

## Chapter 5

# The Labor Market

- ◆ The labor market in 2006 was characterized by positive trends—increased employment, lower unemployment, and a rise in real wages.
- ◆ The main reason for the expansion of employment in the various industries was the acceleration of economic activity, which was not adversely affected even by the second Lebanon war, which broke out in the middle of the year.
- ◆ Economic growth continued to be based on a rise in labor productivity and fall in unit labor cost—developments which are typical of a process of emergence from a recession—but there were signs of a transition to sustainable growth. The most important of these was the significant decline in unemployment and its stabilization at a level below that of 2000—the peak of the previous business cycle—despite the increase in the participation rate.
- ◆ The expansion of the human-capital-intensive industries led to an increase in the relative demand for skilled employees, a rise in their wage, and a decline in their unemployment rate to its ‘natural rate.’ On the other hand, the unemployment rate of unskilled workers remained very high, and the real wage in the industries employing them did not increase, and even declined in some of them.
- ◆ In addition to the efforts to increase the participation in the labor market of weaker segments of the population, supplementary measures should be adopted which will make it easier for them to find employment and improve their remuneration. Consequently, the programs currently in effect aimed at encouraging employment should be expanded, particularly since the current level of expenditure on them is low by international standards. In the long term most of the emphasis should be placed on investing in education.

### 1. MAIN DEVELOPMENTS

The continuation of rapid economic growth—expressed in increased employment, a rise in the participation and employment rates, decline in unemployment, and increase in wages—characterized 2006. Even the exceptional event of the Second Lebanon War, which lasted for about a month, did not adversely affect the positive trends in the labor market, and its repercussions on the demand for employees were confined to 2006:III only, mainly in the north of the country. The employment rate did not decline in the quarter in which the war occurred,<sup>1</sup> although there was a notable rise in the extent of absenteeism.

<sup>1</sup> A closer examination reveals that the employment rate in the business sector slowed in 2006:III, but this was offset by the significant expansion of employment in the public services.

Demand for labor rose steeply in 2006, reflected in a decline in unemployment.

Unit labor costs continued falling this year, the result of a relatively modest rise in the real wage and an increase in labor productivity.

According to several signs, utilization of the factors of production is nearing exhaustion.

Increased employment in the business sector was influenced by the acceleration in real activity. The rate of increase of employment in the public sector was similar to that of the population.

Rapid economic growth brought about an improvement in job security among the employed.

The labor market was characterized by an increase in both labor supply, measured by the labor force participation rate, and demand for labor, as indicated by the Bank of Israel's Companies Survey and the Ministry of Industry, Trade and Labor's Survey of Employers. The rise in the demand for employees was more significant, and as a result of it the unemployment rate fell and wages rose—despite the increase in the labor force participation rate. The rise in the real wage was relatively moderate in 2006, thereby facilitating the continued reduction of unit labor cost while improving manufacturers' profitability. The declining trend of unit labor cost has been evident since the second half of 2003, when the economy began to emerge from the recession. At the beginning of the process of economic expansion GDP growth was made possible by the greater utilization of existing factors of production—a rise in TFP (total factor productivity) without a significant increase in employment and capital stock. This process moderated the rise in the real wage, particularly in view of the high unemployment rate, thus serving to dampen production costs, maintain profitability, and enable the continued expansion of economic activity. Increased factor utilization appears to be approaching its limit in 2006. This is indicated by several factors: the acceleration of nonresidential investment, the marked increase in employment in most industries, the stabilization of the rate of increase of labor productivity, and the slower decrease in unit labor costs. According to these indicators, the economy is shifting to a stage of sustainable growth which will be accompanied by a further fall in the unemployment rate.

The main factor behind the expansion of employment in the various industries was the acceleration of economic activity: the expansion of manufacturing employment stemmed from the sharp rise in demand for Israel's manufactured exports; the various services expanded as a result of the increase in the standard of living and steep rise in incoming tourism in the first half of the year;<sup>2</sup> the expansion of employment in the financial services was stimulated by the reform of the capital market. In 2006, too, the expansion of employment in business-sector services was notable, so that some of the incremental employment was in part-time positions.<sup>3</sup> A decline in the average number of hours worked per employee, however, encompassed all the principal industries. The rise of employment in the public services was similar to that of the population at large, with most of the incremental employment occurring in education. The share of non-Israeli workers in the business sector continued to decline but still remained relatively high. To date, the replacement of foreign workers by Israelis has occurred only in the construction industry.

Rapid economic growth and improved chances of finding employment led to an increase in the labor-force participation rate among most education groups, as well as to a decline in the number of discouraged workers. Among employees there is a clear-cut improvement in employment security, as reflected in the rise in the rate of absenteeism (not only in the quarter in which the war occurred) and in the relatively

<sup>2</sup> Because of the war in the north the total number of tourist bed-nights in 2006 was similar to that in 2005.

<sup>3</sup> The services are characterized by a high proportion of part-time positions.

large proportion of employee-initiated job separations in total job separations. Note, however, that the process of labor market segmentation by education level persisted: whereas the unemployment rate of highly educated workers has fallen sharply in recent years and has approached the natural unemployment rate, the unemployment rate of low-educated workers still remains very high, although it has fallen to some extent (only the unemployment rate of persons with 0–8 years of schooling has not fallen, but this group is relatively small). The relative wage of low-skill workers declined owing to the rise in real wages in industries with a high and stable proportion of highly-educated employees and the stability or even decline in real wages in industries employing primarily unskilled workers.

Notwithstanding the fall in the general unemployment rate, the depth of unemployment rose; this trend is reflected in the increased share of persons seeking work for over a year. The deepening of unemployment, after over three years of economic growth in which the seasonal component of unemployment was reduced, may derive from a change in the composition of unemployment—a rise in the share of persons with a low level of education<sup>4</sup>—and attests to the structural nature of unemployment. The difference in the trend of development of the real wage between skilled-labor-intensive industries and unskilled-labor-intensive ones, and the persistent gap between the level of unemployment among skilled and unskilled persons, as well as the fact that the industries which contributed to the decline in the unemployment rate were primarily skill-intensive—all these stress the need to focus the government’s labor-market policy on improving the remuneration of unskilled workers and their employment possibilities. Although efforts have been made in recent years to foster labor-force participation on the part of the weaker segments of the population, policy measures focused mainly on cutting welfare allowances and introducing more stringent eligibility criteria for them. In the last two years there has been a transition to an active policy of bringing the weaker segments of the population into the employment circle (the Ministry of Industry, Trade and Labor’s *Mehalev* (an acronym for *Mehavtakhat Hakhnasah Leta’asuka Betukha*, From Income Supplements to Secure Employment) [‘Wisconsin’] employment program and the *Tabat* (an acronym for *Tnufa Bata’asuka*, Momentum in Employment) employment program in cooperation with the JDC–American Jewish Joint Distribution Committee), but these programs are limited in scope and geographical extent. In order to bring about any genuine change they must be expanded and additional steps taken to facilitate the entry of the weaker segments of the population into the labor market and improve their earning power. These measures should include: improving and expanding the vocational training system, putting labor laws into practice, introducing an earned income tax credit system, providing or subsidizing employment-supporting services (child care and transportation), and significantly reducing the number of foreign workers. However, it is important to bear in mind the fact that at a time of growing demand for education and skills and a decline in demand for unskilled workers, the principal investment in the long run must be in education, starting with pre-school education.

Unemployment deepened despite a fall in the unemployment rate.

In the past two years, there has been a considerable move in policy toward integrating weaker segments of the population into the workforce, but supplementary steps are required to ease their entry into the labor market and to improve their earning power.

<sup>4</sup> About two thirds of unemployed persons have only 0–12 years of schooling.

## 2. THE POPULATION

The population of Israel in 2006 numbered 7,053,000.

Israel's population grew by 1.8 percent in 2006 (the same as in 2005), and averaged 7,053,000 (Tables 5.1 through 5.3 and Table 5.A.1). Most of the rise was the result of natural increase, as the rate of immigration to Israel was negligible. The birth rate

**Table 5.1**  
**Principal Labor Market Indicators,<sup>a</sup> 2006**

	(percent)							
	Change from same quarter in 2005 <sup>b</sup>				Change from previous quarter <sup>c</sup>			
	I	II	III	IV	I	II	III	IV
1. Working-age population	1.8	1.8	1.8	1.8				
2. Participation rate in civilian labor force, <sup>d</sup> total					55.5	55.8	55.5	55.6
Men					60.9	61.4	60.8	61.2
Women					50.4	50.6	50.5	50.3
3. Civilian labor force	3.0	3.5	2.2	1.5	0.1	1.0	0.0	0.5
4. Israelis employed, total	3.5	3.6	3.2	2.5	0.3	1.0	0.6	1.1
4.1 Full-time employees	1.3	-2.0	-0.8	14.1	1.7	0.0	2.3	2.9
4.2 Part-time employees	7.2	19.4	3.1	-16.2	-2.2	1.6	-6.6	1.3
4.3 Temporarily absent from work	16.7	-12.4	32.2	4.3	5.4	0.8	14.0	-9.3
5. Public-sector employees (Israelis)	-2.8	1.8	7.2	2.2	-3.4	4.7	4.6	-3.4
6. Business-sector employees (Israelis)	6.3	4.4	1.5	2.7	1.3	0.0	-1.4	2.8
7. Foreign workers in business sector <sup>e</sup>	-2.9	0.6	1.8	8.9				
8. Palestinian workers in business sector <sup>e</sup>	1.6	-18.4	7.2	19.1				
9. Average weekly hours worked per business-sector Israeli employee	-1.9	-3.6	-3.0	6.3	4.7	-1.7	0.4	2.4
10. Israeli labor input in business sector	4.3	0.7	-1.5	9.1	6.0	-1.6	-1.0	5.3
11. Business-sector labor input of foreign workers <sup>e</sup>	-2.6	0.7	2.0	8.9				
12. Business-sector labor input of Palestinian workers <sup>e</sup>	-1.3	-22.6	7.2	16.6				
13. Unemployment rate <sup>d</sup>					8.8	8.8	8.3	7.7
14. Number of unemployed persons	-2.0	2.3	-7.4	-8.8	-1.0	1.4	-6.3	-5.8
15. Real wage per employee post, total	1.0	0.9	1.2	3.5	1.1	1.0	0.9	1.0
15.1 Business sector	1.6	0.4	1.3	3.8	1.6	-1.1	1.1	2.2
15.2 Public sector	-0.5	1.9	0.8	2.7	-0.2	2.8	1.4	-1.3

<sup>a</sup> The numbers of foreign and Palestinian workers include both reported and unreported workers.

<sup>b</sup> Unadjusted data.

<sup>c</sup> Adjusted data.

<sup>d</sup> Actual level, not rates of change.

<sup>e</sup> National Accounts data.

SOURCE: Central Bureau of Statistics, Labor Force Surveys and National Accounts data.

of the general population averaged 2.84 children per woman, the highest in all the industrialized countries.<sup>5</sup> The overall birth rate among Jewish women (2.7 children) was lower by only one child than that among Arab women (3.7). The narrowing of the gap in the birth rates of the Jewish and Arab populations is due to the stabilization

**Table 5.2**  
**Labor Market Indicators,<sup>a</sup> 2003–06**

	(change over previous year, percent)			
	2003	2004	2005	2006
1. Population (annual average)	1.8	1.8	1.8	1.8
2. Immigrants who arrived in this period	-30.7	-10.2	1.3	-9.0
3. Working-age population	1.8	1.8	1.8	1.8
4. Participation rate in civilian labor force, total <sup>b</sup>	54.5	55.0	55.2	55.6
Men	60.1	60.6	60.7	61.1
Women	49.1	49.6	50.1	50.4
5. Civilian labor force	2.5	2.6	2.3	2.5
6. Total employees	0.8	1.8	3.4	3.1
Israelis	2.0	3.0	3.9	3.2
Non-Israelis	-8.6	-9.6	-1.8	1.9
7. Public-sector employees	1.5	-0.4	4.1	2.0
Public-sector labor input	-0.7	-1.7	4.8	0.9
8. Business-sector employees	0.6	2.6	3.1	3.5
Israelis	2.1	4.6	3.8	3.7
Foreign workers	-12.7	-10.9	-6.8	2.0
Palestinians	28.5	-3.7	24.1	1.7
Share in business sector of foreign and Palestinian workers <sup>b</sup>	13.7	12.1	11.5	11.3
9. Business-sector labor input	0.0	1.1	2.4	2.8
Israelis	1.6	2.9	3.1	3.0
Foreign workers	-13.2	-11.1	-6.3	2.2
Palestinians	31.5	-0.8	20.5	-0.8
10. Real wage per employee post	-3.0	2.5	1.0	1.6
Business sector	-2.5	1.5	1.5	1.8
Public sector	-4.1	4.6	0.0	1.2
11. Minimum wage (real)	1.4	0.4	-1.3	2.8
12. Unit labor costs in business sector <sup>c,d</sup>	-3.9	-3.0	-2.1	-1.4
13. Gross domestic product per labor hour in the business sector <sup>c,d</sup>	2.2	5.6	4.1	3.5
14. Unemployment rate, total <sup>b</sup>	10.7	10.4	9.0	8.4
Men	10.2	9.5	8.6	7.9
Women	11.3	11.4	9.5	9.0
15. Government expenditure on the active labor market policy (percent of GDP) <sup>e</sup>	0.34	0.28	0.25	0.26

<sup>a</sup> The numbers of foreign and Palestinian workers include both reported and unreported workers.

