Chapter 5

The Labor Market

- The number of employed Israelis rose rapidly during 2010, by about 100,000, and the real wage partially recovered as a result of the continued increase in the demand for labor.
- Labor force participation and employment rates grew rapidly (to 57.4 percent and 53.5 percent, respectively), particularly among women.
- The unemployment rate fell to 6.7 percent despite the increase in the participation rate. However, it is believed that the Israeli economy has still not reached full employment since unemployment among men is relatively high and the ratio of vacant posts to number of unemployed is still low.
- The number of Israelis employed in the business sector grew by about 60,000, of which a quarter occurred in the business services industry and about a quarter in the construction industry.
- Employment grew despite the only partial implementation of the declared government employment policy: the Lights to Employment (Wisconsin) program was cancelled; the number of foreign workers was not reduced; the enforcement of labor laws was not improved; and the reform of the Employment Service was not implemented. On the other hand, the day-care budget was increased in the last five years by about 60 percent in real terms.
- The labor force participation and employment rates among adult men and women grew as a result of the increase in retirement age to 67 for men and 62 for women, without an accompanying increase in the rate of unemployment.
- The higher level of academic education among the ultra-Orthodox population has not yet been manifested in the rate of employment among ultra-Orthodox men; however, it is expected to increase in coming years.

1. MAIN DEVELOPMENTS

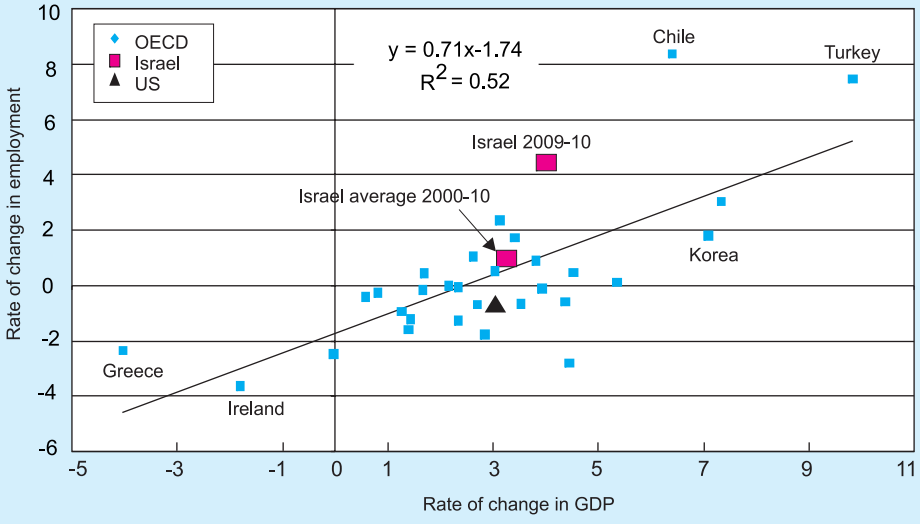
Employment in the Israeli economy continued its rapid expansion during 2010, while the real wage increased moderately. The number of Israeli employees grew by about 100,000, about two-thirds of whom were hired in the business sector and one-third in the public sector. The expansion of employment and the rise in the real wage were mainly the result of the continued rapid growth in the demand for labor, particularly in the business sector, as a result of the increase in exports and private consumption. Meanwhile, the supply of labor also grew: the participation rate among men recovered, after its decline in 2009, and the fifteen-year upward trend in the participation rate of

women continued. The growth in the demand for labor was reflected in an increase in the real wage per employee post in the business sector, after its erosion during the crisis (2008–09) and the marked decline in the unemployment rate to about 6.7 percent, which occurred in spite of the growth of participation rate. However, it should be mentioned that about half of the increase in employment was in part-time jobs and that the downward trend in the rate of unemployment leveled off in the second quarter of 2010.

The growth in employment and the decline in unemployment to a level close to that in 2007 and 2008, prior to the global crisis, suggest that the economy is approaching a full employment situation.[1] Nonetheless, the fall in unit labor cost during the last two years, at a cumulative rate of about 5 percent, indicates that productivity grew faster than gross wages and therefore it is expected that employers will expand employment before the output gap is closed. Despite the indications that the economy is approaching full employment, it should be noted that, given the rate of participation in the workforce, the rate of unemployment among men is still higher than its pre-crisis level (Table 5.1). In addition, it should be taken into account that the ratio of job vacancies to the number of unemployed— which is used as a measure of pressure in the labor market—is still lower than it was in 2007 and early 2008. Thus, it is possible to conclude that the Israeli economy is still not at full employment. Moreover, the rate

Israel enjoyed a high rate of growth in GDP and employment this year, similar to those in the developing countries and higher than those in the Western countries.

Figure 5.1
Rates of Change of GDP and Employment in Israel and the OECD, 2009:Q2 to 2010:Q2



SOURCE: The Central Bureau of Statistics and the OECD.

[1] Full employment is a theoretical concept, which indicates that those looking for work at the prevailing level of wages in the economy find work within a reasonable period of time. There is no consensus as to the natural unemployment rate at full employment.

Table 5.1

Principal Labor Market Indicators, 2006-10[d]

(Change over previous year, percent)

	2006	2007	2008	2009	2010
1.Population (annual average)	1.8	1.8	1.8	1.8	1.8
2. Working-age population	1.8	1.8	1.8	1.8	1.7
3. Participation rate in civilian labor force[b,c] total	55.9	56.6	56.8	57.0	57.4
Men	61.3	62.0	62.2	61.8	62.2
Women	50.8	51.4	51.7	52.3	52.8
4. Civilian labor force	2.5	3.0	2.2	2.0	2.4
5. Employment rate[a]	51.2	52.5	53.4	52.6	53.5
Employment rate among the 25-64 age group	68.8	70.3	71.2	70.1	71.0
6. Total employees	2.9	4.5	4.0	0.5	3.3
Part-time	2.1	4.5	1.3	-0.1	5.1
Israelis	3.2	4.2	3.5	0.3	3.4
Non-Israelis[c]	0.1	7.4	9.7	2.1	2.0
7. Public services employees	2.0	3.8	3.1	1.7	4.0
Public services labor input	0.0	5.4	3.4	3.6	4.4
8. Business-sector employees	3.3	4.7	4.4	0.0	3.0
Israelis	3.7	4.4	3.7	-0.2	3.2
Share in business sector of foreign and Palestinian workers[b]	10.9	11.2	11.8	12.1	11.9
9. Business-sector labor input	3.0	5.6	4.4	0.2	2.8
Israelis	3.5	5.4	3.6	0.1	3.1
Foreign workers[d]	-1.0	7.2	9.8	4.0	0.4
Palestinians[d]	3.0	8.3	11.0	-9.4	2.9
10. Real wage per employee post	1.3	1.6	-0.7	-2.6	0.9
Business sector	1.7	1.4	-0.7	-2.6	1.0
Public services	0.3	2.2	-0.7	-2.4	0.6
11. Minimum wage (real)	-1.3	2.8	4.5	-1.8	-1.4
12. Unit labor costs in business sector[b]	0.6	2.0	2.1	-4.9	-0.3
13. Gross domestic product per labor hour in the business sector[e]	3.8	0.2	0.3	-0.1	2.4
14. Unemployment rate[b], total	8.3	7.3	6.0	7.5	6.7
Men	7.9	6.8	5.7	7.5	6.8
Women	8.9	7.8	6.4	7.5	6.5

[a] The analyses from 2009 are based on the 2008 population census. The data for 2006-08 have been retrospectively adjusted according to changes in the sample.

[b] Actual levels, not rates of change

[c] The participation rates for 2006-08 have been retrospectively adjusted according to changes in the sampling method in the Manpower Surveys from 2009.

[d] Including reported and unreported foreign and Palestinian workers. Data on non-Israeli employees are less reliable than those on Israelis, which are based on the Labor Force Survey. Estimates by the Palestinian Central Bureau of Statistics are different than the estimates in Box 5.3, which are based on Palestinian labor force surveys..

[e] Data from the Employers Survey.

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

Table 5.2
Principal Labor Market Indicators, 2007–10[d]

(thousands, annual averages)

					Change from previous year			
	2007	2008	2009	2010	2007	2008	2009	2010
1. Mean population[a]	7,224.0	7,353.5	7,487.1	7,624.8	127.2	129.5	133.6	137.7
2. Working-age population[a]	5,213.5	5,305.2	5,398.7	5,488.6	90.6	91.7	93.5	89.9
3. Civilian labor force[a]	2,949.0	3,013.4	3,072.9	3,147.1	85.7	64.4	59.5	74.2
4. Employees, total[b,c,g]	2,981.3	3,101.8	3,116.9	3,219.8	127.6	120.5	15.1	102.9
Israelis	2,735.0	2,831.6	2,841.0	2,938.3	110.5	96.6	9.4	97.3
of whom Part-time[b]	793.6	804.0	803.1	843.7	34.2	10.4	-0.9	40.6
Men	1,362.8	1,407.3	1,466.5	1,514.5	59.2	48.0	-12.2	49.5
Women	1,180.1	1,217.1	1,268.4	1,317.0	51.3	48.6	21.7	47.8
Non-Israelis	246.3	270.2	275.9	281.5	17.1	23.9	5.7	5.6
of whom Foreign workers[b]	193.2	211.3	220.2	220.9	12.9	18.2	8.9	0.7
Palestinians	53.1	58.9	55.7	60.6	4.2	5.8	-3.1	4.9
5. Public-services employees[b,c,g]	811.1	835.9	850.0	883.9	30.0	24.8	14.1	33.9
6. Business-sector employees[b,c,g]	2,170.2	2,265.9	2,266.9	2,335.9	97.6	95.7	1.0	69.0
7. Number of unemployed[b,c,g]	214.0	182.3	231.9	208.9	-24.6	-31.7	49.6	-23.0
8. Claims for unemployment benefit	62,824	59,773	88,659	75,862	-6,804	-3,051	28,886	-12,797
of which New claims	13,441	12,314	17,672	14,713	-783	-1,127	5,358	-2,960
9. Vacancies in business sector[e]	92.6	71.4	37.5	54.0	35.1	-21.1	-34.0	16.6
Balance of vacancies filled in business sector[e]	45.8	10.4	-3.7	29.1	-44.3	-35.5	-14.0	32.8
10. Nominal wage per employee post (NIS/month)	7,630	7,922	7,974	8,263	162	292	52	289
Public services	7,279	7,556	7,623	7,878	197	277	66	255
Business sector	7,790	8,089	8,140	8,445	143	298	52	305

[a] The analyses from 2009 are based on the 2008 population census. The data for 2006-08 have been retrospectively adjusted according to changes in the sample.
[b] Labor Force Survey data.
[c] National Accounts data, including data from education and health imputed to business sector.
[d] Including reported and unreported foreign and Palestinian workers. Data on non-Israeli employees are less reliable than those on Israelis, which are based on the Labor Force Survey.
[e] Data from the Employers Survey.
[f] Average monthly wage, in shekels, per employee post.
[g] Israeli and non-Israeli employees.
SOURCE: The Central Bureau of Statistics Labor Force Surveys and National Accounts data; National Insurance Institute data; and Employers Surveys of the Ministry of Industry, Trade and Labor.

