

Chapter 4

Employment and Wages

1. MAIN DEVELOPMENTS

Concurrent with the expansion of economic activity in 1992, employment (of Israelis and residents of the administered areas) grew by an appreciable 5.0 percent. As in 1991 the civilian labor force grew faster than employment among Israelis, so that the unemployment rate continued to rise, reaching an annual average of 11.2 percent. Together with this rise, the average duration of unemployment also increased. The high unemployment rate exerted downward pressure on real hourly wages in the business sector, and for the first time in many years real wages declined in the public services.

During 1992, 77,000 immigrants arrived, compared with about 190,000 in 1990–91 (annual average). The slowdown in the immigration rate since mid-1991 is presumably due to absorption difficulties—chiefly in employment—and to the easing of pressure to leave the former USSR speedily.

Employment grew by more in the business sector than in the public services reversing the trend that has prevailed for many years. The expansion of business-sector employment was consistent with increased economic activity in that sector, and was helped by steps taken in 1991 and 1992 to stimulate employment by reducing labor costs. These included subsidizing additional employment, reducing employers' national insurance contributions, and abolishing employers' tax. In the business sector the high average growth rate of employment in construction is still prominent, though since mid-1992 this industry has been shedding workers.

Labor inputs (in man-hours) of Israelis and residents of the administered territories rose by some 8 percent in 1992, a higher growth rate than that of employment. These developments reflect a 3 percent increase in the number of hours worked per employee due mainly to a decline in the number of man-hours in the first quarter of 1991, arising from absenteeism during the Gulf war. In addition, some of the increase in hours worked per employee (which began in the second quarter of 1991) is because firms preferred to extend employee man-hours rather than take on additional employees, owing to uncertainty as to whether the expansion would continue—and with what intensity—and the time required to train new employees.

Real wages per employee post declined by 0.5 percent in the public services, and rose by 1.7 percent in the business sector. Wage-increases in the business sector reflect a 2.4 percent rise in the number of hours worked per employee and a 0.7 percent decline in the real hourly wage.

The high unemployment rate was evident in continued downward pressure on wages. The high proportion of new employees—most of them starting at low wages—and their concentration in industries where wages are relatively low also contributed to the decline. In 1992, too, the unions had a moderating effect on the downward pressure exerted on wages by the high unemployment rate. This was particularly apparent in the defense industries, which are highly unionized and have high and rigid wage levels. Even though these industries are in difficulties, they are unable to reduce the high wages they pay, as rationalization would require. The improved profitability of 1989–91 (see Chapter 2), and the measures adopted in 1991–92 aimed at expanding business-sector employment

Table 4.1
Principal Labor Market Indicators, 1981–92^a

	Average				
	1981–85	1986–89	1990	1991	1992
<i>Percent change over preceding year</i>					
Permanent population	1.7	1.7	5.7	4.9	2.6
Migration balance, thousands	2.7	2.8	187.5	163.3	61.1
Israeli employed persons	1.8	2.0	2.1	6.1	4.2
Business sector	1.7	2.2	2.1	5.9	4.7
Public services	1.9	1.6	2.3	6.6	3.2
Labor input, business sector	3.6	2.1	2.3	4.6	8.7
Wages per employee post	1.1	5.0	-1.0	-1.7 ^b	1.1
Business sector	1.6	4.9	-1.6	-3.4 ^b	1.7
Public services	0.1	5.3	0.2	1.6	-0.5
Minimum wage	2.9	13.0	-0.9	-0.9	-4.0
Daily wage of residents of administered areas	2.1	18.9	-6.9	0.5	
Unit labor cost, business sector ^c	1.2	2.1	-0.9	-6.0	-0.5
Labor productivity, business sector ^d	1.7	2.7	5.1	2.6	-0.9
<i>Ratio^e</i>					
Labor-force participation rate	49.9	51.0	51.5	51.7	52.0
Unemployment rate	6.9	7.4	9.6	10.6	11.2

^a Wages and labor cost 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.

by reducing labor costs to employers, also helped to moderate downward pressure on wages in this sector in 1992. In addition, the fact that the inflation rate, slowed by more

Table 4.2
Principal Labor Market Indicators, 1989–92

(thousands, annual average)

	1989	1990	1991	1992	Change over preceding year			Cumulative growth
					1990	1991	1992	1990–92
Working-age population	3,082.2	3,201.6	3,427.4	3,574.4	119.4	225.8	147.0	492.2
Civilian labor force	1,603.3	1,649.9	1,770.3	1,857.8	46.6	120.4	87.5	254.5
Established population			1,673.9	1,704.0			30.1	100.7
Immigrants			96.4	153.8			57.4	153.8
Israelis unemployed	142.5	158.0	187.2	207.6	15.5	29.2	20.4	65.1
Employed persons	1,565.7	1,599.6	1,680.9	1,765.7	33.9	81.3	84.8	200.0
Established population			1,523.8	1,540.8			17.0	80.0
Immigrants			59.3	109.4			50.1	109.4
From administered areas	104.9	107.7	97.8	115.5	2.8	-9.9	17.7	10.6
Public services ^a	434.9	444.7	471.9	486.2	9.8	27.2	14.3	51.3
Business-sector ^a	1,130.8	1,154.9	1,209.0	1,279.5	24.1	54.1	70.5	148.7

^a Including employees from the administered areas.

SOURCE: Central Bureau of Statistics.

than had been expected contributed to the reduction of real wages in the business sector, since some (nominal) wage agreements were signed when inflationary expectations were higher.

Unit labor costs in the business sector fell by 0.5 percent, in the wake of the cumulative 9 percent fall in 1989–91 (after an exceptional rise following the 1985 economic stabilization program—ESP). In 1992 this decline reflected a 0.9 percent fall in output per man-hour and a 1.4 percent fall in labor costs, with trends varying between industries. Particularly notable were the 12 percent rise in unit labor costs in construction and the 5 percent reduction in industry. Excluding construction, unit labor costs in the business sector went down by 1.2 percent.