<sup>b</sup> Actual levels, not rates of change.

<sup>c</sup> At constant prices.

<sup>d</sup> Based on gross product, not net product as in previous years.

<sup>e</sup> Including training, employment services, programs to integrate recipients of benefits into the work force, aid related to the employment of new immigrants, etc.

SOURCE: Central Bureau of Statistics, Labor Force Surveys and National Accounts data.

<sup>5</sup> This birth rate is similar to that prevailing in developing countries such as India, South Africa, Uzbekistan, Venezuela, and Bahrain.

of the birth rate among Jews and significant decline in that among Arabs in Israel (primarily among the Bedouin) since the beginning of the current decade.

Immigration to Israel in 2006 was the lowest since 1988—only 19,264 individuals,<sup>6</sup> about half of them from European countries.<sup>7</sup> About one fifth of the immigrants were from Ethiopia (see Box 5.1 for an account of their absorption in Israel). Alongside the weakening of immigration to Israel in recent years there has been a rise in emigration from the country, bringing the balance of immigration to almost zero.

The number of immigrants to Israel in 2006 was the lowest since 1988.

**Table 5.3**  
**Principal Labor Market Indicators,<sup>a</sup> 2003–06**

	(thousands, annual averages)							
					Change from previous year			
	2003	2004	2005	2006	2003	2004	2005	2006
1. Mean population	6,689.7	6,809.0	6,930.1	7,052.9	119.7	119.3	121.1	122.8
2. Immigrants who arrived in this period	23.3	20.9	21.2	19.3	-10.3	-2.4	-1.6	-1.9
3. Working-age population <sup>b</sup>	4,791.8	4,876.0	4,963.4	5,053.1	85.6	84.2	87.4	89.7
4. Civilian labor force <sup>b</sup>	2,610.0	2,678.6	2,740.1	2,809.7	63.3	68.6	61.5	69.6
5. Number of unemployed <sup>b</sup>	279.8	277.8	246.4	236.1	17.4	-2.0	-31.4	-10.3
6. Employees, total <sup>c</sup>	2,591.6	2,637.0	2,725.7	2,810.0	21.4	45.4	88.6	84.3
Israelis	2,330.2	2,400.8	2,493.7	2,573.6	45.8	70.6	92.8	79.9
Non-Israelis	261.4	236.2	232.0	236.4	-24.5	-25.2	-4.2	4.4
Foreign workers	222.6	198.8	185.7	189.3	-32.9	-23.8	-13.1	3.6
Palestinians	38.8	37.4	46.3	47.1	8.5	-1.4	8.9	0.8
7. Public-sector employees <sup>c,d</sup>	730.3	727.1	756.9	772.1	10.8	-3.1	29.8	15.3
8. Business-sector employees <sup>c,d</sup>	1,861.4	1,909.9	1,968.8	2,037.9	10.5	48.5	58.9	69.1
9. Nominal wage per employee post, (NIS/month)	6,908.7	7,050.8	7,220.5	7,492.7	-165.0	142.0	169.7	272.2
Public sector	6,548.9	6,823.3	6,910.9	7,144.2	-236.4	274.4	87.6	233.3
Business sector	7,084.1	7,159.7	7,365.0	7,653.4	-129.2	75.6	205.4	288.4

<sup>a</sup> The numbers of foreign and Palestinian workers include both reported and unreported workers.

<sup>b</sup> Labor Force Survey data.

<sup>c</sup> National Accounts data, including data from education and health imputed to business sector.

<sup>d</sup> Israelis and non-Israelis.

SOURCE: Central Bureau of Statistics, Labor Force Surveys and National Accounts data.

<sup>6</sup> Down by 9 percent from 2005.

<sup>7</sup> The main countries of origin of immigrants from Europe were the European countries that constituted the former USSR (63 percent) and France (24 percent).

**Box 5.1****Integration of Ethiopian immigrants in Israel: summary of the current situation**

The Ethiopian community in Israel numbered some 106 thousand at the end of 2005, of which 33 thousand were native-born Israelis. The immigration from Ethiopia became possible as a result of the ruling by Rabbi Ovadia Yosef in the early 1970s that the members of the Ethiopian community—Beita Yisrael—were descendents of the lost tribe of Dan. Following that, the Israeli government decided to include them under the Law of Return. A significant portion of the immigrants from Ethiopia arrived in Israel through Operation Moses (1984) and Operation Shlomo (1991) and at a later stage part of the Falashmura community (who had converted to Christianity in the past) were also brought to Israel. At the beginning of 2005, it was decided that the remaining Falashmura, who were living in compounds and numbered between 13,000 and 17,000, would be brought to Israel by the end of 2007 within the framework of family unification; however, since then the pace of immigration has remain unchanged.

A substantial amount of resources has been invested in the absorption of Ethiopian immigrants in Israel with the goal of integrating them within Israeli society and within the Israeli economy. These efforts involve the bridging of substantial cultural and other gaps. Thus, for example, the cumulative government expenditure on absorbing one immigrant from Operation Shlomo was more than NIS 400 thousand<sup>1</sup> up until 2003 and added to this is a not insubstantial expenditure by the non-profit sector. Over the years, there has been significant progress in the integration of Ethiopian immigrants in the areas of housing, employment and education. For example, the vast majority of the immigrants live in permanent housing that they own and a large proportion of the remainder have been renters in public housing since the pre-fab housing sites were dismantled. Nevertheless, a great deal of work still remains to be done. It can be assumed that only in the long run will the socioeconomic gaps between the Ethiopian immigrants and veteran Israelis be significantly reduced, as was the experience with immigrants from Asia and Africa who arrived in Israel following the creation of the State.

Several of the characteristics of the Ethiopian immigrants make their integration within Israeli society particularly difficult (Table 1). Thus, they tend to have large families, though their birthrate has fallen over time, and there is a large proportion of single-parent families and children who live with elderly parents, all of which result in a high dependency ratio. A large proportion of the Ethiopian immigrants have settled in a small number of distressed

<sup>1</sup> S. Balasha (2005), Changes in the Fiscal Effect of the Ethiopian Immigrants over Time, Hebrew University of Jerusalem, The School for Public Policy and the Faher Institute, Orange Series, November (in Hebrew).

neighborhoods, primarily in the cities of the Center and the South, in spite of the declared policy to disperse them. The concentration of their population has made it difficult for local governments to provide them with needed assistance and is liable to slow the pace of their integration within Israeli society. Thus, for example, the concentration of weak immigrant students in the schools limits their achievements. The level of education among Ethiopian immigrants is relatively low since many of them arrived in Israel as uneducated, or even illiterate, adults (about 40 percent of the immigrants of working age in 2005 had an elementary school education or less). In addition, many of them lack required vocational skills. (The vast majority of them were involved in agriculture in Ethiopia.)

The participation rate of Ethiopians of working age in the labor market is lower than for the Jewish population as a whole which, together with their relatively high rate of unemployment, results in a very low rate of employment of only 57 percent as compared to 76 percent among the general Jewish population.<sup>2</sup> The gaps are particularly large among Ethiopian women. Due to their low level of educational and vocational skills, a large percentage of Ethiopian immigrants work as unskilled laborers and a relative high proportion are employed by manpower agencies, a situation that is manifested in their low monthly wage. As a result, work satisfaction among Ethiopian workers is much lower than among the general population of Jewish workers.

Ethiopian immigrants have not fared well in the labor market over the last decade as a result of market-wide trends that have worsened the conditions of workers with low levels of education and vocational skills. These include the shrinkage of traditional industries, the growth in the proportion of non-Israeli workers and the expansion of non-unionized employment, including employment through manpower agencies that involves temporary jobs at relatively low wages. In addition, the government has seriously cut back on its vocational training courses which also benefit Ethiopian immigrants.

As a result of the high dependency ratio, the low employment rate and low wages, the standard of living among families in the Ethiopian community is particularly low. Their income per standard individual in 2005 stood at about two thousand shekels per month as compared to about four thousand shekels per month for the average Jewish household. About 52 percent of the Ethiopian households were defined as below the poverty line as opposed to only about 16 percent of the Jewish population as a whole. This was also reflected in the low level of satisfaction of Ethiopian immigrants with their economic situation. However, from a wider perspective, it can be said that the proportion of Ethiopian immigrants who are satisfied with their lives is greater than that of the immigrants

<sup>2</sup> For further discussion: Y. King and A. Walda-Tsadik (2006), *Patterns of Integration in Employment of New Immigrants ages 22-62*, Myers-Joint-Brookdale Institute and the Ministry of Absorption, dm-06-486 (in Hebrew).

who arrived in the 1990s from the FSU, and only slightly less than that among veteran Israelis.

Looking to the future, it is worth mentioning the numerous difficulties that will face the future generation of Ethiopian immigrants who currently account for about one half of the community. (The median age in the community is less than 21.) The incidence of poverty among the children of Ethiopian immigrants is very high and to this can be added barriers such as the parents' low level of education and poor knowledge of Hebrew, the weakening of tradition and the breakdown of family frameworks. Therefore, the Ministry of Education is allocating substantial resources to the advancement of immigrant students from Ethiopia.

During the 2003/4 school year, there were some 15 thousand immigrant students from Ethiopia who constituted about 10 percent of all immigrant students. Most of them were in the State Religious education system.<sup>3</sup> Their high representation can be seen in the technological track, in boarding schools and also in special education, which may be evidence of tracking. The educational achievements of the immigrant students from Ethiopia are relatively low (in, for example, Hebrew and mathematics), a phenomenon which first appears in the lowest grades and persists in the higher ones.<sup>4</sup> The dropout rate among Ethiopian immigrants in Grades 7-12 during the 2003-4 school year was 3.4 percent which was higher than that of native Israelis (2.6 percent) though it was lower than that among FSU immigrants (5.1 percent). The rate of hidden dropouts among Ethiopian immigrants is high, as is the rate of transfer between schools. The rate of eligibility for a matriculation certificate among Grade 12 students reached only about 44 percent as compared to about 57 percent among veteran students. Only about 34 percent of them met the criteria for university as compared to 83 percent among native Israelis. As a result, the representation of immigrant students from Ethiopia in the higher education system is particularly low. Nonetheless, it is worth mentioning that over the years there has been a significant improvement in the indices of success among Ethiopian students in the education system. Thus, during the last ten years, the rate of eligibility for a matriculation certificate among Grade 12 students increased by 27 percentage points and the proportion of those who met university criteria grew by 10 percentage points.

<sup>3</sup> See: The Central Bureau of Statistics (2006), *Immigrant Students in the Schools 2003/4*, Statistical Abstract 2006/04 (in Hebrew); The Central Bureau of Statistics (2006), *Statistics of Education in Israel 1995-2004*, Social Indicators, Publication #13 (in Hebrew). The Falashmura students are obligated to learn in the religious school system as part of their conversion process.

<sup>4</sup> T. Levin, A. Shohami and D. Spulaski (2003), *Scholastic Achievement among Immigrant Students: Findings and Recommendations to Decision Makers, Research Report*, presented to the Ministry of Education, the Office of the Chief Scientist and the Branch for Absorption of Immigrant Students (in Hebrew).

**Table 1**  
**Socioeconomic Characteristics of Veteran Jewish Israelis,<sup>a</sup> and New Immigrants, 2005**

	(percent)			
	Total	Veterans	Immigrants from USSR <sup>b</sup>	Ethiopian immigrants <sup>c</sup>
Number of children aged 17 years and under	1.1	1.1	0.7	2.2
Proportion of single-mothers	11.5	9.4	21.2	22.5
Educational level (highest qualification or degree) <sup>d</sup>				
No qualification	0.9	0.8	0.5	20.4
Elementary school	10.0	11.2	4.0	19.5
High school/matriculation certificate	39.9	42.2	29.9	38.4
Higher education	49.2	45.8	65.6	21.7
Share reporting low Hebrew reading ability <sup>e</sup>	13.7	5.0	47.9	22.8
Participation rate <sup>d</sup>	82.5	82.4	86.6	65.7
Men	84.6	84.4	88.9	70.3
Women	80.6	80.4	84.6	61.8
Employment rate <sup>d</sup>	76.4	76.2	80.9	57.0
Men	78.7	78.5	83.6	62.5
Women	74.2	73.9	78.6	52.4
Unemployment rate <sup>d</sup>	7.4	7.6	6.6	13.2
Men	7.0	7.0	6.0	11.1
Women	7.9	8.1	7.1	15.3
Proportion of the unemployed out of work more than six months <sup>d</sup>	38.3	40.4	27.4	42.7
Composition of employees, by occupation				
Graduates, liberal professions, managers	37.2	40.5	25.2	7.9
Clerks, sales workers, services workers	38.5	39.8	31.1	33.2
Skilled workers in agriculture, manufacturing and construction	16.7	14.5	27.4	22.3
Unskilled workers	7.6	5.2	16.3	36.6
Share of employed persons employed by manpower companies	2.4	1.9	4.2	8.0
Average hours worked per week (hours)	40.6	40.4	41.0	37.1
Gross monthly wage of head of household (NIS)	8,497	9,454	5,727	4,747
Hourly wage (NIS): Average	46.6	51.8	31.7	27.8
Median	34.5	39.6	25.2	22.0
Share who are satisfied <sup>f</sup> with their job	83.0	85.3	73.7	69.0
Disposable monthly income per standardized person (NIS) <sup>g</sup>	3,947	4,249	2,994	1,994
Incidence of poverty <sup>g</sup> among: Families	15.8	14.5	16.9	51.7
Children	24.4	23.4	15.2	65.3
Housing density (persons per room)	1.0	1.0	1.0	1.6
Share who are satisfied <sup>f</sup> with their economic situation	49.1	53.7	31.9	34.6
Share who are satisfied <sup>f</sup> with their lives	83.1	86.0	71.6	80.3

<sup>a</sup> And "others" (mostly non-Jewish immigrants).

