment rate		12	10								
SOURCE: Central Bureau of Statistics and Labour Force Surveys.											

began. The main reasons for this are that immigration has steadied at a lower level than the initial rate, and that emigration has risen. Immigration is usually accompanied by increased emigration, as some immigrants do not manage to integrate economically and socially.

The rate of change of the working-age population also reflects changes in the mean population. As immigration increased, the rate of growth of the working-age population rose—from an annual average of 2 percent in the 1980s to some 5 percent in 1990–92, declining to 3 percent in 1993–94. The more rapid increase in the proportion of persons of working age in the general population in recent years is associated with the age composition of the current influx of immigrants, as well as with the rise in the proportion of persons of working age in the established population. The average years of schooling of the working-age population has risen in the last few years, as a result of both the higher level of education of the established population and the particularly high number of years of schooling of the immigrants.

In tandem with the increase in the mean working-age population in 1994, the participation rate continued to rise, reaching 53.6 percent, while the civilian labor force rose by 4.3 percent, continuing the steep increase evident since mass immigration began.

The rise in the participation rate was due to the increased participation rate of immigrants—as their average length of stay in Israel grew—exceeding that of the established population. In the established population, there was no change in the participation rate of men, while that of women rose, reflecting the long-term trend of a change in social norms regarding women's employment outside the home, and a rise in their level of education.

3. EMPLOYMENT AND LABOR INPUT

In 1994 the number of employed persons rose by 6.3 percent—4.6 percent in the public services and 7.0 percent in the business sector. The number of man-hours per week increased by about 1.5 percent in both the public services and the business sector, largely as a result of the decline in the proportion of part-time positions. This, together with employment data, indicates that overall labor input went up by 8 percent—6.1 percent in the public services and 8.6 percent in the business sector. The number of workers from the administered areas fell by 18 percent, while the number of Israelis employed rose by 6.9 percent, and the number of foreign workers soared (Table 4.2).¹

The change in the composition of employment in 1994 continued the trend evident in 1993, and is explained by the recurring closures of the administered areas and more extensive screening of workers from there. The closures caused the attendance of these workers to be erratic and disrupted work—primarily in construction and agriculture,

¹ In both 1993 and 1994 there were extensive changes in the numbers of foreign workers and workers from the administered areas, giving rise to estimation difficulties. According to Ministry of Labour data, by February 1995 there were 65,000 foreign workers in Israel.

where they constitute a relatively high proportion of labor. The repeated interruptions impelled employers to reduce their dependence on these workers, many of whom were replaced by Israelis or foreign workers. In 1993 many were replaced by Israeli employees, sometimes with the help of government subsidies. In 1994, on the other hand, as it became increasingly hard to find suitable Israeli workers, the number of permits issued for workers from the administered areas increased, and foreign workers accounted for a significant proportion of substitute labor.

Table 4.4
Structure of Employment of Israelis, 1981-94

	(percent)								
							Annual average rates of change		
	1990	1991	1992	1993	1994	1981-1985 ^a	1986-1989 ^a	1990-1994	
Total	100.0	100.0	100.0	100.0	100.0	1.8	2.0	5.1	
Public services	29.4	29.6	29.3	28.6	28.0	1.9	1.6	4.1	
Business sector	70.6	70.4	70.7	71.4	72.0	1.7	2.2	4.5	
Industry	21.6	21.5	21.1	21.2	21.2	4.7	0.4	4.8	
Agriculture	4.1	3.5	3.5	3.5	3.3	-0.3	-1.6	-1.7	
Electricity and water	1.1	1.1	0.9	1.0	1.1	-1.8	5.1	7.1	
Construction	5.1	6.1	6.5	6.8	6.3	-1.8	-0.2	10.5	
Trade and catering	14.5	14.1	13.9	14.3	15.0	3.1	5.9	5.9	
Financial and business services	9.9	10.2	10.4	10.5	11.0	5.1	2.5	7.4	
Transport, storage and communications	6.2	6.1	6.3	6.1	5.8	0.1	1.9	3.2	
Personal and other services	7.4	7.3	7.4	7.5	7.7	3.4	4.9	6.0	

^a New series since 1985, comprising working-age population aged 15+ (instead of aged 14+); population and labor force estimates adjusted according to 1983 population census.

SOURCE: Labour Force Surveys of Central Bureau of Statistics.

Public-services employment expanded more in 1994 than in 1992-93, encompassing all its segments, with a notable rise in the number of employees in the civil service (8.5 percent) and the health services (5.8 percent).

