Chapter 8
Welfare Issues

- In 2016, the incidence of household poverty and net income inequality continued the downward trend that commenced in 2010. The situation in 2016 was achieved after the government reduced its intervention in the redistribution of income and households increased their labor income.
- The incidence of poverty and net income inequality in 2016 remained high based on an international comparison, as did the poverty rate among working individuals.
- Between 2003 and 2016, the number of employed individuals per houshold and monthly average number of working hours increased in the bottom two quintiles, while these indicators remained unchanged for households in the higher quintiles. Nonetheless, very large differences between these two groups remained in both aspects.
- Hourly wages of salaried employees in the bottom quintile increased between 2003 and 2016 at a rate similar to that of hourly wages of employees in the higher quintiles, but the wage differences between the groups remained large, as did the differences in total net income. These findings suggest that income inequality declined in this period—initially the inequality in economic income and subsequently, in net income; mainly due to an increase in labor input, and also, to a lesser degree, due to the rise in hourly wages.
- To continue reducing net income inequality, the government should extend its policy initiatives designed to improve workers' basic skills, continue to expand employment rates and improve job quality, and continue to implement tools that support a rise in the income of working households. At the same time, a system of social services should be established to provide social security to the entire population without undermining employment incentives.
- In 2017, unemployment levels reached a record low—3.7 percent in the prime working-age population (25–64)—although rates vary by geographic location, sector, and education level. Unemployment in the geographic peripheral regions is higher than in the center of the country, and in all regions, employment rates of groups with generally low labor force participation rates (ultra-Orthodox males and Arab females) are lower than their neighbors' rates.
- The demand for educated workers is low in the northern and southern regions of Israel, as is their supply. This equilibrium prevents the economic development of these regions. Commuting provides a partial solution for residents of the peripheral regions: Commuting is typically used by educated workers, and depends on the distance from central business areas. Public transportation should be further developed to extend commuting opportunities to additional workers and to improve the welfare of all commuters.
- In January 2018, the government approved a reform in public Long Term Care (LTC) insurance, establishing a national LTC program. Subject to the Knesset's approval, the reform will be implemented gradually between 2018 and 2021, with NIS 1.8 billion added to the budget base. The reform is significant: It will improve public services and ease the burden of expenses imposed on households, yet it does not address many of the problems that plague the current LTC services system in Israel, and in some cases, it offers incomplete solutions that do not take future developments into account.

In 2017, the economy continued to stabilize around full employment: The labor participation rate remained steady, and unemployment continued to fall, reaching a record low. Rising employment rates were sustained, affecting diverse population groups. This situation was the outcome of long-term developments, including increasing education levels and participation of women in the labor force, and the government's strenuous policy efforts to restructure the labor market—that is, to increase the labor force participation rate of the employable poor and reduce their reliance on the welfare system. The current convenient macroeconomic environment supports these structural changes.

In view of this situation, the first two sections of this chapter address the close relationships between employment and well-being. The trends in poverty and inequality, and how they have been affected by the rising employment rate are presented first. We provide an in-depth discussion of the changes in employment rates and income of households in the bottom quintile.

The second section discusses the inter-regional variance in unemployment and job quality and focus on the unemployed. Israel is a small country in terms of its size, yet regional differences in the labor market prevail as a result of the population's diversity and the geographic distribution of economic activities. Given individual differences, we explore whether an association exists between region of residence and probability of employment, and review the barriers and opportunities to employment in each region. The economy now has convenient conditions to address the differences between regions, and such efforts might serve as preliminary action with significant long-term returns.

Finally, we will discuss the planned policy changes in public LTC insurance. High-quality LTC insurance has both immediate and long-term importance, and the government plays a key role in ensuring its availability to the population. This issue will become even more important in the future because forecasts state that the population will grow older rapidly and the number of family member caregivers will drop, and these two developments affect households' expenditure on LTC services. The 2019 budget includes the national LTC program, a reform that has already commenced in 2018 but will be implemented mainly in 2019–21; the program is reviewed against the backdrop of its motivations and its strengths and weaknesses are noted.

Figure 8.1
Incidence of Poverty: Share of Poor Individuals and Households, by Net Disposable Income, 1997–2016

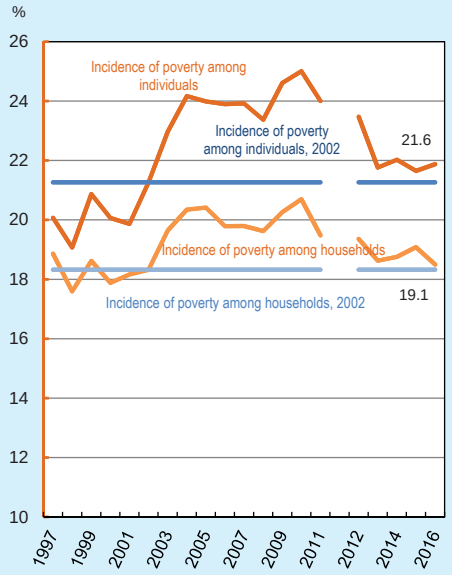
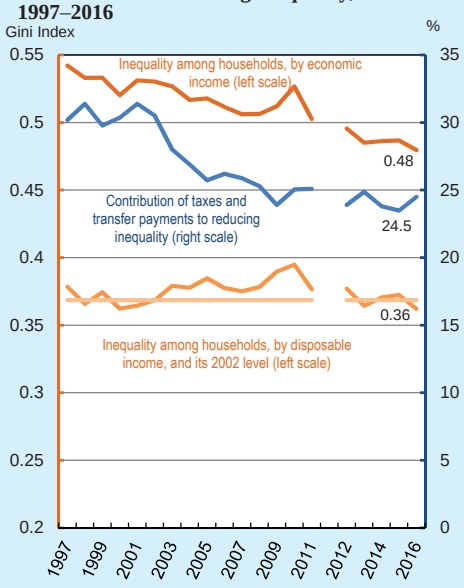


Figure 8.2
Inequality among Households, by Economic and Disposable Income, and Goverment's Contribution to Reducing Inequality, 1997–2016



SOURCE: Based on Central Bureau of Statistics Expenditures Surveys. In 2012, there were changes in the survey that created breaks in the series.

1. HOUSEHOLD INCOME AND DEVELOPMENTS IN EMPLOYMENT[1]

The incidence of poverty among individuals and households reached a record high in 2010 and has since declined. In 2016, poverty levels were only slightly higher than on the eve of the cut in allowances in early 2000.