<sup>b</sup> Those who immigrated in 1990 or after.

<sup>c</sup> Those who immigrated from Africa in or after 1980, most of whom were from Ethiopia.

**Due to the small sample size, some of the data in the table have high inter-year volatility, and should therefore be viewed with caution, as approximations only.**

<sup>d</sup> Among those aged 25-54.

<sup>e</sup> Those aged 20 or above who reported a weak reading ability of Hebrew or no ability whatsoever. 2003-04 average.

<sup>f</sup> Those aged 20 or above who are satisfied or very satisfied.

<sup>g</sup> According to country of origin of head of household.

SOURCE: Based on Central Bureau of Statistics data.

In addition, there is a relatively high rate of involvement of Ethiopian youth in risk situations. Thus, for example, the proportion of 12-20 year-olds who have a criminal record stood at 4.6 percent in the 2002–3 school year which is more than twice that of native Israelis. In addition, the consumption of alcohol and drugs is relatively more common among Ethiopian youth.

In general, there is a need for a policy to disperse the Ethiopian population geographically within Israel, with emphasis on neighborhoods and towns that are more prosperous than those in which they now live.<sup>5</sup> This policy will make it easier for the local government to provide necessary assistance and to support the integration of Ethiopian students in the education system. In any case, it would be worthwhile increasing the resources available to the schools that have a high proportion of Ethiopian students and to avoid tracking as much as possible. In addition, it would be desirable to expand the vocational training programs for these immigrants and perhaps even to expand the policy of affirmative action in hiring them in the public sector.

<sup>5</sup> Policy recommendations can be found in: Myers-Joint-Brookdale Institute (2001), *Integration of Ethiopian Olim in Israeli Society—Challenges, Policy, Programs and Directions for Action*, tm-01-18 (in Hebrew).

### 3. THE CIVILIAN LABOR FORCE

The working age population grew by the same rate in 2006 as that of the general population (1.8 percent), but the civilian labor force, which includes employed and unemployed Israelis, expanded at a far faster rate, 2.5 percent, bringing it to an annual average of 2.81 million persons. The difference between the growth rates of the labor force and the working-age population stemmed from a 0.4 percentage-point rise in the participation rate, which reached a peak of 55.6 percent (Table 5.2). The male participation rate has risen since 2004, in contrast with its long-term declining trend, and in 2006 it increased by 0.4 percentage points. The female participation rate also rose by 0.4 percentage points, similar to its rise in 2005.

The constant rise in the labor force participation rate in the last few years is largely the result of Israel's rapid economic expansion and the improved chances of finding work, but the government's policy of encouraging people to seek work played its part. In contrast with the past, when the increase in the general participation rate was achieved mainly as a result of a change in the composition of the labor force—a rise in the proportion of persons with a higher level of education and reduction in that of persons with only a few years of schooling alongside a decline in their participation rate—the participation rate of persons with a relatively low level of education (9–12

The civilian labor force grew faster than the population of working age, due to a rise in the rate of participation in the labor force.

In 2006, in contrast to previous years, the participation rate increased among those with relatively low levels of education.

years of schooling) rose (Table 5.6).<sup>8</sup> A preliminary analysis shows that the cuts in allowances that substitute for work influenced the decision to enter the labor force on the part of the affected population. The influence of the cuts in child allowances on the labor-force participation of parents of large families is discussed in Box 5.2. According to the data in the first report on the Mehalev program prepared by the National Insurance institute, between November 2005 and July 2006 the number of recipients of income-support allowances who participated in the program declined by 28.3 percent, compared with stability in the number of recipients of these allowances—due to lack of unemployment or low wages—in the rest of the system.

The participation rate in Israel is low by international comparison.

Despite the narrowing of the gap between Israel and the developed countries, Israel's labor-force participation rate is still low by international standards because of the relatively low male participation rate.<sup>9</sup> In the OECD countries the participation rate of persons in the 25–54 age group (the prime age population) in 2005 averaged 80.7 percent—92.1 percent for men and 69.5 percent for women. The equivalent participation rates in Israel were 82.7 percent for men and 70.7 percent for women.<sup>10</sup>

For the first time since 2001, the group of discouraged workers shrank, mostly among the educated.

As a result of the rapid economic growth and improved chances of finding employment, the group of discouraged workers—persons who have stopped actively seeking work and are hence not included in the labor force—declined for the first time since 2001.<sup>11</sup> On average, the number of discouraged workers was down by 15 percent from the 2005 average, especially among women (a 23 percent drop, compared with a decline of only 8 percent among men). However, about 54,500 people are still defined as discouraged, and if they were included in the labor force and defined as unemployed the unemployment rate would have risen to 10.1 percent.<sup>12</sup> The main reason why workers become discouraged and stop seeking work is the lack of appropriate employment in or near their area of residence—the explanation given by more than half the discouraged workers. The proportion of discouraged workers in the labor force declines as the level of education rises, and the shifts in the number of discouraged workers in 2006 were not uniform across education levels. The main

<sup>8</sup> The participation rate of persons with 0–8 years of schooling continued to decline, but this group is relatively small, accounting for only 12.5 percent of the working-age population. About three quarters of the population with only 0–8 years of schooling is aged 45 or more, and about 60 percent is aged 55 or more; because of the age of this population, its share of the labor market is shrinking with time.

<sup>9</sup> The labor-force participation rate of men in Israel is affected primarily by the lack of participation of ultra-orthodox males, the fact that soldiers and individuals in the other security services are not included in the civilian labor force even though they belong to the working-age population, and the fact that because of the obligation to serve in the military, young men postpone their higher education and their entry into the labor market. Note, however, that the participation rate of men with only a few years of schooling is particularly low.

<sup>10</sup> Particularly notable is the high participation rate of Jewish women—80.3 percent—compared with only 24.9 percent for Arab women.

<sup>11</sup> That was the first year that the Labor Force Survey of the Central Bureau of Statistics included a question intended to identify discouraged workers. In that year the number of discouraged workers was almost 40,000, and it rose rapidly thereafter, reaching over 64,000 in 2005.

<sup>12</sup> For purposes of comparison, the unemployment rate including discouraged workers was 11.3 percent in 2005 and 12.8 percent in 2004.

decline among men was for those with 13 or more years of schooling, and among women it was largely among those with 11–15 years of schooling; among women, the number of discouraged workers with a low level of education rose.

### Box 5.2

#### Child allowances and the labor force participation rate among parents of large families

Child allowances are a widely-used policy tool for raising the birth rate, narrowing socioeconomic gaps and reducing poverty among children. In contrast to the financial benefits paid to working parents, such as the tax credit on income, the child allowance is not conditional on employment but rather is paid to any family with children, thus increasing a household's non-earned income. The allowance is generally small relative to the average wage in the economy though in large families with low incomes its contribution to total income is significant. Thus, the child allowance creates a disincentive to work and encourages parents, primarily mothers, to move from full-time to part-time employment or even to leave the labor market altogether.

Numerous studies have examined the influence of welfare payments on the supply of labor among mothers, particularly in the US.<sup>1</sup> The results of these studies indicate that the structure of transfer payments and the conditions for eligibility have an impact on participation in the labor force.<sup>2</sup>

In Israel, the payment of the child allowance was made the responsibility of the National Insurance Institute in 1959. Since then, the rules governing the child allowance have been changed a number of times. However, since 1993 the child allowance has been paid universally—without a means test—for every child up to the age of 17. For historic demographic reasons, the structure of the child allowance system in Israel has been fine-tuned in order to raise the birthrate. Thus, the child allowance increases for each additional child, starting

<sup>1</sup> For a survey of the literature on the influence of the welfare system on work incentives, the dependency on welfare support, family composition and immigration, see R. Moffin (1992) "Incentive Effects of the US Welfare System: A Review," *Journal of Economic Literature*, 30, 1-61.

<sup>2</sup> On the experience of other countries, see for example: N. Ghazala (2004). "The Impact of Cash-Benefit Reform on Parents' Labor Force Participation," *Population Economics*, 17, 369-383; K. Milligan and M. Stabile (2004). "The Integration of Child Tax Credits and Welfare: Evidence from the National Child Benefit Program," working paper.

However, a study carried out in Britain, in which the size of the allowance is maximal for the first child and decreases for additional ones, found no effect of the child allowance on the participation rate among mothers. See: A. León (2003). *Family Allowances and Female Labor Force Participation*, University of Pittsburgh, Department of Economics Working Paper no. 290.

from the third.<sup>3,4</sup> As a result, in large families, the child allowance significantly increases the household's total income.<sup>5</sup> In this context, it should be noted that the potential earning ability of the parents in these families is limited since their level of education is generally low. Thus, during the period 1995–2005, the average level of education among married men in families with 5 children or more was 12.5 years of schooling as compared to 13.2 years among married men in families with 1-4 children.<sup>6</sup> This gap was even larger among women: the average years of schooling among married women in families with 5 children or more during this period was only 10.5 as compared to 13 years for married women in families with 1-4 children.

In 2001, the Large Families Law was passed, which significantly increased the child allowance to families with five or more children. The payment of a child allowance of this size, which is not conditional on participation in the labor force, reduced the need to seek sources of income and discouraged child allowance recipients from participating in the labor force. The subsequent reduction in child allowances began already in 2002 as a means of reducing public expenditure<sup>7</sup> although a serious reform was implemented only in July 2003 as part of the economic recovery plan. As part of this reform, it was decided to gradually cut the child allowance for the third child and onward who had already been born, such that by 2009 the size of the child allowance for each child would be equalized. It was also decided to immediately cut the child allowance for children born from then on. The primary goal of the reform was to reduce the dependence on welfare payments and to encourage participation in the labor force.

It is important to ascertain whether the reduction in child allowances succeeded in achieving its goal, i.e., changing the behavior patterns of the recipients and inducing them to join the labor force. Thus, the changes in child allowances in recent years can serve as a kind of “natural” experiment. A study that examined the behavior patterns in the labor market among the ultra-

<sup>3</sup> Until 2003, the size of the child allowance for the third child was double that for each of the first two children.

<sup>4</sup> More exactly, in some years, the child allowance for the seventh child and beyond was somewhat lower than that for the sixth child.

<sup>5</sup> During the period 1995–2001 (apart from 2000 in which there was a significant increase in the average wage) the income from the child allowance for a family with 5 children constituted more than 30 percent of the average wage for a salaried worker. In a family with 6 children, it constituted more than 40 percent and for every child from the seventh and onward the family income increased by more than 9 percent of the average wage.

<sup>6</sup> It is important to mention that this comparison also includes ultra-orthodox Jewish education which does not increase the individual's earning ability.

<sup>7</sup> In March 2002, the size of the child allowance was reduced by 12 percent and the value of the child allowance point was not updated. In July 2002, there was a further reduction of 4 percent and it was decided not to update the value of the child allowance point in January 2003.

Orthodox<sup>8</sup>—a population that is known for its dependence on welfare payments, foremost among them the child allowance—found that during the period 2002–04 their participation in the labor force did indeed increase. However, the main change observed was the increase in the number of jobseekers (4.2 and 2.1 percent among ultra-Orthodox men and women, respectively), though this was not accompanied by any significant change in rates of employment. Indirect evidence of the influence of child allowances on the decision to work among parents of large families can be found in another finding of that same study. Thus, the probability of participating in the labor force differed significantly between parents in families with five or more children and parents of smaller families. This was found to be true for both men and women and for both the ultra-Orthodox and non-ultra-Orthodox. This finding was even more pronounced among families with seven or more children.

In this box, we will examine the changes in participation rates among married men and women<sup>9</sup> in families with 4 children or more in comparison to families with 1-3 children.<sup>10</sup> In order to neutralize the effect of other factors, we will consider only non-ultra-Orthodox Jewish families<sup>11,12</sup> who are divided into three groups according to education (0-10, 11-12 and 13+ years of schooling). The comparison of two groups with a different number of children will be helpful in differentiating between the influence of changes in the child allowance and the influence of the business cycle under the assumption that the behavior of parents in the two groups is similarly influenced by economic conditions (growth or recession). It is important to mention that in this analysis we are examining the behavior of parents in families that have four or more children as opposed to the influence of the changes in the child allowance on the decision by parents regarding the number of children they desire.

First, it should be mentioned that the participation rates of parents in large families are much lower than those of parents in families with 1-3 children (Table 1). It is usually thought that a large number of children constitutes a

<sup>8</sup> Daniel Gottlieb (2006), “Poverty and Behavior in the Labor Market in Ultra-Orthodox Society,” (in Hebrew), as yet unpublished.

<sup>9</sup> The narrowing of the sample to families with two parents allows us to ignore other welfare payments to one-parent families.

<sup>10</sup> The percentage reduction in the child allowance in 2002 was uniform for each child, while the cut in 2003 most affected families with four children or more.

<sup>11</sup> The separate analysis of the ultra-Orthodox and non-Jews is not possible due to the small number of observations for each group.