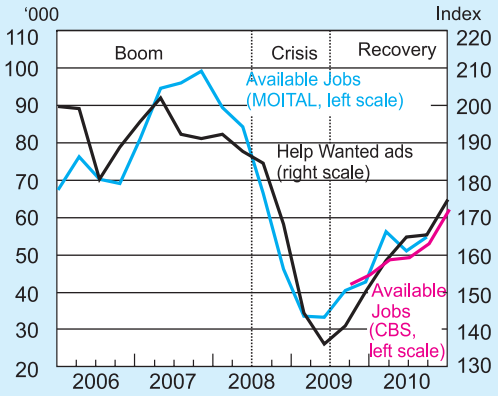
of labor force non-participation in Israel is still high in international terms, and the full implementation of the employment encouragement policy, in contrast to its limited implementation in 2010 (see Section 5.5), is expected to increase the number of participants in coming years and thus raise the theoretical level of full employment.

An international comparison of the growth in GDP with the growth in the number of employees during the year of recovery from the peak of the crisis in the Israeli economy, i.e., in the second quarter of 2009, until the second quarter of 2010 indicates that the Israeli economy enjoyed growth in both employment and GDP during this period. This is in contrast to most Western economies, which experienced a jobless economic recovery. The situation was especially severe in a number of European economies, such as Ireland and Greece, which are experiencing serious fiscal and financial crises. On the other hand, Turkey, Chile, South Korea and Mexico experienced particularly fast growth in GDP with the growth in employment in Turkey and Chile even greater than that in Israel. The growth in employment in Israel during the relevant period is particularly notable against the background of the relatively moderate effect of the crisis on employment in Israel during 2008 and 2009, and in comparison with the average growth of employment and GDP during the last decade. However, as about 40 percent of the growth in employment during this period was in part-time jobs, which produce lower output, Israel's ratio of the increase in the number of employees to the increase in GDP is high relative to the rest of the OECD countries.

2. THE DEMAND FOR LABOR

There has been an uninterrupted recovery in the demand for new workers since late 2009.

Figure 5.2
Demand for Workers: Vacancies, 2006-10



SOURCE:Central Bureau of Statistics, Ministry of Industry, Trade and Labor, Employers Surveys.

The demand for labor increased during 2010, continuing the recovery that began in mid-2009. The recovery followed the crisis that erupted in late 2008 and was accompanied by a sharp drop in the demand for workers. The number of job vacancies in the business sector, which represents the demand for new workers in this sector, reached about 55,000, which indicates the recovery in demand. It is important to mention that in parallel to the growth in demand for new workers, total employment grew and therefore total demand for workers, both veteran and new, increased. However, the number of vacancies is still lower than its pre-crisis level. The decline and partial recovery in the demand for workers is also reflected in the Manpower Company's index of advertised vacancies. Therefore, as in previous business cycles, the demand for workers has been the main driving force in the labor market in recent years: demand for labor fell sharply in late 2008, following

a period of prosperity, and partially recovered starting in the second half of 2009 and during the course of 2010.

The increase in the demand for labor can be attributed to a recovery in exports and private consumption, as well as an upsurge in activity in the construction industry, which created a demand for workers both in the industry itself and among the producers of its inputs. The increase in exports encompassed both manufacturing exports and foreign tourist services, which recovered this year. It is assumed that the fall in the cost of investment in imported capital goods, due to the fall in their prices and the low rate of interest during the last two years, has contributed to the increase in the demand for workers by increasing the potential productivity of labor.

An examination of the breakdown of the demand for labor in the business sector by industry (Table 5.3) indicates that about one-quarter of total vacant posts (about 13,000) were in business services and there were about 6,000 vacant posts in each of the construction and accommodation services industries. The ratio of vacant posts to employee posts in the business services industry indicates that the increase in demand in this industry is not an outlier relative to the size of the industry. This is not the case

Table 5.3
Job Vacancies in the Business Sector, 2010

	Jobs	Percentage of job vacancies	Ratio of job vacancies to employee posts[b]	Rate of skilled workers in sector[c]
	`000	Percent		
Total	53.7	100.0	n/a[d]	n/a[d]
Business sector[b]	45.6	84.9	n/a[d]	n/a[d]
Of which: Manufacturing	1.7	2.31	2.0	0.49
Electricity, water	0.5	1.0	3.1	0.59
Construction	5.8	10.8	4.0	0.27
Trade	7.8	14.6	1.9	0.37
Hotels and catering services	5.7	10.6	3.5	0.35
Transport, communications, etc.	4.1	7.7	2.4	0.42
Banking and finance	1.7	3.1	1.7	0.68
Business services	12.9	23.9	2.4	0.72

[a] The survey does not cover businesses with fewer than 5 employees, the public administration, elementary or high school educational institutions, or the agriculture sector.

[b] Average monthly employee posts in 2010 according to National Insurance Institution reports.

[c] Thirteen years of education or more in 2008.

[d] The ratio of job vacancies to employee posts, and the rate of employees with post-secondary school education cannot be calculated for these categories. In addition, data on vacancies in public services, such as health and education, were omitted.

SOURCE: Central Bureau of Statistics, Job vacancies surveys, wage statistics (2009).

in the construction and accommodation services industries, which recovered rapidly from the previous year's crisis. The growth in the number of job vacancies in these industries accompanied their growth in employment and employee posts (Tables 5.5 and 5.6). Therefore, total demand for workers, both new and veteran, increased and did not simply involve the replacement of veteran workers with new ones. The increase in the ratio of vacant posts to the number of unemployed (Figure 5.8) is additional evidence of the growing pressure in the labor market, a result of the increase in the demand for labor.

The growth in the demand for new workers was concentrated in industries that are intensive in unskilled labor.

The ratio of demand to the size of the industry was higher in industries intensive in un-skilled workers (with less than 13 years of schooling), such as construction, accommodation services and transportation and storage and was lower in industries intensive in skilled workers, such as manufacturing, electricity, water, and finance. An exception is the business services industry which is intensive in highly educated workers and in which the demand for new workers was consistent with the industry's size.

3. THE SUPPLY OF LABOR: THE WORKING AGE POPULATION AND THE CIVILIAN LABOR FORCE

Labor force participation rate rose, particularly among women.

The recovery in the demand for labor was accompanied by a rapid increase of more than 100,000 in the workforce of Israeli workers. The participation rate in the workforce, which reached 57.4 percent this year, is the highest in Israel's history. This is a result of the cumulative increase of about one and a half percent during the last five years. The rate of participation among women rose by about one-half of a percentage point in 2010, reaching 52.7 percent and thus the cumulative increase during the last decade is more than 4 percentage points. It can be assumed that the increase in the government budget for daycare centers during the last five years has encouraged some young mothers to enter the workforce (for a description of the government's budget, see Table 5.9). The participation rate among men also rose this year, essentially a correction of the decline during the previous year as a result of the global crisis. Overall, there was a moderate uptrend in the participation rate among men during the last five years, following a decline during the 1980s and 1990s, and a standstill in the early 2000s. Nevertheless, its 2010 level (62.2 percent) is still low relative to its level in the 1970s (above 65 percent). The increase in the participation rate of women in the workforce can therefore be seen as a structural change that has been ongoing for over 15 years, while the increase in the participation of men during recent years has been a correction of the decline that characterized the Israeli economy in the 1980s and 1990s. A development that particularly stands out is the large increase of five percentage points in the participation rate among the 60–69 age group, which is a result of the changes in the age of retirement (Box 5.1).

There was an increase in the number of non-Israeli workers, particularly Palestinians and illegal workers.

The number of non-Israeli workers in Israel's economy increased moderately during the year, following an increase of about 4,000 in the number of Palestinians working in Israel, which reached 60,000. This followed the increases in the last few years, which

resulted mainly from the Ministry of Defense policy of increasing the number of work permits issued for Palestinian residents of Judea and Samaria to work in Israel[2]. In the context of that policy, the Social-Economic Cabinet decided at the beginning of 2011 on a further increase of 5,250 permits for those workers; and the Israel Association of Contractors and Builders is engaged in activity intended to increase the number of permits issued for Palestinians and other foreign workers significantly. The estimate of the number of foreign workers in Israel has been steady for the last two years, at about 210,000, and the proportion of non-Israeli workers in the business sector in 2010 was about 12 percent, similar to its level in 2008 and 2009.

It should be noted that the above mentioned Central Bureau of Statistics estimate does not include illegal workers who infiltrate across the borders, most of whom come from the Sudan and Eritrea across the border with Egypt. According to the Ministry of the Interior, about 14,000 infiltrators were caught in 2010, and the total number recorded in Israel in January 2011 was about 34,000. It is reasonable to assume that these increase the "official" number of foreign workers in Israel by about 10 percent.[3]

Box 5.1
The Effect of Change in the Retirement Age Law on Participation of the Older Population in the Labor Force

The aging of the population, a result of the steady rise in life expectancy and the decline in the birth rate, is expected to increase the ratio of the size of the population aged 65+ to that of the population aged 25–64. According to the "medium" forecast by the Central Bureau of Statistics (the CBS produces three forecasts–"high", "medium", and "low"), in 2030 Israel will have 3.4 people aged 25–64 for every person over 65, compared with a forecast ratio of 4.2 in 2015 and an actual 4.6 in 2005. These figures show that the dependency ratio will rise even more rapidly in the coming decades.

In view of the rise in life expectancy and the anticipated increase in pension and other expenditure for supporting the older population, the retirement age was gradually raised starting in 2004 from 65 to 67 for men and from 60 to 62 for women, so that since 2009 the retirement age[1] has been 67 for men and

[1] The age at which an employee is entitled to retire from his\her job and to receive a pension, as stated above (see the Retirement Age Law – 2004). The compulsory retirement age (the age at which an employee must retire from his\her job) for men and women was raised from 65 to 67 in 2004-09.

[2] For an analysis of the recovery of Palestinian employment in Israel, see the Annual Report 2009, pages 231-235.

[3] Gilad Nathan, "The State's response to infiltrators and asylum seekers who enter Israel through the border with Egypt", Knesset Information and Research Center (February 7, 2011).

