

Chapter 4

Employment and Wages

The average unemployment rate declined from a peak of 11.2 percent in 1992 to an average 10 percent in 1993, and during 1993 from 11 to 9 percent. This reflects a very large increase in employment, alongside the persistent and substantial rise in the labor supply. The considerable expansion of the employment of Israelis was due to the combination of economic growth and lower labor productivity arising from, among other things, the subsidization of incremental labor and the closure of the administered areas, with the substitution of Israelis for workers from there. Real wages rose slightly, remaining virtually unchanged in the business sector, and continuing to increase in the public services. In the former the rise of construction wages, as a result of the closure, was conspicuous, while other business-sector wages fell by about half a percent.

1. MAIN DEVELOPMENTS

After rising continuously since 1988 to a peak of 11.2 percent in 1992, average unemployment fell to 10 percent in 1993. This decline, the outcome of a substantial increase in the employment of Israelis (6.1 percent), occurred despite the large rise in the labor force (4.8 percent) which reflects the continued entry into the labor force of immigrants and a notable increase in the participation rate of the established population. The real wage per employee post rose slightly, the result of the absence of change in business-sector wages and an increase in those in the public services. The stability of business-sector wages reflects a 4.7 percent increase in construction and a 0.4 percent decline in the rest of the sector. In the public services, however, the real wage rose once more by about one percent, even though increases due to wage agreements signed in the second half of the year had not yet had their full effect.

Unit labor costs rose by 2.4 percent, after declining steadily since 1989, reaching a cumulative 6.5 percent reduction by 1992. The increase in unit labor costs in 1993 is the result of the rise in real labor costs per man-hour (some 2 percent) and a decline in labor productivity (0.7 percent). The fall in the share of construction, where unit labor costs are low, accounts for half the rise in labor costs in the business sector.

The decline in labor productivity was due to several factors. As a result of the closure of the administered areas in the second quarter of 1993 and, to some extent, during the rest of the year, skilled workers from these areas were replaced by Israeli workers.

whose productivity was low. The subsidization of incremental employment involves a training period for new workers during which their output is relatively low. The structural change in the composition of demand also led to a decline in factor utilization in industries which contracted (see Chapter 2).

Table 4.1
Principal Labor Market Indicators, 1981-93^a

	Average		1990	1991	1992	1993
	1981-85	1986-89				
<i>Percent change over preceding year</i>						
Permanent population	1.7	1.7	5.7	4.9	2.7	2.4
Migration balance, thousands	2.6	2.7	187.5	163.3	60.4	46.8
Israeli employed persons	1.8	1.6	2.1	6.1	4.2	6.1
Business sector	1.7	2.2	2.0	5.9	4.7	7.2
Public services	1.9	1.6	2.3	6.6	3.2	3.5
Labor input, business sector	3.6	1.9	2.3	4.7	8.7	3.9
Wages per employee post	1.1	5.0	-1.0	-1.7 ^b	1.3	0.5
Business sector	1.6	4.9	-1.6	-3.4 ^b	1.7	0.3
Public services	0.1	5.3	0.2	1.6	-0.4	1.1
Minimum wage	2.9	13.0	-0.9	-0.9	-4.0	-1.7
Daily wage of residents of administered areas	2.1	18.9	-6.9	0.5		
Unit labor costs, business sector ^c	1.2	2.6	-2.5	-5.9	0.2	2.4
Labor productivity, business sector ^d	1.6	2.8	5.8	3.1	-0.8	-0.7
<i>Ratio^e</i>						
Labor-force participation rate	49.8	51.0	51.5	51.7	52.0	52.9
Unemployment rate	5.3	7.0	9.6	10.6	11.2	10.0

^a Wages and labor costs are in real terms.

^b 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.

^c Based on net product at factor cost.

^d Based on by-industry net product.

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

SOURCE: Based on Central Bureau of Statistics data.

Unemployment has been high since 1989, owing to the decline in economic activity which resulted from the exceptional wage-increases following the 1985 economic stabilization program (ESP). The continued rise in unemployment after 1989 was due primarily to the expansion of the labor supply, as immigrants entered the labor force (even though immigration also contributed to demand and job-creation). There were an additional 100,000 employees in 1993, and this brought unemployment down sharply. The expansion of employment, despite slower economic growth, was fueled by expect-

Table 4.2
Labor Market Indicators, 1989-93^a

	(thousands, annual average)										
	1989	1990	1991	1992	1993	Change over preceding year				Cumulative	
						1990	1991	1992	1993	change	
										1989-93	
Working-age population	3,082	3,202	3,427	3,574	3,682	119.4	225.8	146.6	108.1		599.9
Civilian labor force	1,603	1,650	1,770	1,859	1,946	46.6	120.4	87.5	88.3		342.8
Established population			1,674	1,704	1,751			30.1	47.1		142.5
Immigrants			96	154	195			57.4	41.2		200.3
Israelis unemployed	143	158	187	208	195	15.5	29.2	20.4	-12.6		52.5
Employed persons	1,566	1,600	1,681	1,766	1,835	33.9	81.3	84.8	69.2		269.2
Established population			1,524	1,541	1,596			17.0	54.9		130.7
Immigrants			59	109	155			50.1	46.0		159.6
From administered areas	105	108	98	116	84	2.8	-9.9	17.7	-31.7		-21.1
Public services ^b	435	445	472	486	503	9.8	27.2	14.3	16.5		67.8
Business sector ^b	1,131	1,155	1,209	1,280	1,332	24.0	54.1	70.6	52.7		201.4

^a Data for population, civilian labor force, and unemployed are for Israelis.

^b Including employees from the administered areas.

SOURCE: Central Bureau of Statistics.

ations of accelerated growth in the next few years, the closure of the administered areas (with the substitution of Israelis for workers from these areas), and policy measures intended to reduce unemployment. These included: the subsidization of incremental employment under the Business-Sector Encouragement Law, which helped employers to meet the costs of training additional employees; relief work projects which employed an additional 3,000 persons, on average; and the introduction and application of stricter criteria of eligibility for unemployment benefit. The first two measures were intended from the outset to be temporary and provide short-term relief for unemployment until the business sector created sufficient jobs.

Table 4.3
Sources of Population Growth, 1986-83

	1986	1987	1988	1989	1990	1991	1992	1993 ^a
<i>Thousands</i>								
Beginning-of-year <i>de jure</i> population	4,266	4,331	4,407	4,477	4,560	4,822	5,059	5,196
Natural increase	70	70	71	72	75	74	77	80
Migration balance	-5	6	-1	11	188	163	60	47
Gross immigration ^b	12	16	16	27	203	180	81	77
less Israelis abroad ^c	17	10	17	16	15	16	21	30
Total increase	65	75	70	83	262	237	137	127
End-of-year <i>de jure</i> population	4,331	4,407	4,477	4,560	4,822	5,059	5,196	5,323
<i>Rate per thousand</i>								
Total natural increase	16	16	16	16	16	15	15	15
Jews	14	13	13	13	13	12	11	12
Non-Jews	29	29	29	30	31	31	29	29

^a Provisional.