In 2016, 18.5 percent of all households in Israel were living below the poverty line, and the proportion of individuals in poverty was close to 22 percent of the total population[2] (Figure 8.1). The share of families in poverty declined after having increased slightly in 2014 and 2015, and the decline continues the slow downward trend that has been evident since 2010, when more than one-fifth of all households and almost one-fourth of the population lived in poverty. The incidence of poverty among individuals and households rose slightly between 2015 and 2016.[3] A longer term observation indicates that the incidence of poverty among individuals and household has declined since

[1] Data processed from the CBS Households' Expenditure Survey and Labor Force Surveys refer to 2016, as these are the most recent surveys available. Where data refer to 2017, this fact is stated explicitly.

[2] According to (net) disposable income and the definition of relative poverty. The poverty line equals one half of the median per capita equivalized income.

[3] Beginning from 2016, the CBS Households' Expenditure Survey also represents the Bedouin population in the south, a population that was absent in the 2013–15 surveys. The following analysis includes this population due to its relatively small size. We confirmed that its inclusion does not lead to unreasonable differences between 2015 and 2016. The National Insurance Institute analyzed the incidence of poverty controlling for population composition between 2015 and 2016. Its analysis indicates that by excluding the Bedouin in the south, the incidence of household poverty would drop even further, by a full percentage point, and the incidence of per capita poverty would similarly drop, but by a smaller proportion. An elaboration of the trends in poverty and inequality appear in National Insurance Institute (2017), *The Scope of Poverty and Social Gaps 2016*.

reaching a record high in 2010, and poverty rates in 2016 are only slightly higher than they were in 2002, on the eve of extensive cuts to subsistence allowances in 2003 and 2004.

The macro picture in 2016 with regard to incidence of poverty among households and net income inequality is similar to that in the early 2000s, but it was achieved after cuts in transfer payments and expanded employment.

Inequality measured based on household's economic income (not including transfer payments and before deduction of direct taxes) shows a steady downward trend, primarily as a result of households' consistent increase of labor income due to the narrowing of the output gap (Figure 8.2). Inequality in disposable household income (net, after deduction of direct taxes, and plus transfer payments) only began to decline slowly in 2010, before which it increased because the government limited its intervention in the redistribution of income since the early 2000s, and time elapsed until households compensated themselves for the loss of income by increasing their labor income. In 2016 alone, net inequality declined by one percentage point. Data from 2016 reflected several policy actions designed to support the lower part of the income distribution, and contributed to the decline in poverty and net inequality: the minimum wage was raised in four phases between 2015 and 2017, child allowances were raised from May 2015, and old-age benefits and income supplements to old-age benefits were also increased from December 2015.

Household poverty and net inequality levels in 2016 is similar to that of the early 2000s, before the government cut subsistence and children's allowances. At present, the government is intervening less in the redistribution of income than before the cuts. The government's policy on taxes and transfer payments makes a relatively small direct contribution to the decline in inequality. Therefore, inequality in disposable income is relatively high compared to the OECD average even though economic inequality is close to the OECD average.[4] Declining government intervention in the redistribution of income (primarily through cuts in transfer payments) is one of the factors that increased household participation in the labor market. However, since there are considerable wage differences in Israel and in labor inputs (the extent of employment per individual and number of employed individuals per household), the increase in the share of income from labor in household income makes only a limited contribution to the significant decline in net income inequality, at least in the short term. Therefore, to significantly reduce net inequality, government intervention should be increased—by increasing the supply of work, improving the quality of employment, and expanding transfer payments to households—using policies that do not offset employment incentives. For example, it is possible among the population that belongs to the bottom sector of the income distribution, to improve skills that are in demand in the labor market and expand employment grants (employment grants were extended in 2017 but an assessment of the effects of this action on poverty and inequality will only be possible in the future).

In 2016 and 2017, the labor market was characterized by a full employment environment that continued to entrench itself, with support from long-term

[4] A comprehensive review of inequality in Israel compared to global inequality is available in Bank of Israel (2016) Bank of Israel Annual Report 2015, Chapter 8.

developments. Several of these developments are the result of government policies and others stem from structural changes in the economy; these developments have created positive macro-level conditions for employment, and support the success of government policies. The employment rate in the prime working-age population (25–64) continued to increase in 2017, and reached 77.1 percent, while unemployment in this population group dropped to a record low of 3.7 percent. We find that for some population sectors, participation rates increased considerably in comparison to the beginning of the current decade. The rising employment rates from which the economy has benefited for several years also affect the population groups that are targets of government policies: the ultra-Orthodox population, the Arab sector, and groups with low labor-force participation, such as individuals with disabilities and unemployed individuals living on income support allowances.

a. Development of employment by population group, and policies designed to increase employment

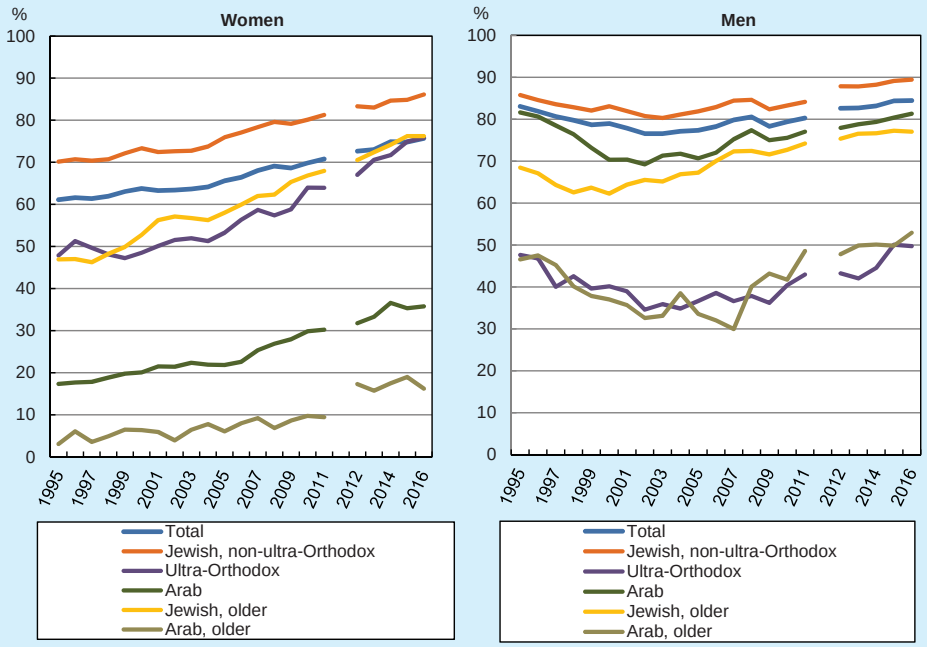
Participation in the labor force expanded due to long-term socioeconomic developments and government policy designed to encourage employment. The convenient macroeconomic conditions support labor force participation.