Table 4.3
Sources of Growth of Population, 1986–92

	1986	1987	1988	1989	1990	1991	1992 ^a
<i>Thousands</i>							
Beginning-of-year <i>de jure</i> population	4,266.2	4,331.3	4,406.5	4,476.8	4,559.6	4,821.7	5,058.8
Natural increase	69.9	69.5	70.9	72.1	74.6	73.8	76.1
Migration balance	-4.8	5.7	-0.6	10.7	187.5	163.3	61.1
Gross immigration ^b	12.3	15.9	16.0	26.8	202.5	179.5	81.0
less Israelis abroad ^c	17.1	10.2	16.6	16.1	15.0	16.3	19.9
Total increase	65.1	75.2	70.3	82.8	262.1	237.1	137.2
End-of-year <i>de jure</i> population	4,331.3	4,406.5	4,476.8	4,559.6	4,821.7	5,058.8	5,196.0
<i>Rate per thousand</i>							
Total natural increase	16.4	15.9	16.0	16.0	15.9	15.2	14.8
Jews	14.0	13.1	13.0	12.6	12.5	11.7	11.2
Non-Jews	28.7	29.2	29.4	30.4	30.7	30.9	29.4

^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.

The unemployment rate has been high since the 1989 recession, which was due in part to the exceptional wage-increases following the ESP (Table 4.1). In 1990, when the effect of immigration on the supply of labor was quite small, the unemployment rate was 9.6 percent. The rate continued to climb as new immigrants entered the labor market. On the other hand, the demand generated by the immigration also led to the creation of jobs. Some of the rise in the unemployment rate derived from structural unemployment. Frictional unemployment rose because of the entry into the labor force of large numbers of immigrants with skills which differed from those of the resident population (due to

Table 4.4
Israeli Labor Force, Selected Data, 1980-92

(annual change, percent)

	Absolute figures		1980- 1985	1985- 1989	1989- 1992	1990	1991	1992
	1991	1992						
Total								
<i>Thousands</i>								
Mean population	4,946.3	5,121.7	1.8	1.6	4.3	3.1	6.1	3.5
Working-age population	3,427.4	3,574.4	2.0	2.0	5.1	3.9	7.1	4.3
Civilian labor force	1,770.3	1,857.8	2.2	2.6	5.0	2.9	7.3	4.9
Employed persons	1,583.1	1,650.2	1.8	2.0	4.1	2.1	6.1	4.2
Unemployed	187.2	207.6	9.1	10.2	13.4	10.9	18.5	10.9
<i>Percent</i>								
Participation rate	51.7	52.0						
Unemployment rate	10.6	11.2						
Men								
<i>Thousands</i>								
Working-age population	1,678.9	1,748.3	2.0	2.0	4.9	3.7	6.7	4.1
Civilian labor force	1,042.7	1,080.9	1.7	1.7	4.2	2.5	6.4	3.7
Employed persons	952.8	981.2	1.2	1.3	3.7	2.0	6.1	3.0
Unemployed	89.9	99.7	10.8	7.6	9.6	8.6	9.4	10.9
<i>Percent</i>								
Participation rate	62.1	61.8						
Unemployment rate	8.6	9.2						
Women								
<i>Thousands</i>								
Working-age population	1,748.9	1,825.7	2.0	2.0	5.2	3.9	7.4	4.4
Civilian labor force	727.9	776.6	3.0	4.0	6.2	3.4	8.7	6.7
Employed persons	630.4	668.8	2.8	3.1	4.8	2.2	6.2	6.1
Unemployed	97.5	107.8	7.1	13.6	17.3	13.3	28.8	10.6
<i>Percent</i>								
Participation rate	41.6	42.5						
Unemployment rate	13.4	13.9						
Employed from administered areas (thousands)								
	97.8	115.5	3.5	3.3	3.3	2.6	-9.2	18.2

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

language difficulties and differences in professional levels and definitions). Long-term unemployment causes social and economic damage, some of it irreversible, e.g., the contraction of future immigration, increased emigration from Israel, a higher rate of natural unemployment due to more hard-core unemployment, and a decline in the

participation rate because of the discouraged worker effect—reflected by the fall in the participation rate of Israeli men in 1992.

The rise in the unemployment rate in the last few years is due to cyclical and structural factors, and it is the task of macroeconomic policy to deal with both. Cyclical unemployment can be reduced by implementing a policy which creates favorable conditions for economic activity in the business sector, thus increasing the demand for labor.

Labor-market policies should involve cancelling some of the institutional arrangements which prevent wages from responding to the high unemployment level; these include minimum wage rates in the public services, wage-linkage between sectors and occupations, and distortions in the Minimum Wage Law. No such steps were taken in 1992. On the contrary, the 1991 decision to cancel the linkage between wages in government corporations and the public services was not implemented in the 1992 public-services wage agreement.

Until the policies bear fruit, short-term solutions for unemployment should also be considered. Furthermore, in order to reduce structural unemployment, vocational training should be expanded so that the unemployed in general, and new immigrants in particular, will better meet the needs of the economy. The fact that private employment agencies have been permitted to operate since 1991, and that the labor exchanges are currently being computerized, should reduce frictional unemployment.