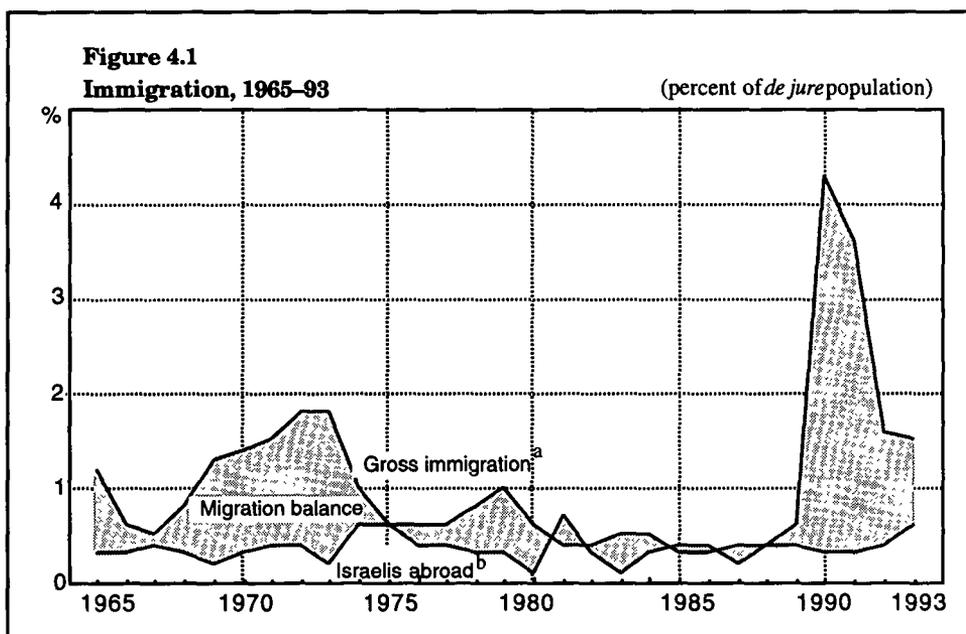
^b Immigrants and persons entering for reunion of families (including from East Jerusalem), etc.

^c Israelis abroad more than 12 months less returning residents, potential immigrants, and Israelis who have not returned from a visit to Jordan.

SOURCE: Central Bureau of Statistics.

As stated, the closure of the administered areas and the security problems arising from the employment of workers from there caused a substantial reduction of labor input from the areas and the replacement of these workers by Israelis, mainly in construction and agriculture. The closure appears to have set off a process whereby the cheap labor from the administered areas is forgone. In agriculture, the services, and industry this has been occurring gradually since the *intifada* began. In construction, however, this process had not yet been evident, because the boom arising from the influx of immigrants required a

rapid and substantial increase in construction employment. The process may stimulate a shift to more mechanized, capital-intensive methods of construction—something which has been delayed for many years because of the availability of cheap labor from the administered areas. When the closure was relaxed, however, most of the workers resumed work in Israel. In the last quarter of 1993 there were 86,000 such workers—down by only a quarter from the number prior to the closure. (At the end of February 1994 another closure, which is expected to reinforce these processes, was imposed.)



^a Immigrants *plus* returning residents *plus* persons entering for reunion of families.

^b Israelis abroad more than 12 months *less* returning residents *plus* potential immigrants and Israelis who have not returned from a visit to Jordan.

SOURCE: Central Bureau of Statistics.

The absorption of immigrants in the labor force presents a mixed picture. On the one hand, their employment rate has risen sharply while their unemployment rate has plunged. On the other, many of them have not found work commensurate with their skills. This is particularly evident when the current influx of immigrants is compared with previous ones. Accelerated tradables-biased growth (i.e., growth which focuses principally on industries whose products are traded internationally), and the expansion of industry, in particular, may help to create jobs which will utilize the immigrants' human capital, and improve the quality of their employment.

Table 4.4
Israeli Labor Force, Selected Data, 1980-93

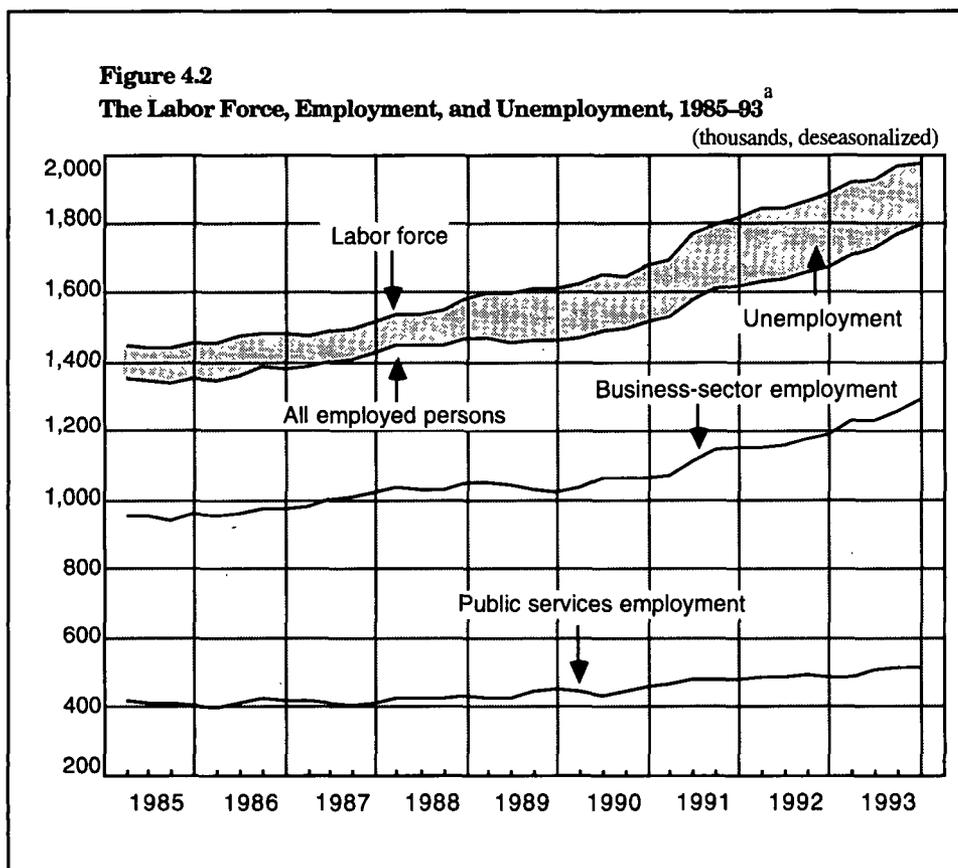
(annual change, percent)