<sup>12</sup> We would point out that the identification of an ultra-Orthodox household in the Manpower Survey was done on the basis of a declaration by one of the family members that he had last studied in a yeshiva. This method of identification is problematic since it underestimates the ultra-Orthodox population in Israeli society (in comparison to the data of the Social Survey). Therefore, the differentiation between ultra-Orthodox and non-ultra-Orthodox is not perfect in this analysis.

barrier to joining the labor force primarily among women. However, as shown in Table 1, the differences in participation rate are also significant for men. The difference in participation rates between fathers of large families and fathers of smaller families narrows as the level of education increases. The figures in Table 1 hint that in some of the families, in which the parents have relatively low earning ability, the dependence on the child allowance substitutes for participation in the labor force.

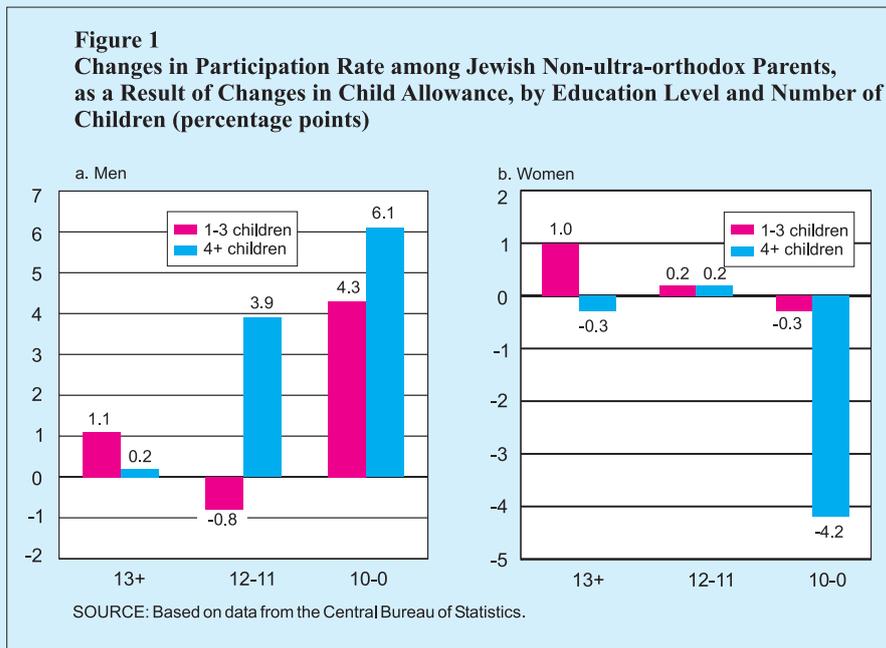
**Table 1**  
**Parents' Participation in Labor Force, by Sex, Level of Education, and Number of Children in Family, 1998-2005 Average Rate**

Level of education (years of education)	Men		Women	
	1-3 children	4+ children	1-3 children	4+ children
0-10	89.1	74.2	64.0	36.6
11-12	92.7	83.2	76.0	49.2
13+	92.3	87.3	86.5	66.7

Figure 1 presents the changes in participation rates among parents in large families compared to families with 1-3 children in response to the reductions in the child allowance starting in 2002. In order to carry out the comparison, the differences in participation rates were calculated, in percentage points, for the periods before and after the changes. Since the number of families with four or more children in the sample is relatively small—which leads to fluctuations in the participation rates of the parents in these families—the analysis is based on tri-annual averages. Thus, the comparison is carried out between the three-year period 1998–2000, prior to the cutback in the child allowance (and prior to the increase as a result of the Large Families Law), and the period 2003–5 following the cutback.

Figure 1 indicates that the changes in the child allowance did have an influence on the behavior of low-educated fathers with four or more children. Thus, the continuous downward trend in their participation rate halted and the rate stabilized, while the participation rate of fathers with 1-3 children continued to decline. (Among mothers, whose participation rate shows a continuous upward trend, the changes in the allowances had no effect, except among the most educated group.) Other data support this conclusion: the participation rate of those with 0–10 years of schooling, which had shown a sharp decline until 2002 (in contrast to the participation rates of the groups with other levels of education) flattened out, apparently owing to a behavior change among the recipients of the allowances. The changes in the participation rates of fathers with five or more children (which are not shown here) confirm this finding, although in view of the volatility in participation rates for small groups, these

results should only be viewed as preliminary. Apparently, the drastic cutback in the size of the child allowance did indeed lead to a change in behavior patterns among the affected families but the change was not immediate and required a period of adjustment. Furthermore, the cutback only led to a partial reaction among the affected families and therefore better results would have been obtained if it had been accompanied by increased incentives to join the labor force (for example, through a negative income tax). The extent of the success of the cutback in the child allowance in increasing participation rates will only be ascertainable in the future when the long-run trends become clear and a greater amount of data allows the use of more exact research methods.



#### 4. EMPLOYMENT

The number of employed persons in Israel averaged 2.81 million in 2006. In the course of the year an additional 84,000 employees found work in the various industries, 3.1 percent more than in 2005 (Table 5.2). The rise in employment in 2006 was slightly lower than in 2005, but far higher than in the first few years of the emergence from the recession (2003 and 2004). Most of the incremental employment—about 82 percent—stemmed from the expansion of the business sector, where employment was up by 3.5 percent over 2005, the highest growth rate since the beginning of the decade. The

The expansion in employment was led by the business sector, where the rate of increase in number of employed was the highest since the beginning of the decade.

share of foreign and Palestinian workers in the business sector continued to fall from its 1999 peak, when it was 16.5 percent, but is still relatively high, particularly in view of the high unemployment rate among unskilled Israelis.

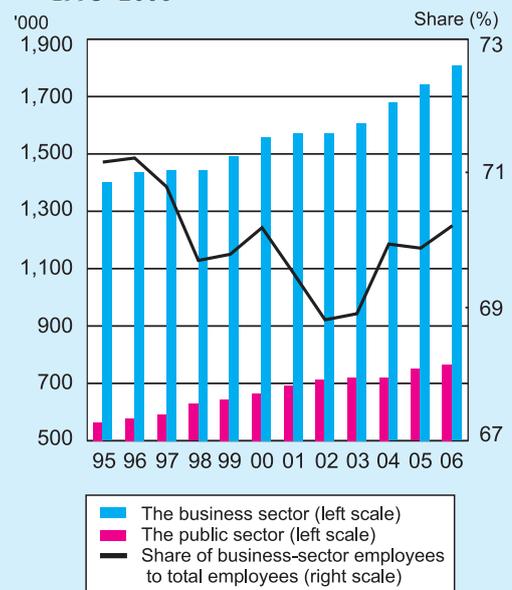
There was an increase this year in full-time jobs, and the rate of involuntary part-time employees out of total part-time employees fell.

There was an appreciable increase in full-time positions in 2006 (2.9 percent), even surpassing the rise in part-time positions (2.1 percent). The share of employees working part-time involuntarily, in the total number of part-time employees, fell by 10 percent. The growth of part-time employment is explained mainly by the expansion of the services, which are characterized by a high proportion of part-time jobs.<sup>13</sup> The continued decline in the average number of hours worked per week per employed person in 2006 stemmed from the reduction in the number of work-hours per employed person in most industries (Table 5.A.9) rather than from the addition of part-time positions, whose total extent was also lower than in 2005. As a result, labor input in the business sector rose by less than the number of persons employed in it (Table 5.2).

In the wake of the government's measures to reduce the relative extent of the general government sector (principally freezing new intake and encouraging the early retirement of mature employees), the rise in employment in the public services<sup>14</sup> in 2006 was relatively low, only 2.0 percent, similar to the population growth rate.<sup>15</sup> Labor input in the public services rose even more moderately due to the contraction of the average number of hours worked weekly per employed person.

One of the major effects of the Second Lebanon War was the steep rise in absenteeism from work in 2006:III (Table 5.1). Nonetheless, the proportion of persons temporarily absent from work also rose in the other quarters of the year; the average number of

**Figure 5.1**  
The Number of Employees, by Sector, and the Share of Business-Sector Employees to Total Employees, 1995–2006



SOURCE: Central Bureau of Statistics.

<sup>13</sup> Note that 75 percent of the work obtained through the Mehalev program is in part-time positions.

<sup>14</sup> The public services include sub-sectors in which most employees work in the public sector. Because available data is limited, it is impossible to make a more precise distinction between employees in the public and private sectors.

<sup>15</sup> The relatively rapid expansion of employment in the public sector in 2005 was due to the extensive recording of manpower companies' employees as direct employees of government ministries.

absences in 2006 was 11.1 percent higher in 2006 than in 2005, which could indicate an improvement in job security among employees. Another expression of increased confidence about employment is the high proportion of workers who left their jobs voluntarily,<sup>16</sup> according to the Ministry of Industry, Trade and Labor's Survey of Employers.

#### a. By-industry developments

In the business sector there was a notable expansion of employment in the various services, encompassing banking, insurance, and financial institutions, hotels and catering, transport, storage and communications, and business services, particularly those defined as knowledge-intensive<sup>17</sup> (Table 5.4). However, the average number of hours worked per employee rose in only two business-sector industries—construction, and transport, storage and communications. In the other industries labor input rose by less than employment because of the decline in the weekly number of hours worked per employee (between 0.5 and 4.1 percent, Table 5.A.9). The transport, storage and communications industry was also notable for the significant rise in its output—up by 7.4 percent over 2005—with 30 percent growth since 2000 (Table 5.8). Another industry whose output expanded impressively was banking, insurance, and financial institutions. The growth of this industry in the last few years stemmed from the burgeoning stock market, which drew many private investors, as well as from the implications of the Bachar reforms, which were introduced in order to reduce the degree of concentration of the banking system.

The number of employed persons in manufacturing rose by 2.7 percent in 2006 (Table 5.4). Although the increase in labor input in manufacturing was moderate, its output was up by 10.5 percent over 2005 (Table 5.8). The expansion of manufacturing production was led by the growth of the high-tech industry,<sup>18</sup> in which employment was double the industry average.

An additional 4,400 persons were employed in the construction industry in 2006,<sup>19</sup> and its labor input grew even though its product declined by 2.4 percent, bringing the fall since 2000 to 13.2 percent (Table 5.8). Employment in agriculture was down by 5.7 percent,<sup>20</sup> with Israelis and foreign workers being replaced by Palestinians (Table 5.4)—running counter to the government's declared policy of employing unskilled

Most noteworthy in the business sector was the expansion of employment in the service industries, as in recent years.

<sup>16</sup> Accounting for more than half of all job separations in 2006.

<sup>17</sup> The number of employees in the R&D two-digit industry rose by 12.4 percent from 2005 to 2006, and the number in computer services by 4.3 percent.

<sup>18</sup> The manufacturing industries defined as high-tech include electronic communication equipment, industrial, medical and scientific equipment, electronic components, office machinery and computers, aircraft and pharmaceutical products.

<sup>19</sup> Because of the substitution between foreign and Palestinian workers on the one hand, and Israelis on the other, employment of Israelis in the industry rose by 7,300 individuals.

<sup>20</sup> In agriculture, despite the decline in the number of persons employed, the number of vacant positions averaged 4,000 in 2006 according to the Ministry of Industry, Trade and Labor's Survey of Employers.

**Table 5.4**  
**Employment and Labor Input, by Industry,<sup>a</sup> 2002-06**

	Employment									
	Thousands					Rates of change				
	2002	2003	2004	2005	2006	2003	2004	2005	2006	
Total business sector <sup>b</sup>	1,850.9	1,861.3	1,909.9	1,968.8	2,037.9	0.6	2.6	3.1	3.5	
Agriculture	69.6	68.4	73.8	76.5	72.2	-1.8	7.8	3.8	-5.7	
Construction	211.3	207.9	196.1	188.3	192.7	-1.6	-5.7	-3.9	2.3	
Manufacturing	385.4	385.8	394.4	402.6	413.3	0.1	2.2	2.1	2.7	
Commerce and vehicle repairs	332.8	336.9	345.6	354.2	354.4	1.2	2.6	2.5	0.1	
Hotels and catering services	121.1	117.0	121.4	129.3	135.0	-3.4	3.8	6.4	4.5	
Banking, insurance, and finance	76.2	78.0	79.1	82.1	87.4	2.4	1.4	3.8	6.5	
Business services	325.8	346.4	359.9	375.2	395.0	6.3	3.9	4.3	5.3	
Transport, storage, and communications	147.5	150.8	155.1	163.8	172.6	2.2	2.9	5.6	5.4	
Public sector	719.4	730.3	727.1	756.9	772.1	1.5	-0.4	4.1	2.0	

	Employment and labor input, by industry, 2005									
	Employment						Labor input			
	Israelis	Foreign workers		Israelis	Foreign workers		Israelis	Foreign workers		Palestinians
		Palestinians	Thousands		Palestinians	Rates of change				
Total business sector <sup>b</sup>	1,807.0	184.3	46.6	3.7	2.0	1.7	2.9	2.2	-0.8	
Agriculture	45.1	23.1	4.0	-9.8	-0.7	22.0	-13.5	-0.7	17.0	
Construction	134.4	39.8	18.4	5.7	-4.7	-5.1	7.0	-4.5	-7.6	
Manufacturing	401.9	2.0	9.4	2.6	2.0	4.9	1.9	2.2	0.9	
Commerce and vehicle repairs	336.7	10.0	7.7	-0.1	0.0	10.9	-0.7	0.0	8.0	
Hotels and catering services	122.1	10.7	2.3	6.1	-10.7	2.3	3.7	-10.6	-0.6	
Banking, insurance, and finance	87.4	0.0	0.0	6.5			5.3			
Business services	354.4	36.0	4.6	5.7	1.5	2.7	4.3	1.7	1.9	
Transport, storage, and communications	171.6	0.0	1.0	5.5		-12.6	9.0		-15.7	
Public sector	766.6	5.0	0.5	2.0	0.0	0.0	1.3	0.0	0.0	

<sup>a</sup> Including reported and unreported foreign workers and Palestinians.