The labor supply in Israel (in the prime working age population, ages 25–64) has undergone many changes in the past 20 years, and two are especially notable from a macro perspective: a steady increase in the participation rate of women; and the participation among men ceased to decline and began to rise. Several factors explain the rise in participation, mainly sociocultural changes that increased women's participation globally, a rise in education levels, and the increase in the age of entitlement to old-age benefits.[5] In addition to these factors, another factor also contributed to increasing employment: government policy to expand employment, including steps to limit subsistence allowances. Macroeconomic conditions supported the rising demand for employees (see Chapter 2), as a result of which the supply of labor was translated into a sustained increase in employment rates that affected all sectors and age groups (Figure 8.3), and unemployment dropped to a record low (Figure 8.4). There has been a consistent and rapid increase in employment rates among women in all population and age groups since 1995. Especially prominent is the consistent increase in employment rates of ultra-Orthodox women, the employment rate of Arab women (which doubled), and the sharp rise in employment rates of women in the 55–59 age group, who are approaching retirement. Men also enjoyed higher employment rates from the outset. Although men in all population groups occasionally showed temporary declines in employment rates over this period, their employment rates in 2016 are higher than they were in the mid-1990s: the main growth in employment rates occurred since the early 2000s. Especially prominent is the growth in employment of ultra-Orthodox men and men over the age of 55.[6] Still, very large differences in

[5] More information on the factors underlying the increase in labor force participation since the early 2000 appears in Bank of Israel (2017) "The composition of those joining the labor market in the first decades of the century," *Fiscal Survey and Selected Research Analyses* No. 142.

[6] It is important to note that between 2015 and 2017, the participation rates of ultra-Orthodox men remained almost without change, after having risen considerably in preceding years. Later in this chapter we discuss employment rates of in the ultra-Orthodox population relative to government targets.

Figure 8.3
Employment Rates, by Population Groups, Gender, and Age, 1995–2016[a]



[a] The figures refer to the prime working ages (25-54). "Older" refers to women aged 55-59 and men aged 55-64.

SOURCE: Based on Labor Force Surveys by the Central Bureau of Statistics. Between 2011 and 2012 there is a break in the series due to changes in the survey. The data are not concatenated.

employment rates remained between various population groups, especially between (1) Jewish (ultra-Orthodox and non-ultra-Orthodox) women and Arab women; only one-third of all Arab women are employed; (2) Jewish non-ultra-Orthodox and Jewish ultra-Orthodox men; only one-half of all ultra-Orthodox men are employed; and (3) Jewish non-ultra-Orthodox men and Arab men, although the difference between these two groups was relatively small.

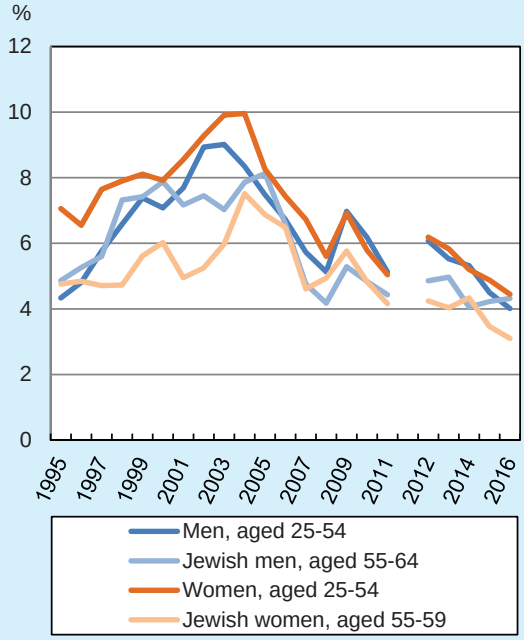
As noted, increased participation in the labor market is also explained, in addition to the long-term factors noted above—changes in women's participation rates, rising education levels, and an increase in the retirement age—by government policy aimed to increase participation. The government operates numerous programs, either directly or through outsourced service providers, designed to increase employment and the labor income share, and reduce reliance on subsistence allowances. This policy was implemented in 2002–03, and targeted population groups that typically have low labor force participation rates: Arab women, ultra-Orthodox men, single mothers, new immigrants from Ethiopia, young Bedouins, and groups that have a low probability of employment without assistance, such as the long-term unemployed, and individuals who receive income support benefits.

The "From Welfare to Work" policy has been implemented in Israel since 2005, and is designed to integrate subsistence allowance recipients into employment. The

Mahalev program, the original program operated under this policy, was replaced in August 2007 by an improved program (Lights for Employment—"Orot LeTa'asuka"), and both programs were operated on a pilot basis. Both were cancelled in 2010 in response to the extensive criticism they drew, and were subsequently replaced by other programs.

In 2009, the government established an inter-ministerial committee to examine employment policy in Israel, and the committee submitted its recommendations in 2010. The committee recommended to define targets for employment rates by population group, and to continuously monitor the achievement of these targets. The targets were based on figures for 2008, and included (1) short-term targets for the year 2013; (2) intermediate targets for the year 2020; and (3) long-term targets: the committee recommended to increase employment rates in Israel to the average of the 15 highest employment rates in OECD countries, and to reduce employment differences between population groups.

Figure 8.4
Unemployment Rate, by Age and Gender[a]
1995–2016



[a] The unemployment rate among older men and women refers only to the Jewish population, as older Arabs, particularly women, participate very little in the labor force.

SOURCE: Based on Labor Force Surveys by the Central Bureau of Statistics. Between 2011 and 2012 there is a break in the series due to changes in the survey. The data are not concatenated.