62 for women (Retirement Age Law, 2004).[2] Furthermore, the retirement age for women will be raised gradually to 64, subject to a decision by a public committee scheduled to discuss the matter. In this box, which deals with this law's effect, we present empirical evidence of a behavioral change—postponement of retirement from the labor force—as well as a quantitative estimate of the increase in the participation rates caused by the law among the target population.

The Labor Force Survey indicates that retirement from the labor force of men and women in Israel begins after the age of 50, long before they reach the pension eligibility age. Achdut and Gharrah (2008)[3] show that the tendency not to participate in the labor force becomes statistically significant a number of years before the retirement age—at age 58—59 among women and at age 62–63 among men, and becomes stronger at a later age. The authors assert that the decline in the participation of people aged 50 or more in the workforce is due to a poorer state of health, among other things. According to the estimates presented in their study, the decrease in participation due to a decline in the health status amounts to 6.2 percentage points among men aged 50–64 and 13.8 percentage points among women aged 50–64. The changes over time in the participation rates of the older population are not only due to health considerations but also due to factors such as the spouse's retirement decision and early retirement arrangements. A decline in demand for older workers[4] can also explain the drop in participation in the labor force.

Given the retirement trends among older people and the change in the Retirement Age Law, it is important to examine whether the rise in the retirement age delayed retirement from the labor force, and if so, to what degree. The analysis in this box focuses on the non-ultra-Orthodox Jewish population, which is the main group participating in the labor force (particularly among the older population). The Arab population and the ultra-Orthodox are not included in the analysis, due to low participation in the labor force, which greatly reduces the analytical possibilities for this population.[5]

As Figure 1 implies, in the years following the change in the Retirement Age Law, the labor force participation rate of both men and women, with or without higher education, rose sharply, beyond the general increase in recent years, most of which reflects the increase in women's participation rate. This increase in participation is particularly prominent in the age groups directly affected by the change in the Law

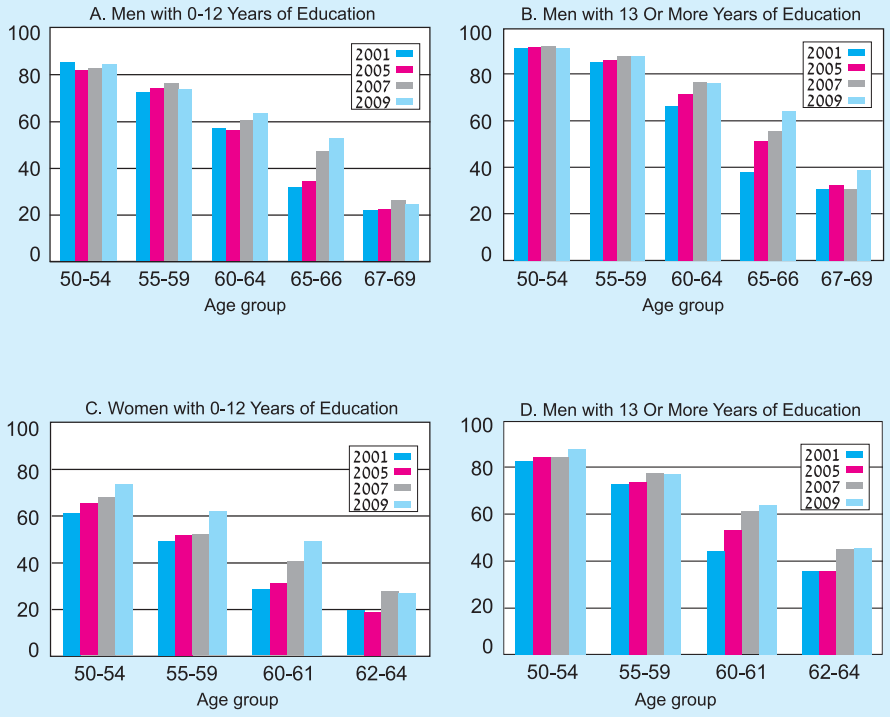
[2] In practice, the retirement age was raised by four months each year, thereby increasing the retirement age by two years over a six-year period.

[3] L. Achdut and R. Gharrah (2008), "Work and Retirement Among Israelis Aged 50," Social Security Journal 76 (March 2008).

[4] Due to a preference for younger workers because their salaries are lower than those of long-standing workers, and to an alleged decline in output which is sometimes assumed among older workers.

[5] The participation of Israeli Arabs in the labor force was discussed in E. Yashiv and N. Kasir, "Israeli Arabs: Patterns of Labor Force Participation," Bank of Israel Research Department Discussion Paper no. 2009.11. Box 5.2 in this chapter relates to the employment of the ultra-Orthodox.

Figure 1
Rate of Participation in the Labor Force of Non-Ultra-Orthodox Jews in Selected Years
(percent)



SOURCE: Based on Central Bureau of Statistics data.

(those whom the Law was designed to retain in the labor force: men aged 65–66 and women aged 60–61). This finding implies a direct connection between the change in the Law and changing patterns of participation. Participation also rose prominently among even older people: men aged 67–69 and women aged 62–64.

The effect of raising the retirement age on the participation by older workers in the labor force was examined through an empirical analysis that used logistic regression to estimate the probability of participating in the labor force, based on data for individuals from the Labor Force Survey. The regression was estimated separately for non-ultra-Orthodox Jewish men and women in the relevant age group, 50–69 for men and 50–64 for women, according to data for 2001–09.[6] These years represent the period starting before the change in the Retirement Age Law, up until its full implementation.

[6] In 2001, the Central Bureau of Statistics changed its weighting method to derive estimates for the real population in the Labor Force Surveys. Therefore, in order to maintain consistency in definitions, the analysis begins in that year.

The changes in the participation rate were estimated for four age groups for men: 50–59 (the base group), 60–64, 65–66, and 67–69 and four age groups for women: 50–54 (the base group), 55-59, 60–61, and 62–64. Dummy variables for the years were also introduced into the regression in order to capture the general long-term trends affecting the rates of participation. In order to test the effect of the Law, variables for the interaction between age groups and years were added to the regression. Other independent variables in the regression are family status, level of education, employment status of the spouse, and the unemployment rate in the district in which an individual resides, as a measure of difficulty in finding employment and of the business cycle.[7] According to the results of the logistic regression, the chance of participating in the labor force decreases with age, but in the years following the change in the Retirement Age Law, the probability to participate in the labor force increased. Among the groups directly affected by the Law, the increase in this probability was particularly steep and significant.

In order to facilitate the interpretation of the coefficients of the interaction variables, which are the core of the analysis of the effect of the Retirement Age Law on participation by older people, we also estimated the same regressions using OLS method.[8] The advantage of estimation using the OLS method is that the interaction variables' coefficients show the difference in percentage points between the participation rates of each age group in every year and those of the base age group (men aged 50–59 and women aged 50–54) in the base year (2001). Figure 2 displays the interaction coefficients as estimated for all the age groups and all the years in the sample. The change in percentage points in the participation rate of the group, compared with that of the base group in 2001, can be seen on the vertical axis, given that all the other factors controlled by the regression remain unchanged. The results of the regressions support the statistical data displayed in Figure 1, from which it can be concluded that the change in the Retirement Age Law indeed had a considerable impact on the decisions by men and women in the relevant age groups concerning their participation in the labor force. As expected, the interaction coefficients in the years preceding the implementation of the Law are generally not statistically significant, but the impact of the Law was strong and significant for men starting in 2005, and for women starting in 2006.

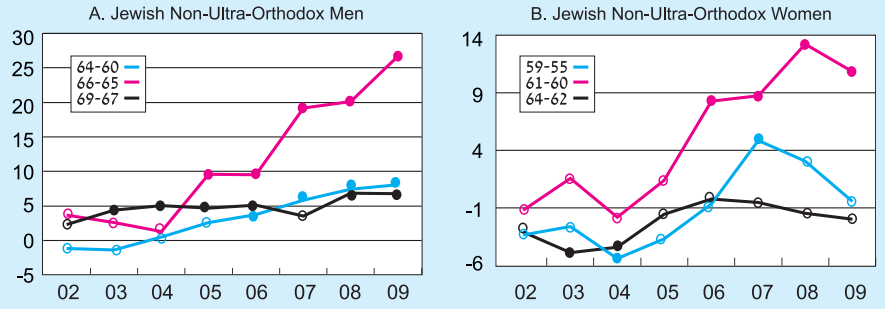
[7] The quarterly unemployment rates were calculated for the population aged 25+ in the districts of Jerusalem, the North, Haifa, the Central Region, Tel Aviv, and the South separately for women and for men. Due to the small size of the first and the absence of the second from the sample in some of the years, the Judea and Samaria and Gaza districts were excluded from the sample. Each individual was then assigned with the appropriate unemployment rate according to gender, residential district, and the quarter in which he was surveyed.

[8] This method is imprecise in estimating regression with a binary dependent variable, but the inference is clearer. Furthermore, the results we obtained from OLS regression are consistent with the results of Logit regression and the descriptive statistics.

Because all the coefficients of the interaction variables show the change in comparison with the same base group, the changes over time in the participation rates of each age group are reflected in the differences between the coefficients. It can therefore be concluded that the participation rate of men aged 65–66 rose by 17.1 percentage points between the beginning of the process until its full implementation (2005–09), given that all of the other factors controlled by the regression remain unchanged. The participation rates of the other groups were also affected: the participation rate of men aged 60–64 rose by 5.5 percentage points in 2005–09, and that of men aged 67–69 rose by 2.1 percentage points, given that all of other factors remain unchanged. Among women, the participation rate of those aged 60–61 rose by 9.4 percentage points in 2005–09, and that of women aged 62–64 rose by 3.3 percentage points, given that all of the other factors remain unchanged. The change in the Law had no effect on the participation rate of women aged 55–59 (the change was very small and not statistically significant).

According to the estimation results displayed in Figure 2, the strongest rise in the participation rate in the years following the Law was in the age groups directly affected by the Law – men aged 65–66 and women aged 60–61. The estimation results clearly support the hypothesis that raising the retirement age had a strong impact on the behavior of the relevant population groups,[9] and were consistent with the

Figure 2
The Change in Participation Rates of Certain Age Groups Over Time,[a,b] 2002-09 (percent)



[a] The figure shows the interaction coefficients from the OLS regression. The coefficients that are statistically significant at the 5 percent significance level are shown as dots, and those that are not statistically significant are shown as circles.
[b] The changes in the participation rates are shown for each age group in relation to the base group: men aged 50-59 years, and women 50-54 years.
SOURCE: Based on Central Bureau of Statistics data.