	Absolute figures		1980/	1985/	1989/				
	1992	1993	1985	1989	1993	1990	1991	1992	1993
Total									
<i>Thousands</i>									
Mean population	5,122	5,256	1.8	1.6	3.9	3.1	6.1	3.5	2.6
Working-age population	3,574	3,682	2.0	2.0	4.5	3.9	7.1	4.3	3.0
Civilian labor force	1,858	1,946	2.2	2.6	5.0	2.9	7.3	4.9	4.8
Employed	1,650	1,751	1.8	2.0	4.6	2.1	6.1	4.2	6.1
Unemployed	208	195	9.1	10.2	8.2	10.9	18.5	10.9	-6.1
<i>Percent</i>									
Participation rate	52.0	52.9							
Unemployment rate	11.2	10.0							
Men									
<i>Thousands</i>									
Working-age population	1,748	1,799	2.0	2.0	4.4	3.7	6.7	4.1	2.9
Civilian labor force	1,081	1,129	1.7	1.7	4.3	2.5	6.4	3.7	4.5
Employed	981	1,033	1.2	1.3	4.1	2.0	6.1	3.0	5.3
Unemployed	100	96	10.8	7.6	6.2	8.6	9.4	10.9	-3.5
<i>Percent</i>									
Participation rate	62.8	9.2							
Unemployment rate	9.2	8.5							
Women									
<i>Thousands</i>									
Working-age population	1,826	1,883	2.0	2.0	4.7	3.9	7.4	4.4	3.1
Civilian labor force	777	817	3.0	4.0	6.0	3.4	8.7	6.7	5.2
Employed	669	718	2.8	3.1	5.4	2.2	6.2	6.1	7.4
Unemployed	108	99	7.1	13.6	10.3	13.3	28.8	10.6	-8.4
<i>Percent</i>									
Participation rate	42.5	43.4							
Unemployment rate	13.9	12.1							
<i>Thousands</i>									
Employed from areas	116	84	3.5	3.3	-5.5	2.7	-9.2	18.1	-27.4

SOURCE: Central Bureau of Statistics, Labour Force Surveys, and Family Expenditure Surveys in the administered areas.

2. THE POPULATION AND THE CIVILIAN LABOR FORCE

The mean population increased by 2.6 percent in 1993 (3.5 percent in 1992) (Table 4.4). The moderation in the growth rate was due to the stabilization of immigration (at about 80,000 immigrants a year), which reduced its contribution to the total growth rate, and to a higher rate of emigration, i.e., a smaller migration balance than in 1992.¹ The increase



^a Data are for Israelis.

SOURCE: Labour Force Surveys of Central Bureau of Statistics.

in the working-age population slowed to 3 percent, reflecting the slowdown in population growth. Nonetheless, the increase in the working-age population is faster than in the population as a whole, due to the age-structure which characterizes this

¹ The increase in the proportion of persons leaving the country after an influx of immigrants is a characteristic of mass immigration which has been observed in the past. We do not yet have information on the destinations or composition of the emigrants.

immigration and the increase in the proportion of persons of working age in the established population. Despite the slowdown in immigration, immigrants accounted for half the increase in the working-age population. The latter, together with the substantial rise in the participation rates of both immigrants and Israelis, is reflected by the large increase in the labor force—4.8 percent—following a similar increase in 1992. The immigrants' participation rates are higher than those of the established population, for both men and women. The participation rate for men rose as a result of the increase in the proportion of the groups (age and educational level) in which the tendency to participate is high, and of the growth in their specific participation rates (i.e. the change within each group), in contrast to their declining trend in the 1980s. The increase among women was due principally to changes in the composition of these groups, and only slightly to the specific participation rates. The rise in the specific participation rates in 1993, especially among men, appears to be due to improved chances of finding work, bringing 'discouraged workers' back into the pool of work-seekers.

Table 4.5
Structure of Employment of Israelis, 1981–93

	(percent)						
	1990	1991	1992	1993	Annual average rates of change		
					1981–1985 ^a	1986–1989 ^a	1990–1993
Total	100.0	100.0	100.0	100.0	1.8	2.0	4.6
Public services	29.4	29.6	29.3	28.6	1.9	1.6	3.9
Business sector	70.6	70.4	70.7	71.4	1.7	2.2	4.9
Industry	21.6	21.5	21.1	21.2	4.7	0.4	4.3
Agriculture	4.1	3.5	3.5	3.5	-0.3	-1.6	-2.1
Electricity and water	1.1	1.1	0.9	1.0	-1.8	5.1	5.0
Construction	5.1	6.1	6.5	6.8	-1.8	-0.2	13.4
Trade and catering	14.5	14.1	13.9	14.3	3.1	5.9	4.4
Financial and business services	9.9	10.2	10.4	10.5	5.1	2.5	6.2
Transport, storage and communications	6.2	6.1	6.3	6.1	0.1	1.9	3.3
Personal and other services	7.4	7.3	7.4	7.5	3.4	4.9	5.3

^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 the Central Bureau of Statistics.

3. EMPLOYMENT AND LABOR INPUT²

The number of employed persons rose by 3.9 percent in 1993, reflecting a 6.1 percent increase among Israelis and a 27.4 percent decline among workers from the administered areas as a result of the closure imposed in the second quarter.³ Immigrants' employment rose by about 40 percent. Employment expanded by similar rates in the business sector and the public services (4.1 and 3.4 percent respectively). Business-sector employment excluding construction rose by about 6.2 percent.

The considerable increase in the employment of Israelis in the business sector was furthered by the subsidization of incremental employment to about a third of employees' salaries. In 1993 this subsidy was given for an average of 53,000 employees a month, at least 15,000 of whom were added this year (39,000 in 1992). The subsidy facilitated the rapid expansion of employment, despite the cost of training and low productivity during this period, thus alleviating unemployment in the short term. It will be possible to assess the long-term effectiveness of subsidization once it becomes clear whether the employment created was permanent or temporary. The subsidy is given for two years, and no new workers will be subsidized after the end of 1993. The questions which should be examined are the extent to which the incremental employment consists solely of unskilled workers whose employment is made worthwhile by subsidization, and whether their productivity increases after the training period, making their employment worthwhile even without subsidization. The extent of private nonresidential investment indicates that producers expect output to expand substantially, so that much of the increase in employment should be permanent. The advantage of subsidizing incremental employment is that it serves as an incentive for expanding employment while incurring relatively little budgetary expense. This incentive also appears to have eased the substitution of Israelis for workers from the administered areas resulting from the closure. The disadvantage of subsidization is that it discriminates against small businesses (employing up to 5 persons), and is temporary in nature, possibly encouraging the temporary employment of unskilled workers who need a relatively short training period. This policy measure also requires a supervisory mechanism to ensure that it is not misused, and there is no guarantee that this mechanism is efficient. A further drawback of subsidization is that guaranteeing new workers a relatively high wage can exert upward pressure on wages in general.

² Employment data do not include workers from abroad (employed with the permission of the Employment Service), whose number swelled from the middle of the year. At the end of 1993 some 11,000 foreign workers were employed, 6,000 of them in construction.