The government approved the recommendations (Decision No. 1994 dated July 15, 2010)[7], and subsequently established the Employment Unit in the Ministry of the Economy.[8] This unit concentrates the government's work on employment targets, regulation of the labor market, day care centers, and increasing the human capital of the workforce, and it operates a broad range of programs for populations that typically have a weak connection to the labor market — the groups that were the focus of the labor committee's attention. Many of these programs are operated jointly with

The government conducts active labor market policy through many programs, but the public expenditure on these programs is low in international comparison.

[7] The committee also recommended defining targets for increasing household incomes: income in the bottom quintile will, between 2010 and 2020, grow by a rate that is 10 percent higher than the increase in median income in that period, and the share of labor income will increase from 47 percent to 60 percent. The government adopted only the committee's employment targets.

[8] Due to organizational changes, the unit belongs to the Ministry of Labor, Social Affairs and Social Services since 2016.

the American Jewish Joint Distribution Committee (JDC) (through Tevet, the JDC's employment initiative), and some are operated jointly with other entities, including local governments, higher education institutions, and business organizations. In 2016–17 alone, the unit operated 30 programs. These programs—at a cost between several millions of shekels to tens of millions of shekels per year—served between dozens to thousands of participants annually. The programs address a broad range of areas, from vocational training, through placement, to financial aid for academic education granted to members of the target populations.[9] The per-participant cost of these programs varies significantly, which is only to be expected from the diversity of services that they offer.

The government operates employment programs in other frameworks as well. "Employment Circles," for example, is an Employment Service program designed to assist new income support claimants to integrate into employment and prevent them from slipping into long-term unemployment and reliance on transfer payments. This program also focuses on a small target population. The program has been in operation on a pilot basis since 2014, and although it is not yet operated nationwide, its reach is gradually growing.[10]

Despite the growing number of employment incentive programs, government spending on active labor market policy (ALMP)[11] is relatively low. On average, ALMP spending in OECD countries was 0.6 percent of GDP, yet in Israel ALMP spending was 0.2 percent of GDP. This difference extends across numerous budget items, and indicates that active labor market policy should be expanded to further reduce inequality through a policy that generates sustainable comprehensive economic growth rather than through transfer payments.

In addition to the abovementioned programs, the government applies supplementary tools to support an expansion of the labor supply and income of working households. Among the most significant of these tools are the Earned Income Tax Credit - EITC (named in Hebrew "Employment Grants"), which is primarily designed to increase

[9] On the large budget items, the unit refers target individuals to Rian, a program engaged in occupational counseling, training, and placement assistance in the minorities sector. This program received NIS 201 million for 2012–16, and NIS 208 million for 2017–20. A second prominent budget item allocated NIS 35 million in 2017 to the operation of employment counseling centers, workshops and basic skills training for the ultra-Orthodox population. Additional programs have smaller budgets but because they target smaller population groups, the per-participant budget is high and reaches several tens of thousands of shekels per year. For example, Ashbal finances academic studies in the Bedouin sector, and Talpiot provides professional training to ultra-Orthodox individuals and integration into employment in the high tech industries. Each of these programs has no more than several dozen participants each year.

[10] The program is accompanied by a unique research framework: It is based on random assignment of target population individuals to treatment and control groups. An interim study shows that the program contributes to higher employment and reduces participants' reliance on livelihood allowances. The interim report of the study is available at: https://en-econ.tau.ac.il/sites/economy_en.tau.ac.il/files/media_server/Economics/foerder/papers/16-2016.pdf.

[11] This expense includes the public expenditure on vocational training, placement, counseling, and guidance, and on additional programs that support employment, and income for the unemployed and other groups in the labor market.

the incomes of working households in the bottom section of the income distribution[12] and to reduce poverty among these households. Another tool is the expansion of afternoon day-care centers in kindergartens and schools in towns that belong to lower socioeconomic clusters, a step designed to support an increase in the labor supply of families with children in the lower section of the income distribution. These means to support working families with children were extended to some degree after the social protest that erupted in 2011. The "Net Family" program was added to these steps in 2017. This program used a budget supplement to increase the number of credit points awarded to working parents (this policy tool supports increased income of parents in the upper section of the income distribution), extend the earned income tax credit to working fathers (and equalize conditions for mothers and fathers, and expand support for working parents from the lower section of the income distribution), increase subsidies for afternoon day-care centers in kindergartens (see additional discussion in Chapter 6; the discussion there also analyzes the effect of the program on reducing poverty among families with children under the age of 6).

Table 8.1
Employment targets adopted by the government in 2010, and their actual implementation

Population (in prime working ages, 25–64)	Employment rate[a]		
	2008	2020	2017
	Actual	Target	Actual
Overall population	71.1	76.5	77.8
Ultra-Orthodox men	40.0	63.0	46.6
Ultra-Orthodox women	57.1	63.0	73.7
Arab men	73.3	78.0	77.5
Arab women	24.5	41.0	34.9
Other men and women	78.0	83.0	84.9
OECD average (2016)			73.0
Average for 15 countries leading OECD			80.1

[a] 2008—Base year, the Committee used its data in its work. 2020—target year. 2017—current year.
SOURCE: The Committee to Examine Employment Policy, Final Report (2010), Central Bureau of Statistics, and OECD.stats.

[12] In 2007, the program was initially implemented in selected areas on a pilot basis, and since 2011 is has been implemented countrywide. The program is designed to increase the income of working families, without undermining employment incentives. For additional details see Bank of Israel (2016), "The earned income tax credit: A preliminary report on a designated survey among eligible individuals," *Recent Economic Developments*, No. 140.

Table 8.1 summarizes the employment targets recommended by the inter-ministerial committee in 2010, and compares them with employment rates in 2017. Between 2008 and 2017, employment rates increased significantly in all population groups targeted by the committee. Ultra-Orthodox women and Jewish non-ultra-Orthodox men and women have already attained their 2020 targets and as a result, the entire population attained the overall employment target. In the remaining groups, especially Arab women and ultra-Orthodox men, employment rates remain far from the 2020, and there is little chance that the targets for these groups will be met.

In 2017, the government re-instated the inter-ministerial committee on employment, and the committee is presently concluding its work. The current committee was assigned the task of defining targets for the development of employment in the economy up to 2030, for the entire population and for various groups, and to outline the methods for attaining these targets. The preceding committee focused on the quantitative expansion of employment, while the current committee is also addressing future expansion in terms of quality, which is reflected in action to increase earning capacity. These steps should ensure that the work force, employers, and the labor force policy are prepared for the challenges of the future, and specifically (1) frequent technological changes, which will affect the skills required of employed individuals; (2) increased life expectancy, which will have a significant effect due to the transition to defined contribution pension plans, and requires that the period of employment be extended in order to finance the retirement period.