<sup>b</sup> Figures may not add due to the exclusion of 'miscellaneous.'

SOURCE: Central Bureau of Statistics and National Accounts data.

In the public services,  
only education  
expanded.

Israeli workers<sup>21</sup> in appropriate employment—and the industry's product shrank by 8.6 percent from 2005 (Table 5.8). Additional industries in which employment contracted in 2006 were commerce and vehicle repairs, electricity and water. In the latter a policy of dismissals was adopted in order to increase efficiency.

In the public services there was a notable expansion of education, in which an additional 12,000 employees found work. Most of the increase was in the universities (13.1 percent) and elementary education (6.3 percent). The number of persons

<sup>21</sup> Note that the government has permitted the entry of another 3,000 foreign workers for agriculture in 2007.

employed in public administration dipped slightly (by 400 employees), while the health and welfare services contracted by 1,900 workers, mainly due to the drop in employment in clinics and medical institutions as well as in hospitals (down by 4.7 and 4.0 percent respectively).

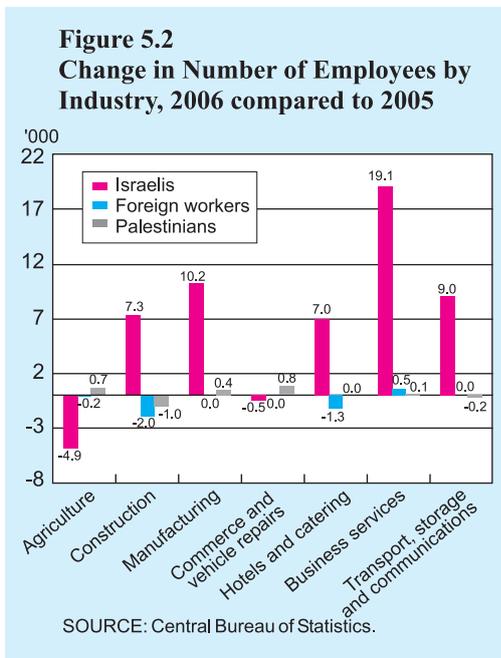
**b. Employment of Israelis**

The number of Israelis employed rose by 3.2 percent (another 80,000 persons) in 2006 to average 2,574 million, 1,807 million in the business sector and 767,000 in the public services. The growth rate in the business sector was almost double that in the public services (3.7 percent vis-à-vis 2.0 percent). In 2006:III, the quarter in which the war took place, the rate of expansion of business-sector employment slowed considerably,<sup>22</sup> but this slowdown was temporary and was offset by a significant expansion of employment in the public services; as a result, the rate of employment (defined as the number of persons employed *divided* by the working-age population)

remained stable. The growth rate of labor input of Israelis employed in the business sector was slightly more moderate than that of employment, due to the reduction in the number of hours worked per employed Israeli.

The main factor behind the employment of Israelis in the various industries was the acceleration of economic activity. The boom in employment in the financial services was led by the reform of the capital market; the hotels and catering, transport, storage and communications, and personal services industries all expanded as a result of the rise in the standard of living and surge in incoming tourism in the first half of the year, until the outbreak of the war

The major factor that affected Israelis' employment in various industries was the acceleration in economic activity. In construction, Israelis managed to replace foreign workers.



<sup>22</sup> According to the Ministry of Industry, Trade and Labor's Employers Survey, the effect of the war was far greater in the north than in the center and the south of Israel, particularly as regards positions filled and the employment balance (positions filled vis-à-vis job separations): whereas in the north the number of new posts fell by almost 25 percent, in the rest of the country this category dipped by only 2.7 percent. The employment balance in the north declined by 126 percent and became negative (the number of jobs lost exceeded the number of posts filled). In the rest of the country, on the other hand, the employment balance was positive and was up by almost a third over 2006:II. Data for 2006:IV indicate that the economy recovered very rapidly from the war in the north: the demand for workers in the business sector soared in most industries, with the most significant improvement being in the north (a positive employment balance of 8,000 posts and a 10 percent increase over 2006:III in the number of vacant positions).

in the north. Employment in manufacturing expanded due to the steep rise in the demand for Israeli manufactured exports at all technological levels. The employment of Israelis in construction rose as a result of the government's policy of reducing the number of foreign workers in Israel and replacing them with unskilled Israelis—a policy which included, in addition to the reduction of the number of permits issued for legal workers and the expulsion of foreign workers remaining in Israel illegally, vocational training courses in construction for unemployed Israelis. The policy of replacing foreign workers did not succeed in agriculture, where the number of Israelis employed actually shrank by 10 percent.

Since 2003 the employment rate has risen in most education groups, and this was especially the case for those with lower levels of schooling—9–12 years of education (Table 5.6). This was a consequence of the expansion of employment in almost all industries, whether human-capital-intensive or unskilled-labor-intensive.

### c. Employment of non-Israelis

The number of non-Israelis employed in Israel rose this year.

In 2006, 189,300 foreign workers and 47,100 Palestinians were employed in Israel—even more than in 2005. Their number exceeded that of unemployed Israelis with 0–12 years of schooling (about 157,000) and was high by international standards.<sup>23</sup> The number of foreign workers employed in the business sector rose by 2.0 percent in 2006, while the number of those employed in construction, agriculture, and the hotels and catering services declined (Table 5.4). The employment of Palestinians also rose, by 1.7 percent. The increase in the labor input of foreign workers was slightly higher than the rise in their number, because of the increase in the number of hours worked per employed person, while the labor input of Palestinians declined. In spite of the rise in the number of non-Israeli (i.e., foreign and Palestinian) workers, their share in the business sector fell as a result of its rapid expansion, and stood at 11.3 percent (Table 5.2 and Figure 5.2).

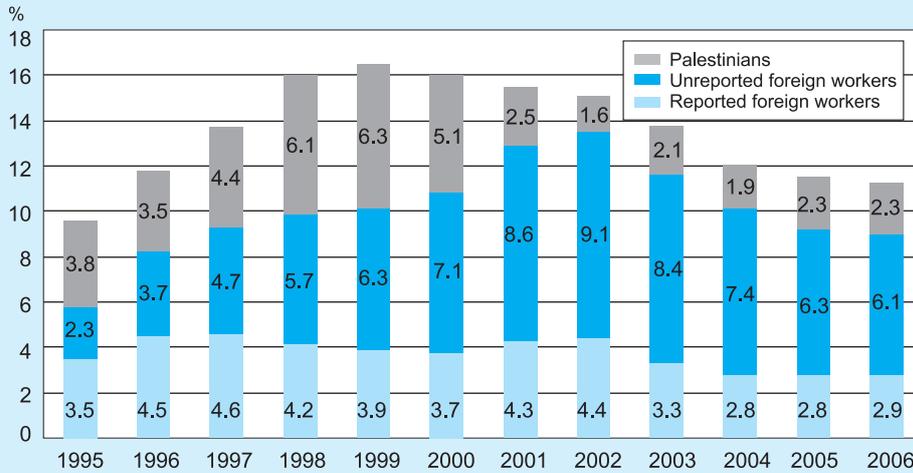
Government policy in reducing the employment of foreign workers slackened off this year.

Adherence to the government's policy of reducing the employment of foreign workers slackened in 2006: the number of permits issued for legal foreign workers rose, but this was the result of the rise in permits for the home-care industry,<sup>24</sup> compared with stability in the number of permits for construction and agriculture. Only in manufacturing did the number of permits decline, but it was low there from the outset (an annual average of 2,400 in 2003–2005). Efforts to implement the law—as measured by the number of files investigated, fines imposed, and charges brought—weakens, although the amount of revenue collected, particularly for illegal unemployment in previous years, rose considerably. The courts came down heavily on manpower companies that employed foreign workers illegally, and imposed

<sup>23</sup> The proportion of foreign workers in the labor force of the OECD countries averaged 5.5 percent in 2004; in Israel that year foreign workers (including Palestinians) accounted for 8.8 percent of the labor force. In 2006 the share of foreign labor contracted to about 8 percent of the civilian labor force.

<sup>24</sup> There is no upper limit for permits in the home-care industry, and the number is set according to need.

**Figure 5.3**  
**The Share of Foreign Workers and Palestinians in the Business Sector, 1995–2006**



SOURCE: Central Bureau of Statistics.

large fines on them which ran to millions of shekel. The government endeavored to introduce measures to increase the cost of employing foreign workers, but these were not entirely successful. Since January 2007 manufacturing plants and services companies have been obliged to pay expert foreign workers the minimum monthly wage of NIS 15,390.<sup>25</sup> In addition, the government sought to increase the levy on the employment of foreign workers<sup>26</sup> from 10 to 18 percent of the worker's annual wage, however this proposal encountered fierce opposition from the members of the Finance Committee and was not adopted.

In the course of January 2007 the Ministerial Committee on Foreign Workers made several decisions regarding the gradual reduction of quotas of these workers in most industries, eventually canceling them completely (with the exception of experts, at a minimum wage of twice the average wage). It was decided that no further permits would be issued for the hotel industry in Eilat as of February 2007. The decision was also made to set the monthly wage of foreign workers in manufacturing at NIS 5,000, and that of foreign chefs in the ethnic restaurant industry at no less than NIS 8,000. These measures, which make it more expensive to employ foreign workers, might serve to increase wages in the industries in which foreign workers are concentrated, making employment in them more attractive to Israelis.

<sup>25</sup> The government decision was made in 2004, but did not go into effect because of appeals submitted to the Supreme Court by the Manufacturers Association. In its ruling of December 2004 the Supreme Court decided in favor of the government (Supreme Court Ruling 9722/04).

<sup>26</sup> This tax is paid in addition to the employment license charge of NIS 6,800 per worker, which the employer pays to the Ministry of Industry, Trade and Labor.

## 5. UNEMPLOYMENT

Unemployment fell to an average of 8.4 percent in 2006.

In 2006 the unemployment rate was down by 0.6 percentage points from 2005, and averaged 8.4 percent of the civilian labor force. This was the third consecutive year of a decline in the unemployment rate, after this had reached a peak of 10.7 percent in 2003 (Table 5.A.4). The lower unemployment rate in combination with the increase in the participation rate means that the rise in demand for labor exceeded the rise in supply.

The decline in the unemployment rate among men outstripped that in the unemployment rate of women by 0.1 of a percentage point, so that the gender gap between the two unemployment rates widened slightly. The male unemployment rate was 7.9 percent of the civilian labor force, while the female rate was 9.0 percent (Table 5.2). While the unemployment rate of immigrants who arrived in and after the 1990s was the same as that of veteran residents in 2004, in 2006 for the second year in succession the unemployment rate of immigrants was lower than that of veterans, and the gap in the two unemployment rates even widened to 1.5 percentage points<sup>27</sup> (Table 5.A.4). The number of unemployed persons averaged around 236,000 in 2006, two thirds of them with 0–12 years of schooling.

The drop in unemployment encompassed individuals with almost all levels of education. Unemployment among those with high levels of education approached the natural level of unemployment, while among those with low levels of education, the rate remained very high.

The decline in the unemployment rate encompassed all educational groups except those with the lowest level of education (0–8 years of schooling), among whom the unemployment rate soared to 16 percent (Table 5.6). A cross-section of unemployment rates by education groups shows that among the more educated segment of the population, especially those with 16 or more years of education, the unemployment rate has plummeted since the recession of 2001–2003 and is close to the ‘natural’ unemployment rate, most of which is short-term frictional unemployment. The unemployment rates of groups with high-school education or less have remained very high, however, even though they have fallen. The polarization of unemployment rates between highly-educated and less-educated groups is the result of globalization and Israel’s specialization in advanced industries which are human-capital-intensive (see Box 5.3). The industries contributing most to the decline in the unemployment rate were the high-skill-intensive ones, whereas the negative contribution of several unskilled-labor-intensive industries was moderated by the expansion of employment in others—construction, and hotels and catering services (Table 5.5).

As a result of the faster decline in the unemployment rate of highly-educated groups than of less-educated ones, the composition of unemployment altered, with a rise in the share of the less-educated. This shift in the composition of unemployment may have served to increase the depth of unemployment—the proportion of unemployed persons who have been looking for work for over a year—in spite of the decline in the overall level of unemployment (Table 5.A.7). On the other hand, according to the Ministry of Industry, Trade and Labor’s Survey of Employers, the amount of

<sup>27</sup> Despite the fact that the participation rate of immigrants rose by 1.3 percentage points, while among the rest of the population it rose by only 0.2 percentage points.

time required to fill a vacant post has also become longer, and this may mean that the difficulty in filling posts derives from a mismatch between the skills required by employers and those offered by work-seekers. The longer time needed to fill posts may also be explained by the reluctance of work-seekers to accept jobs which do not fit their requirements, preferring to take longer in seeking the right kind of work,<sup>28</sup> although data from the Companies Survey tend to bear out the first explanation.