³ The closure affected both the number of workers from the administered areas and the number of man-hours. The number of workers from the administered areas fell by some 45 percent from the first quarter to the second, and the number of their man-hours per week fell by half. In the third quarter the number of workers from the administered areas was only 5 percent higher than in the second quarter, but their number of man-hours per week rose to its level before the closure. In the last quarter of 1993 the number of workers from the areas rose by 26 percent, to a level approximately one quarter lower than it was before the closure. Their man-hours per week rose by about 2 percent, to a level that was 7 percent higher than in the first quarter.

In the business sector, the expansion of employment in industry (5.7 percent), trade, and business and personal services (7.9 percent), financial services (8.2 percent), and electricity and water (20.7 percent) was particularly notable, while construction employment plummeted (7.4 percent) due to the contraction of government-initiated construction and the closure of the administered areas (Table 4.6). Nonetheless, employment of Israelis rose substantially in both construction (9.9 percent) and agriculture (7.3 percent), as a result of the closure.

Table 4.6
Business Sector Employment and Labor Input,
by Industry, 1988–93^a

	(percent change over preceding year)							
	Absolute figures ^b		1988	1989	1990	1991	1992	1993
Employed persons								
Business sector ^c	1,280	1,332	3.0	-0.4	2.1	4.7	5.8	4.1
Business sector excl.								
construction	1,086	1,153	2.3	-0.5	1.2	3.0	3.8	6.2
Construction	194	179	8.9	-0.2	9.6	16.6	18.6	-7.4
Industry	356	376	-2.8	-3.2	1.8	4.1	2.4	5.7
Agriculture	68	71	-5.0	-1.9	-9.2	-9.6	1.5	3.7
Transport	104	106	3.5	-1.8	-0.6	4.4	7.8	1.9
Trade, personal services,								
business services ^d	466	503	12.3	3.3	2.6	5.1	5.1	7.9
Financial services	64	69	3.2	-3.2	-0.2	0.2	1.3	8.2
Electricity and water	15	18	6.6	-0.7	15.3	1.2	-13.7	20.7
Labor input								
Business sector ^d	50.1	52.1	0.3	1.4	2.3	4.7	8.7	3.9
Business sector excl.								
construction	42.3	45.0	1.0	1.0	1.1	2.9	6.6	6.3
Construction	7.8	7.1	-4.6	5.1	11.8	17.1	21.6	-8.8
Industry	14.4	15.4	-4.3	-0.5	0.9	4.6	6.0	6.9
Agriculture	2.6	2.7	-8.4	-1.0	-10.5	-10.6	1.6	5.4
Transport	4.2	4.3	1.4	-2.3	2.7	2.9	8.3	4.2
Trade, personal services,								
business services ^c	17.9	19.0	14.8	5.1	1.9	3.6	8.6	6.1
Financial services	2.4	2.6	2.9	-1.4	0.4	0.2	4.0	7.6
Electricity and water	0.6	0.7	14.5	-1.4	15.0	-1.8	-10.6	16.8

^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.

When the sources of the rise in employment are examined more closely, we find that the following had roughly equal effects: the closure (replacement of workers from the administered areas), economic growth (under 'normal' conditions of increased labor productivity), and the 0.7 percent decline in labor productivity (as against a 'normal' increase) due to the subsidization of incremental employment, the closure, and structural change. A smaller increase—some 3,000 employees—was due to relief work projects.

Table 4.7
Indicators of Employment of Workers from the Administered Areas in Israel, 1984–93

	Average 1984– 1987	1988 ^a	1989	1990	1991	1992	1993
<i>Thousands</i>							
Employed persons ^b	98.5	109.4	104.9	107.7	97.8	115.5	83.8
Labor input ^b	4.4	3.7	3.8	4.0	3.7	4.6	3.0
<i>Rate of change, percent</i>							
Employed persons	4.0	0.4	-4.1	2.7	-9.2	18.1	-27.4
Labor input ^c	4.0	-23.8	1.6	6.1	-8.2	24.4	-33.3
<i>Percent</i>							
<i>Share of labor input in</i>							
Business sector	10.2	8.3	8.2	8.6	7.6	8.8	5.6
Construction	43.7	38.2	40.4	42.8	38.9	43.2	30.4
Agriculture	18.7	17.5	14.9	15.3	16.1	14.2	11.1
<i>of which Employees in</i>							
agriculture	44.7	43.2	37.6	37.9	38.0	33.3	24.0
Industry	6.9	5.2	4.5	3.8	2.2	2.2	1.3

^a Including those temporarily absent from work—whose proportion was particularly large in 1988.

^b Average for 1985–87.

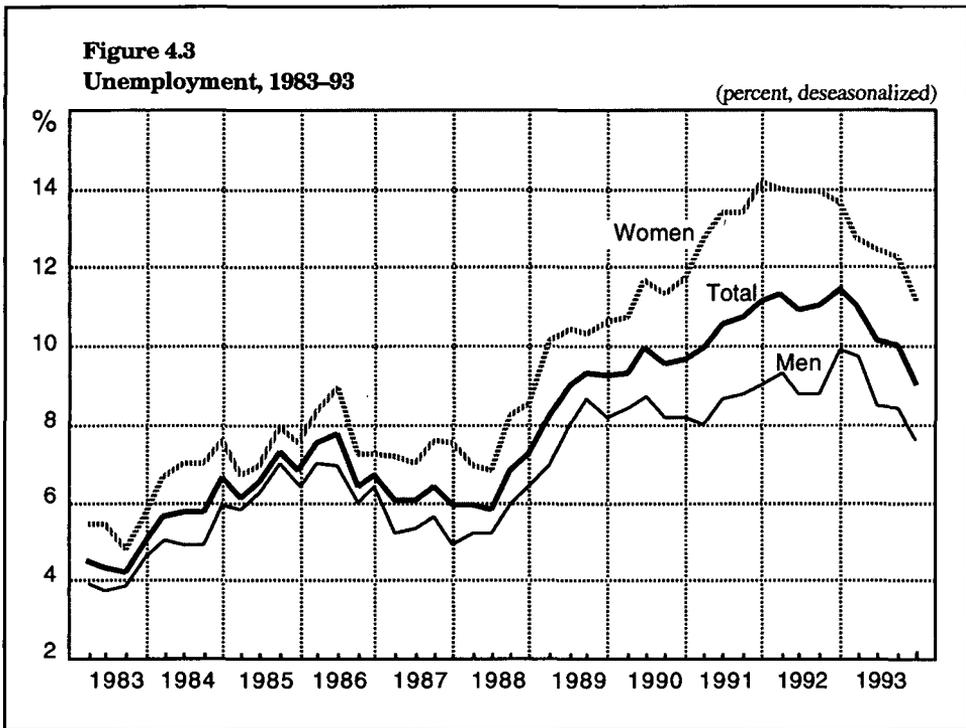
^c Share of labor input of workers from the administered areas in all domestic labor input.