The large number of plans and extensive resources devoted to their operation justify the expectation for the government to publish statistical reports describing the programs' operations, their budgets, and the number of their participants, and to conduct rigorous research to assess the programs' contribution to the achievement of their short-term and long-term targets, and their impact on household incomes. Many of the programs are experimental, and some have been discontinued after the pilot stage for various reasons. Although a portion of the plans are accompanied by research work in the initial stages of their operation, the majority of the studies are not based on controlled experiments, as is necessary to assess the contribution of these policy programs.[13]

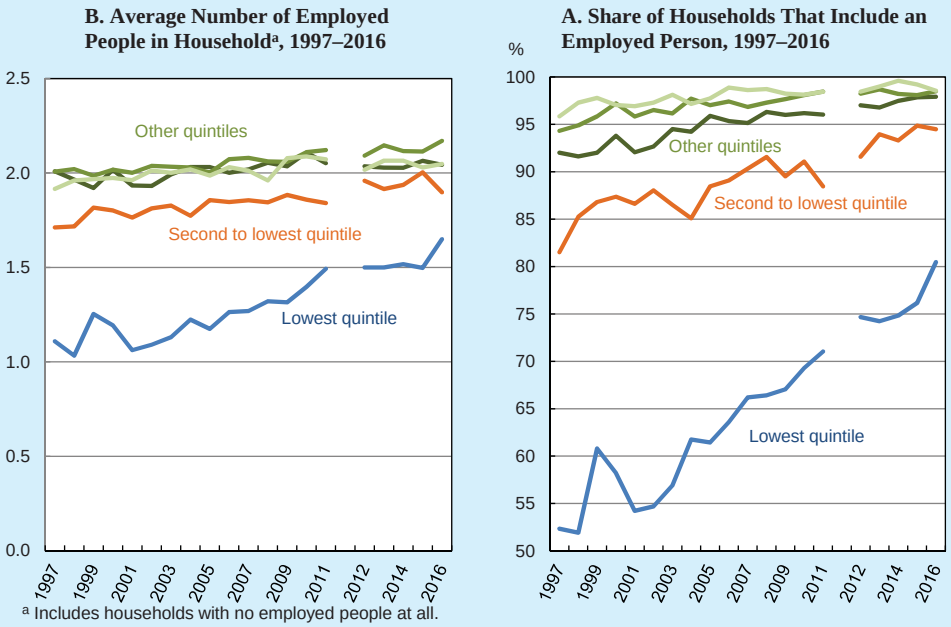
[13] Two programs are exceptions: Since its inception, "Employment Circles" has benefited from a research study based on a controlled experiment (the study is being conducted jointly by researchers of Tel Aviv University and the Employment Service, the National Insurance Institute, and the Bank of Israel); and the Earned Income Tax Credit has benefited from accompanying studies since its inception, in conjunction with the Bank of Israel, the National Insurance Institute, the Tax Authority, and the Meyers-JDC-Brookdale Institute.

b. How is increased employment reflected in household income? [14]

Since the 2000s, employment rates have risen rapidly, reflected in the rapid increase in the share of working households, the number of working hours, and household income from work.

Expanding employment functions as a lever for increasing household income, if the increase in net income from work exceeds the net decline in income from other sources such as transfer payments. There is a close connection between employment and income, and the population in the bottom income quintile is indeed characterized by low employment rates and low wages compared to the population in the higher quintiles. The rapid increase in household employment rates since the early 2000s is reflected in the rapid growth in the proportion of working households (Figure 8.5a), the number of working household members (Figure 8.5b) and the number of working hours of salaried employees. Participation of the bottom quintiles in the labor market has, over the years, come to resemble the participation rate of the top quintiles, yet a large difference remains, stemming from, among other things, almost one-fifth of the households in the bottom quintile having no working household member, and working household members in the bottom two quintiles working much fewer hours than working household members in the remaining quintiles.

Figure 8.5
Households Aged 25–54, by Net Income Quintiles, 1997–2016

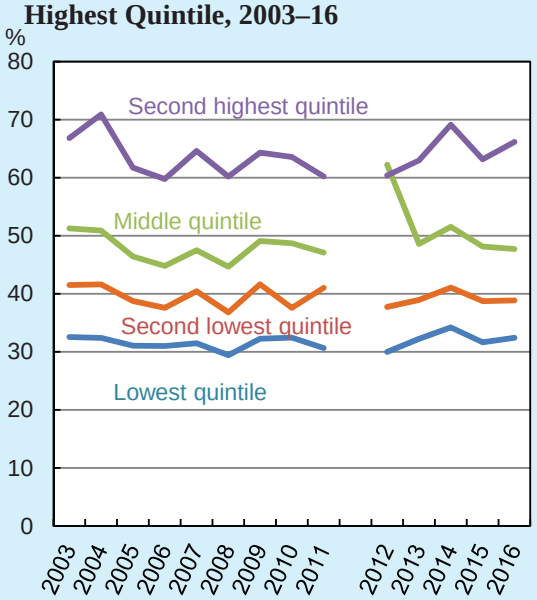


[a] Includes households with no employed people at all.
SOURCE: Based on Expenditure Surveys by the Central Bureau of Statistics. In 2012 there were changes in the survey that created breaks in the series.

[14] The following discussion focuses on men and women between the ages of 25 and 54, the primary participants in the workforce. As the data are not based on repeated samples of the same households, the trends described below are subject to the effects of the composition of households in the various income quintiles, and as a result were are unable to track employment and income dynamics in the same households.

Between 2003 and 2016, real hourly wages of salaried employees (25–54 age group) rose in all five income quintiles.[15] However, since real wages in the bottom quintile increased at the same rate as in the remaining quintiles, wage differences remained stable in this period (Figure 8.6). These differences are one of the factors that explain the high net income inequality and the fact that, despite the growth in labor input, net income inequity has declined only recently and only moderately, and the incidence of poverty among working individuals in Israel is extremely high based on an international comparison.[16]

Figure 8.6
Average Real Wage Per Hour Worked, Employees 25–54 in the Lowest 4 Quintiles Relative to the Figure for the Highest Quintile, 2003–16



SOURCE: Based on the Expenditures Survey conducted by the Central Bureau of Statistics. In 2012, there were changes in the survey, creating a break in the series.