[9] The increase in participation among men was probably influenced also by the raise of the compulsory retirement age from 65 to 67 as well as by the raise of the retirement age, which allowed those who were willing to work also after the age of 65 to do so. However, as for women, the total change in participation explained by the regression reflects the influence of the change of the retirement age, which is still lower than the compulsory retirement age.

magnitude of the changes in participation displayed in Figure 1. An examination of the unemployment rates among these age groups[10] does not indicate an increase in the unemployment rates beyond their cyclical development, a finding indicating that the increase in the participation rate was channeled mainly into employment.

Summary and recommendations

Raising the retirement age is one of the policy instruments used to extend the working life of older workers. It will enable workers to increase their total pension provisions, and make it possible for employers to deal with the future personnel shortage. Changes that took place in recent decades, such as the rise in the quality of life; the lower proportion of poorly educated people, who are inclined to retire relatively early,[11] in the general population;[12] and the shift from physical labor in industry to the service sectors – all these enable older workers to remain active for a longer period. On the other hand, older workers are liable to find it difficult to continue working for reasons related to demand. The demand for older workers is likely to be lower, because these workers are sometimes considered less productive and less up-to-date than younger workers. Furthermore, older workers are also more likely to lose their jobs, and experience more difficulties in finding a new job than younger workers, especially older workers with low education.[13]

[10] These figures are not displayed here, because the groups involved were relatively small, and their unemployment rates are relatively volatile. Nevertheless, it can be concluded that the unemployment trends in these age groups were similar to the trends in younger age groups.

[11] For example, see R. Klinov, "The Participation of the Elder Population in the Work Force: Current Situation and Implications for Policy," Manpower Planning Authority, Ministry of Labor and Social Affairs, Discussion Paper No. 10.01, Jerusalem 2001, The Manpower Planning Authority, Ministry of Industry, Trade and Labor, Jerusalem, August, 2001; M. Dahan (2004), "Why Did Male Rates of Labor Force Participation Decline in Israel," Discussion Paper no. 19.04, Economic Planning and Research Administration, Ministry of Industry, Trade, and Labor. Jerusalem, November 2004.

[12] In 1980, 70 percent of those aged 50–64 had 0-12 years of schooling. This proportion had fallen to 52 percent by 2008.

[13] According to the 2008 Social Survey, it takes older workers more time on the average to find a job, and many of them believe that their advanced age is the reason they are unable to find work. As a result, some don't bother to seek work.

4. EMPLOYMENT AND WAGES

Employment and wages rose among Israeli employees as a result of the increase in the demand for labor.

During the course of the year, there was rapid growth in labor inputs (by about 3.4 percent), particularly in employment (by about 3 percent), as a result of the increase in the demand for employees. This was accompanied by an increase in the real gross wage per employee post (by about 0.9 percent). Most of the increases in employment were of Israeli workers (about 100,000 individuals) while a minority were Palestinians

and illegal workers who infiltrated, though not other foreign workers. The increase in employment was about evenly divided between men and women. About two-thirds of the increase in the number of Israeli employees occurred in the business sector (see Section 4a below) and about one third in the public services industries, which include the public sector, non-profit organizations and private companies (see Section 4b below).

About half of the growth in employment involved part-time employment, particularly in the case of the self-employed.

About 40,000 of the increase in the number of employees, primarily among men, were hired in part-time jobs (Tables 5.2 and 5.4). It is interesting that the expansion in part-time employment, which primarily involved men, also characterized the years 2003 and 2004, during the recovery from the crisis at the beginning of the decade. Meanwhile, involuntary part-time employment fell, apparently as a result of the return of employees, whose total work hours were cut back during the crisis, to full-time employment. This interpretation is consistent with the drop in the number of salaried workers working in part-time jobs during those years[4]. The increase in the number of part-time employees this year was apparently a reflection of the rapid rise in the number of non-salaried employees, including the self-employed, whose number fell rapidly during the crisis. A similar pattern was observed during the previous crisis, in which non-salaried part-time employees fell in 2002 and then increased sharply during 2003 and 2004 (Table 5.4).

Table 5.4
Part time employees, 2002-10[c]

	'000	Rate of change, (percent)								
	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010
Part time employees	843.7	-2.6	6.2	9.2	4.3	2.1	4.5	1.3	-0.1	5.1
Women	548.7	-0.2	4.4	6.1	6.4	2.5	3.2	2.3	0.5	3.5
Men	294.9	-7.2	10.0	15.2	0.6	1.4	7.0	-0.6	-1.2	8.1
Employees or members of cooperatives	581.6	-2.1	0.6	-4.4	19.8	4.5	0.2	2.4	4.3	-2.2
of whom Involuntary part-time	112.5	26.8	23.9	4.7	-2.6	-10.2	-9.6	-1.2	5.9	-4.7
Other part time workers[b]	262.1	-4.2	23.3	42.7	-21.3	-3.7	16.3	-1.3	-10.8	25.9

[a] Data for 2006-08 were linked according to a sampling change in the 2009 labor force survey.
[b] This includes self-employed, employers, kibbutz members, and those employed at family enterprises for no pay.
SOURCE: Central Bureau of Statistics Labor Force Surveys.

[4] Brender and Gallo showed that Israeli women who worked in a part time job involuntarily (between the years 1991-2004) tended to increase their work status during times of economic growth. Adi Brender and Lior Gallo (2008), "The Response of Voluntary and Involuntary Female Part Time Workers to Changes in Labor Market Conditions", Bank of Israel Discussion Paper No. 2008.8 (August). See also an analysis of part time employment in Box 5.2 in the Bank of Israel report 2005.

a. Employment and wages in the business sector

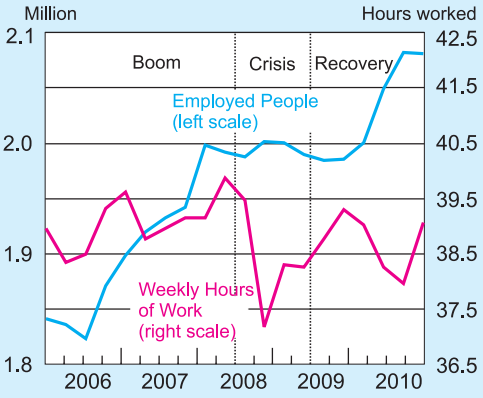
Employment in the business sector grew in 2010 by about 63,000 (2.8 percent) and labor input increased by about 2 percent, as a result of the increased demand for labor in this sector. The changes in the demand for labor in the business sector in recent years, i.e., the period of prosperity until mid-2008, the fall in demand during the crisis in the second half of 2008 and first half of 2009 and the recovery beginning in mid-2009, are clearly reflected in total labor inputs, employee posts and wages in the business sector. Labor inputs in the business sector rose during the period of prosperity, fell during the crisis, and began to recover in mid-2009 (Figure 5.3).

Figure 5.3
Labor Input in the Business Sector, 2006-10

SOURCE: Central Bureau of Statistics Labor Force Surveys.

There was uninterrupted growth in labor input against a background of flexibility in hours per employed worker.

Figure 5.4
The Number of Employees and Hours Worked per Employee in the Business Sector, 2006-10



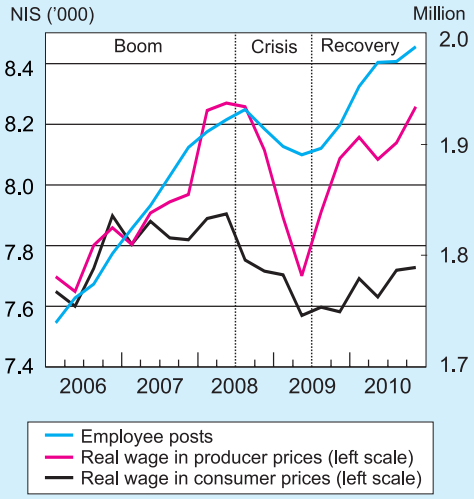
SOURCE: Central Bureau of Statistics Labor Force Surveys.

An interesting dynamic can be seen in the changes in the components of labor input, i.e., the number of employed people and weekly work hours per employed person (Figure 5.4): The years of prosperity were characterized by a rapid increase in the number of employees and in the moderate growth in number of work hours until the beginning of 2008 while the crisis was characterized by a sharp drop in the number of work hours per employee in late 2008 and in the static number of employees during the years 2008 and 2009. The recovery in the demand for labor in the second half of 2009 was first manifested in the growth in average number of work hours per employed persons; only afterward, during most of 2010, did the number of employees grow at a rapid pace, accompanied by volatility in the number of hours per employed person. Despite this volatility, total labor inputs grew during 2010 (Figure 5.3), as the demand for labor in the business sector recovered. The changes in work hours per employed person, i.e., the decline during the crisis and the volatility during the recovery, indicate the flexibility of the labor market, which in our estimation reduced the effect of the crisis on employment in the business sector.

As a result of the increase in the demand for labor, the number of employee posts grew, as did the real wage from the employer's point of view.

The changes in the demand for labor can also be seen in employee posts and wage per employee post in the business sector. Thus, the period of prosperity until mid-2008 is characterized by the parallel increases in number of employee posts and the real wage deflated by producer prices (business sector output prices). The crisis during the second half of 2008 and the first half of 2009, which was reflected in the decline of both indicators, and the subsequent recovery in the demand for labor, which began in the second half of 2009, can be seen in the renewed rise in the number of salaried positions and the increase in the real wage in producer prices. Real wages deflated by producers prices almost reached their pre-crisis level in mid-2010 despite the rapid increase in the number of part-time employees. Therefore, it can be assumed that the real wage in producer prices per work hour rose this year at an even faster rate[5]. In any case, the parallel changes in the number of employee posts and the real wage in producer prices are consistent with the expansion in the demand for labor during the last 18 months.

Figure 5.5
Employee posts and real wages from the perspective of producers and consumers, 2006-10



SOURCE: Central Bureau of Statistics based on National Insurance Institute reports and National Accounts.

The real wage from the worker's point of view has not yet fully recovered from the crisis.

In contrast, from the worker's viewpoint, the gross real wage deflated by consumer prices eroded significantly as a result of the increase in prices during the crisis in late 2008 and early 2009 and partially recovered during 2010, following the rise in nominal wages and despite the increase in the CPI. The gross real wage has not yet reached its level of early 2008, prior to the crisis; the erosion of the real wage in the business sector during the period 2008–10 was offset, at least partially, by the reduction in tax rates on labor income (see Box 6.1).

The employment of Israelis in the construction industry grew rapidly, without any parallel increase in the real wage.