The expansion of demand in 1994 led to a rise in production, with the increase in labor input exceeding that in capital (because labor input can be adapted more rapidly to changes in production), reflected by the rise in labor intensity. The marked growth of labor input in the business sector was made possible by the high unemployment rate as well as the high level of investment in previous years. The expansion of employment was also partly due to expectations of sustained growth. The substantial rise in the number of hours worked since 1992 limited the potential for expanding labor input by increasing them further, and thus the steep rise in labor input was reflected by the sharp increase in the number of persons employed. In the business sector, changes in employment varied considerably between industries (Table 4.5), with a particularly large

Table 4.5
Business-Sector Employment and Labor Input,
by Industry, 1988-94^a

	Absolute figures ^b		(percent change over preceding year)						
	1993	1994	1988	1989	1990	1991	1992	1993	1994
Employed persons									
Business sector ^c	1,346	1,440	3.0	-0.4	2.1	4.7	5.8	5.2	7.0
Business sector excl. construction	1,163	1,259	2.3	-0.5	1.2	3.0	3.8	7.1	8.3
Construction	183	188	8.9	-0.2	9.6	16.6	18.6	-5.4	2.7
Industry	371	388	-2.8	-3.2	1.8	4.1	2.4	4.3	4.6
Agriculture	74	75	-5.0	-1.9	-9.2	-9.6	1.5	8.5	1.5
Transport	106	281	3.5	-1.8	-0.6	4.4	7.8	1.9	2.6
Trade, personal services, business services ^d	503	563	12.3	3.3	2.6	5.1	5.1	7.9	12.0
Financial services	69	72	3.2	-3.2	-0.2	0.2	1.3	8.2	5.2
Electricity and water	18	20	6.6	-0.7	15.3	1.2	-13.7	20.7	16.0
Labor input									
Business sector ^d	53	57	0.3	1.4	2.3	4.7	8.7	5.1	8.6
Business sector excl. construction	45	50	-0.8	2.2	1.9	3.8	7.5	2.7	11.2
Construction	7	8	-4.6	5.1	11.8	17.1	21.6	-6.5	6.3
Industry	15	16	-4.3	-0.5	0.9	4.6	6.0	5.4	5.8
Agriculture	3	3	-8.4	-1.0	-10.5	-10.6	1.6	11.9	4.3
Transport	4	5	1.4	-2.3	2.7	2.9	8.3	4.2	6.4
Trade, personal services, business services ^c	19	22	14.8	5.1	1.9	3.6	8.6	6.1	17.3
Financial services	3	3	2.9	-1.4	0.4	0.2	4.0	7.6	6.6
Electricity and water	1	1	14.5	-1.4	15.0	-1.8	-10.6	16.8	19.3

^a Employment figures are annual averages; labor input figures are weekly averages.

^b Employed persons—thousands; labor input—million man-hours.

^c Includes 'not known'.

^d Industries 50-59, 90-99, 73; includes 'other employees' from the administered areas except for those employed in public services.

SOURCE: Based on Central Bureau of Statistics data.

increase in employment in services—accounting for two thirds of the incremental business-sector employment.

The rate of expansion of labor input in the business sector was slightly higher than that of product, and labor productivity declined by 0.9 percent, continuing the downward trend evident in 1992 and 1993. The decline in labor productivity (Table 4.1) was due in part to the high rate of labor-force entrants—whose initial productivity is lower—in the last few years, indicated by the considerable expansion of business-sector

employment. The proportion of labor-force entrants in the number employed rose by even more, *inter alia* because of the replacement of workers from the administered areas by Israelis and foreign workers. The high proportion of immigrants (10 percent of all employed persons) whose professional skills had not yet been adapted to Israel's needs also contributed to the low level of labor productivity.

4. UNEMPLOYMENT

The unemployment rate continued to decline, reaching an annual average of 7.8 percent (158,500 jobless) in 1994. The unemployment rate (seasonally adjusted) fell in the first quarter, remaining relatively steady throughout the rest of the year.

Table 4.6
Indicators of the Depth of Unemployment, 1988-94

	1988	1989	1990	1991 ^a	1992 ^a	1993 ^a	1994
<i>Thousands</i>							
Work-seekers for 27 weeks or more	19.5	35.2	42.4	47.2	67.5	63.9	46.3
<i>of which</i> 27-52 weeks	15.1	27.6	33.2	35.4	48.8	37.5	28.3
53 weeks or more	4.7	8.3	10.4	12.9	19.9	25.9	18.1
Unemployed for last 12 months	46.0	65.9	81.6	107.1	116.2	104.8	85.6
<i>Days</i>							
Average number of days unemployment benefit received	101	107	119	122	127	132	119
<i>Percent of all unemployment benefit recipients</i>							
Receiving unemployment benefit for entire period of eligibility	32.1	38.5	46.1	48.5	54.1	53.0	46.3
<i>Percent of all unemployed</i>							
Work-seekers for 27 weeks or more	19.8	25.2	27.6	25.8	33.2	33.1	29.5
<i>of which</i> 27-52 weeks	15.1	19.4	21.0	18.9	23.5	19.2	17.4
53 weeks or more	4.7	5.8	6.6	6.9	9.6	13.3	11.2
Unemployed for last 12 months	46.0	46.2	51.7	56.7	56.0	53.7	54.0