Low income in the bottom two quintiles is the result of low labor force participation, which stems from individual characteristics that lead to low employability and to part-time employment. The perception of job security in the bottom quintile is lower compared to perceptions of job security in the other quintiles.

Between 1997 and 2016, the share of income from work in the total income of households in the bottom quintile increased significantly, as did the total equivalized net income, because the increase in income from work exceeded the decline in government transfer payments (Figure 8.7). The net total (average) income of households in the bottom quintile did not increase at a greater rate than the remaining quintiles (Figure 8.8). Although income from work increased in the bottom quintile, this increase did not reduce the net income difference over time, even in comparison to the second and third quintiles, because when compared to these quintiles, the bottom quintile remains characterized by low employment rates, fewer working hours, low human capital, low wages and limited income from other sources.

[15] Data on work hours in the expenditure survey are available for 2003–16 only.
[16] OECD (2018), OECD Economic Surveys: Israel.

Figure 8.8
The Increase in Total (Equivalized) Net Real Income, Households Ages 25-54, by Net Income Quintiles

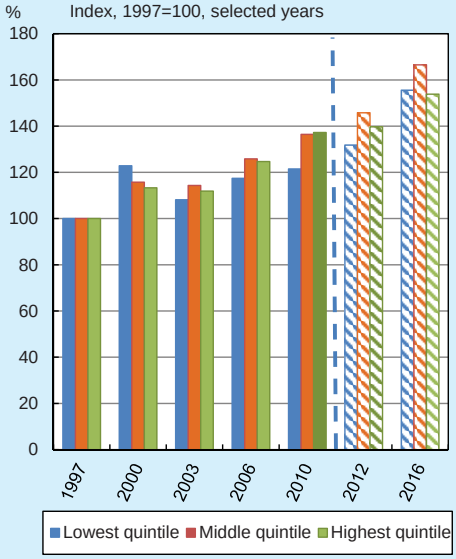
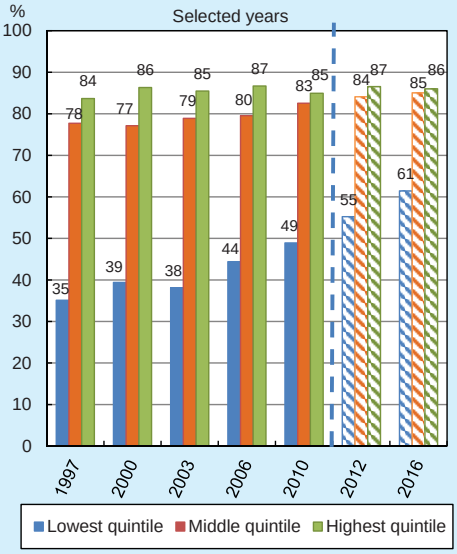


Figure 8.7
Share of Labor Income out of Total Equivalized Net Income, Households Ages 25-54, by Net Income Quintiles



SOURCE: Based on the Expenditures Survey by the Central Bureau of Statistics. Beginning in 2012, the data are based on the new Expenditures Survey, so there is a break in the series.The data are not concatenated.

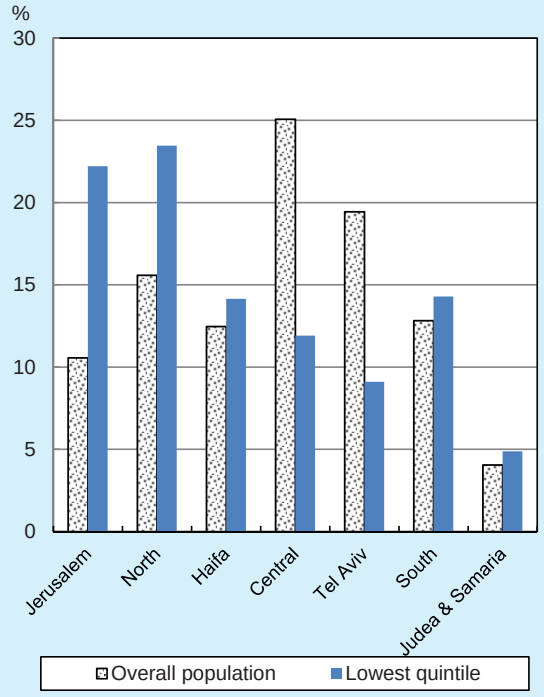
c. Unique features of the labor supply in the bottom quintile

The 25–54 year old group with unexhausted (quantitative[17]) employment potential primarily belongs to the bottom quintile, and to a lesser degree, to the second lowest quintile as well; most households in the bottom quintile are poor. However, the low income in the two bottom quintiles does not stem solely from few working hours but also from individual characteristics that explain this.

The households of 25–54 year old individuals in the bottom quintile encounter difficulties that impede their integration in employment due to geographic, sociocultural, training, and health-related barriers. Their prevalence in the geographic periphery is very high (Figure 8.8), and Arabs and ultra-Orthodox Jews account for a significantly higher share of these households compared to their share in all households of this age group. The basic skills of Arabs and ultra-Orthodox Jews are lower than the skills of non-ultra-Orthodox Jews and make a smaller contribution to their wages.[18] Only one-half of the households in the bottom quintile contain more than one household member with more than 12 years of education (compared with 73 percent of the households in the general population), and on average these households have one more child under age 18 compared with the general population.

[17] That is, the labor input and not its quality.
[18] See Bank of Israel (2017), *Bank of Israel Annual Report 2016*, Chapter 1.

Figure 8.9
Distribution of Households Aged 25–54, by Geographic Regions: The Lowest Quintile and the Overall Population, 2016



SOURCE: Based on the Expenditures Survey by the Central Bureau of Statistics.

The income quintiles also differ in workers' perceptions of job security,[19] that is, their subjective assessment of the probability that they will lose their job in the next year and the probability that they will find another job at a similar salary. This subjective dimension enriches the manner in which unemployment is generally studied, as it provides information on the stability and security that employees experience in current macroeconomic conditions. These perceptions affect workers' wellbeing, but also affect their economic behavior.