**Table 5.5**  
**Contribution to Change in Unemployment Rate, Israelis,<sup>a</sup> 2003–06**

	(change from previous year, percentage points)			
	2003	2004	2005	2006
Total	0.4	-0.3	-1.4	-0.6
Public sector	0.2	0.8	-0.5	0.1
Business sector	0.2	-1.2	-0.9	-0.7
High-skill industries <sup>b</sup>	-0.1	-0.4	-0.4	-0.5
Nontradables	-0.3	-0.4	0.0	-0.2
Manufacturing	0.1	0.0	-0.2	0.0
Computer services	0.1	0.0	-0.2	-0.3
Unskilled-labor-intensive industries <sup>c</sup>	0.0	-0.2	-0.1	0.2
Manufacturing	0.1	-0.1	0.3	0.2
<i>of which</i> Textiles and clothing	0.0	0.0	0.0	0.1
Construction	-0.3	0.2	0.2	-0.1
Hotel and catering services	0.1	-0.3	-0.3	-0.1
Other industries (not classified) <sup>c,d</sup>	0.2	-0.6	-0.4	-0.4
<i>of which</i> Manufacturing	0.1	0.1	0.1	-0.2

<sup>a</sup> The contribution to the rise in unemployment was calculated as the difference between the number of Israelis who would be employed if employment had expanded in line with the growth of the civilian labor force and its actual expansion (for by-industry breakdown, see Table 5.A.10).

<sup>b</sup> High-skill industries include some manufacturing, computer services, banking, insurance, financial institutions, and other business activities. This classification differs from that in the section on manufacturing in Chapter 1.

<sup>c</sup> Unskilled-labor-intensive industries include some manufacturing, commerce and repairs, construction, and hotel and catering services.

<sup>d</sup> Other industries (not classified) include agriculture, water and electricity, transport, storage and communications, equipment rentals, employment agencies, security and cleaning, entertainment and other personal services.

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

<sup>28</sup> Note, however, that the period of eligibility for unemployment benefit in Israel is one of the shortest in the developed countries, especially for young people.

According to these data, the constraint arising from the lack of skilled workers was more severe in 2006 than in 2005 in all industries except construction. The formation of a hard core of unskilled unemployed persons could cause serious and irreversible social and economic harm;<sup>29</sup> it underlines the importance of expanding employment in the various commercial and service industries, which are unskilled-labor-intensive, as well as the significance of vacating existing posts which are currently filled by foreign workers so that they may be replaced by Israelis.

**Table 5.6**  
**Israelis' Participation, Employment and Unemployment Rates, by Educational Level, 2001–06**

	(percent)					
	2001	2002	2003	2004	2005	2006
Rate of participation <sup>a</sup>						
Total	54.1	54.3	54.8	54.9	55.0	55.6
Years of education						
8-0	23.8	22.8	22.7	23.8	23.5	23.0
9-10	39.9	39.2	39.0	38.0	37.2	38.4
11-12	54.7	54.8	54.1	54.1	54.2	54.6
15-13	65.3	64.5	65.6	66.0	65.9	65.8
16+	74.6	77.0	77.0	77.2	77.0	77.1
Employment rate <sup>a</sup>						
Total	49.1	48.7	48.9	49.2	50.3	50.9
Years of education						
8-0	20.8	19.5	18.9	19.9	19.9	19.3
9-10	34.2	33.4	33.0	32.3	32.1	33.5
11-12	48.2	47.9	46.7	46.8	47.6	48.5
15-13	60.0	58.7	59.9	60.3	61.1	61.4
16+	71.3	72.5	72.4	73.1	73.9	74.0
Unemployment rate <sup>b</sup>						
Total	9.3	10.3	10.7	10.4	9.0	8.4
Years of education						
8-0	12.8	14.5	16.6	16.1	15.1	16.0
9-10	14.2	14.7	15.3	15.2	13.7	12.8
11-12	11.8	12.5	13.6	13.5	12.1	11.2
15-13	8.1	9.1	8.7	8.7	7.3	6.6
16+	4.5	5.8	5.9	5.3	4.1	4.0

<sup>a</sup> Percent of the working-age population.

<sup>b</sup> Percent of the civilian labor force.

SOURCE: Central Bureau of Statistics Labor Force Survey.

<sup>29</sup> A lengthy period of unemployment erodes the individual's human capital and marks him/her as 'unsuitable' in the eyes of potential employers, thereby reducing the person's chances of finding work in the future; discouragement with the extended work-seeking process causes the individual to drop out of the labor market. From the standpoint of the wider economy, too, this process leads to the loss of social welfare.

### **Box 5.3**

#### **Labor market segmentation by education level**

A wealth of literature describes labor market segmentation by characteristics such as gender, race and education level, or by sector or occupation. In view of the differences in employment and unemployment rates and in wage levels between various groups of workers, it appears that there are essentially separate labor markets characterized by different working conditions, advancement opportunities and even labor market institutions. Most types of segmentation in the labor market are the result of a historic process. For example, the segmentation by race or gender is based primarily on subjective factors, such as prejudice, family values and education. In contrast, the creation of a dual labor market—for skilled and unskilled workers—is a relatively new phenomenon. While it first appeared during the 1970s in the developed economies, it appeared only a decade later in the emerging economies. The reasons are objective and involve changes in the demand and supply of labor. Therefore, while the boundaries between labor markets segmented by gender and race are becoming increasingly blurred over time, the segmentation by level of skill is becoming increasingly evident.

Numerous empirical studies have provided evidence of the simultaneous increase in wages and rates of employment among skilled relative to unskilled workers. A positive connection between the relative changes in wages and employment has been presented as the main argument in support of the hypothesis that this is related to an increase in the demand for educated workers and the lag in their supply change due to the need for investment in human capital.

Various explanations have been proposed in the literature for the relative increase in demand for skilled workers. The main ones include technological change that is biased towards educated and skilled workers and an increase in international competition as a result of globalization and the expansion of world trade. The technological change in recent decades has generated dramatic changes in the demand for skilled workers and a sharp reduction in the demand for unskilled labor. Many empirical studies attribute the change in the general composition of employment primarily to the increase in the share of highly-educated workers within sectors (as opposed to the changes between sectors) as a result of technological change.<sup>1</sup> Exposure to international trade has worked in the same direction by bringing about a transition in the traditional sectors from local

<sup>1</sup> See, for example, K. Flug, N. Kasir (Kaliner) and S. Ribon (2000), *Unemployment and Education in Israel: on Business Cycles, Structural Changes and Technological Changes, 1986–98*, series of discussion papers, Bank of Israel, Research Department. (In Hebrew); E. Berman, J. Bound and Z. Griliches (1994), "Changes in the Demand for Skilled Labor within U.S. Manufacturing: Evidence from the Annual Survey of Manufactures," *The Quarterly Journal of Economics*, 109, 367-397; E. Berman and S. Machin (2000). "Skill-Based Technology Transfer around the World," *Oxford Review of Economic Policy*, 16(3), 12-22.

production to the import of cheap substitutes from economies with an abundance of cheap labor and by increasing international competition.<sup>2</sup> Two additional factors are outsourcing—the transfer of unskilled-labor-intensive manufacturing processes to low-wage economies<sup>3</sup>—and worker migration (foreign workers in Israel).

As a result, the relative demand for skilled and highly educated workers has risen while the status of unskilled workers in the labor market has deteriorated. The shrinking of traditional sectors due to the intensification of international competition led to the displacement of a large number of workers. Thus, according to the Central Bureau of Statistics, the number of employee posts in low technology manufacturing in Israel fell by 19.5 percent between 1995 and 2005. Since the search for alternative employment in other sectors requires retraining, the chances of these unskilled workers—who possess a low level of skills and formal education—finding new jobs were poor and many of them, particularly the older ones, left the labor market. The continuation of these trends in the future is likely to bring about a further decline in the status of unskilled workers in the labor market. Therefore, the expansion of the nontradable sector, particularly nontradable services, which can provide employment to individuals who lack education and skills, is of great importance. At the same time, the government should invest resources in human capital, including vocational training for the unemployed, schooling (starting from the pre-school stage and particularly in the periphery and the development towns) and increased accessibility to higher education.

Data relating to Israel indicate that for more than two decades there have essentially been two separate labor markets—one for skilled workers and another for unskilled workers—a situation which is manifested in the huge differences in indices such as the participation rate, employment rate, rate and depth of unemployment and the average wage. Figure 1 presents the participation and employment rates for the period 1980–2005, as well as the average hourly wage for the period 1987–2005,<sup>4</sup> among unskilled workers (those who reported an elementary to high school education or no formal education at all) relative to educated workers (those who reported more than a high school education, including university).<sup>5</sup> The participation rate among the unskilled was on

<sup>2</sup> Among the articles on this subject, see: R. Freeman (1995). "Are Your Wages Set in Beijing?" *Journal of Economic Perspectives*, 9(2), 15-32.

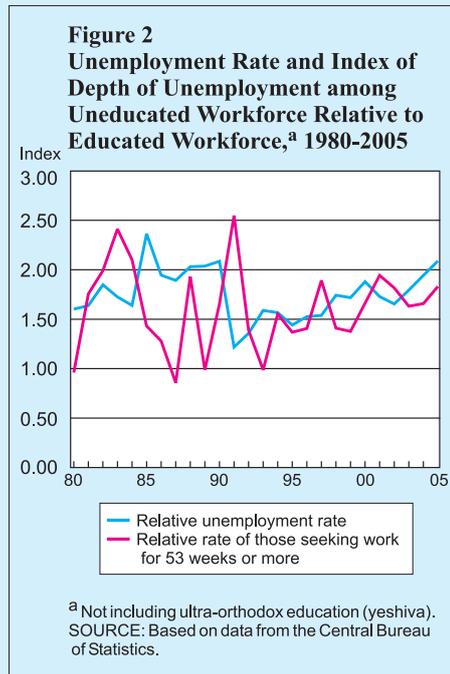
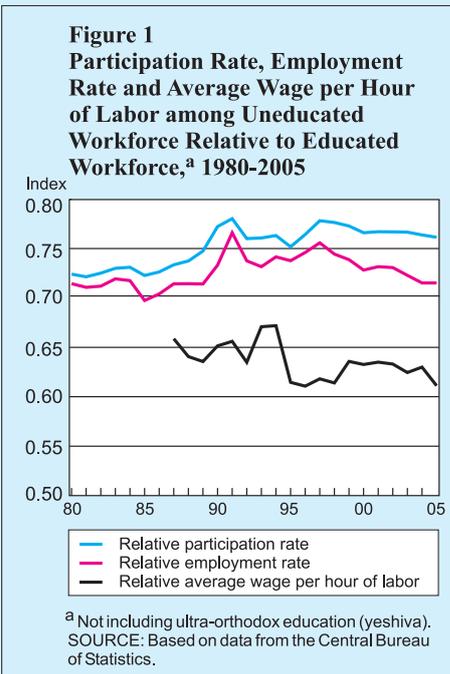
<sup>3</sup> See, for example: R. Feenstra and G. Hanson (1996). "Foreign Investment, Outsourcing and Relative Wages," in R. Feenstra, G. Grossman and D. Irwin (eds), *The Political Economy of Trade Policy: Papers in Honour of Jagdish Bhagwati*, Cambridge: MIT Press.

<sup>4</sup> Data on wages during the period prior to 1987 are problematic and for some years unavailable.

<sup>5</sup> In order to simplify the analysis, those with an ultra-orthodox education (Yeshiva) were not taken into account due to the specific nature of this type of education.

average about three-quarters of that among the skilled and a similar ratio (73 percent) was found for the employment rate. The wage of an average worker with a high school education or less was about 64 percent of the hourly wage of an educated worker. There was a small increase in this ratio in the early 1990s but it can be explained by the changes that occurred in the economy as a result of the wave of immigration from the former Soviet Union. On the one hand, an increase in the demand for nontradable goods (including housing) benefited less-skilled workers and even led to a decrease in the demand for skilled workers. On the other hand, the wages of skilled workers were affected by the entry of the immigrants, many of whom had higher education, into sectors and occupations characterized by low wages. Since the mid-1990s, the share of high-tech sectors in total employment has increased and has led to deterioration in the labor market status of unskilled workers. The long-term trend is one of a gradual decline in the wages of unskilled workers relative to those of skilled workers.

In addition to the magnitude of these gaps, the stability of the relative indices over time strengthens the claim that there are two different labor markets—one for educated workers and another for uneducated workers. Nonetheless, it is important to mention that there has also been a dramatic change in the relative size of these labor markets. Thus, while in 1980 only 26.6 percent of the labor



force had more than a high school education, by 2005 this figure had risen to 55.7 percent.

Figure 2 presents the rate of unemployment among unskilled workers relative to skilled ones and the index of the relative depth of unemployment. Following a sharp decline at the beginning of the 1990s as a result of the wave of immigration, the gap between the rates of unemployment in the two groups has widened, particularly in recent years. It appears that the rate of unemployment in the two groups is determined not only by general factors, which represent the effect of the business cycle, but also to a large extent by a mismatch between the level of human capital demanded by employers (as a result of technological change, changes in sectoral structure, etc.) and the level of human capital offered by unskilled jobseekers. In addition, the depth of unemployment among unskilled workers has worsened relative to that among skilled workers. Thus, the proportion of unskilled workers who are unemployed for a relatively short time has fallen, while the proportion of those who are unemployed for more than a year has risen, relative to skilled workers.