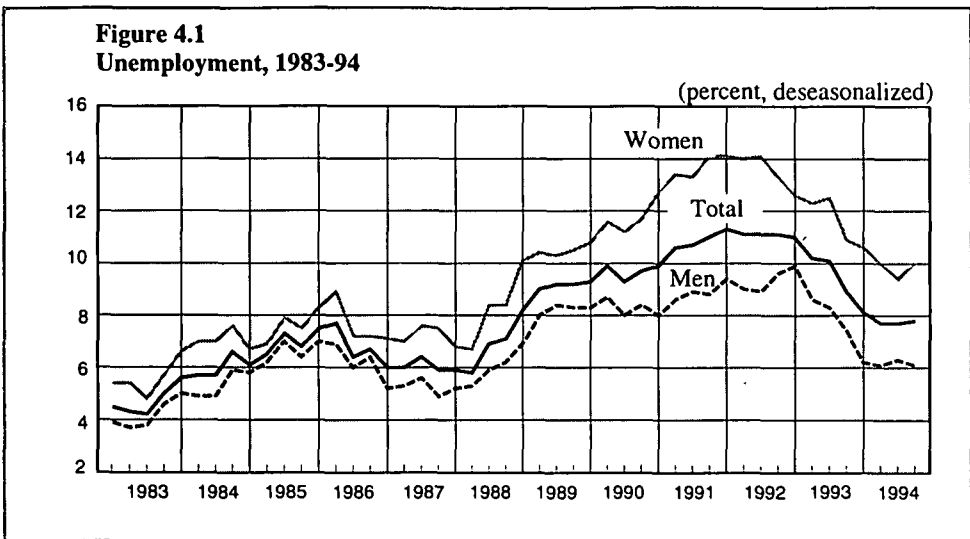
^a Because of the large proportion of immigrants who have been in the labor force a relatively short time and have not worked during the last 12 months, some of the estimates of the depth of unemployment are biased.

SOURCE: Central Bureau of Statistics and National Insurance Institute.

The decline in the unemployment rate since 1993 follows a protracted rise, from 6.4 percent in 1988 to an unprecedented 11.2 percent in 1992. After the recession and restructuring of the late 1980s, the unemployment rate was as high as 8.9 percent in 1989, before mass immigration began. The rapid rise in the civilian labor force in 1990-92, primarily due to the influx of immigrants, who encountered difficulties in finding

employment and had to adapt to Israel's needs, contributed to the persistent rise in unemployment in those years (see Bank of Israel, *Annual Report, 1992*).

The decline in the unemployment rate in 1993 and 1994 was the outcome of the rise in demand for Israeli workers, which outstripped the expansion of supply. The increase in employment is connected with economic growth and expectations that it would be sustained. The expansion of employment was supported by the accelerated growth of capital stock since 1992 and by improved profitability, which began in the early 1990s due to the decline in real wages, and policy measures introduced by the government intended to expand business-sector employment by reducing labor costs (cancellation of employers' tax, reduction of employers' national insurance contributions, and temporary subsidization of incremental employment). The closure of the administered areas, causing the replacement of workers from there by Israeli employees, as well as special relief works projects,² were the main factors contributing to the expansion of employment of Israelis in 1993. In 1994 the rate of expansion of public-services employment also played a part.

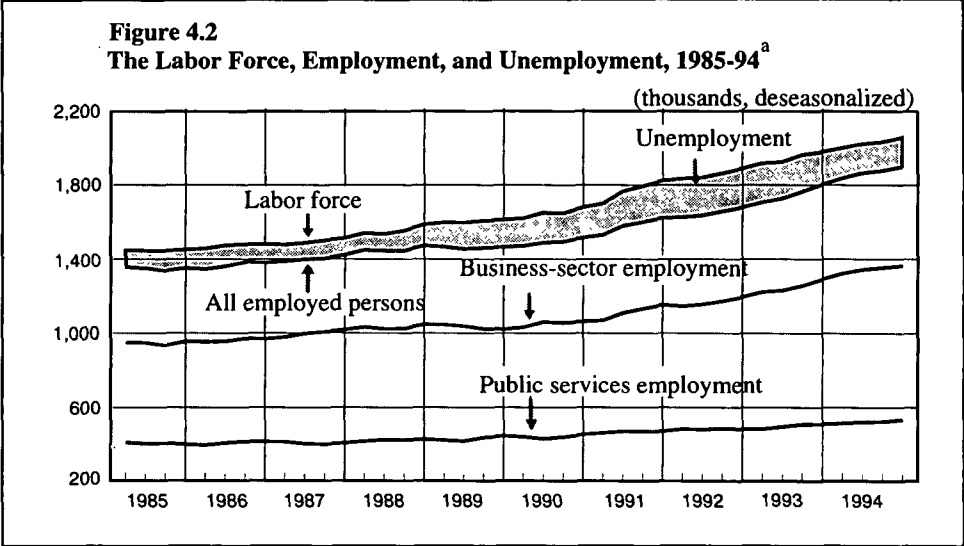


SOURCE: Labour Force Surveys of Central Bureau of Statistics.