Table 4.5
Employment and Labor Input, by Sector, 1988–92^a

	(percent change over preceding year)						
	Absolute figures ^b		1988	1989	1990	1991	1992
	1991	1992					
Employed persons							
Israelis	1,583.1	1,650.2	3.5	0.5	2.1	6.1	4.2
From administered areas	97.8	115.5	0.4	-4.1	2.7	-9.2	18.1
Total	1,680.9	1,765.7	3.3	0.2	2.2	5.1	5.0
less Public services	471.9	486.2	4.0	1.9	2.3	6.1	3.0
Business sector	1,209.0	1,279.5	3.0	-0.4	2.1	4.7	5.8
Labor input							
Israelis	57.0	60.7	3.5	1.7	1.8	5.8	6.6
From administered areas	3.7	4.6	-23.8	1.6	6.1	-8.2	24.4
Total	60.6	65.3	1.1	1.6	2.1	4.9	7.6
less Public services	14.5	15.2	3.8	2.4	1.6	5.4	4.4
Business sector	46.1	50.1	0.3	1.4	2.3	4.7	8.7

^a Figures are rounded.

^b Employed persons—thousands, labor input—million man-hours. Employment figures are annual averages; labor input figures are weekly averages.

SOURCE: Based on Central Bureau of Statistics data.

2. EMPLOYMENT AND LABOR INPUT

The number of employed persons rose by 5.0 percent in 1992, the number of employed Israelis increasing by a lower rate—4.2 percent, and that of employed persons from the administered areas by 18.1 percent. This is explained by the small number of employed persons from the administered areas in 1991 in the wake of the Gulf war. The number of employed immigrants in 1992 was double the 1991 figure.

Employment expanded faster in the business sector (6 percent) than in the public services (3 percent), in contrast with the trend of the last few years. The rise in business sector employment, which reflected increased activity in that sector, was aided by the reduction of taxes on labor (paid by employers) and the subsidization of additional employment (see section on wages).

There is considerable inter-industry variability in changes in employment within the business sector (Table 4.6). Particularly notable is the increase in construction employment, which accounts for 43 percent of incremental business-sector employment. Excluding construction, employment expanded by some 4 percent. The steep rise in construction employment was due to increased activity in the industry as well as to the labor-intensive nature of the final stages, whose share of activity rose sharply. Construction employment continued to expand in the first two quarters of 1992, and began to decline in the third quarter. In industry, despite the appreciable increase in output, employment grew by a moderate 2.4 percent, though the number of man-hours rose more substantially—by 3.5 percent.

In 1992 the increase in the share in employment of manufacturing—mainly nontradables—industries persisted, and they accounted for over 80 percent of incremental business-sector employment (Table 4.7). Business-sector employment in the nontradables industries grew by some 10 percent, and in tradables by only 2 percent—despite the greater rise in tradables output (see Chapter 2). The reason for this lies in industry differences in labor-intensity and productivity trends, the latter being affected in part by a delay in the response of employment to production changes and in part by steeper reductions in real wages (deflated by producer prices) in nontradables industries in the last few years (Table 4.13).

The expansion of public-services employment encompassed most of the sector in 1992, about half of it in education.

The total number of man-hours rose by 2.5 percent—2.8 percent in the business sector and 1.3 percent in the public services. Together with employment data, this indicates that labor inputs rose by 8.7 percent in the business sector and by 4.4 percent in the public services. Most of the increase in the number of man-hours in both the business sector and the public services is explained by the decline in the number of hours worked per employee in the first quarter of 1991, arising from absenteeism during the Gulf war. In addition, part of the increase in man-hours in the business sector is due to the fact that at a time of expansion, the extent and duration of which are uncertain, employers prefer to extend employees' work-day rather than take on extra employees,

Table 4.6
Business-Sector Employment and Labor Input,
by Industry, 1988-92^a

(percent change over preceding year)

	Absolute figures ^b						
	1991	1992	1988	1989	1990	1991	1992
Employed persons							
Business sector	1,208.9	1,279.5	3.0	-0.4	2.1	4.7	5.8
Business sector excl. construction	1,045.8	1,086.0	2.3	-0.5	1.2	3.0	3.8
Construction	163.1	193.5	8.9	-0.2	9.6	16.6	18.6
Industry	347.2	355.7	-2.8	-3.2	1.8	4.1	2.4
Agriculture	67.2	68.2	-5.0	-1.9	-9.2	-9.6	1.5
Transport	96.6	104.1	3.5	-1.8	-0.6	4.4	7.8
Trade, personal services, business services ^c	443.5	466.2	12.3	3.3	2.6	5.1	5.1
Financial services	62.7	63.5	3.2	-3.2	-0.2	0.2	1.3
Electricity and water	16.8	14.5	6.6	-0.7	15.3	1.2	-13.7
Not known	10.4	10.7					
Labor input							
Business sector ^d	46.1	50.1	0.3	1.4	2.3	4.7	8.7
Business sector excl. construction	39.7	42.3	1.0	1.0	1.1	2.9	6.6
Construction	6.4	7.8	-4.6	5.1	11.8	17.1	21.6
Industry	13.6	14.4	-4.3	-0.5	0.9	4.6	6.0
Agriculture	2.5	2.6	-8.4	-1.0	-10.5	-10.6	1.6
Transport	3.8	4.2	1.4	-2.3	2.7	2.9	8.3
Trade, personal services, business services ^c	16.5	17.9	14.8	5.1	1.9	3.6	8.6
Financial services	2.3	2.4	2.9	-1.4	0.4	0.2	4.0
Electricity and water	0.7	0.6	14.5	-1.4	15.0	-1.8	-10.6

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

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

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

^d Includes 'not known.'

SOURCE: Based on Central Bureau of Statistics data.

since increased capital utilization precedes the expansion of capital stock in situations of his kind. The time required to train new employees also accounts for the increase in hours worked per employee when production rises. Incentives to expand employment offered to parts of the business sector moderated the tendency to increase man-hours, which depends on the greater readiness of employees to work additional hours in order to increase their income. The likelihood of this has risen because the high unemployment rate and reduction in real wages of recent years have reduced households' incomes.