In 2010, there was growth in both employment, as reflected in the number of employees and the number of employee posts, and in the real wage (in consumer prices) in most industries, which was a result of the recovery (Tables 5.5 and 5.6). In the construction industry, whose activity grew rapidly as a result of the increase in real estate prices during the last two years, there was a rapid increase in the number of employees (of about 16,000 or 7.6 percent) to about 220,000. The number of Israelis in the industry grew by about 14,000, which was an exceptionally large increase and accounted for more than one-fifth of the total increase in the employment of Israelis in the business sector. Since there was no significant increase in real wages in the industry, the growth in employment is consistent with easy entry into the industry

[5] The statistics on wages and salaried positions do not differentiate between full and part-time jobs.

Table 5.5
Employment by Industry,[a] 2006-10

	Employment (Thousands)					Rates of change			
	2006	2007	2008	2009	2010	2007	2008	2009	2010
Total business sector[b]	2,072.6	2,170.2	2,265.9	2,266.9	2,335.9	4.7	4.4	0.0	3.0
Foreign Workers	178.3	191.2	209.3	218.2	218.9	7.2	9.5	4.2	0.3
Palestinian Workers	48.4	52.6	58.4	55.2	60.1	8.7	10.9	-5.4	8.9
Construction	189.6	208.1	214.4	207.9	224.1	9.7	3.0	-3.0	7.8
of which: Israelis	135.6	151.5	151.9	143.6	157.4	11.7	0.3	-5.5	9.6
Manufacturing	421.4	440.9	452.1	427.3	428.0	4.6	2.5	-5.5	0.2
Commerce and vehicle repairs	357.1	380.0	402.5	393.4	407.2	6.4	5.9	-2.2	3.5
Hotels and catering services	138.3	138.6	149.2	150.3	156.2	0.2	7.6	0.8	3.9
Banking, insurance, and finance	90.7	98.5	102.9	109.8	116.1	8.6	4.5	6.7	5.7
Business services	402.3	428.8	449.3	462.9	479.8	6.6	4.8	3.0	3.7
Transport, storage, and communications	176.4	176.2	179.8	187.1	194.9	-0.1	2.0	4.1	4.2
Public services	781.1	811.1	835.9	850.0	883.9	3.8	3.1	1.7	4.0

[a] Including reported and unreported foreign workers and Palestinian. Data on non-Isreali employees are less reliable than those on Israelis, which are based on the Labor Force Survey.
[b] Figures may not add due to the exclusion of "miscellaneous".
SOURCE: Based on the Central Bureau of Statistics Labor Force Surveys.

for Israelis (as explained in chapter 2 on the construction industry). The number of employees in the business services industry grew by about 16,000 and contributed about one-quarter of the increase in the employment of Israelis in the business sector. This was accompanied by a static real wage in the construction industry. The number of employed persons in the business services industry increased by 16,000 and contributed about a quarter of the increase in employment of Israelis in the public sector, which also saw a real salary freeze. In view of the size of this industry, which numbers about 400,000 employees, the rate of increase in employment was not out of the ordinary.

The effect of the business cycle was particularly noticeable in manufacturing, commerce, and the hotel industry. Thus, employment and the real wage in these industries fell during 2008 and 2009 and began to recover in 2010, in parallel to the increase in production and manufacturing exports, construction inputs, local consumption and incoming tourism. There was a particularly rapid increase in employment in the traditional/mixed manufacturing industries although the level of wages and employment in manufacturing as a whole was still lower than its pre-crisis levels (in 2008).

The effect of the business cycle on employment in the financial industry was not large and it continued to increase at a rapid pace of about 6 percent, as in previous years. Nonetheless, wages in the industry clearly reacted to the business cycle, with an

increase of 4.8 percent in 2010, following a precipitous drop in 2009 due to the global crisis. The only industry in which real wages declined in 2010 was the transportation and storage industry, in which employment expanded rapidly during the last two years.

Table 5.6
Number of Employee Posts and Change in Real Wage per Employee Post,[a,b] 2007-10

	Employee posts					Real wage per employee post				
	Thousands	Rate of change (%)				NIS/month	Rate of change (%)			
	2010	2007	2008	2009	2010	2010	2007	2008	2009	2010
Total	3,035.8	5.0	3.9	0.3	3.7	7,200	1.6	-0.7	-2.6	0.9
Israelis	2,919.5	4.8	3.3	0.2	3.7	7,345	1.8	-0.3	-2.5	0.9
Business sector, total	2,061.2	5.3	4.0	-0.9	3.9	7,353	1.4	-0.7	-2.6	1.0
Israelis	1,973.4	5.1	3.3	-1.0	3.8	7,498	1.4	-0.2	-2.6	1.1
Agriculture, total	83.7	4.9	6.4	-1.7	2.6	4,429	1.9	-2.7	-0.3	0.8
Israelis	53.4	2.5	-1.0	2.1	4.6	4,879	0.8	1.0	0.0	0.8
Manufacturing–Israelis	360.7	4.5	2.3	-2.6	2.5	10,117	2.5	-1.8	-2.2	1.7
Electricity and water–Israelis	17.4	-1.8	-3.2	1.5	3.7	18,623	-0.8	3.0	-0.3	1.4
Construction, total	161.4	5.9	0.7	-0.6	3.1	6,031	1.8	1.1	-2.0	0.6
Israelis	135.5	4.7	-1.4	-1.2	3.5	6,452	2.4	2.5	-1.9	0.3
Financial services	98.6	6.0	5.3	5.4	4.8	13,220	-0.9	1.1	-12.9	2.4
Business services	525.1	5.0	3.8	-3.1	4.7	7,668	3.6	1.6	-2.6	0.8
Commerce and repairs	407.5	6.1	4.3	-0.8	3.7	6,414	2.1	-1.1	-2.5	1.5
Transport, storage and communications	169.9	5.6	5.0	0.6	4.4	8,306	0.0	-2.4	1.2	-3.4
Hotel and catering services, total	162.3	10.5	3.4	1.7	3.3	3,511	1.8	-1.3	-0.9	1.7
Public services	974.6	4.3	3.7	2.9	3.4	6,882	2.2	-0.7	-2.4	0.6

[a] Real monthly wage per employee post according to National Insurance Institute reports. Includes reported Palestinian and foreign workers, unless otherwise indicated.
[b] The sectors are defined according to industry and not employers' classification.
[c] At constant prices. Base, 2004
SOURCE: Central Bureau of Statistics.

b. Employment and wages in the public services industries

The real wage in the government sector grew as the recovery continued and was accompanied by continued growth in employment.

Employment in the public services industries (education, health, community services, etc.) grew in 2010 by about 34,000 (about 3 percent), which was similar to its increase in 2007 and 2008 but exceeded the increase in 2009. Real wages in these industries grew by 0.7 percent (Table 5.6). The public services industries includes the government sector, public and private non-profit organizations, as well as private companies that provide education, health and other similar types of services, often with public funding. Therefore, we examine their employment and wages separately for they operate within different frameworks and have different sources of funding.

The number of employee posts in the government sector and its components (the central government, the local authorities and the public non-profit organizations)

continued to grow in 2010 at a rate of about 3 percent, similar to previous years, while the increase in the real wage this year compensated for the erosion in 2009. Nonetheless, the average wage per employee post in the local authorities and public non-profit organizations did not rise at the same rate that it declined in the previous year, which was apparently due in part to the recruitment of new workers at low wages. These changes are consistent with the countercyclical pattern of employment in the public sector and a cyclical wage as in other OECD countries (Table 5.7).[6]

Table 5.7
Number of Employee Posts and the Average Wage in the Public Services, 2007-10

	Employee posts				Wage per Employee Post			
	'000	Rate of change (%)			NIS/Month	Rate of change (%)		
	2010	2008	2009	2010	2010	2008	2009	2010
Total public services	946.1	3.4	2.7	3.4	8,046	-0.6	-2.3	0.7
Public sector	521.9	2.7	3.1	2.8	8,995	0.1	-1.8	1.8
of which: Central government[a]	199.5	2.0	2.2	3.0	11,549	0.4	-1.4	2.6
Local authorities	120.4	3.4	3.5	2.8	7,885	0.1	-3.6	1.7
Public nonprofit organizations	202.0	3.1	3.6	2.6	7,135	0.0	-0.9	0.5
Companies	232.3	4.0	4.5	4.1	8,352	-0.4	-4.1	-0.9
of which Government corporations[b]	38.4	2.3	3.1	0.6	13,143	-0.7	1.9	2.6
Private companies	191.4	4.1	4.8	4.4	7,420	-1.5	-7.2	-1.6
of which: Education, health, sanitation etc.	121.6	4.1	9.5	7.6	4,377	0.5	-2.0	-2.6
Households	24.7	6.0	-6.2	5.2	3,018	0.1	0.4	-4.2
Private nonprofit organizations	166.8	4.4	0.6	4.3	5,379	-1.0	-1.2	-0.3

[a] Including National Insurance Institute and other administrative sources.
[b] Most corporations classified as government corporations are government hospitals.
SOURCE: Central Bureau of Statistics

In late 2010, the Ministry of Finance and the Histadrut national union agreed in principle on a new wage agreement for workers in the public sector. The agreement that is taking shape provides a wage increase of 6.25 percent in three stages in each January during the period 2011-13. This is in addition to the one-time grant of NIS 2,000 and at a later stage a planned increase of one percent in the pension deduction of employees and employers and a wage increase for working mothers. The total budget cost of the agreement's full implementation is estimated at about NIS 6.5 billion per year. Another major agreement was signed in late December between the Ministry of Finance, the Ministry of Education and the teachers union, as part of the reform in teachers' employment conditions. According to the agreement, about 40,000 high-

[6] Philip R. Lane, "The cyclical behavior of fiscal policy: evidence from the OECD", Journal of Public Economics, Volume 87, Issue 12, December 2003, pp. 2661-2675.

school teachers will work 16 additional hours a week in the schools and their wages will increase gradually by about 50 percent. The total cost of the agreement is NIS 2.5 billion per year. In addition, agreements were signed in late 2010 and early 2011 with the state attorneys, port workers and employees of the Foreign Ministry and the Broadcasting Authority. The total budget cost of wage agreements during this period was about NIS 9 billion.

The real wage continued to fall among private companies and private non-profit organizations in the public services sector.

An examination of the trend in employment (employee posts) and wages in private companies in the public services (Table 5.7) also indicates a rapid increase of employment during 2008-10, primarily in health, welfare and nursing care, in which wages are low. The average real wage in these companies has eroded by more than 10 percent in the last three years, with a particularly large decline of more than 7 percent in 2009. In contrast to private companies, private non-profit organizations experienced renewed growth in the number of employee posts in 2010. This followed the standstill in 2009, which presumably was the result of a decrease in donations to non-profit organizations, both from Israel and abroad.[7] The wages in these non-profit organizations has eroded at a moderate rate in recent years. If this pattern is characteristic of business cycles in general, then the transfer of public services from the government ministries and local authorities to non-profit organizations apparently increases the cyclicity in public services.