In order to increase the readiness of unemployed persons to accept work, the criteria of eligibility for unemployment benefit, which had been tightened in the past, were made even more stringent in 1994, and the reforms introduced in 1991 were applied more rigorously. Within a short space of time the total unemployment rate declined by 3

² The average number of persons employed on special relief works projects was 3,500 in 1993 and 3,800 in 1994.

percentage points, from 11.1 percent at the end of 1992 to 8.1 percent at the beginning of 1994—lower than that prevailing in 1989, before mass immigration began. The rate declined even though the labor market experienced a shock as a result of the size of the influx. Although on the face of it the shock was temporary, the overall unemployment rate (some 6 percent) is still higher than the annual average during the 1980s.



^a Data refer to Israelis.

SOURCE: Labor Force Surveys of Central Bureau of Statistics.

Although the depth of unemployment—those out of work for over a year—dipped in 1994, it has soared from 5 percent of all unemployed in 1988–89 to 11 percent (18,000 unemployed) in 1994, raising fears that the high unemployment rates of recent years may have made it impossible to return to the rates of the early 1980s (Table 4.6).

The decline in the unemployment rate in 1994 reflects both that of immigrants, which fell from some 19 percent in 1993 to 14 percent (partly due their longer period of residence in Israel), with the rise in their share of the labor force, and that of the established population, from 9 percent in 1993 to about 7 percent in 1994.

5. WAGES³

Nominal wages per employee post rose by an average of 15.2 percent in 1994—23.7 percent in the public services and 11.7 percent in the business sector. These nominal increases reflect a 2.6 percent increase in real wages—a rise of 10 percent in the public services and a decline of 0.5 percent in the business sector (Table 4.8).

The steep rise in public-services wages is largely due to exceptional wage agreements reached with the trade unions in this sector since the second half of 1993. These agreements began to come into effect in the second quarter of 1994, and are expected to contribute to a further rise in real wages in 1995 and at the beginning of 1996.

Unlike in the past, the 1993 public-services wage agreements were not part of a general framework, so that there is wide variation between different groups of employees regarding both the amounts of increases and their effective dates. Differences in wage increases were the result of attempts to eliminate discrepancies which had evolved in the past (e.g., raising wage levels which were below the minimum wage, and improving teachers' pay), and of pressure exerted by different groups, the largest increments going to health, university, and social workers.

The large gaps between the wage increments granted within the public services could create pressure for further increases on the part of groups which received less. The existence of wage linkage and equalization mechanisms (some of them formal) within the public services will reinforce this trend. Indications of this were in evidence in 1994, when two agreements—with the clerical workers and the teachers—were reformulated.

In contrast to the exceptional increases in public-services wages, the real annual average wage per employee post in the business sector declined by 0.5 percent, and during the year there were slight real reductions. Real business-sector wages per employee post of Israelis fell at a faster rate—1.8 percent. When adjusted for the rise in the number of hours worked, real wages per man-hour fell by 2.1 percent, and by 3.8 percent for Israelis.

The difference between wage developments in the private and public sectors in 1994 continues the trend of previous years (Figure 4.3). Real business-sector wages began to decline in 1989, in response to the high unemployment rate, with a cumulative 6.2 percent reduction in the real wage per employee post in 1989–93.⁴ On the other hand, in the public services the real wage per employee post rose in this period by 3 percent.

Past experience has shown that public-services wage increases in Israel tend to trickle down to the business sector, particularly through wage-linkage agreements (both formal

³ Wages per employee post are calculated as wage payments *divided by* all employed persons (regardless of whether they work full or part time). Consequently, part of the change in wages per employee post is technical, and arises from changes in the full- or part-time nature of employee posts, number of man-days, etc.

⁴ This decline followed exceptional wage increases in 1986–89, and also reflects the significant rise in the proportion of labor-force entrants, whose wages are relatively low. For employed Israelis (adjusting for the 4.4 percent increase in the average number of hours worked), real wages per man-hour fell by 10.7 percent during this period.

Table 4.7
Change in Real Hourly Wage of Israelis and all Employed Persons,^a 1989–94