Table 4.7
Business-Sector Employment, 1990-92^a

	(percent change over preceding year)			
	1990	1991	1992	Average 1990-92
Employment				
Tradables ^b	0.4	1.9	1.6	1.3
Nontradables	4.0	7.7	9.9	7.2
Distribution of employed persons				
Tradables	49.8	48.5	46.5	48.3
Nontradables	49.0	50.4	52.3	50.6
Not known	1.2	1.1	1.1	1.1
Distribution of incremental employment				
Tradables	9.3	20.2	13.2	14.1
Nontradables	92.2	79.9	85.2	85.7
Not known	-1.6	-0.1	1.6	0.0

^a Employment of Israelis and residents of the administered areas.

^b Tradables include industry, parts of agriculture, sea and air freight, and some catering and trade services.

SOURCE: Central Bureau of Statistics.

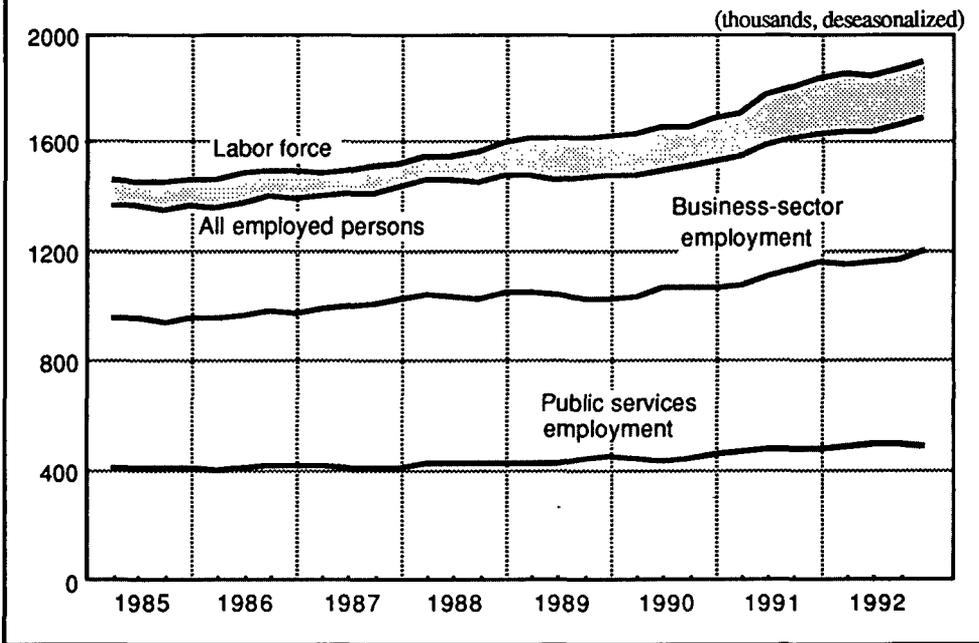
3. UNEMPLOYMENT

Unemployment increased, reaching an annual average of 11.2 percent—some 208,000 persons out of work; throughout 1992 the unemployment rate (seasonally adjusted) remained relatively stable.

The changes in the unemployment rate help to explain its current high level. Unemployment first began to rise in the early 1980s, reaching an annual 5 percent, after remaining at 3 percent in the 1970s. Some of the increase reflects a rise in the natural unemployment rate, and can be explained by the expansion of unemployment insurance schemes, which eased the pressure on individuals to return to work, and by the persistent rise in the participation rate of women. Technological change, with the greater variability in employees' skills and employers' demands, pushed frictional unemployment up. Unemployment continued to rise in the second half of the 1980s, reaching an annual average of 7 percent, and stayed at the 6-7 percent level even in 1986-87, when economic activity accelerated. After the ESP the government adopted a policy of fiscal discipline, which led to less readiness to take on new employees in the public services at a time when the business sector was shedding workers, or to bail out failing companies solely in order to prevent their closure. This change increased structural unemployment.

Unemployment rose to 8.9 percent in 1989. The economic recession towards the end of the decade led to dismissals of employees and an increase in cyclical unemployment. The power of the unions hampered the reduction of veteran employees' real wages to

Figure 4.1
The Labor Force, Employment, and Unemployment, 1985-92



SOURCE: Labour Force Surveys.

their former level, so that the wage-rises had a permanent effect on the unemployment rate. The restructuring of firms (e.g., Koor), which began after the ESP and led to widespread dismissals, contributed to the increase in the structural component of unemployment in the late 1980s. The persistent rise in the participation rate beginning in 1988 (partly in response to higher unemployment) also contributed to unemployment. In 1990, before the effect of the immigrants on the labor supply was felt, the unemployment rate was 9.6 percent. The massive increase in the civilian labor force in 1991–92, chiefly because of the new immigrants, contributed to the persistent rise in unemployment, and the need to train the immigrants to meet the needs of the Israeli economy increased structural unemployment.

The increase in unemployment in 1992 reflects a reduction in the average unemployment rate of immigrants, from 39 percent in 1991 to 29 percent in 1992, due to the longer period of time since their arrival in Israel and their greater share in the civilian labor force. It also reflects the rise in unemployment among the established population—from 9 percent in 1991 to 9.6 percent in 1992, after falling in 1991. The fact that unemployment among the established population grew indicates that not all the rise is attributable to the frictional unemployment caused by the entry into the labor force of immigrants—whose skills differ from those of the established population.

Long-term unemployment has grown, according to several indicators (Table 4.8). The proportion of unemployed seeking work for 27 weeks or more rose in 1992, and their number has more than tripled since 1988. The share of unemployed persons seeking work for 6–12 months and more has also grown. The average number of days for which unemployment benefit was paid continued to rise in 1992, and the proportion of the unemployed who had exhausted their period of eligibility for such benefit increased. This was also reflected by a rise in the number of Israelis applying for income support and their increased proportion among the unemployed.