SOURCE: Based on Central Bureau of Statistics data.

The number of man-hours per week declined by about 0.5 percent in the economy and in the business sector; this occurred mainly in construction and the public services, while in the business sector excluding construction the average remained virtually unchanged. Most of the decline in man-hours in construction was the result of the reduction in man-hours of employees from the administered areas due to the closure. In the second quarter, when the closure was first imposed, the number of man-hours per employee from the areas fell by half, but rose again in the third quarter. There was almost no change in the number of man-hours per Israeli worker, and this remained at the high level of 1992. The 1992 rise, together with expectations of sustainable growth and the subsidization of incremental employment, led to an increase in labor input in 1993 through the employment of additional workers rather than a further increase in hours worked per employee.

4. UNEMPLOYMENT

In 1993 unemployment fell, reaching an annual average of 10 percent—some 195,000 jobless (207,000 in 1992). During the year unemployment (seasonally adjusted) declined from 11 percent in the first quarter to 9 percent in the fourth. The drop in unemployment in 1993 followed a steady increase, from 6.4 percent in 1988 to 8.9 percent in 1989, due to the recession before the influx of immigrants began, rising to a peak of 11.2 percent in 1992. The increase since 1989 was the result of the extremely rapid growth of the civilian labor force due to immigration, and the difficulty of employing immigrants, which involved adapting their skills to Israel's economic needs.



SOURCE: Labour Force Surveys of Central Bureau of Statistics.

Unemployment fell throughout the economy, among both Israelis and immigrants, men and women. There are conflicting indications regarding the depth of unemployment, however. The share of short-term unemployment (up to 8 weeks) rose, while that of persons unemployed from 8 to 27 weeks fell, and that of those unemployed for more than six months remained unchanged—about one third of all those out of work. The proportion of persons in the last category unemployed for over a year—hard-core unemployment—soared, rising by about 6,000, and accounting for 13 percent of all the

jobless. Some of them would appear to be elderly immigrants whose chances of finding employment are low. The continued growth of hard-core unemployment was also reflected by the steep increase in the number of persons applying for income support—a monthly average of 40 percent—some of them immigrants no longer eligible for unemployment benefit. The fall in unemployment was expressed in the 6 percent decline from 1992 in applications for unemployment benefit, to which the more stringent criteria for eligibility and their stricter application also contributed.

Table 4.8
Indicators of the Depth of Unemployment, 1988–93

	1988	1989	1990	1991 ^a	1992 ^a	1993 ^a
<i>Thousands</i>						
Work-seekers for 27 weeks or more	19.5	35.2	42.4	47.2	67.5	63.9
<i>of which</i> 27–53 weeks	15.1	27.6	33.2	35.4	48.8	37.5
53 weeks or more	4.7	8.3	10.4	12.9	19.9	25.9
Unemployed for last 12 months	46	65.9	81.6	107.1	116.2	104.8
<i>Days</i>						
Average number of days unemployment benefit received	101	107	119	122	127	132
<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
<i>Percent of all unemployed</i>						
Seeking work for 27 weeks or more	19.8	25.2	27.6	25.8	33.2	33.1
<i>of which</i> 27–53 weeks	15.1	19.4	21.0	18.9	23.5	19.2
53 weeks or more	4.7	5.8	6.6	6.9	9.6	13.3
Unemployed for last 12 months	46.0	46.2	51.7	56.7	56.0	53.7

^a Because a large proportion of immigrants 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 the National Insurance Institute.

The unemployment data also indicate the creation of a hard core of elderly unemployed. While remaining at about 6 percent in the 55 and over age-group in 1993 (compared with 2 percent in 1988), the unemployment rate declined in the other age-groups. The share in unemployment of relatively more educated workers (at least 13 years of schooling) continued to fall, although that of those in the middle group (9–12 years of schooling) rose. Unemployment remained higher in the south, Haifa, and the north, and lower in Jerusalem and Tel Aviv. The increase in the proportion of unemployed persons who had resigned from their jobs—characteristic of an economy where the chances of finding employment are improving—is noteworthy.

The appreciable increase in employed Israelis, which brought unemployment down, also reflects the fact that total labor input was provided by expanding employment rather than by increasing hours worked per employee—as in previous years—even though this involves relatively high training costs. The generous subsidization of incremental employment—about one third of a new employee's salary—appears to have contributed greatly to this development, facilitating the addition of many employees.

On average, 3,000 persons (rising from 1,200 at the beginning of the year to 4,000 from May onwards) were employed in relief work. The object of the relief work program was originally to rescue work-seekers from chronic unemployment, but it is not confined to the long-term unemployed. Many of the persons employed in these projects have, moreover, remained in them for over six months instead of being replaced by other unemployed persons. This system, which was designed to provide habits and skills appropriate for the labor market, is relatively inefficient. Its contribution will be measured by the extent to which persons who have benefited from it manage to find work elsewhere in the business sector.

Alongside policy measures intended to expand employment, the criteria of eligibility for employment benefit were made more stringent in 1993, and existing criteria were applied even more rigorously. This reduces recorded unemployment by removing some of the unemployed from the register (provided they register solely in order to obtain unemployment benefit), or impelling them to accept less attractive employment. The latter may reduce the effectiveness of unemployment benefit as a means of enabling the unemployed to look for appropriate work—to their own advantage and that of the economy as a whole.

Together with the reduction of unemployment, the gap between men's and women's unemployment narrowed in 1993, after widening since 1988. This gap changes with total unemployment, among other things because of differences in the way men's and women's participation rates respond to the business cycle and to unemployment. Among men the 'discouraged worker effect' appears to be dominant, and in periods of high unemployment their participation rate falls, reducing measured unemployment. Among women the 'added worker effect' appears to be stronger, and when unemployment rises more women tend to enter the labor force, increasing their unemployment rate. These labor-market entrants have relatively little work experience, making it more difficult for them to find employment. In 1992, when unemployment peaked, men's absolute participation rates continued to decline, while those of women soared. In 1993, when unemployment dipped, men's absolute participation rates rose significantly while those of women rose only slightly, in accordance with their characteristic long-term trend.