	(percent)					
	1990	1991	1992	1993	1994	1989– 1994 ^b
Israelis						
Total	-0.7	-1.7	-0.8	-0.3	0.1	-6.0
Business sector	-2.3	-3.3	-0.2	-1.5	-3.0	-13.4
Business sector excl. construction	-0.8	-2.5	-1.2	-1.2	-3.4	-12.0
Agriculture	-3.9	-4.2	5.2	-4.2	0.6	-7.3
Industry	1.0	-4.0	-1.2	-0.2	-1.4	-7.5
Electricity & water	-0.6	3.6	1.6	0.1	-2.8	3.8
Construction	-5.6	0.1	8.2	-1.5	-1.7	-7.9
Trade and catering	-0.6	-2.5	-1.5	1.7	-3.4	-11.2
Transport	-3.4	2.8	1.0	-4.2	-4.4	-10.1
Business & financial services	-1.4	-4.8	-0.9	-0.5	-4.5	-18.1
Public services	0.8	1.9	-1.4	1.7	8.5	12.0
Personal services	-2.8	-0.3	-3.4	2.8	4.3	-4.2
All employed persons						
Total	-1.1	-2.9	-1.1	-1.7	0.3	-9.0
Business sector	-2.0	-4.7	-0.9	0.8	-2.1	-12.4
Business sector excl. construction	-1.4	-3.0	-1.2	-0.1	0.6	8.2
Agriculture	-4.2	-11.8	4.3	-15.0	-6.4	-30.4
Industry	0.7	-3.9	-1.4	-2.4	-1.6	-10.0
Electricity and water	-0.6	3.6	1.6	0.1	-2.8	3.8
Construction	-6.6	-13.0	6.6	-7.5	0.5	-25.8
Trade and catering	-0.6	-2.5	-1.5	-24.0	-3.3	-33.6
Transport	-3.4	2.8	1.0	-4.2	-4.9	-10.6
Business and financial services	-1.4	-4.8	-0.9	-0.5	-4.4	-18.0
Public services	0.8	1.9	-1.5	3.0	8.2	12.7
Personal services	-2.8	-0.3	-3.4	2.8	7.9	-0.8

^a Including workers from the administered areas.

^b Cumulative change.

SOURCE: Wages per employee post—National Insurance Institute; hourly wage—Labour Force Surveys of Central Bureau of Statistics.

	(percent change)								
	1989	1990	1991 ^b	1992 ^b	1993 ^b	1994	1981- 1985	1986- 1988	1989- 1994
Deflated by CPI									
Public services	0.3	0.2	1.6	-0.4	1.1	9.9	0.3	22.3	13.1
Business sector	-1.7	-1.6	-5.0 (-2.0)	1.7 (1.5)	0.3 (-0.8)	-0.5 (-1.8)	8.4	23.3	-6.7
Business sector excl. construction	-1.5	-1.2	-3.5	1.3	-0.4	-0.9	8.7	21.2	-6.2
Agriculture, etc. ^c	-0.8	-4.6	-12.5 (-5.9)	2.4 (2.7)	1.6 (-0.1)	2.9 (1.1)	1.8	25.3	-11.3
Industry	0.9	0.0	-3.0	2.1	0.5	-0.4	13.8	18.8	0.0
Water & electricity	1.6	-1.8	1.0	4.7	-2.6	-0.1	7.5	19.9	2.7
Construction	-2.2	-4.5	-13.3 (-2.7)	9.4 (8.8)	4.7 (0.3)	4.0 (0.9)	-1.9	35.7	-3.5
Trade, restaurants, hotels	-2.6	-2.4	-2.5	1.4	0.6	-1.9	15.5	26.9	-7.2
Transport, etc.	-3.4	0.1	1.5	0.2	-0.8	-0.6	4.0	24.4	-3.0
Financial & business services	-4.8	-0.9	-5.3	1.1	-0.8	-2.6	3.4	26.3	-12.8
Personal & other services	-5.2	-3.4	-3.2	1.5	0.5	6.0	3.0	43.2	-4.2
Total	-1.3	-1.0	-3.0 (-1.7)	1.3 (1.1)	0.5 (-0.4)	2.6 (2.1)	5.9	23.3	-1.1
Real-disposable income per employee post ^d	-0.7	1.2	-0.4	1.5	-0.7	1.5			2.4

^a Central Bureau of Statistics data, from employers' returns to the National Insurance Institute, deflated by the CPI.

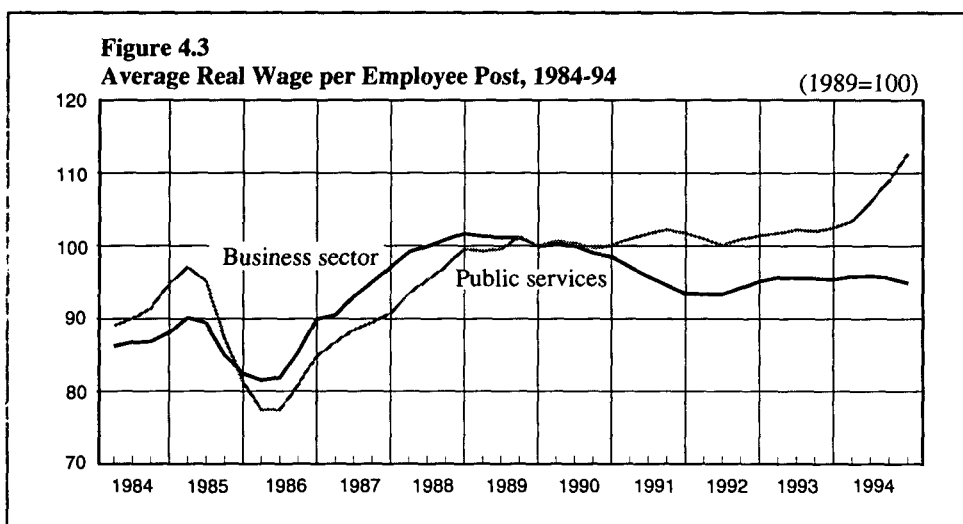
^b The sharp changes in the proportion of workers from the administered areas in 1991-93 have a significant effect on the average rate of change. The figures in parentheses exclude workers from the administered areas.