Table 4.8
Indicators of the Depth of Unemployment, 1988–92

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

^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.

Higher rates of long-term unemployment cause social and economic damage, some of it irreversible. First of all, they reduce immigrants' prospects of finding work, or appropriate work, leading to a reduction in immigration and an increase in emigration (by both the established population and new immigrants). In addition, some of the increase in unemployment becomes permanent (a phenomenon known in the labor-market literature as hysteresis). Persistently high unemployment increases hard-core unemployment and reduces chances of finding work in the future. Individuals who have been out of work for a long time lose part of their human capital and are less able to use their previous work experience as an indication of their skills, so that their chances of

finding work in the future are further reduced. Consequently, persistently high unemployment pushes up the natural unemployment rate and causes work-seekers to become discouraged and leave the labor force. The decline in the participation rate of the established population in 1992 indicates that this has happened (the discouraged worker effect), even though it reduces measured unemployment.

All this underscores the need to create the conditions for sustainable business-sector growth. In the labor market such conditions will obtain once the role played by institutional agreements which create wage rigidity is diminished. This will increase labor-market flexibility, thus reducing unemployment. The long lag before this policy bears fruit, the persistence of high unemployment and the deepening of its extent indicate that a policy of short-term solutions for unemployment should be adopted¹ to prevent the expansion of hard-core unemployment. The temporary nature of makework solutions should, however, be assured, and their adverse effect on economic efficiency minimized, since they could serve to ease the pressure to reduce wages, and hence to seek long-term employment.

Under legislation introduced in April 1991 and December 1992, in an effort to increase the readiness of the unemployed to accept work, the conditions of eligibility for unemployment benefit were tightened. The main reason for the high unemployment rate is the shortage of jobs, however, rather than the refusal of unemployed persons to accept work. Consequently, the treatment of unemployment should focus on measures designed to stimulate economic activity, thus increasing demand for labor, rather than on increasing the stringency of the rules governing eligibility for unemployment benefit, the object of which is, among other things, to provide work-seekers with the time needed to find appropriate employment. The law should, however, be enforced more rigorously. The fact that many of the jobs offered by the labor exchanges are not manned by Israeli work-seekers, and that few refusals are registered at the exchanges, would seem to indicate both that there are difficulties in enforcing the law and that sanctions are rarely used against those who violate it. The expert committee which examined the law (in March 1993) recommended increasing the penalty for unemployed persons who refuse employment and persons posing as unemployed, but did not deal with the failure to register refusals.

The resort to vocational training has risen in the last few years, and the intention is to increase it further in 1993. The object of such training is to adapt the human capital of the labor force to the requirements of the economy. Training should be undertaken in consultation with employers to ensure that courses do in fact serve firms' needs.

¹ In the first quarter of 1993, work in afforestation and archaeological excavations was offered as a short-term employment solution.

4. WAGES²

Nominal wages per employee post rose by some 13 percent in 1992—by 14 percent in the business sector and 11 percent in the public services, reflecting a 1.1 percent rise in real wages—a 1.7 percent rise in the business sector and a 0.5 percent decline in the public services. This contrasts with the trend of the last two years, when real wages fell in the business sector and rose in the public services.

The trend of wages per employee post in the business sector could be misleading, since man-hours rose by 2.4 percent after several years in which there was no change. In fact, the hourly wage indicates that in 1992, too, the high unemployment rate continued to exert downward pressure on wages—so that the real hourly wage in the business sector fell by 1 percent.

Table 4.9
Wages per Employee Post and Hours Worked per Employee, 1992

	(rate of change, percent)		
	Wages per employee post ^a	Hours worked per employee ^a	Hourly wage
Business sector	1.7	2.4	-0.7
Business sector excl. construction	1.3	2.4	-1.1
Agriculture	2.6	-1.6	4.3
Construction	9.3	2.5	6.6
Industry	1.9	3.6	-1.6
Electricity and water	4.7	3.1	1.6
Trade and services	1.3	2.4	-1.1
Transport and communications	0.0	-0.8	0.8
Financial services	1.2	1.9	-0.7
Personal services	1.3	5.1	-3.6
Public services	-0.5	1.0	-1.5
Total	1.1	2.3	-1.2

^a Data for wages per employee post from the National Insurance Institute, data for hours worked per employee from Labour Force Surveys.

Although the wage system has become more flexible in the last few years (reflected by a decline in wages since 1989, after exceptional wage-increases in 1986–88)—due to the persistently high unemployment rate, which also helped to moderate the role played by institutional wage-agreements—the sensitivity of wages to unemployment is still limited.

² Wages per employee post are calculated as all 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
Real Wages per Employee Post, 1981–92^a

	(percent change)									
	Over preceding year							Cumulative change		
	1986	1987	1988	1989	1990	1991 ^b	1992	1981–85	1986–88	1989–92
Deflated by CPI										
Public services	4.1	7.1	9.8	0.3	0.2	1.6	-0.5	0.3	22.4	1.6
Business sector	9.1	8.0	4.7	-1.7	-1.6	-5.0 (-3.4)	1.7	8.2	23.4	-6.5
Business sector <i>excl.</i> construction	8.6	7.5	5.0	-1.7	-1.2	-3.7	1.3	8.4	22.6	-5.2
Agriculture	9.9	9.4	4.2	-0.8	-4.6	-12.5 (-5.9)	2.6	1.8	25.3	15.0
Industry	7.0	7.1	3.7	0.9	0.0	-3.0	1.9	13.8	18.8	-0.3
Water & electricity	0.3	13.4	5.5	1.6	-1.8	1.0	4.7	7.5	20.0	5.6
Construction	12.8	16.3	3.4	-2.2	-4.5	-13.3 (-2.7)	9.3	-1.9	35.6	-11.5
Trade, restaurants, hotels	11.5	7.8	5.5	-2.6	-2.4	-2.5	1.3	15.5	26.8	-6.1
Transport, etc. ^c	9.2	10.1	3.5	-3.4	0.1	1.5	0.0	4.0	24.4	-1.8
Financial & business services	11.2	5.1	8.1	-4.8	-0.9	-5.3	1.2	3.4	26.3	-9.6
Personal & other services	17.6	14.5	6.5	-5.2	-3.4	-3.2	1.3	3.0	43.4	-10.2
Total	7.8	7.9	6.0	-1.3	-1.0	-3.0 (-1.7)	1.1	5.9	23.3	-4.1
Real disposable income per employee post ^d			5.0	-0.7	1.2	-0.4	1.3			1.4