5. UNEMPLOYMENT

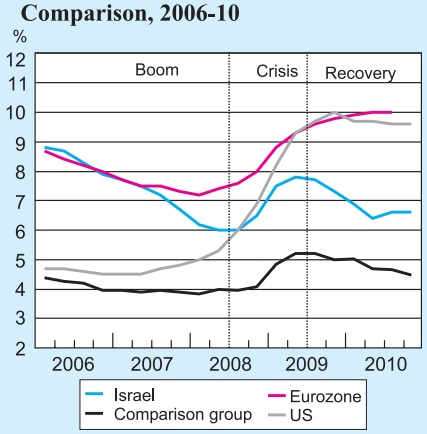
Total unemployment fell despite the increase in the labor force.

The rapid growth in the demand for labor led to a significant drop in unemployment rate to 6.7 percent in 2010, which represents a decline of about 23,000. This was in spite of the increase in participation rate by 0.4 percentage points, which represents about 75,000 individuals. A rapid decline of about 22,000 was recorded in the number of unemployed who had worked in the previous year, though the number of unemployed who had not worked in the year did not decline significantly. This development can be explained as a rapid return to employment by individuals who were laid off during the last crisis. This group was characterized by a relatively high proportion of Jewish men who live in the Tel Aviv and the Central districts,[8] who are well integrated within the labor market and were able to again find jobs with the passing of the crisis. This is in contrast to the hardcore unemployed who have not worked for a long period and who require government intervention in order to find work. The quick return to a low level of unemployment was therefore the result of the relatively rapid recovery from the last crisis and the flexibility that has characterized the labor market during the last two years.

[7] Donations and estates transferred from abroad to corporations, most of them non-profit organizations, grew during 2005-8 from $1.5 billion to $2.5 billion per year and remained unchanged during 2009-10. Source: Reports of the banks and the non-profit organizations and processing by the Division for Information and Statistics at the Bank of Israel (Aggregation S461).

[8] Nonetheless, it should be mentioned that the rate of unemployment among individuals with higher education grew only moderately relative to individuals with a high school education or less.

Figure 5.6
Unemployment Rates, an International Comparison, 2006-10



SOURCE: OECD and Central Bureau of Statistics.

The dynamics of prosperity until mid-2008, a crisis from mid-2008 until mid-2009, and a recovery since then can also be seen in the rate of unemployment, which fell from high levels of around 9 percent in mid-decade to about 6 percent at the beginning of 2008, then rose rapidly during the crisis to almost 8 percent and finally fell again, with the recovery in the demand for labor to about 6.6 percent. However, the fall in the rate of unemployment was halted during the second quarter of 2010 despite the increase in the number of vacant posts during the year (Figure 5.2).

The rate of unemployment in Israel is lower than in the developed countries, though it is higher than in countries that did not experience a fiscal and financial crisis.

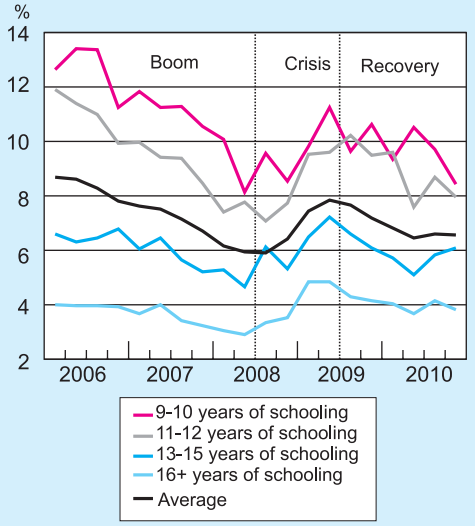
In contrast to Israel, most of the developed countries, such as the US and the eurozone countries, did not benefit from a quick recovery in the demand for labor, and their level of unemployment remained around 9 percent. In some of the reference group countries—open economies that did not suffer from a serious financial crisis during the last global crisis, such as Poland, New Zealand and Canada—the unemployment rate rose during the crisis but did not fall during the recovery and in Korea the rate of unemployment remained at 3-4 percent during the whole crisis. Nonetheless, the abovementioned dynamic in the Israeli labor market, i.e., boom, crisis and recovery, is not unique and was also observed in two other reference group countries: Chile and Australia.

One of the interesting developments during the exit from the last crisis was the especially rapid decline in unemployment among women. Thus, their rate of unemployment fell during the last two years, for the first time in the history of Israel, to below that for men, i.e., 6.8 percent for men versus 6.5 percent for women (Table 5.1, line 14), a particularly noticeable reversal considering the increase in the participation rate of women in recent years. The rapid decline in unemployment among women during the recovery is a result of the low sensitivity of unemployment among women to the business cycle relative to men, which is explained by the high proportion of women employed in public services, where the influence of the business cycle is small relative to the business sector. This can be observed in other developed economies, including the US, Britain and Germany. In any case, the relatively high rate of cyclical unemployment among men is evidence that the Israeli economy is still not in a situation of full employment.

The rate of unemployment among unskilled workers began to drop in 2010 and the decline in the rate of unemployment among skilled workers, which began in 2009, continued.

An analysis of the rate of unemployment according to level of education shows that the rate of unemployment at the beginning of the global crisis, during the second half of 2008, increased both among those with a post high school education (13-15 and 16+ years of schooling) and among those with a full or partial high school education (9-10 and 11-12 years of schooling). However, the first to benefit from the recovery

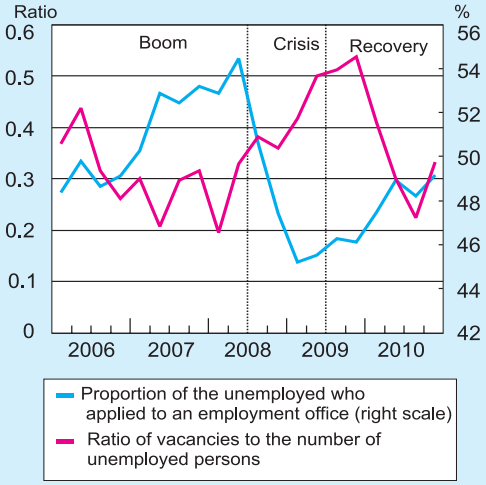
Figure 5.7
Unemployment Rates, by Educational Level, 2006-110



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

Figure 5.8
The Ratio of Vacancies to the Number of Unemployed Persons, and the Proportion of the Unemployed who Applied to an Employment Office, 2006-10

The ratio of vacancies to total unemployed grew in 2010 though it is still lower than its pre-crisis level.



SOURCE: Central Bureau of Statistics Labor Force Surveys and the Ministry of Industry, Trade and Labor Employers Survey.

during the second half of 2009 were those with a post-secondary education, while unemployment among those with only a high school education remained high (at about 10 percent) during all of 2009 and only started to fall during 2010.

A similar phenomenon was observed during the exit from the preceding crisis: the rate of unemployment among those with a post-secondary education started to decline in 2003, while among those with lower levels of education the downward trend started only in 2004-5 and continued during 2006-8. The difference can be explained by the general human capital possessed by those with a post-secondary education, which enables them to adjust to changes in the labor market during crises.[9] It can be surmised that should the period of prosperity in Israel continue, and there is no increase in the supply of non-Israeli workers - who compete with Israelis lacking an academic education - then the rate of unemployment among the latter can be expected to continue falling during 2011.

The ratio of the number of vacant posts to the number of unemployed persons (Figure 5.8) serves as an indicator of pressure in the labor market. This indicator rose during the recovery, which began during the second half of 2009, after plummeting in the second half of 2008 due to the global crisis. Nonetheless, its current level, i.e., one vacant post for every

[9] Moscarini and Vella found that in the US those with an academic education tend to change profession more frequently than those with a high school education during a crisis, but not during periods of prosperity. This pattern can be explained by the general human capital that an academic education provides. See Guiseppe, Moscarini and Vella, Francis, Occupational Mobility and the Business Cycle (February 2008), NBER Working Paper No. W13819.

three unemployed, is similar to that in 2006 and is still lower than the full employment level that prevailed on the eve of the crisis in 2007 and early 2008, i.e., one available job for every two unemployed.

The fall in the demand for labor in the business sector during the crisis could also be seen in the growth in the number of unemployed who registered with the Employment Service. It can be assumed that these were primarily "freshly" laid-off individuals who were eligible for unemployment benefits. They were also, to some extent, non-eligible individuals who were interested in information on jobs, which had become less available in the business sector. It should be noted that the limited relaxation in the conditions of eligibility for unemployment benefits,[10] which was in force from June 2009 until February 2010, did not prevent the drop in the rate of unemployment, which began when the program started, more than six months after the start of the crisis and in parallel to the turnaround in the business cycle. Thus, the effect of the increase in demand for labor exceeded that of the relaxation in conditions of eligibility for unemployment benefits. It is recommended therefore that consideration be given to a relaxation in the conditions for eligibility and an increase in the level of unemployment benefits, in order to allow the unemployed to invest greater effort and time in finding employment that is appropriate to their skills.

6. GOVERNMENT POLICY AND INSTITUTIONAL CHANGES

The Government has set itself ambitious employment targets for the coming decade.

During 2010, the government restated its policy to expand employment, primarily in the ultra-Orthodox and Arab sectors; however, in practice the year was characterized by limited government activity in the area of employment. In July, the government decided to update the employment targets of its socio-economic agenda (Government Decision No. 1994) and thus adopted one of the main recommendations of the Committee for Employment Policy.[11] According to this decision, the government is attempting, within a decade, to increase the rate of employment among the 20-64 age group to 76.5 percent, which is the average among 15 countries that are defined as developed with respect to GDP per capita. In order to achieve these targets, rates of employment among ultra-Orthodox men and Arab women need to be increased by more than 23 and 16 percentage points, respectively (see Table 5.8).

[10] The qualification period was shortened from 12 to 9 months for most laid-off individuals. According to the figures of the National Insurance Institute, about 12,000 unemployed individuals benefited from the relaxation in the conditions for eligibility and the cost of the project was about NIS 100 million.

[11] The Eckstein Committee, Ministry of Industry, Commerce and Employment. The Committee for Examining Employment Policy: Final Report (July 2009), pp. 34-56. Prior to this, Government Decision No. 2162 in August 2007 set an employment target of 71.7 percent for 2010; a government decision in May 2009 pushed off this target until 2013 due to the crisis. It is worth mentioning that the EU established employment targets, including an increase in the rate of employment among the population as a whole from 61 percent in 2000 to 70 percent in 2010, but did not manage to meet them, partly due to the crisis that began in late 2008. EU Presidency, Conclusions: Lisbon European Council (23–24 March 2000), paragraph 30.