^c Agriculture, afforestation, and fishing.

^d Adjusted for changes in direct taxes (income tax and national insurance contributions deducted from employees' salaries). The estimate is based on an approximation.

SOURCE: Based on Central Bureau of Statistics data.

and informal) that connect wages in certain public-sector corporations with those in the public services for given occupations, as well as via the Minimum Wage Law. In addition to the large wage-increases granted in the public services in 1994, and the expansion of employment in this sector, the unemployment rate declined, almost amounting to a labor shortage in certain specialized occupations. All these provide an environment favorable to the exertion of upward pressure on business-sector wages. The spillover of wage-increases to the business sector, without an appropriate increase in labor productivity, will impair profitability, in turn depressing growth and increasing unemployment.



SOURCE: Based on Central Bureau of Statistics data.

The steep rise in public-services wages did not spread to the business sector in 1994, where nominal wages increased at the same rate as in the last few years, possibly because of the short time since the public-services wage agreements were signed. Thus, the engineers' wage agreement, which is closely connected with the business sector, was signed only in May 1994. Business-sector wage agreements usually cover one or two years, so that many wage agreements signed before 1994 are still in effect.

In contrast to the past, however, several factors could moderate the pressure to raise wages in the business sector. One of the most important is the change in behavior of public-sector corporations—formerly the link between public-services and business-sector wages—regarding wages and employment, largely due to the difficulties in which some of them have found themselves. The cancellation of the linkage between wage agreements in loss-making public-sector corporations and the public services will prevent equivalent wage increases in the former. Even if some wage increases do filter through to them, the corporations failure to take on new employees because of their

	(percent change)									
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
CPI ^a	304.6	48.2	19.9	16.3	20.2	17.2	19.0	12.0	10.9	12.3
COLA as percent of CPI	56.9	74.9	54.3	61.3	43.1	49.4	52.6	46.0	34.0	38.2
Change in wage due to										
COLA ^a	173.3	36.1	10.8	10.0	8.7	8.5	10.0	5.5	3.7	4.7
COLA and industry-wide agreements	196.3	38.9	16.5	10.5	8.7	8.5	10.0	5.5	3.7	4.7
Increment on COLA and industry-wide agreements	24.5	19.8	11.2	10.0	8.8	6.5	2.5	7.9	7.2	6.5
Change in actual wage ^a	268.8	66.4	29.6	21.6	18.3	15.6	12.8	13.8	11.2	11.5
Real change ^b										
After COLA	-31.5	-12.4	-7.6	-5.3	-9.6	-7.4	-7.5	-5.9	-6.5	-6.7
After COLA and national agreements ^c	-24.5	-10.3	-2.8	-4.9	-9.6	-7.4	-7.5	-5.9	-6.5	-6.7
Total wage	-6.5	9.2	8.1	4.7	-1.6	-1.4	-5.4	1.9	0.2	-0.7

^a Geometric mean of the change from month *i* in the preceding year to month *i* in the current year (*i* = 1, 2, ..., 12).
^b Deflated each month by the CPI.
^c Does not include the effect of changes in the minimum wage.

SOURCE: Data of the Institute for Economic and Social Research of the Histadrut (National Federation of Labour).

	(percent change)										
										Cumulative change	
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1986-88	1989-94
Deflated by CPI											
Nontradables	11.4	8.8	6.3	-3.7	-1.8	-6.1	2.1	0.6	-0.2	28.8	-9.0
Tradables	6.9	7.7	3.7	0.7	-0.8	-3.5	1.7	0.3	0.3	19.4	-1.4
Deflated by producer prices^c											
Nontradables ^d	3.3	1.5	3.3	-6.3	-2.7	-5.8	1.7	-1.0	-0.3	8.3	-13.8
Tradables	12.8	10.0	5.7	0.1	4.7	-0.6	4.2	0.5	4.0	31.1	13.5
Industry	19.7	10.3	6.6	-0.4	5.7	1.6	4.2	1.4	4.9	40.7	18.5
Agriculture	2.2	6.1	6.0	11.9	3.4	-7.7	5.3	7.6	3.9	14.8	25.6
Water & electricity	13.1	22.6	9.5	-3.6	-7.1	-2.8	5.8	0.1	3.3	51.8	-4.6
Construction ^e	26.6	17.6	2.4	-10.0	-15.5	-21.3	10.2	-2.1	-4.7	52.5	-38.5
Trade, restaurants, hotels ^f	14.4	0.6	0.5	-5.2	3.8	0.9	1.4	-1.3	-1.0	15.7	-1.6
Transport etc. ^f	5.1	13.8	10.6	-7.6	-1.1	-3.7	0.7	-5.3	1.7	32.3	-14.7
Financial & business services ^f	-8.7	-6.2	2.5	-6.9	-1.9	-3.9	-1.8	-2.0	-2.6	-12.2	-17.7
Personal & other services ^f	-5.4	-9.7	-1.9	-3.3	0.0	2.0	3.7	4.8	11.3	-16.3	19.5