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

^b 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. The total wage has therefore also been calculated excluding residents of the administered areas for the business sector, agriculture, and construction, where they account for a significant proportion of employment. The figures in parentheses exclude workers from the administered areas.

^c Transport, storage and communications.

^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.

This is because of the structure of the labor market, whose rigidity is due in part to institutional factors and in part to the basic nature of the employee-employer relationship. This structure, in which wages are determined by negotiations between employers and unions who represent the interests of workers (insiders) rather than of unemployed persons, inevitably restricts the ability of the unemployed to bring wages down, since the unions can prevent the dismissal of unionized employees and their replacement by lower-paid, non-unionized employees (the insider-outsider theory). The moderating effect of the unions on the response of wages to the economic situation was evident in 1992 in the defense industries, where there is a high level of unionization, and hence wages are rigid and high. Although these industries are undergoing a crisis, they are finding it difficult to reduce wages, as the streamlining process would require.

The steps taken in the last few years to trim labor costs and expand business-sector employment served to moderate the downward pressure on business-sector wages. These steps included reducing employers' national insurance contributions, abolishing employers' tax (both of which reduce labor costs for new and old employees), and subsidizing additional employment (which works only at the margin). As with most subsidies, or tax reductions, both consumers and producers benefit, and in this instance the employers—since wage-related costs are reduced. Thus, employees gain since there is less pressure on employers to reduce labor costs by lowering wages.

Legislation introduced in July 1991 was designed to expand business-sector employment by contributing one third of the wage of new employees (where employers meet the eligibility requirements) in their first year, and a quarter in the second year (up to a maximum wage of NIS 3,000, updated each quarter according to the CPI). This subsidy acts directly to increase the wage paid to additional employees. Since the unions protect the wages of veteran employees more than those of new ones, a firm's average wage is reduced, generally by paying a relatively low wage to new employees.³

By the end of December 1992 the employment subsidy had been paid for about 67,000 additional employees. In the second half of 1991 the monthly average number of employees for whom the incentive was paid was 12,500, and 32,600 in the first half of 1992.

The fact that inflation slowed by more than had been expected also helped to bring hourly wage rates down in the business sector, since some of the wage agreements in that sector had been signed (in nominal terms) when inflationary expectations were higher. This is estimated to have contributed about 1 percent.

³The incentive offered to the business sector for expanding employment helps to increase employment but also creates inefficiency. The law discriminates between employers, e.g., it is given only to firms with at least 5 employees, and is difficult to implement. It is impossible to prevent over-reporting of additional employment without incurring high budget costs, and the short-term nature of the law means that mostly temporary, unskilled employees whose training period is short are taken on. Employers also receive the benefit for employees they would have taken on in any case. Nonetheless, in comparison to reducing taxes on labor for all employers, this subsidy acts as a greater incentive to increasing employment, since it works only at the margin.

The cost-of-living agreement (COLA), which compensates for 85 percent of price-increases over 3 percent and is calculated twice a year, covered about half the inflationary price-rises since 1988. At inflation rates of 9–10 percent (as in 1992), the agreement compensates for only a third of the price-rise, so that it contributed some 3 percent to nominal wage-increases.

The high proportion of new employees, who usually start at low wage rates, helped to bring the average wage down. According to the distribution of incremental employment in 1992, some 75 percent was in industries where the average wage per employee post is lower than in the business sector. As in 1990–91, therefore, the change in the industrial composition of employment served to reduce the average real wage in the business sector in 1992, too.

Table 4.11
Gross Hourly Business-Sector Wage of Israeli Residents, 1985–92

	(percent change over preceding period)							
	1985	1986	1987	1988	1989	1990	1991	1992
CPI ^a	336.1	56.6	20.0	16.2	20.2	17.1	19.0	12.1
COLA as percent of CPI	58.4	68.6	54.0	61.7	43.1	49.7	52.6	45.5
Change in wage due to ^a								
COLA	196.2	38.8	10.8	10.0	8.7	8.5	10.0	5.5
COLA and industry-wide agreements	226.7	42.0	16.6	10.6	8.7	8.5	10.0	5.5
Increment on COLA and industry-wide agreement	22.3	19.3	14.3	7.6	5.8	6.2	4.9	5.4
Change in actual wage ^b	299.7	69.4	33.3	19.0	15.0	15.2	15.4	11.2
Real change ^c								
After COLA	-31.5	-12.4	-7.6	-5.3	-9.6	-7.4	-7.5	-5.9
After COLA and national agreements ^d	-24.5	-10.3	-2.8	-4.8	-9.6	-7.4	-7.5	-5.9
Total wage	-7.5	8.6	11.1	2.4	-4.3	-1.7	-3.1	-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 $\{[100 + (4)] / [100 + (3)] - 1\}100$.

^c Deflated by CPI annual average of real monthly changes.