Table 4.9
Real Wages per Employee Post, 1981–93^a

	(percent change)													
	1986	1987	1988	1989	1990	1991 ^b	1992 ^b		1993 ^b		1981– 1985	1986– 1988	1989– 1993	
Deflated by CPI														
Public services	4.1	7.1	9.8	0.3	0.2	1.6		–0.4		1.1	0.3	22.3	2.8	
Business sector	9.1	7.9	4.7	–1.7	–1.6	–5.0	(–2.0)	1.7	(1.5)	0.3	(–0.8)	8.4	23.3	–6.2
Business sector excl. construction	8.6	6.5	4.8	–1.5	–1.2	–3.5		1.3		–0.4		8.7	21.2	–5.3
Agriculture ^c	9.9	9.4	4.2	–0.8	–4.6	–12.5	(–5.9)	2.4	(2.7)	1.6	(–0.1)	1.8	25.3	–13.8
Industry	7.0	7.1	3.7	0.9	0.0	–3.0		2.1		0.5		13.8	18.8	0.4
Water & electricity	0.3	13.4	5.5	1.6	–1.8	1.0		4.7		–2.6		7.5	19.9	2.8
Construction	12.8	16.3	3.4	–2.2	–4.5	–13.3	(–2.7)	9.4	(8.8)	4.7	(0.3)	–1.9	35.7	–7.2
Trade, restaurants, hotels	11.5	7.8	5.5	–2.6	–2.4	–2.5		1.4		0.6		15.5	26.9	–5.5
Transport, etc.	9.2	10.1	3.5	–3.4	0.1	1.5		0.2		–0.8		4.0	24.4	–2.4
Financial & business services	11.2	5.1	8.1	–4.8	–0.9	–5.3		1.1		–0.7		3.4	26.3	–10.4
Personal & other services	17.6	14.5	6.5	–5.2	–3.4	–3.2		1.5		0.2		3.0	43.2	–9.9
Total	7.8	7.9	6.0	–1.3	–1.0	–3.0	(–1.7)	1.3	(1.1)	0.5	(–0.4)	5.9	23.3	–3.6
Real disposable income per employee post ^d			5.0	–0.7	1.2	–0.4		1.5		–1.3				0.4

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

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

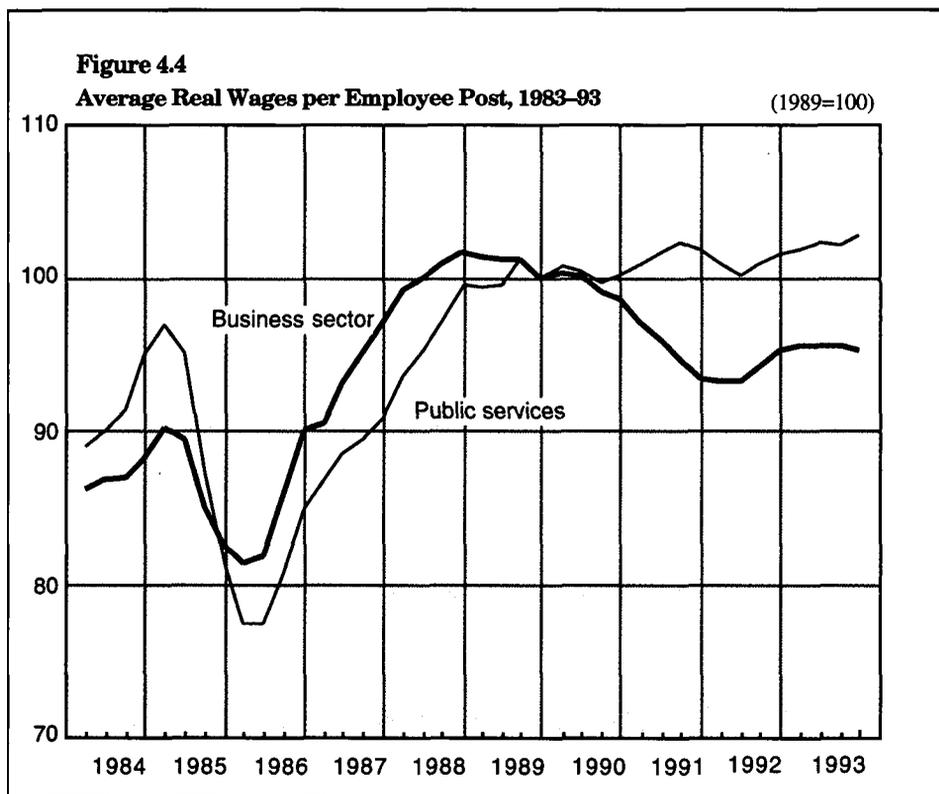
^c Agriculture, afforestation, and fishing.

^d 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.

SOURCE: Based on Central Bureau of Statistics data.

. WAGES⁴

Nominal wages per employee post rose by an average of 11.6 percent—11.4 percent in the business sector and 12.2 percent in the public services. These nominal increases represent a 0.5 percent rise in real wages—0.3 percent in the business sector and 1.1 percent in the public services. Real wages in the business sector excluding construction declined by 0.4 percent, and rose by 4.7 percent in construction. Wages changed little in other industries, and the increases measured in construction and agriculture reflect primarily the decline of the proportion of workers from the administered areas due to the loss, as well as—though to a lesser extent—the resultant excess demand for Israeli workers. Excluding workers from the administered areas, construction wages rose by only 0.3 percent, remained virtually unchanged in agriculture, and declined by 0.8 percent in the entire business sector (Table 4.9).



SOURCE: Based on Central Bureau of Statistics data.

⁴ 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.

Table 4.10
Change in Real Hourly Wage of Israelis and all Employed Persons^a, 1987-93

	1987	1988	1989	1990	1991	1992	1993	1989-1993 ^b
Israelis								
Total	8.2	6.0	-2.7	-0.7	-1.7	-0.8	-0.4	-6.2
Business sector	9.2	4.6	-3.8	-3.8	-1.8	-0.8	-1.0	-10.7
Business sector excl. construction	7.9	4.6	-3.4	-0.8	-2.5	-1.2	-1.4	-9.0
Agriculture	5.5	5.0	-0.5	-3.9	-4.2	5.2	-4.2	-7.8
Industry	8.7	3.9	-1.9	1.0	-4.0	-1.2	-0.2	-6.2
Electricity & water	22.6	-1.8	1.9	-0.6	3.6	1.6	0.1	6.8
Construction	13.7	4.5	-7.0	-5.6	0.1	8.2	-1.6	-6.4
Trade and catering	10.5	3.0	-5.4	-0.6	-2.5	-1.5	1.7	-8.1
Transport	8.7	4.8	-2.1	-3.4	2.8	1.0	-4.2	-6.0
Business & financial services	6.0	9.1	-7.4	-1.4	-4.8	-0.9	-0.5	-14.3
Public services	6.7	9.8	-0.0	0.8	1.9	-1.4	1.7	3.1
Personal services	12.2	5.8	-4.6	-2.8	-0.3	-3.4	2.8	-8.1
All employed persons								
Total	8.4	8.2	-2.8	-1.1	-2.9	-1.1	1.1	-6.7
Business sector	9.3	6.8	-3.9	-1.9	-4.7	-0.8	0.6	-10.4
Business sector excl. construction	7.9	5.8	-3.3	-1.2	-3.1	-1.2	-0.3	8.9
Agriculture	7.4	10.9	-0.7	-4.2	-11.8	4.3	-2.0	-14.2
Industry	8.6	5.4	-1.9	0.7	-3.9	-1.4	-0.1	-6.5
Electricity and water	22.6	-1.8	1.9	-0.6	3.6	1.6	0.1	6.8
Construction	15.3	18.3	-7.8	-6.6	-13.0	6.6	6.0	-15.3
Trade and catering	10.5	3.0	-5.4	-0.6	-2.5	-1.5	1.7	-8.1
Transport	8.7	4.8	-2.1	-3.4	2.8	1.0	-4.2	-6.0
Business and financial services	6.0	9.1	-7.4	-1.4	-4.8	-0.9	-0.5	-14.3
Public services	6.7	9.8	-0.0	0.8	1.9	-1.5	1.8	3.0
Personal services	12.2	5.8	-4.6	-2.8	-0.3	-3.4	2.8	-8.1

^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.