## 6. WAGES

Real wages rose by 1.6 percent this year, but this increase was not uniform to all industries.

The real wage per employee post increased by a moderate 1.6 percent in 2006 over 2005—up by 1.8 percent in the business sector and by 1.2 percent in the public services. This increase reflects a 3.8 percent rise in wages in nominal terms.

Changes in the real wage in the business sector were not uniform across the various industries (Table 5.8). The wage increases were led by the financial services industry (5.9 percent), manufacturing (3.9 percent), and business services (2.4 percent).<sup>30</sup> Wages rose by 1.7 percent in agriculture, largely due to the higher cost of employing foreign workers.<sup>31</sup> In the other industries the real wage remained stable despite the expansion of employment in them and the admirable increase in product (excluding the construction industry). Employed persons' income-tax data bear out the by-industry heterogeneity of the wage changes. According to these data, the increase in tax receipts stemmed from the 51 percent rise in revenues from the banking and insurance industry (which accounts for 18 percent of total revenues) and the 5–6 percent expansion of revenues from the manufacturing, commerce, and business services industries (accounting for 40 percent of total revenues).

<sup>30</sup> The very moderate wage increase in business services is somewhat surprising in view of its education-intensity. A more detailed analysis shows that in the computer services sub-industry, which employs some 30 percent of employees in the high-tech industry, the real wage dipped by 2.1 percent, while in the R&D sub-industry it rose by 6.2 percent.

<sup>31</sup> Wages of Israelis in agriculture rose by only 0.9 percent.

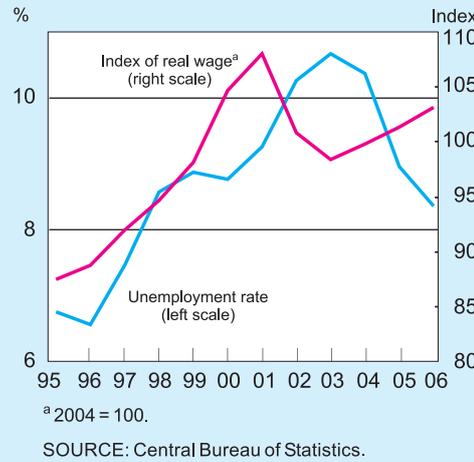
Unit labor cost has been declining ever since the emergence from the recession, in 2003, but its rate has moderated over the years (Table 5.2). At the beginning of the process of economic growth the expansion of supply was made possible by increased factor utilization, expressed in the steep rise in TFP without a significant increase in employment and capital stock. This process moderated the rise in the real wage, particularly in view of the high unemployment rate, and served to moderate the increase in costs and maintain profitability, thus enabling further expansion of economic activity. Today the rise in factor utilization appears to be coming to an

end, as signaled by several indicators: 2006 was characterized by extensive investment in the principal industries, substantial incremental employment encompassing most industries, the stabilization of the growth rate of labor productivity, and a slowing of the decline in unit labor cost. These signs attest to the fact that further economic expansion will require a far greater increase in employment than has hitherto been the case, and this could be translated into an additional decline in the unemployment rate, which is still high by international standards. A persistent increase in the demand for highly-educated workers (if their supply lags behind global demand) could exert upward pressure on their wage. However, the rate of wage-increases in 2006 was still lower than that of labor productivity, expressing a further decline in unit labor cost alongside an improvement in producer profitability.

In April 2006 the minimum wage was raised to NIS 3,457 a month (a 3.7 percent increase), for the first time since 2002. On 1 June it was increased once again, to NIS 3,585, in accordance with the Minimum Wage Law (Increases in Minimum Wages, Provisional Directive, 5765-2006). The next minimum wage hike, planned for 1 April 2007, has been postponed.

The wage increase in the public services was influenced by the implementation of the second stage of payment of the Cost of Living Allowance (COLA), which was to have been implemented in 2003 but was deferred, in accordance with an agreement between the General Federation of Labour (Histadrut) and the Finance Ministry because of the difficult economic situation. On 1 June 2006 the wages of persons employed in the public sector were raised by 2.1 percent (in nominal terms), in accordance with the uniform updating in the wage tables. In real terms the hike was confined to the public administration (2.3 percent), despite the reduction in the number of persons employed in it and the decline in the average number of hours worked per employee. In the

**Figure 5.4**  
**Index of Real Wage per Employee**  
**Post in Business Sector<sup>a</sup> and**  
**Unemployment Rate, 1995–2006**



The drop in unit labor costs since 2003 contributed to moderating the rise in output costs and to maintaining profitability.

The minimum wage was raised this year for the first time since 2002.

**Table 5.7**  
**Change in Real Wage per Employee Post,<sup>a</sup> 2002-06**

	(percent, at constant prices)				
	2002	2003	2004	2005	2006
Total	-6.2	-3.0	2.5	1.0	1.6
Israelis	-6.2	-3.1	2.3	1.1	1.7
Public sector	-4.9	-4.1	4.6	0.0	1.2
Business sector, total	-6.6	-2.5	1.5	1.5	1.8
Israelis	-6.8	-2.7	1.0	1.5	1.8
Agriculture, total	-4.5	-0.9	0.6	0.7	1.7
Israelis	-3.8	-0.9	-0.3	-0.1	0.9
Manufacturing–Israelis	-4.5	-0.2	2.2	2.6	3.9
Electricity and water–Israelis	-3.1	-2.7	0.4	6.4	6.5
Construction, total	-4.6	-3.6	1.6	-1.0	0.4
Israelis	-5.3	-3.1	-0.8	-0.7	0.6
Commerce and repairs–Israelis	-6.9	-2.7	0.2	1.0	-0.1
Hotel and catering services, total	-6.9	-0.1	-0.4	-0.4	0.4
Transport, storage and communications–Israelis	-5.2	-2.6	-0.7	0.2	0.1
Financial services–Israelis	-10.2	-3.4	10.3	3.0	5.9
Business services–Israelis	-8.8	-4.2	3.0	4.6	2.4

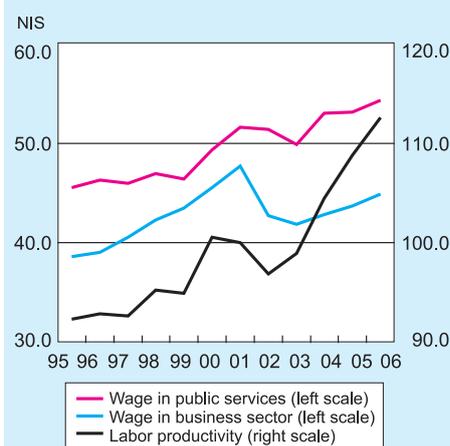
<sup>a</sup> Real wage per employee post according to National Insurance Institute reports. Includes registered Palestinian and foreign workers, unlike otherwise indicated.

SOURCE: Labor Force Surveys of Central Bureau of Statistics.

education, health, and welfare services the real wage was stable in 2006. In the community, social, and personal services (including posts which are attributed to both the public and the private sectors) wages dipped by 0.4 percent despite the expansion of employment.

Note that with the exception of the Medical Association, there is currently no valid wage agreement in the public sector. The last wage agreement that was reached with the Histadrut settled the terms of employment for 1999–2001. An economic growth stimulation agreement for the period 1.7.2003–30.6.2005, which was signed in 2002, included wage cuts in view of the economic crisis then prevailing. Discussions have recently begun on a new wage agreement for the period starting July 2005 which may incorporate retroactive compensation to that date.

**Figure 5.5**  
**The Real Wage per Employee Post in the Business Sector and in Public Services (at 2004 prices), and Labor Productivity,<sup>a</sup> 1995–2006**



<sup>a</sup> Index of net business-sector domestic output per man/hour (base year 2001).

SOURCE: Central Bureau of Statistics.

**Table 5.8**  
**Change in Output, Labor Inputs and the Real Wage, by Industry, 2006**

	Share of employees with more than 12 years' education <sup>a</sup>	Change from 2005			Change from 2000		
		in output	in labor input	in real wage per employee post	in output	in labor input	in real wage per employee post
Agriculture	0.29	-8.6	-7.6	1.7	17.8	-11.5	5.5
Manufacturing	0.50	10.5	1.8	3.9	9.7	-1.8	7.1
Electricity and water	0.52	6.7	-16.3	6.5	21.2	-8.1	10.0
Construction	0.28	-2.4	2.8	0.4	-13.2	-21.3	-3.2
Commerce and vehicle repairs	0.37		-0.4	-0.1		6.1	-6.4
Hotels and catering services	0.37	5.2	2.0	0.4	13.0	-6.3	-7.3
Transport, storage and communications	0.41	7.4	8.8	0.1	29.5	13.3	-7.1
Financial services	0.67		5.3	5.9		17.2	6.2
Business services	0.71	7.3	4.0	2.5	24.0	24.5	1.1

<sup>a</sup> Data for 2005

SOURCE: Central Bureau of Statistics.

## 7. THE GOVERNMENT'S LABOR MARKET POLICY

As stated, the government's labor market policy in recent years has been directed towards encouraging labor-force participation, primarily among that segment of the population whose connection to the labor market is weak: recipients of welfare benefits and low-educated persons (which two groups often overlap). Nevertheless, active expenditure on encouraging employment is very low in Israel—only 0.26 percent of GDP (Table 5.2), compared with the OECD average of 0.7 percent of GDP.

In August 2005 four employment centers began to operate in Jerusalem, Hadera and its environs, Nazareth and Upper Nazareth, and the Sderot-Ashkelon region. The centers were based on the principles of the Wisconsin Program, the best-known of the 'Welfare to Work Programs.'<sup>32</sup> During the first year of the program some 23,000 persons who had received or applied for income-support benefit were called to turn to the centers. By July 2006 their number had declined by 52 percent and the extent of benefits paid out in the areas where the program was operating had also dropped by 51 percent. According to reports from the National Insurance Institution, the national decline of 9,500 in the number of recipients of income-support benefit who were work-seekers was concentrated around the centers, while in the rest of the country the number of recipients of this benefit, as assessed by an employment test, remained

Expenditure on active labor market policy in Israel is far lower than the average in OECD countries.

During the first year of operating the Mehalev program, some 23,000 people reported to the employment centers, of which 7,300 were placed in jobs.

<sup>32</sup> For particulars of the program, see Box 5.1 in the Bank of Israel's Annual Report for 2005. For an account of the first year's activities, see Bank of Israel press release of 20.2.2007.

unchanged. In 2006 about 10,800 placements were made for 7,300 participants in the program (some 30 percent of the participants obtained more than one placement), and work-support services—mainly transportation costs, training, and child care—were financed for 32,500 participants. Only 7 percent of the active participants did not keep to the program's particular requirements or turned down the work offered them, and hence forfeited the right to receive the benefit. Deficiencies in the implementation of the program gave rise to hostile responses from private welfare organizations, which demanded its immediate cessation. Because of the widespread criticism a program has recently been drawn up by the Ministry of Finance, in conjunction with the Ministry of Industry, Trade and Labor, to improve the functioning of the employment centers. The program sets out a new system of incentives which shifts the emphasis away from reducing the number of recipients of income-support benefit by removing eligibility, to placing unemployed persons in work and focusing on job quality. Within this framework, operators of the program will be granted incentives for providing vocational training, and participants will be rewarded for remaining in work. In addition, it is planned to establish a separate track for participants whose integration into the labor market is encumbered (mothers of children under 12, disabled persons, unemployed persons who are approaching pensionable age, etc.); these groups account for one quarter of participants in the program.

Due to widespread criticism of the Mehalev program, a plan was devised to improve the functioning of the employment centers.

In cooperation with the JDC, some 35 programs (the Tabat programs) aimed at incorporating weaker segments of the population—disabled persons, immigrants, ultra-orthodox groups, Arabs, and young people without the backing of a family or economic security—in the labor market have been set up, at a total cost of over \$ 54 million. The programs include providing the preliminary skills—motivation, readiness to accept authority, understanding of the work environment, etc.—required to enable the individual to enter the labor market as well as offering job placement, and ensuring occupational stability. Over 60,000 persons are participating in the various Tabat programs.

The extent of vocational training provided for unemployed persons has been drastically reduced in recent years. Expenditure on vocational training was slashed in 2003, and the benefits paid while the individual was undergoing training were also cut,<sup>33</sup> causing the number of participants in courses to plunge by over fifty percent. The number of participants in vocational training courses fell by another forty percent in 2006. However, the reduction of vocational training derived not only from economic considerations but also from the realization that, the vocational training system as it was then constituted was not sufficiently efficient.<sup>34</sup> Consequently, the focus is now on shorter programs which are suited for the special needs of the population groups concerned (the ultra-orthodox, immigrants from the Caucasus and from Ethiopia, Arabs) and combine the specific vocational training required by the

In recent years, vocational training for the unemployed has been scaled back, with stress placed on small plans for special populations, which combine training with job experience.

<sup>33</sup> For the government's vocational training system for adults in Israel, see Bank of Israel, Research Department, *Recent Economic Developments* 113.

<sup>34</sup> A committee was set up in October 2006 to examine the vocational training system and change its underlying rationale to meet the needs of the economy and the labor market.

market with practical work experience.<sup>35</sup> In addition to these, many courses have been organized by the Vocational Training Department of the Ministry of Industry, Trade and Labor in such fields as construction with the object of substituting Israelis for foreign workers.