Declared employment policy was only partially implemented in 2010.

The Committee reached the conclusion that these ambitious targets can be achieved through, among other things, the implementation of programs such as the negative income tax and Lights to Employment (Wisconsin) (which was cancelled) on a national level, the reduction in the number of non-Israeli workers, the continued expansion of day care, improvements in the activity of the Employment Service and in vocational training and by strict enforcement of labor laws. Some of these steps, such as the increased budget for day care and the implementation of the negative income tax nationwide, were indeed implemented; however, most of the other steps were not. The Lights to Employment program was cancelled in April 2010, the number of foreign workers was not reduced, and the government even increased the number of Palestinian workers during 2010 and decided to continue doing so at the beginning of 2011. Furthermore, labor laws are not well enforced and the number of labor inspectors in Israel is low relative to other countries. Thus, the increase in employment in Israel in 2010 cannot be credited primarily to government employment policy.

The daycare budget has grown by 60 percent in real terms during the last five years.

Nonetheless, the active government employment budget grew by about 20 percent in real terms during the last five years, though its share of the total state budget and of GDP has not increased dramatically. The main increase was in the budget of the women's employment branch, which grew by about 60 percent during this period. It primarily funds nursery schools and is meant to facilitate employment of young mothers.[12] The increase in this budget is consistent with the growth in the participation rate of women in recent years. This connection was depicted for Arab women in a study carried out by Shlosser.[13] However, in the absence of a more detailed study of this issue, it is not possible to quantify the effect of the increased daycare budget in all segments of Israeli society. Another component of the employment budget is devoted to the training of youth, graduates of technological colleges and technicians by the Branch for Vocational Training. However, the Branch's budget, which was cut at the beginning of the decade, remains small.

[12] There are about 67,000 children in day care centers recognized by the Ministry of Industry, Commerce and Employment and about 10,000 are in recognized nursery schools. Eighty percent of these children are subsidized by the Ministry. In addition, the number of children in afternoon care who receive subsidization increased from about 4,000 in 2007–08 to 13,500 in 2009-10. See Eliezer Shwartz and Orli Almagor-Lotan (2010) "Follow-up of the implementation of the government decision regarding the encouragement of the employment of mothers of children aged 0–5 and the regulation of day care centers, nursery schools and afternoon care," the Knesset, Center for Research and Information (July 13).

[13] Shlosser, Analiya (2006), "The effect of providing free nursery school education on the supply of labor by Arab mothers: findings of a natural experiment", Israel Economic Review, 53:3 (September), 517-553. Similarly, Lefebvre and Merrigan found that the subsidization of kindergartens by Quebec, Canada during the late 1990s led to a significant increase in the participation of women in the workforce. See Pierre Lefebvre and Philip Merrigan (2008). "Child-care policy and the labor supply of mothers with young children: a natural experiment from Canada" Journal of Labor Economics, 28:3, pp. 519-548.

Table 5.8
Government expenditure on labor market active policy, 2005-2010[a]
NIS million, 2010 prices

	2005	2006	2007	2008	2009	2010
Total	2,067.4	2,274.8	2,319.4	2,399.8	2,602.9	2,651.8
Day care and pre-nursery subsidy[b]	569.5	674.6	764.7	812.3	870.1	919.5
Professional training[c]	692.9	632.6	646.1	602.7	647.1	726.8
Employment Service	166.0	171.2	158.8	153.9	153.2	165.3
Employment support[c]	249.0	374.4	376.7	408.5	514.2	417.0
of which "Mehalev" program[e]	23.7	170.8	172.0	152.8	131.3	81.4
Earned Income Tax Credit	0.0	0.0	0.0	0.0	76.0	77.6
Grant for discharged soldiers[d]	105.6	99.3	98.0	109.8	106.6	121.2
Employment support for new immigrants	203.5	232.2	177.7	220.0	207.7	202.0
Employment support for handicapped	158.1	161.6	164.9	171.6	177.2	188.5
of which Protected employment[c]	140.4	144.9	147.8	153.2	155.2	169.4
Percentage of GDP	0.31	0.32	0.31	0.32	0.32	0.31
Percentage of budget	0.64	0.70	0.69	0.70	0.73	0.72

[a] Figures were updated compared with those published in Bank of Israel annual reports of previous years. Figures for 2010 are not final.
[b] Not defined by the OECD as active labor market policy.
[c] Excluding designated plans for supporting employment of new immigrants and the handicapped
[d] Grant for discharged soldiers working in a preferred job in an industry considered vital.
[e] From Welfare to Work (Wisconsin).
Source: Based on Ministry of Finance, National Insurance Institute, Ministry of Defense, Central Bureau of Statistics data.

The Bank of Israel is in favor of the nationwide extension of the EITC (negative income tax) program.

In 2009 and early 2010, the earned income tax credit (EITC, or negative income tax) program, which provides grants to low-salaried workers, was implemented in the same areas in which the Lights to Employment (Wisconsin) program had been introduced (i.e., Jerusalem, Ashkelon, Sderot, Hadera, Netanya and Nazareth; see Chapter 8). During the first year of its operation, about 29,000 individuals out of about 64,000 who were eligible (about 45 percent) exercised their rights to a grant, which amounted to about NIS 2,500 shekels per eligible individual on average per year. The negative income tax grant reduced the incidence of poverty among workers by about 4.54 percent during the first year of its operation and there was a reduction in the depth of poverty. In addition, there was evidence of an improvement in the welfare of grant recipients, most of whom belong to groups that do not receive transfer payments.[14]

[14] "The negative income tax: results for the first year of the implementation of the law", the Tax Authority and the National Insurance Institute (June 2010).

At the time of writing, it seems that the negative income tax will only be paid for the period January-April 2010 and not for the rest of the year due to the cancellation of the Lights to Employment program. This decision goes against the declared goal of the government to encourage entry into the labor market and reduces the welfare of low-earning workers. It is also likely to end the process to increase the proportion of eligible individuals exercising their rights in the program. The Bank of Israel recommends that the negative income tax be implemented nationwide, as recommended by the Employment Committee and as determined in the 2011 budget.

In addition to direct government activity, a number of non-profit organizations and community interest companies operate in the area of employment. The largest program in this category is Tevet, a public interest company created in 2005 and jointly funded by Joint Distribution Committee (JDC) and the government. This program focuses on expanding employment among certain target populations, which include immigrants, young people without family support, Arabs, the ultra-Orthodox and the handicapped. In December 2010, it encompassed about 51,000 active participants. Most of the other non-profit organizations active in this area aim at promoting employment among populations whose ability to integrate within the labor market is limited, such as the hardcore unemployed, immigrants from Ethiopia, Arabs, young people in the Periphery, the ultra-Orthodox, the handicapped and even the elderly.

New legislation was passed in 2010 to protect vulnerable groups of workers: security and cleaning workers and women.

During the last two years, a number of changes have been introduced in the labor laws. Thus, in December 2009, Amendment 25 to the Severance Pay Law was introduced. It changed the calculation of the period of employment so as to protect the right to severance pay for workers whose employment was interrupted for less than six months. This amendment was intended to prevent cycles of hiring and firing over short periods, which allows employers to reduce the cost of employment. In January 2011, Amendment 10 to the Law for the Employment of Workers by Manpower Agencies was introduced. It required companies providing cleaning and security services to obtain a license and to deposit a guarantee. The licensing and guarantees, which the Ministry of Industry, Trade and Labor can cancel by means of an administrative decision, are meant to prevent service companies in these sensitive industries from employing workers without their being able to exercise their full legal rights.[15] Two amendments (number 45 and 46) to the Women's Work Law, which were intended to improve the conditions of women in the labor market, involved protection from being laid off for women undergoing fertility treatment and the extension of unpaid maternity leave to 26 weeks.

The year 2010 was characterized by a renewal of institutional arrangements, which had weakened in recent decades. Thus, the Ministry of Industry, Trade and Labor published a number of Extension Orders to expand collective agreements, which require employers to improve working conditions and which formalize the rights of workers. The orders apply to the service industries and non-tradable industries. Thus, it can be assumed that they will improve the conditions of workers while perhaps

[15] Until January 2011, more than 300 companies requested a license to provide security and cleaning services.

increasing prices somewhat in these industries, though without a significant reduction in employment in view of the absence of competing imports.

Orders were issued to expand agreements in the construction industry and the supermarket chains.

Prominent among these agreements is the order to expand the general collective agreement in the construction industry (January 2010) since it updated the industry's minimum wage, which is now higher by NIS 500 than the legal minimum wage, and in addition redefined work hours, pension rights, study funds, vacation days and other benefits. This agreement also applies to Palestinian and foreign workers and if it is indeed enforced in the industry, it will likely reduce the effect of employing non-Israelis on the employment and wages of Israeli workers in the industry. Another order applies to workers in commercial chains with at least two branches. This order formalizes the right of workers to compensation for increases in the cost of living as well as compensation for seniority, pension insurance, holiday pay and appropriate physical conditions on the job. In addition, it regulates work hours on holidays. Apart from the improvement in the working conditions of employees of supermarket chains, this order is likely to also increase the survivability of small businesses in the industry since it does not apply to them. These orders are in addition to those issued in recent years for those employed as security guards (2009) and those dealing with convalescence pay (2008–10) and the issue of employer participation in travel costs (2008–10).

During the year, there was a continued upsurge in union activity, which began in recent years as a result of the crisis, the increased competition between unions and the requirement of employers to negotiate with workers during the initial stages of organization. In March 2010, an amendment was introduced into the Histadrut constitution which allows legal non-Israeli workers to be full members of the Histadrut. This is a significant step for Israeli workers as well since it was intended to support, among other things, the fulfillment of employment conditions for foreign workers according to labor laws that apply to Israelis. This change was manifested in the construction industry, among others, as mentioned above. The Histadrut was also involved in roundtable discussions with the government and employers on the budget.

Concurrently, competition between the different unions—that was spurred by the establishment of "Koach Laovdim—Democratic Workers Organization" in 2007––continued, and intensified after the establishment of the Workers Unionization Division in the Histadrut in 2009, with the continuation of the activity of the Leumit Workers Union. It seems that against the background of this competition the Histadrut and the other organizations increased their efforts to unionize workers and ensure they obtain their rights in full. Thus, for example, the Histadrut and Koach Laovdim struggled over the right to represent the employees of the Open University of Israel, who until then had not been unionized; the first Open University work agreement was not signed until the court ruling that decided in favor of Koach Laovdim. Companies in which unions were formed or in which attempts were made to unionize staff included communication companies (Partner, Hot and Yes), and credit card companies

(Visa-Cal and Isracard). It is interesting to note that a significant share of the new workers committees are in civilian associations and organizations, a sector hitherto not unionized.