We also used the social survey of the Central Bureau of Statistics to study workers' subjective job security between 2008 and 2016, a period in which unemployment declined. We divided working households into income quintiles,[20] and found that in the bottom quintile, perceived job security is lower. Workers were more apprehensive about losing their job in the forthcoming year and believed that they would be less able to find a similar job, compared to perceptions of workers in higher quintiles (Figures 8.10 and 8.11). This fundamental difference between income groups remained stable even when controlling for features such as gender, education, and location of residence.

Several findings emerge from a regression-based analysis: First, as expected, perceptions related to the probability of unemployment are dependent on (and counter-cyclic to) the business cycle, but perceptions related to the probability to find a job with similar wages are not dependent on the business cycle. Second, as unemployment

[19] Measures of job quality are increasingly included in well-being indices used by the OECD, the International Labour Organization, and other academic and non-academic organizations. The components of quality that survey participants consider significant include job security—the probability of unemployment and the time required to find a job when unemployed. See for example, Cazes, S., A. Hijzan and A. Saint-Martin (2015), Measuring and Assessing Job Quality: The OECD Job Quality Framework, OECD Social , *Employment and Migration Working Papers*, No. 174, OECD Publishing, Paris.

[20] This is an approximate division because the social survey pools household income.

Figure 8.11
People Aged 25–54 Who Assess That They Have a High Chance of Finding Employment at a Similar Wage: Share in Various Income Groups, 2008-16

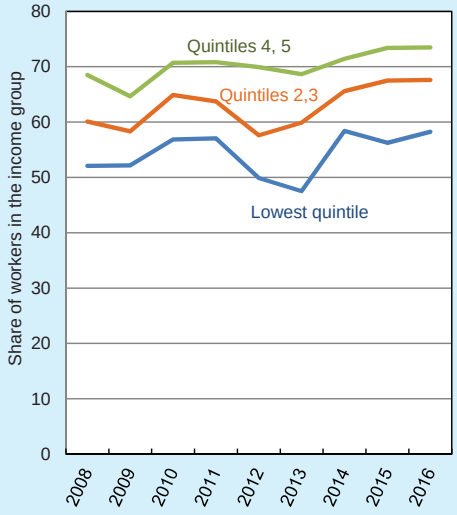
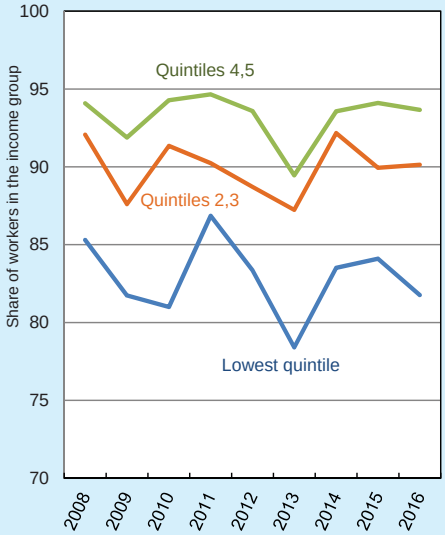


Figure 8.10
People Aged 25–54 Who Assess That They Have a Low Chance of Losing Employment in the Coming Year: Share in Various Income Groups, 2008-16



SOURCE: Based on the Social Survey by the Central Bureau of Statistics.

declines in the employee's region of residence, the employee's job security increases, as do both subjective assessments of the two aforementioned probabilities. Third, a fundamental gender-based difference exists: Women (excluding women in the top two quintiles) are less concerned than men about losing their jobs, perhaps because many of them are employed in the public sector, and the regression results show the chances of finding a job at a similar salary are viewed as higher by women than by men. Finally, differences were found between the center of the country and the geographic periphery: In the higher income quintiles, the chances of finding a similar job are estimated to be lower by workers in the periphery[21] than by employees in the center, but there is no significant difference between center and periphery workers' job security perceptions in the bottom quintile.

Summary

In recent years, the economy has enjoyed favorable macroeconomic conditions, and these have supported government policy efforts to increase employment. Employment expanded especially among groups that have weak connections to the labor market, after their income was significantly affected by the cut in allowances. This policy, and social and other development that motivated population groups to increase their participation in the labor market, significantly reduced household employment differences. However, the increase in income from work only slightly reduced net

[21] The periphery includes the northern district, the southern district, Haifa district, and Judea and Samaria district, and the center includes the Jerusalem district, Tel Aviv district, and central districts.

income inequality among households because extremely significant differences between households remained in productivity (and therefore, in wages) and working hours. To continue to reduce the net income inequality and scope of poverty, it is important to further expand programs that increase income without undermining employment incentives; support improvements in employability—especially by enhancing human capital—and provide economic welfare to those unable to work.

In recent years, government labor policy efforts have been primarily directed at increasing the labor supply of groups with a weak connection to the labor market. Additional population groups should also be addressed, and efforts should be specifically directed to increase job quality and workers' welfare related to participation in the work force.

It is reasonable to estimate that the labor market will face many complex challenges in the forthcoming years, and the main challenges will be: increasing life expectancy as a result of which the working period must be extended in order to finance retirement; frequent technological changes will considerably change the skills required of employees, and employees will be required to participate in frequent training in order to remain relevant in the job market (a challenge that is compounded by the increased duration of working life); it is very reasonable to believe that increased competition and exposure to fluctuating business cycles will undermine the favorable conditions in the labor market; an increase is expected in self-employed workers, part-time employment and/or temporary employment[22] both in Israel and worldwide, and these patterns create new challenges for work relations and household welfare.

In this situation, policy makers and policy program operators have a complex function: They must improve workers' basic skills and facilitate adjustments of the supply to the changing demand by introducing changes in the education system and through a specific policy for the labor market, including vocational education and training and assistance in vocational retraining.[23] The social security system also constitutes an element in this coping system and should ensure that unemployment insurance includes the elements designed to help the unemployed find an optimal match in the labor market. In Israel, eligibility for unemployment insurance is subject to relatively strict conditions compared to other countries, and unemployment benefits are relatively low for all age groups, but especially for unemployed individuals under age 30. This element admittedly accelerates their return to the labor market, but may also undermine their ability to find an optimal fit in the market, which is necessary for employment stability and for creating an optimal fit between workers' skills and employers' requirements. Therefore, the government should study the changes

[22] The proportion of self-employed individuals increased among ultra-Orthodox and non-ultra-Orthodox Jewish women, but not among other groups of women (older Jewish women and Arab women) or among men. Although the proportion of part-time workers (men and women) did not increase, the absolute number of these workers increased because the total number of workers increased significantly.