The tax reform continued in 2006, and the marginal tax rates for persons earning in the medium and high brackets dipped by 1–3 percentage points.<sup>36</sup> National Insurance contributions of persons on low incomes (up to NIS 4,170 a month) were also reduced, while the National Insurance and Health Fund contributions of persons earning higher wages were raised. An earned tax credits program is planned for workers from the disadvantaged segments of the population<sup>37</sup> (for further information, see Box 5.4). The complementary measure required to implement the earned tax credits program is to enforce the basic labor legislation—primarily the Minimum Wage Law.<sup>38</sup> For this purpose it was decided to bolster the unit in the Ministry of Industry, Trade and Labor which is responsible for ensuring that labor legislation is enforced: the unit's budget was increased by NIS 20 million a year for the next four years, the government's connections with manpower agencies (mainly in the areas of security and cleaning services) are being reviewed in order to ensure that their contracts involve adherence to the Minimum Wage Law. The Ministry of Education will be the first government ministry to monitor the persons working for it via manpower agencies. The Ministerial Legislative Committee has approved the government's support for a private bill according to which the onus of responsibility for the terms of employment of personnel employed through manpower agencies will be upon the place of work, even though legally it is not the direct employer of these workers. In order to improve the terms of employment of construction workers, they are now included in the collective agreement which previously did not cover them.

Notwithstanding, measures are planned intended to tighten the legislation regarding the unemployment benefit. According to the new Economic Arrangements Law, at the beginning of 2007 the conditions of eligibility for unemployment benefit for persons under 28 will become more stringent.<sup>39</sup> It is by no means certain that this measure

Income tax reform continued in 2006, and an earned income tax credit system is planned for the weakest segments of the population.

<sup>35</sup> For example, the 'New Horizon' course for training technicians in cooperation with Intel, courses for training ultra-orthodox women for work summarizing US real-estate contracts in Upper Modi'in in cooperation with Citibank Services, the Class in the Plant program for training Bedouin youngsters as machine operators in the Kitan factory in Dimona in cooperation with Kitan and the Etgar College, and the training course in pharmaceutical mechanization with guaranteed employment in cooperation with Teva, etc.

<sup>36</sup> Persons earning between NIS 4,171 and NIS 34,450 a month benefited from the marginal tax reduction.

<sup>37</sup> The proposed Earned Tax Credits Program Law was given its first reading on 10.1.2007. It was resolved that the program would begin to go into effect in the second half of 2007, initially in the four areas where the Mehalev program was in effect.

<sup>38</sup> An examination undertaken by the Ministry of Industry, Trade and Labor in September 2006 showed that 92 percent of employers infringed one or more clauses of the labor laws.

<sup>39</sup> The unemployment benefit for eligible persons will be cut by 25 percent; the period of eligibility for persons in the 25–28 age group will be reduced from 100 days to 67 days; persons under 25 will be required to accept any work offered to them after 14 days of unemployment, and those in the 25–28 age group will be required to do so after 30 days.

will bring about significant savings in unemployment benefit payments, but it may cause irreversible damage to those young persons who are unemployed. According to research on the subject from all over the world, the unemployment benefit enables the individual to endeavor to find work that is appropriate for his/her skills; reducing the period in which they are able to look for work could be harmful, and the fact that a young person who is unemployed is obliged to accept an unsuitable job could impair his/her employment career and future earning ability.<sup>40</sup>

#### **Box 5.4**

##### **How the increase in the minimum wage and earned income tax credits affect the poverty of workers**

In the wake of the increase in income inequality in the industrialized countries in the 1990s, many countries arrived at the policy conclusion that government intervention is required in order to enable unskilled workers to reach an adequate income level. In Israel, too, poverty among workers has increased, as has policymakers' awareness of the need for government involvement. Two instruments which together have an extensive effect on workers and are arousing growing interest among policymakers worldwide are a hike in the minimum wage<sup>1</sup> and the earned income tax credit, namely, a direct subsidy paid by the government to workers earning a low wage. Policymakers in Israel are also cognizant of these instruments. The government decided to increase the minimum wage gradually to NIS 3,835 a month in 2008 whilst reviewing the implications of this measure for employment; it also decided to gradually introduce an earned income tax credit program as of 2008. Below we analyze the effects of these two instruments on poverty among workers.

Research studies published in the professional literature have examined the repercussions of these instruments on employment, participation in the labor market, and poverty.<sup>2</sup> Most studies focused on countries such as the UK and

<sup>1</sup> Another instrument with great potential to reduce poverty is augmented implementation of the minimum wage. The government's decision of 4 February 2007 includes measures in this sphere which will be implemented in 2007 and 2008.

<sup>2</sup> Some studies have also examined the effect of these instruments on the drop-out rate from the education system. See, for example, Erhenberg and Marcus (1982). 'Minimum wages and Teenagers' Enrollment-Employment Outcomes: a Multinomial Logit Model,' *The Journal of Human Resources*, XVII, 39–58. According to the results of that study, this effect appears to be marginal, as the decision whether to remain in education depends largely on other variables. In an article on policy in Israel, Malul and Luski (2006) claim that this effect could be significant, but to the best of our knowledge there is no empirical support for this in Israel or elsewhere.

<sup>40</sup> For a more detailed analysis, see Bank of Israel, Research Department, *Recent Economic Developments*, 116, pp. 21-22.

the US, where these instruments have been in effect for many years, but many studies have also been undertaken for other countries.

### **Effects on labor-market participation and employment**

An extensive study was undertaken by Neumark and Wascher (2006) to examine the effect of the minimum wage on employment; this was based on over 150 research studies undertaken in various countries, both developed and developing.<sup>3</sup> They stress that “While there is no agreement regarding the question whether the minimum wage increases or decreases employment, according to the vast majority of studies its effect on employment is negative.”<sup>4</sup> There is no agreement either as regards the effect on employment of earned income tax credit. It is true that in most cases this has been found to be positive, but opinions are divided as to whether the effect is partially offset by a reduction in the number of hours worked.<sup>5</sup> Cancian and Levinson (2005) conclude their findings by asserting that ‘even if the positive effect on employment of earned income tax credit is unclear, there is no doubt that among the existing instruments it is the only one which does not have a negative effect on employment.’

### **The effect on poverty**

Studies of earned income tax credit demonstrate unequivocally that it reduces poverty among workers’ families.<sup>6</sup> The effect of the minimum wage is less clear-cut, and there is a dispute as to whether the positive influence of an increase in the minimum wage is offset by a decline in employment or not.<sup>7</sup>

In order to assess the effect of the program on poverty among workers we analyzed the population groups concerned on the basis of data from the CBS Income Survey for 2005. An increase in the minimum wage has a direct effect

<sup>3</sup> Neumark and Wascher (2006). ‘Minimum Wages and Employment: a Review of Evidence from the New Minimum Wage Research,’ N.B.E.R. Working Paper 12663 (1992). ‘Using Regional Variation in Wages to Measure the Effects of the Federal Minimum Wage,’ *Industrial and Labor Relations Review*, 46, no. 1, 22–37.

<sup>4</sup> In Israel, too, Flug, Rubinstein and Kasir found that the effect of the minimum wage on employment is negative, primarily in the tradables industries.

<sup>5</sup> See, Eissa and Hoynes (2004). ‘Taxes and the Labor Supply of Married Couples: the Income Tax Credit.’ *Journal of Public Economics*, 88, 1931–1958. However, in a later article the same authors found that the effect on hours is minor and even non-existent. In Israel Brender and Strawczynski (2006) found a positive influence on participation, but Brender and Gallow (forthcoming) found that the participation effect and the employment effects offset one another.

<sup>6</sup> See Hotz and Scholz (2003). ‘The Earned Income Tax Credit,’ in R. Moffit (ed.), *Means-Tested Transfer Programs in the United States*, NBER, 141–198.

<sup>7</sup> See Neumark and Wascher (1997). ‘Do Minimum Wages Fight Poverty?’ NBER Working Paper no. 6127.

on persons earning a wage around that amount; we assumed<sup>8</sup> that the reference is to a range of ten percent in either direction. Earned income tax credit deals primarily with the population group which earns between NIS 1,500 and NIS 5,000 a month, according to criteria derived from income and family structure. The analysis presents two alternatives to earned income tax credit assuming that they have been implemented on a nation-wide basis: the first alternative is that the government decision of 4 February 2007, costing NIS 750 million, is implemented, and the second alternative is that concerning the ‘principal breadwinner,’ at a cost of NIS 1.3 billion.<sup>9</sup> The main difference between the two alternatives is that in the one based on the government decision the benefit is given to two earners in a family, but the amount awarded to each one is less than in the second alternative, while in the second alternative the benefit is awarded solely to the person who is the family’s principal breadwinner.<sup>10</sup> Below we review the ‘treatment coefficient,’ namely, the share of the group in the total population concerned *divided by* the share of the group in the population. If the ‘treatment coefficient’ is greater than 1, the group receives a significant amount of treatment from program.

In general, the analysis shows that the minimum wage has a direct effect on all low-wage workers, but does not necessarily focus on poor families. The earned income tax credit deals with families whose income is low, and focuses on families in the population groups with high poverty rates (large families, families with a single wage-earner, Arabs, and ultra-orthodox Jews).

In order to assess the extent of the effect of the three programs we ran a simulation, taking into account the effect of participation (earned income tax credit) and unemployment (minimum wage).<sup>11</sup> The simulation shows that the

<sup>8</sup> We also examined the 15 percent range in both directions, and the results were similar. Note that in the long run the minimum wage has an additional effect, which is not captured in the simulation. The minimum wage can have a beneficial influence on economic growth, through the adoption of technologies which support growth, but it can also have a negative effect, by impacting on efforts to increase investment in human capital (see Amit Friedman, ‘Wage Distribution and Economic Growth,’ *Bank of Israel Research Department Discussion Paper* no. 2005.12).

<sup>9</sup> The details of the proposal may be seen in the press release published on the Bank of Israel’s website on 17 October 2006.

<sup>10</sup> According to the government’s decision, each wage-earner receives about half the financial benefit that the principal breadwinner receives in the second alternative, up to a ceiling of NIS 10,000 per family income. This program embodies, on the one hand, an incentive for the family’s second wage-earner to participate in the labor market, but on the other it reduces the benefit per family if the family has only one wage-earner, and hence costs less.

<sup>11</sup> The earned income tax credit was used in elasticities in the study undertaken by Brender and Strawczynski (2006). ‘Features of the Desired Earned Income Tax Credit System in Israel in View of the Characteristics of the Supply of Labor and the Incidence of Poverty Among Persons with Low Income Potential,’ *Economic Quarterly*, no. September, 407–439 (Hebrew). For the minimum wage, employment elasticity at wage levels near the minimum wage was used, as estimated by K. Flug, N. Kasir, and I. Rubinstein, ‘The Effect of the Minimum Wage on Employment in Selected Low-Skilled-Labor Intensive Industries in Israel,’ *Bank of Israel website* (Hebrew).

earned income tax credit in the government decision alternative reduces poverty among working families by about 3 percent, the ‘main breadwinner’ by about 13 percent, and the aforementioned increase in the minimum wage by about 4 percent.<sup>12</sup> Another result obtained in this simulation is that under the government decision alternative with the earned income tax credit about 75 percent of the amount spent by the government reaches families in the four lowest deciles, while under the ‘principal breadwinner’ alternative about 81 percent does; with the minimum wage, however, only 39 percent of the amount spent by employers reaches families in the four lowest deciles.

Note that the introduction of the earned income tax credit program will be financed entirely by the government while the minimum wage is financed by the employers—whether the government or the private sector. The simultaneous implementation of changes in the minimum wage and the earned income tax credit program, as is planned for 2008, requires augmented implementation of the minimum wage, in accordance with the recent government decision. This will prevent employers from taking advantage of the benefits given through the earned income tax credit program in order to reduce the wages they pay employees.

**Table 1**  
**The Effect of Minimum Wage and EITC<sup>a</sup> on Poverty among Workers**

	Minimum wage		EITC			
			Government decision		Alternative	
	Number of	“Treatment coefficient” (ratio)	Number of households entitled to treatment	“Treatment coefficient” (ratio)	Number of households entitled to treatment	“Treatment coefficient” (ratio)
<b>Relation to poverty line</b>						
Above poverty line	168,487	1	132,203	0.8	155,166	0.7
Below poverty line	40,305	1	81,131	2	101,492	2.1
<b>Number of children</b>						
2	25,776	0.9	60,227	1.5	60,961	1.3
3	12,253	0.7	40,513	1.7	60,756	2.1
4+	10,962	0.8	41,567	2.1	63,284	2.6
<b>Population group</b>						
Israeli born, excl.						
Arabs and ultra-orthodox						
	131,317	0.9	111,064	0.7	129,229	0.7
Arabs	34,341	1.1	55,656	1.8	76,582	2.1
Immigrants	38,936	2	31,396	1.6	31,326	1.3
Ultra-orthodox	4,198	0.6	15,218	2	19,521	2.1
<b>Number of workers in household</b>						
1	55,466	0.9	111,658	1.4	155,192	1.6
2+	98,043	1.3	101,676	1	101,466	0.8

<sup>a</sup> Earned Income Tax Credit.

<sup>12</sup> The amount by which the minimum wage is raised is slightly higher than the amount given in the government decision alternative of earned income tax credit for the equivalent income range; this accounts for the fact that its effect on reducing poverty is slightly greater.