Box 5.2
Education and Employment in the Ultra-Orthodox Population

The ultra-Orthodox sector, particularly the male population, is characterized by very low rates of participation in the labor force and low rates of employment. In recent years, government labor policy has focused on increasing the integration in the labor market of populations characterized by low participation rates, among them the ultra-Orthodox. It is interesting, therefore, to examine whether employment patterns of the ultra-Orthodox population have indeed changed. This is a vitally important issue in view of the growth rate of the ultra-Orthodox population, which greatly exceeds that of the non-ultra-Orthodox Jewish population. According to various estimates, the ultra-Orthodox currently constitute 8-10 percent of the population, and their proportion of 25-64 year-olds (the main working age) will reach 17 percent in about twenty years.[1] The growth in the proportion of the ultra-Orthodox, a consequence of the ageing of the overall population and the declining birth rates in other population groups, highlights the importance to the economy of their integration in the labor market.

Several research articles have recently been published on the employment patterns of the ultra-Orthodox population. One of the major findings is how little the rate of employment of ultra-Orthodox males has changed in recent years.[2] Among the social and economic reasons for the low participation rate of ultra-Orthodox men are the lack of education geared to the labor market, the high social status accorded to a "yeshiva student" in ultra-Orthodox society, and the "Torato Umanuto" (Torah is his vocation) arrangement (by virtue of the "Tal Law") that requires an ultra-Orthodox yeshiva student to study at least 45 hours a week in order to be exempt from compulsory military service.[3]

Several policy steps have been adopted in recent years to encourage the employment of the ultra-Orthodox, including indirect measures such as the reduction in child allowances in 2003, and direct programs for encouraging employment. In 2003 the Large Families Law (the "Halpert Law") was revoked,

[1] The Israel Democracy Institute (2010). "Employment in the Ultra-Orthodox Sector", a summary document presented to the Caesarea National Forum for charting national economic policy.

[2] H. Levin and R. HaCohen (2010). "Methods of Identifying and Quantitatively Characterizing the Ultra-Orthodox Sector", Economic Council, Prime Minister's Office.

[3] H. Levin (2009). "The Ultra-Orthodox Sector in Israel: Empowerment Through Participation in the Labor Force", Economic Council, Prime Minister's Office.

and a further cut in allowances was instituted. This blow to the major source of income of ultra-Orthodox families, most of which are large,[4] was intended, among other things, to motivate ultra-Orthodox men to enter the circle of employment. Furthermore, various programs have been introduced in recent years to encourage the integration of the ultra-Orthodox in the labor market by means of professional training and placement, stipends for academic studies, and employment support. These programs are operated mainly by the Ministry of Industry, Trade, and Labor, the Ministry of Public Security, the IDF, and the Higher Education Council, as well as by the JDC by means of Tevet (the Hebrew acronym of "Drive for Employment", the "Fighting Poverty Through Employment" nonprofit initiative jointly owned by the state and the JDC), funded mainly by the government and partly by private bodies. Government expenditure on these projects exceeded NIS 300 million in 2010.[5] Encouraging the ultra-Orthodox to acquire education appropriate to the labor market as well as professional training, is the key to their integration in the world of work.

Rates of employment of the ultra-Orthodox population

Data from the labor force surveys (Figure 1) shows a constant and significant increase in the rate of employment of ultra-Orthodox women over the past decade. As against this, the rate of employment of ultra-Orthodox men, as mentioned, showed no significant changes during this period.

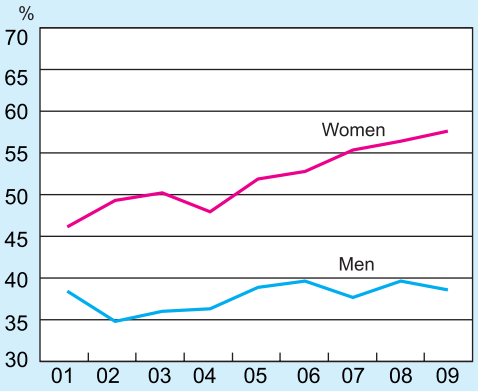
One of the major reasons for the non-participation of ultra-Orthodox men in the labor force is the economic disincentive for doing so, a result of their inappropriate education for the needs of the labor market. As Levin (2009) shows, the disposable income of an ultra-Orthodox family in which only the woman works, is liable to decrease when the man goes out to work (on the assumption that he earns the minimum wage), because of the decrease in the family's non-labor income (for example, stipends for married yeshiva students and economic assistance from charity organizations). Furthermore, various household expenses (such as childcare) increase when both spouses work. A significant change in the employment patterns of ultra-Orthodox men is, therefore, largely dependent on a rise in their earning capacity relative to alternative sources of income outside the labor market. This change could occur through acquiring education or training geared to the labor market, which will potentially raise their salary.

[4] In June 2003 the amount of the basic allocation was reduced as well as the additional allocation for third and fourth children. The allocation for fifth and sixth children was abolished completely.

[5] Of which NIS 150 million was allocated as a subsidy for day-care centers serving the ultra-Orthodox population.

Academic study in the ultra-Orthodox sector

Figure 1
Rates of Employment[a] in the Ultra-Orthodox Population,[b] 2001-09



[a] In the population aged 25-64 years.
[b] The ultra-orthodox population is identified by the last educational institute attended and by the symbols associated with ultra-orthodox communities, similar to the method of identification used by Levin and Cohen (2010).
SOURCE: Based on Central Bureau of Statistics Labor Force Surveys.

In recent years a slow but steady process of pursuing academic study has been taking place in the ultra-Orthodox sector, particularly among the men. Ultra-Orthodox men and women are enrolling in academic and professional studies in programs designated for this population as well as in programs for the general population. According to data of the Council for Higher Education, the number of ultra-Orthodox students (men and women) in study programs geared to the ultra-Orthodox sector rose from around 2,000 in 2005 to around 5,000 in 2010 (Table 1). The change was overwhelmingly due to the growth in the number of male students. This figure does not include ultra-Orthodox students studying in programs and institutions for the general public. The assessment[6] is that the overall number of ultra-Orthodox students in 2010 was around 6,000, 42 percent of whom were men. Furthermore, we see (Table 2) that the trend of academic studies is concentrated around acquiring professions with a high potential for integrating in the labor market. More than 90 percent of ultra-Orthodox students study subjects that will equip them to join the labor market.

Further evidence of the trend in recent years of ultra-Orthodox men pursuing academic studies and the considerable effect of this process on the characteristics of this population, can be found in the labor force surveys. The data shows that the rise in the number of men whose last place of learning was a yeshiva has been halted,[7] even though the overall number of ultra-Orthodox men continues to grow. It can reasonably be assumed that the reason for this is that more and more ultra-Orthodox men are enrolling in academic studies.

Because of the trend of pursuing academic studies, it is necessary to change the method of estimating the employment rate among ultra-Orthodox men.

[6] According to the Ya'adim Association, which deals with the placement of ultra-Orthodox students in academic institutes.
[7] This finding is particularly (but not exclusively) salient in the 25-29 year-old group.

Table 1: Ultra-Orthodox Students by Learning Institutions (Men and Women)

		2010			
		Course			
	2005	Preparatory Program	Undergraduate Degree	Masters degree	Total
Ono Academic College (Or Yehuda and Jerusalem campuses)	1,200	281	1,927	-	2,208
Ultra-Orthodox Bnei Brak College (Mivhar)	137	90	601	101	792
Ultra-Orthodox College in Jerusalem	262	80	520	153	753
Jerusalem College of Technology - Lev Institute, Neveh Institute, Tal Institute	ca. 300	-	438	-	438
Jerusalem College of Technology - Lustig Institute		-	382	46	428
The Open University	-	-	240	-	240
Other institutes of higher learning	-	123	373	-	496
Total	**2,000-2,400***	**574**	**4,481**	**300**	**5,355**

* Estimate based on growth in number of students in various institutions.
Source: The Higher Education Council and the institutes themselves.

A common method[8] to identify ultra-Orthodox people is by the question: "What was the last educational institution in which you studied?" If the last educational institution of one household member was a yeshiva, the household as a whole is defined as ultra-Orthodox. This method detracts from the ability of identifying the ultra-Orthodox population, because, as we said, more and more ultra-Orthodox are enrolling in academic institutions in recent years. These people do not meet the above criterion, and their households are therefore excluded from the count of ultra-Orthodox persons.

When we estimate the number of ultra-Orthodox men who "disappeared" from the labor force surveys, according to the social survey of the Central Bureau of Statistics, and add it to the number of ultra-Orthodox employees according to labor force surveys, we see that the estimate of the rate of employment of ultra-Orthodox men is slightly higher than the accepted estimate.[9] Despite the above, there seems very little difference until now in the trend of employment rates between the various

Table 2: Ultra-Orthodox Students by Area of Study*

Area of Study	Men	Women	Total
Business and management science	524	659	1,183
Law	800	301	1,101
Social sciences	507	531	1,038
Engineering	123	404	527
Paramedical professions	15	497	512
Education and teacher training	31	285	316
Mathematics and computer sciences	90	7	97
Humanities	7	-	7

* The overall number of students by areas of study does not necessarily equal the number of students in 2010.

Source: The Higher Education Council.

[8] For more about the different identification methods, see Romanov et al., The Central Bureau of Statistics (2011).

[9] On the assumption that the percentage of employees among ultra-Orthodox men who acquired professional or academic education, is identical to the rate of employment of non-ultra-Orthodox Jewish men in the relevant age groups.

estimates. The results of the trend of pursuing academic studies is expected to express itself in the coming years, but in order to follow the changes in the rate of employment of ultra-Orthodox men, a new way needs to be found to identify them in the personnel surveys.

Summary

Significant changes are taking place in the attitude of the ultra-Orthodox population to integration in the labor market. The number of ultra-Orthodox students acquiring education that will equip them for the labor market has grown within a short period of five years from around 2,000 in 2005 to around 6,000 in 2010. This change is particularly conspicuous among the men; here the number of students grew during the period from a few hundred to around 2,500. Government policy could assist in overcoming the barriers that prevent the ultra-Orthodox population from participating in academic and professional study. If the above trend continues, it will imply a significant change in the employment patterns of the ultra-Orthodox population, a change that could greatly affect the state of the Israeli economy, and prevent the situation in which low participation rates in the labor force hampers the economy's growth.