Since 1989, when unemployment first increased significantly, and in the wake of the exceptional wage-increases of 1986-89, real wages per employee post have declined by some 6.2 percent (Table 4.9). When only Israeli employees are considered (adjusting for the 4.4 percent increase in average hours per employee), real hourly wages fell by 10.

percent in this period (Table 4.10). The decline in the average wage reflects the appreciable increase in the proportion of new employees—whose wage is relatively low—due to the considerable expansion of employment, as well as the decline in wages among employed persons due to high unemployment.

Relative changes in the supply of and demand for labor help to explain changes in wages. Several factors were at work in 1993 to increase the relative demand for Israeli workers, thereby affecting wages. Economic growth and expectations that it would continue, the subsidization of employment, and the closure of the administered areas all exerted upward pressure on wages. These factors were not dominant, however, since the persistently high unemployment rate (notwithstanding its decline during 1993) made it possible to respond to the increased demand for workers without a rise in wages.

Whereas business-sector wages increased only slightly because of unemployment, public-services wages continued to rise (by some 3 percent since 1989). In the second half of 1993 wage agreements were signed with some of the labor unions in this sector which guaranteed an annual increase of 4.5 percent for four years. This, together with the cost-of-living allowance (COLA) and expected wage drift, will cause a real annual increase of 1–2 percent. The implementation of the agreements began only towards the end of 1993, so that they will find full expression only in 1994. A wage agreement was also signed with the teachers, granting them substantial increases in 1993 and 1994.⁵ This agreement reflects the government's intention of attaching greater importance to education as part of its reordering of national priorities. Past public-sector wage-increases exerted pressure on business-sector wages, too, through the wage-linkage arrangements between public-sector corporations and the public services as well as between professions. These pressures eased with the high unemployment rate of the last few years, but may resurface as unemployment continues to decline.

The object of government policy was to increase business-sector employment by reducing labor costs, and in 1993 this was done by subsidizing incremental labor. In previous years employers' national insurance payments were reduced and employers' tax abolished, thus generally reducing labor costs. Subsidizing incremental employment by up to one third of a worker's wage (with a ceiling of some NIS 1,300 a month, adjusted in accordance with the COLA) in the first year, and a quarter in the second, raised the wages of new workers and reduced costs to employers. This subsidy, which was given for an average of 39,000 employees in 1992 and 53,000 in 1993, accounted for about one percent of all wage payments in most of the business sector, and 2 percent in agriculture.

Unit labor costs rose by an average of two percent in the business sector, by almost one percent in the business sector excluding construction, and by 2 percent in construction. Consequently, to a great extent the slight increase in labor costs in the entire business sector reflects the reduced share of construction, where labor costs are

⁵ In 1994 new wage agreements were signed with the major public service unions. These granted sizeable wage-increases in 1994, 1995, and 1996, estimated to involve real annual wage-increases of 5–6 percent.

Table 4.11
Real Wages per Employee Post, by Industry, 1985–93^{a,b}

	(percent change)											
											Cumulative change	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1986–88	1989–93	
Deflated by CPI												
Nontradables	-5.6	11.4	8.8	6.3	-3.7	-1.8	-6.1	2.1	0.4	28.8	-9.0	
Tradables	-7.7	6.9	7.7	3.7	0.7	-0.8	-3.5	1.6	0.3	19.4	-1.8	
Deflated by producer prices^c												
Nontradables ^d	-4.7	1.0	0.2	3.5	-5.1	-1.0	-7.0	0.5	0.7	4.9	-11.6	
Tradables	-20.8	12.6	9.4	5.3	0.4	4.6	-1.6	4.1	0.7	29.7	8.4	
Industry	-4.7	17.4	9.8	5.5	-0.2	5.5	1.0	4.0	1.7	36.0	12.5	
Agriculture	-11.2	2.2	6.1	6.0	11.9	3.4	-7.7	5.3	7.5	14.9	20.8	
Water & electricity	-13.9	13.1	22.6	9.5	-3.6	-7.1	-2.8	5.8	-0.6	51.8	-8.3	
Construction ^e	-14.1	-1.7	7.6	-0.6	-0.8	-4.7	-12.3	9.0	8.6	5.1	-1.9	
Trade, restaurants, hotels ^f	9.2	14.4	0.6	0.5	-5.2	3.8	0.9	1.4	-1.5	15.7	-0.8	
Transport, etc. ^{f,g}	-32.3	5.1	13.8	10.6	-7.6	-1.1	-3.7	0.7	-6.5	32.3	-17.2	
Financial & business services ^f	-4.0	-8.7	-6.2	2.5	-6.9	-1.9	-3.9	-1.8	-2.1	-12.2	-15.6	
Personal & other services ^f	3.2	-5.4	-9.7	-1.9	-3.3	0.0	2.0	3.7	4.9	-16.3	7.4	

^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. When deflated by the increase in man-hours per employee post, wages in both sectors have declined, though by more in nontradables.

^d Including public services.

^e The index of prices here is derived from construction investment (from National Accounts data).

^f Since no factor price index is available for these industries, we have used by-industry consumer price indices, which may bias the results.

^g Transport, storage and communications.

SOURCE: Based on Central Bureau of Statistics data.