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

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

In the business sector, there were wage-increases in construction, agriculture, water and electricity, transport, and communications (Table 4.9). Alongside the wage-increases in construction there was a 19 percent increase in employment (compared with the 1991 average), following appreciable wage-reductions in 1990–91. It is difficult to explain the development of wages in this industry in the last few years. In water and electricity, and transport and communications, where wage levels are high, exceptional

Table 4.12
Real Wages per Employee Post, by Industry, 1985-92^{a,b}

	(percent change)										
										Cumulative change	
	1985	1986	1987	1988	1989	1990	1991	1992	1986-88	1989-92	
Deflated by CPI											
Nontradables	-4.4	13.7	8.5	6.3	-3.4	-1.8	-5.0	2.8 ^c	31.1	-7.3	
Tradables	-7.2	9.5	8.7	4.1	-0.2	-0.7	-4.9	2.2 ^c	23.9	-3.6	
Deflated by producer prices											
Nontradables ^d	-5.5	10.8	4.0	3.3	-5.4	-4.2	-6.0	2.7	19.0	-12.5	
Tradables	-4.5	15.8	10.2	5.1	0.5	5.1	-0.4	3.9	34.0	9.4	
Industry	-4.8	17.9	11.1	4.2	-2.6	4.0	0.8	4.2	36.6	6.4	
Agriculture	-9.7	4.4	5.2	6.6	11.7	2.1	-8.1	7.3	17.0	12.6	
Water & electricity	-13.9	13.1	22.6	9.5	-3.6	-7.1	-2.8	5.8	51.8	-7.8	
Construction	-7.2	34.8	19.9	1.5	-12.4	-16.9	-21.3	12.3	64.1	-35.7	
Trade, restaurants, hotels	4.8	11.7	1.0	0.3	-2.4	5.0	2.8	1.3	13.1	6.7	
Transport, etc. ^e	-21.5	10.1	13.2	10.9	-3.9	-0.9	-1.1	1.7	38.2	-4.1	
Financial & business services	-4.0	-8.7	-6.2	2.5	-6.9	-1.9	-3.9	-1.7	-12.2	-13.7	
Personal & other services	0.5	-4.1	-7.9	-1.2	-3.5	-0.4	1.5	2.1	-12.7	-0.4	

^a Tradables industries comprise industry, part of agriculture, shipping & aviation, and part of catering and trading 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 Transport, storage and communications.

SOURCE: Based on Central Bureau of Statistics data.

wage increases have persisted over time, being associated with the monopolistic character of these industries and their powerful unions.

A comparison of wages per employee post (deflated by producer prices) between tradables and nontradables industries in the business sector (Table 4.12) shows that wages rose more in the former than in the latter. When allowance is made for the increase in the number of man-hours, the hourly wage fell in both categories, though by less in the tradables than in the nontradables industries, continuing the trend of the last few years. This is because the nontradables industries are less organized, and hence more sensitive to labor-market conditions. The large proportion of Histadrut (General Federation of Labour) and general government firms in the tradables sector also helps to make it less sensitive to market conditions. The difference in the rates of change of real wages per employee post (deflated by producer prices) in the two sectors is greater than that indicated by the rates of change of nominal wages, and also reflects the real appreciation of recent years.

After public-services wages rose for three years despite the high unemployment rate, wages per employee post (deflated by the CPI) fell by 0.5 percent in 1992. This decline reflects a 1 percent increase in the number of man-hours and a decline of 1.5 percent in the hourly wage rate.⁴

The decline in public-services wages also has an effect on the response of business-sector wages to labor-market conditions. The decision reached in 1991 to cancel the linkage between wages in government enterprises and those in the public services—a step which would have helped to increase labor-market flexibility—was not implemented in the 1992 public-services wage agreement.

Unit labor costs in the business sector fell by 0.5 percent, after a cumulative 9 percent decline in 1989–91 (following the exceptional increase in the wake of the ESP). This measure represents wages from the perspective of producers, i.e., wages for a standard labor unit producing one output unit. Unit labor costs in 1992 reflect contradictory developments in the principal industries. Most prominent is the 12 percent increase in unit labor costs in construction, after these had fallen by a steep cumulative 20 percent since 1988. Excluding construction, unit labor costs in the business sector declined by 1.2 percent. In industry the decline persisted, reaching 5 percent.

5. IMMIGRATION

Some 77,000 immigrants arrived in 1992. Since the influx began, in 1989, about 460,000 immigrants (mostly from the former USSR) have come, accounting for 9 percent of the Israeli population by the end of 1992. Immigration was 60 percent lower in 1992 than its annual average in 1990 and 1991, and was less than had been expected at the beginning of the year.

⁴ On the basis of data from the Output and Income Research Institute, based on the reports submitted by institutions (mainly the government and the local authorities), and supplementary data obtained from questionnaires, real hourly wages in the public services rose by 0.3 percent.

The extent of immigration is affected by, among other things, developments in both the former USSR and Israel, particularly as regards employment (the push-pull effect). The immigrants' difficulties in finding appropriate employment have contributed to the slowdown in immigration since mid-1991.