^a Tradables industries comprise industry, part of agriculture, shipping & aviation, and part of catering and trade services.
^b Including residents of the administered areas.
^c Data on wages per employee post in 1992. When deflated by the increase in man-hours per employee post, all wages have declined, though by more in nontradables.
^d Including public services.
^e The price index in this calculation is the implicit price of construction inputs (from the national accounts).
^f Since there are no indices of factor prices in these industries, by-industry consumer price indices have been used, hence the figures may be biased.

SOURCE: Based on Central Bureau of Statistics data

difficulties will prevent the increases from being passed on to the rest of the business sector. The decline of profitability in 1993 and 1994 also moderated employees' demands for exceptional wage-hikes. The greater flexibility of the labor market in recent years—because of high unemployment and the growing proportion of unorganized labor (employees hired via private employment agencies or on the basis of individual contracts) may also undermine the intersectoral linkage of various occupations.

Additional factors contributed to the decline of the real hourly wage in the business sector in 1994, foremost among them the high rate of labor-force entrants, most of whom start out at low hourly wages. The distribution of incremental employment indicates that some two thirds was in industries where the average wage per employee post was lower than the business-sector average. Consequently, as has been the case in the last few years, the shift in the by-industry composition of employment served to depress wages in 1994, too.

The expiration of the provisions of the Business-Sector Encouragement Law also operated in the same direction. In 1994, the average number of employees for whom a subsidy was received was 55,000, down from 68,000 in 1993, but no new ones were taken on.

The fact that prices accelerated faster than expected also helped to depress real wages, since some (nominal) wage agreements in the business sector were signed when inflation expectations were lower. This factor is estimated as having contributed between 0.5 and 1 percent to the reduction in wages. The cost-of-living agreement (COLA) accounted for some 40 percent of the nominal wage increase in the business sector in 1994, compared with some 33 percent in 1993 (Table 4.9).

The minimum wage rose by 1.6 percent in real terms (deflated by the CPI). It was eroded in 1990–93 as a result of the lag in updating it, but this was checked in April 1994, when it was updated to 45 percent of the average wage. Nevertheless, the minimum wage amounted to only 41 percent of the average wage towards the end of the year because of the substantial increase in public-services wages.

6. IMMIGRATION

Some 80,000 immigrants came to Israel in 1994. In the first half of the year—following a sharp decline in immigrants' unemployment rate, and as the situation in their countries of origin, and the Ukraine in particular, deteriorated—immigration increased, the monthly average reaching 8,000. Since the beginning of the current influx of immigrants, at the end of 1989, some 610,000 immigrants (the vast majority of them from the former USSR) have arrived, and by the end of 1994 these immigrants constituted 11 percent of Israel's population.

The annual rate of immigration has changed over time. Approximately 200,000 and 180,000 immigrants arrived in 1990 and 1991 respectively, the pace slowing in 1992–94, when the annual average was between 70,000 and 80,000. Despite the slowdown,

the annual immigration rate was still far higher than in the 1970s and 1980s. The steadying of immigration since 1992 at a lower rate than at the beginning of the influx is partly the result of the contraction of the pool of potential immigrants. Another reason for the slowdown is the difficulty immigrants have in finding employment in Israel (any employment in the short run, and employment in their professions in the long run).

Table 4.11
Occupational Distribution and Education Indicators of Immigrants, 1990-94^a

	(percent)					
	1990	1991	1992	1993	1994	1990-94
Scientific workers	38.8	35.1	31.7	26.8	27.9	34.0
<i>of which</i> Physicians	6.2	4.3	3.8	3.5	3.0	4.6
Engineers	24.8	22.4	18.9	15.3	16.9	21.2
Other professional, technical, and related workers	34.4	32.9	32.3	33.3	33.5	33.5
Skilled and unskilled in industry	15.5	19.4	22.2	25.4	26.0	20.0
Other	11.3	12.6	13.8	14.4	12.6	12.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
<i>Thousands</i>						
Total ^b	96.1	79.7	33.8	33.2	39.2	282.0
<i>Years of education^c</i>						
9-12	32.0	34.2	37.8	42.4	42.5	36.0
13+	56.5	51.0	47.9	43.7	44.0	50.7

^a As declared by the immigrants upon arrival.

^b Total of all immigrants employed in the former USSR.

^c Student participation rate of those aged 15+.

SOURCE: Central Bureau of Statistics.