Table 4.12
Immigrants in the Labor Market, Principal Indicators, 1991-93

	1991					1992					1993					
	Annual average ^a	I	II	III	IV	Annual average ^a	I	II	III	IV	Annual average ^a	I	II	III	IV	
<i>Thousands</i>																
Total	317	238	310	343	376	422	395	409	430	453	500	471	489	509	529	
<i>of which</i> Of working age	216	159	200	240	266	300	275	290	312	322	363	346	352	381	372	
In labor force	98	59	88	113	133	156	145	151	162	164	195	180	189	209	201	
<i>Percent</i>																
Participation rate																
Total	44.5	37.0	44.0	47.0	50.0	51.9	52.7	52.0	52.0	51.0	53.8	52.0	54.0	55.0	54.0	
Men	55.5	50.0	57.0	54.0	61.0	61.8	62.0	60.0	63.0	62.0	64.3	63.0	64.0	66.0	64.0	
Women	35.0	25.0	33.0	40.0	42.0	43.8	45.0	44.0	44.0	42.0	44.8	42.0	45.0	47.0	45.0	
<i>Thousands</i>																
Total employed	60	34	54	68	85	111	97	108	116	123	157	141	152	166	168	
Unemployed	38	25	33	44	48	45	48	43	46	41	38	39	37	43	33	
<i>Percent</i>																
Unemployment rate	39.0	42.0	38.0	40.0	36.0	28.8	33.1	28.5	28.4	25.0	19.3	22.0	19.0	20.0	16.0	
Men	28.5	30.0	27.0	30.0	27.0	20.3	25.0	18.0	19.0	19.0	16.0	19.0	15.0	16.0	14.0	
Women	53.0	60.0	54.0	51.0	47.0	38.5	42.0	40.0	39.0	33.0	23.8	25.0	25.0	26.0	19.0	
Proportion of immigrants in																
Population	6.4	4.9	6.3	6.9	7.5	8.2	7.8	8.0	8.4	8.8	9.5	9.0	9.3	9.7	10.0	
Working-age population	6.3	4.7	5.9	6.9	7.6	8.4	7.8	8.1	8.7	8.9	9.9	9.5	9.6	10.3	10.0	
Labor force	5.5	3.5	5.0	6.3	7.3	8.4	7.9	8.3	8.6	8.7	10.0	9.4	9.9	10.6	10.1	
Employed persons	3.8	2.2	3.4	4.3	5.2	6.7	5.9	6.6	7.0	7.3	8.9	8.2	8.8	9.4	9.3	
Unemployed	19.8	15.6	18.5	20.9	24.0	21.5	24.2	22.0	20.5	19.4	19.4	19.2	19.9	20.1	18.4	

^a Figures may not add due to rounding.

SOURCE: Based on Central Bureau of Statistics data.

relatively low. The increase in unit labor costs in construction and agriculture was due primarily to the smaller proportion of workers from the administered areas, whose wages are lower. A gap of about one percent between the rise in consumer prices and that in producer prices at factor cost also contributed to this increase.

After rising steeply in 1987 and 1988, due to the introduction of the Minimum Wage Law, the real value of the minimum wage has declined since 1990, mainly due to the law with which it is updated and its linkage to the average wage, which declined in 1990 and 1991 and rose slightly in 1992 and 1993. The erosion of the minimum wage was corrected in April 1994, when it was set at 45 percent of the average wage.

6. IMMIGRATION

Table 4.13
Occupational Distribution and Education Indicators of
Immigrants, 1990–93^a

	1990	1991	1992	1993	(percent 1990–1993)
Scientific workers	39.0	35.5	32.6	27.1	35.3
<i>of which</i> Physicians	6.2	4.3	3.8	3.4	4.8
Engineers	25.4	22.3	19.9	15.9	22.3
Other professional, technical, and related workers	34.3	32.4	32.7	33.3	33.3
Skilled, and unskilled in industry	15.7	19.1	23.2	26.4	19.3
Other	11.0	13.0	11.5	13.2	12.0
Total	100.0	100.0	100.0	100.0	100.0
<i>Thousands</i>					
Total ^b	96.1	79.7	33.8	33.2	242.8
Years of education ^c					
9–12	31.9	35.0	39.0	43.1	35.4
13+	57.3	52.7	48.8	43.1	52.7

^a As declared by the immigrant 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.

Some 77,000 immigrants came to Israel in 1993, similar to the figure for 1992. Since the current influx began, about 530,000 have arrived (most of them from the former Soviet Union), and by the end of 1993 they accounted for 10 percent of the mean population.

The number of immigrants was affected by events—both actual and expected—in the former USSR and Israel (and to a lesser extent in alternative destinations), especially a regards employment. The rate of immigration has slowed in comparison with 1990 and

1991, among other things because of employment difficulties (beyond the reduction of the pool of potential immigrants after the most highly motivated immigrants have left for Israel).

The rate at which immigrants have entered the labor force has risen slowly with the increase in their average length of stay in Israel, and since the second quarter of 1993 it has remained steady at about 54 percent—64 percent for men and 45 percent for women, in both cases slightly above the rate for Israelis (Table 4.12). The higher participation rates are due to the immigrants' age-structure—there are relatively fewer immigrants in the 15–18 age-group than in the established population. With regard to women this is also due to work habits in the former USSR, the need for an additional earner due to economic difficulties, and the large number of single-parent families.

Immigrants' employment rose by some 40 percent, while their unemployment rate continued to decline—from 29 percent in 1992 to 20 percent in 1993 (16 percent in the last quarter). Women's unemployment remained far higher than men's—24 and 16 percent respectively. The decline in unemployment reflects primarily immigrants' longer average stay in Israel.⁶

Table 4.14
Distribution of Immigrants by Industry, 1991–93

	(percent)		
	1991	1992	1993
Total	100.0	100.0	100.0
Industry	36.5	36.3	34.0
Public services	17.8	19.8	19.8
Construction	10.7	9.7	9.0
Trade	14.0	11.3	12.0
Personal services ^a		11.0	10.5
Other	25.8	20.0	19.3

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

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

The employment picture, as reflected by the participation, employment, and unemployment rates, is not complete without a close examination of immigrants' employment in their professions, comparing this with the absorption patterns of previous influxes of immigrants with a similar professional profile. Surveys undertaken by the Central Bureau of Statistics of immigrants who came at the beginning and end of 1990 indicate that in the current influx a smaller proportion of immigrants with high human capital have found employment in their professions, even two years after immigrating (which should have given them enough time to requalify). Most of those who did not find work in their profession had to accept work of an inferior nature. After two years in

⁶ When length of stay is held constant, the unemployment rate did not decline in 1993.

Israel, only one third of immigrants in scientific, academic, liberal, or technical professions had found work in their field, compared with double this rate in the previous influxes of the late 1970s.

The difficulties of finding employment in general, and suitable employment in particular, are reflected both by the slowing of immigration (since mid-1991) and its changing professional composition, with a reduction in the proportion of members of the scientific, academic, and liberal professions, especially engineers and physicians (Table 4.13). The proportion of skilled and unskilled workers rose, on the other hand. Some of the change may reflect the selective nature of the immigration process, so that persons with professional qualifications, fearing that postponing their departure would reduce their chances of finding work as the labor market became saturated, may have arrived earlier. The change in the occupational distribution of immigrants could also reflect the shift in their distribution by geographical origin.

The proportion of immigrants finding work in the liberal and academic professions rose until the beginning of 1993, but fell in the second half of the year. This may be connected with the end of the subsidy on employment in academic and research institutions, causing the termination of the employment of immigrants whose subsidy rights had ended. Immigrants were employed mainly in industry (34 percent, compared with 21 percent of Israelis) and the public services (20 and 29 percent respectively), with a minority in private services. The relatively high proportion of immigrants in industry is connected with their occupational composition, which is top-heavy in technical occupations. Their employment in the public services is lower than that of immigrants from the USSR in previous influxes.