Table 4.13
Immigrants in the Labor Market, Principal Indicators, 1991-92

	1991					1992				
	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
<i>of which</i> Of working age	216	159	200	240	266	300	275	290	312	322
In labor market	98	59	88	113	133	156	145	151	162	164
<i>Percentage</i>										
Participation rate										
Total	44.5	37.0	44.0	47.0	50.0	51.9	52.7	52.0	52.0	51.0
Men	55.5	50.0	57.0	54.0	61.0	61.8	62.0	60.0	63.0	62.0
Women	35.0	25.0	33.0	40.0	42.0	43.8	45.0	44.0	44.0	42.0
<i>Thousands</i>										
Total employed	60	34	54	68	85	111	97	108	116	123
Unemployed	38	25	33	44	48	45	48	43	46	41
<i>Percent</i>										
Unemployment rate										
Men	28.5	30.0	27.0	30.0	27.0	20.3	25.0	18.0	19.0	19.0
Women	53.0	60.0	54.0	51.0	47.0	38.5	42.0	40.0	39.0	33.0
Proportion of immigrants in										
Population	6.4	4.9	6.3	6.9	7.4	8.2	7.8	8.0	8.4	8.8
Working-age population	6.2	4.7	5.9	6.9	7.4	8.4	7.8	8.2	8.7	8.9
Labor force	5.5	3.5	5.0	6.3	7.3	8.4	7.9	8.2	8.7	8.7
Employed persons	3.5	2.0	3.0	4.0	5.0	6.7	6.0	6.6	7.0	7.3
Unemployed	19.5	15.0	18.0	21.0	24.0	21.8	24.0	21.4	22.4	19.4

^a Figures may not add due to rounding.

SOURCE: Central Bureau of Statistics.

The average participation rate of the immigrants reached 52 percent (62 percent for men and 44 percent for women, Table 4.13). The longer immigrants have been in Israel since the influx began, the higher their participation rates, and these steadied in the last quarter of 1991. The participation rate of immigrant men was similar to that of Israeli men, while that of immigrant women was higher than that of Israeli women. The latter reflects the immigrants' work patterns in the former USSR as well as their economic difficulties, which heighten the need for another wage-earner.

Immigrants' rate of entry into the labor force changed over time, being particularly fast at the beginning of the influx and slowing down later. At the beginning of 1991 the participation rate of immigrants who had been in Israel six months was 59 percent, while at the end of 1992 it was less than 50 percent. The slowdown in the rate was presumably due to their difficulties in finding work, though it may also reflect their leaving the labor force after despairing of finding any, or appropriate, employment. This phenomenon (the discouraged worker effect) and the high proportion of adult immigrants also accounts for the stabilization of their participation rate at a lower level than in the former USSR. The slowdown in the rate of entry, together with immigrants' longer average period in Israel and in the labor market in particular (among other things because of the slowdown in immigration), is reflected by the sharp drop in their average unemployment rate—from 39 percent in 1991 to 29 percent in 1992. However, a survey of immigrants who had arrived earlier in the influx and had been in Israel for an equivalent period of time showed that their unemployment rate did not fall in 1991–92.

Table 4.14
Occupational Distribution and Education Indicators of
Immigrants, 1990–92^a

	(percent)			
	1990	1991	1992	1990–1992
Scientific workers	39.0	35.1	31.7	36.4
<i>of which</i> Physicians	6.2	4.3	3.8	5.1
Engineers	25.3	22.4	18.9	23.2
Other professional, technical, and related workers	34.5	32.9	32.3	33.5
Skilled, and unskilled in industry	15.5	19.4	22.2	18.1
Other	11.0	12.6	13.8	12.1
Total	100.0	100.0	100.0	100.0
<i>Thousands</i>				
Total ^b	96.1	79.7	33.8	209.6
Years of education ^c				
9–12	32.0	34.2	37.8	33.8
13+	56.5	51.0	47.9	53.0

^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.

The higher unemployment rate of immigrants than of the established population reflects their difficulty in finding work because of the time involved in adapting their skills to the needs of the economy. Their occupational distribution and the mismatch between their skills and those required by the economy since 1990, the number of

immigrants, the relatively short time since their arrival, and their age-distribution (a relatively high proportion of adults), also contributed to the high unemployment rate.

The unemployment problem was exacerbated by the lack of correspondence between available housing and employment. Data on the internal migration of immigrants in 1990–91 show that they moved from the center to the outlying areas, where there were more vacant apartments but the unemployment rate was higher. Unemployment among women was higher than among men, 39 and 20 percent respectively.

The proportion of members of scientific, academic, technical, and professional occupations, and of engineers and physicians in particular, was higher among the immigrants than among the established population. The decline in the proportion of scientists, academics, and members of other professions—and of engineers and physicians in particular—continued among immigrants who arrived in 1992. The proportion of skilled and unskilled workers rose, however (Table 4.14). The change in occupational distribution is presumably in response to difficulties in finding any—especially appropriate—employment. Part of the change may be due to the fact that members of certain occupations immigrated earlier, fearing that a delay might harm their prospects of finding work as the labor market became more crowded.

There is a relatively low rate of employment in the immigrants' original occupation and relatively high unemployment among graduates (whose share of immigration is declining). In 1992 some 20 percent of employed immigrants were working in scientific, academic, and other professions—a similar rate to that of 1991, but considerably lower than the proportion employed in those occupations in the former USSR (36 percent). This rate is lower than the proportion of graduates among employed Israelis. A large proportion of immigrants were employed in low-grade services, however.

There has been a deterioration over time in immigrants' absorption in their original occupation, and immigrants who came to Israel at a later stage of the present influx have fewer chances of finding work in their original occupation than immigrants who came during its early stages. Only 20 percent of immigrant graduates who arrived at the end of 1991 and had been in Israel for 12–17 months found work in their original occupation, while about a third of those who came at the beginning of 1991 and had been in Israel for a shorter period, 6–15 months, found work in their original occupations. The deterioration is associated with labor-market density arising from the size of the influx.

A relatively high proportion of immigrants are employed in industry—38 percent, compared with 21 percent of Israelis—and a relatively low proportion are in the public services (19 and 30 percent respectively). This contrasts with the large proportion of immigrants in former influxes who found employment in the public services. The large share of immigrants in industry, even though employment in industry rose very little in the last few years, is due to the suitability of their skills for industry and the fact that they have replaced residents of the administered areas. Compared with the immigrants' employment in the former USSR, however, their share of employment is low in industry, and high in services. This is explained by the relative flexibility of the services, where unionization is lower than in industry.