The immigrants' labor-force participation rate was 55 percent—65 percent for men and 47 percent for women (Table 4.12). As the average duration of their stay in Israel increased, these rates went up steadily, stabilizing in mid-1993. The immigrants' participation rates (for both men and women) are higher than those of the established population. This is because of their age composition (a smaller proportion of 8-15 year-olds), work habits in the former USSR (principally among women), the need for a second income for economic reasons, and the large number of single-parent families. Most of the immigrants who have been in Israel for at least three years are in the labor force, and failure to participate in it is generally for reasons of health or age.

The immigrants' unemployment rate is higher than that of the established population, but the steep rise in immigrants' employment over the years has narrowed the gap. The immigrants' average unemployment rate was some 39 percent in 1991, declining in each of the subsequent years to 29, 19 and 14 percent respectively. The decline in the unemployment rate to a great extent reflects the immigrants' longer term in Israel, as well as the overall decline in unemployment since 1993. The rate of unemployment of

Table 4.12
Immigrants in the Labor Market, Principal Indicators, 1991-94

	Annual average		1993					1994				
	1991	1992	Annual average ^a	I	II	III	IV	Annual average ^a	I	II	III	IV
<i>Thousands</i>												
Total	317	422	500	471	489	509	529	577.5	545.9	563.3	585.0	616.1
<i>of which</i> Of working age	216	300	363	346	352	381	372	424.0	412.2	415.0	425.9	444.6
In labor force	98	156	195	180	189	209	200.5	231.0	219.5	227.0	231.0	246.0
<i>Percent</i>												
Participation rate												
Total	44.5	51.9	53.8	52.0	54.0	55.0	54.0	55.3	55.0	56.0	55.0	55.0
Men	55.5	61.8	64.3	63.0	64.0	66.0	64.0	65.0	65.0	66.0	65.0	64.0
Women	35.0	43.8	44.8	42.0	45.0	47.0	45.0	47.0	47.0	47.0	47.0	47.0
<i>Thousands</i>												
Total employed	60	111	157	141	152	166	168	200	189	198	197.0	217.0
Unemployed	38	45	38	39	37	43	32.5	31	30.5	29	34.0	29.0
<i>Percent</i>												
Unemployment rate												
Men	28.5	20.3	16.0	19.0	15.0	16.0	14.0	9.1	9.0	7.5	12.0	8.0
Women	53.0	38.5	23.8	25.0	25.0	26.0	19.0	18.0	20.0	19.0	18.0	15.0
Proportion of immigrants in												
Population	6.4	8.2	9.5	9.0	9.3	9.7	10.0	10.7	10.2	10.5	10.8	11.3
Working-age popn.	6.3	8.4	9.9	9.5	9.6	10.3	10.0	11.5	11.3	11.3	11.5	11.9
Labor force	5.5	8.4	10.0	9.4	9.9	10.6	10.1	11.9	11.5	11.9	11.7	12.4
Employed persons	3.8	6.7	8.9	8.2	8.8	9.4	9.3	11.4	11.0	11.5	11.2	12.0
Unemployed	19.8	21.5	19.4	19.2	19.9	20.1	18.4	15.7	15.0	15.6	15.9	16.4

^a Figures may not add due to rounding.

SOURCE: Based on Central Bureau of Statistics data.

immigrants who have been in Israel for at least three years is similar to that of the established population.

A comparison of the immigrants' employment in Israel with their original occupations indicates upward mobility. Nonetheless, relatively few of those in academic professions which require many years of study are employed in their original occupation, even after three years in Israel (the amount of time that is usually sufficient to acquire the necessary additional training).

Table 4.13
Distribution of Immigrants by Industry, 1991-94

	(percent)			
	1991	1992	1993	1994
Total	100.0	100.0	100.0	100.0
Industry	37.5	36.5	35.9	35.0
Public services	18.2	19.6	22.5	18.5
Construction	9.0	9.0	7.4	6.1
Trade	13.6	11.2	11.6	14.0
Personal services ^a	9.5	10.3	8.8	10.8
Other	12.2	13.3	13.7	15.6

^a In 1991 this item was included in 'Other.'

SOURCE: Labour Force Surveys of the Central Bureau of Statistics.

Difficulties in finding work in their original occupation, particularly for graduates, were partly responsible for the change in the occupational composition of immigrants arriving in Israel—a decline in the proportion of graduates, especially engineers and physicians. Thus, the proportion of immigrants employed in scientific and academic occupations declined gradually from 39 percent at the beginning of 1990 to 28 percent in 1994, and the share of physicians and engineers fell from 6 and 25 percent respectively to 3 and 17 percent (Table 4.11).⁵ The proportion of persons in these professions is higher among immigrants than among the established population.

Immigrants' average wage is much lower than that of the established population. On the other hand, immigrants' wages are rising far more rapidly than those of the established population, so that the gap is narrowing. A relatively large proportion of immigrants is employed in industry, and a smaller proportion in the public services.

⁵ Part of the change in the occupational composition may be because persons in certain occupations brought their immigration forward, fearing that a delay would impair their chances of finding work as the labor market became more crowded. The change in the distribution of immigrants might also reflect the difference in their distribution by countries of origin.