[23] For reference to basic skills and how to improve them, see Tzur S. (2016), "Basic skills of workers in Israel and industrial productivity", *Fiscal Survey and Selected Research Analyses*, August 2016.

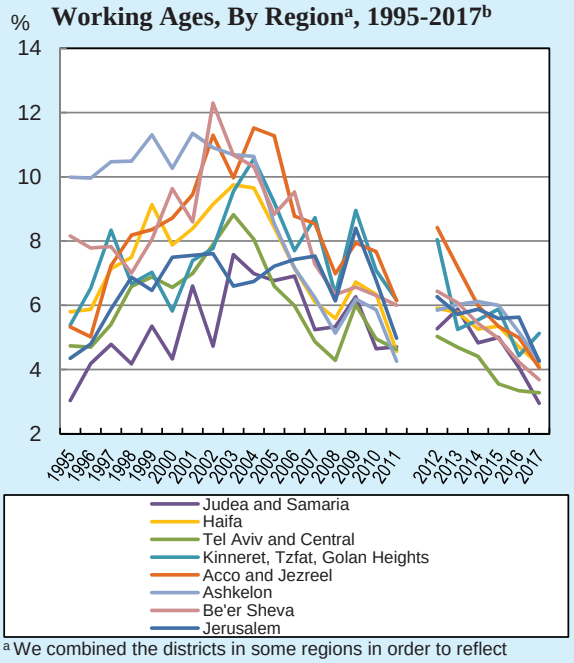
required in this area.[24] The government should provide a safety net that smooths negative fluctuations in workers' income over their life cycle, and should also ensure an appropriate level of material welfare for workers and for individuals unable to work.

2. UNEMPLOYMENT AND EMPLOYMENT IN VARIOUS GEOGRAPHIC REGIONS IN ISRAEL

The unemployment rate in Israel dropped to a record low in 2017—4.2% of the total labor force and 3.7% of the labor force in the prime working age population.

In 2017, unemployment dropped to a record low—4.2 percent of the total labor force and 3.7 percent of the labor force in the prime working age population was unemployed. The participation rate has shown a steady rising trend in the past two decades, and since mid-2015 has remained stable at approximately 80 percent of the main working age population. Although unemployment has declined, differences between regions remain:[25] On the low side of the range are the Judea and Samaria region and the Tel Aviv and central region, where the unemployment rate in 2017 was 2.9 percent and 3.3 percent, respectively; These are followed by the Be'er Sheva region (3.7 percent), Acco and the Jezreel Valley, Jerusalem,

Figure 8.12
Unemployment Rate among Prime Working Ages, By Region[a], 1995-2017[b]



[a] We combined the districts in some regions in order to reflect similarity in terms of size and distance from center of country.
[b] The break in the series was formed because in 2012 the Central Bureau of Statistics changed the sampling method.
SOURCE: Based on Labor Force Surveys by the Central Bureau of Statistics.

[24] A discussion of unemployment insurance in Israel and an international comparison appear in National Insurance Institute (2016), Annual Report 2015; Bendelac J. (2010), "The social security system from an international perspective: Israel and the OECD countries, 2009," (in Hebrew) Periodic Surveys No, 229; Research and Planning Administrative, National Insurance Institute; Gal, J. and S. Madhala-Brik (2016), "The Young Unemployed and Unemployment Benefits in Israel", Policy Brief, Taub Center for Social Policy Studies in Israel.

[25] In what follows we will discuss employment within and outside the area of residence, and to faithfully represent the implications of area of residence, we aggregated districts with small territories and divided large districts. Specifically, we merged the Central and Tel Aviv districts and created the Tel Aviv and Central region; we merged the Kinneret, Tzfat, and Golan Heights districts into a single region; and merged Acco and Jezreel into another region. Haifa, Judea and Samaria, Jerusalem, Ashkelon, and Be'er Sheva districts remained as distinct regions.

Haifa, and Ashkelon (ranging between 4.1–4.3 percent).The highest unemployment rate was recorded in the Kinneret, Tzfat, and the Golan Heights region (approximately 5.1 percent).

Regional unemployment rates are correlated, which indicates that nationwide cyclicality in the unemployment rate is reflected in most regions.

Figure 8.12 portrays several interesting details about the changes in regional unemployment rates in the past two decades. First, regional unemployment rates are correlated, which is evidence that cycles of nationwide unemployment affect all regions. Second, regional ranking by unemployment is not fixed. As an illustration, the Jerusalem region[26] is less affected by unemployment cycles due to the large number of permanent jobs in the public sector in this region, which explains why it had a low unemployment rate when unemployment reached very high levels in the previous decade. Today, however, when nationwide unemployment is low, this region is ranked at the bottom of the list, alongside the northern regions and Ashkelon region.[27] Ashkelon region suffered from particularly high unemployment in the late 1990s, but since 2004, unemployment dropped significantly. Be'er Sheva,[28] the region that was hardest hit by unemployment in 2002, today has the second lowest rate of unemployment, after the central regions.

The variance among regions increases when unemployment nationwide is high.

Third, the variance between regions increases when nationwide unemployment is high. Today, the differences in unemployment rates are relatively small, and reflect the structural gaps between regions. Since these differences are exacerbated during economic crises, the current period of low unemployment rates should be utilized to reduce these gaps and prepare for the future, for example by increasing investment in public transportation that improves commuting conditions and alleviates the existing friction between the regional labor markets.[29]

This section focuses on the regional variations in unemployment and integration in employment, with emphasis on unemployed individuals and the employment opportunities available to them. We examine whether, given individual characteristics, an association exists between region of residence and employment probability. At this stage we do not distinguish between unemployment and non-participation because the choice not to participate in the labor market may stem from a lack of suitable regional employment opportunities, and if low unemployment exists alongside low participation rates, the region is not in full employment in a fundamental respect.[30] That is, it is not in full employment in the broad and qualitative manner that contributes to individual and household welfare, as we observed in the first section of this chapter. We then proceed to review the barriers that prevent unemployed individuals from

[26] The Jerusalem region also includes Beit Shemesh and additional regional councils in the vicinity.

[27] The major cities in the Ashkelon region are Ashdod, Ashkelon, Kiryat Gat, Kiryat Malachi, and Sderot.

[28] The major cities in the Be'er Sheva region are Be'er Sheva, Dimona, Netivot, Arad, Rahat, and Eilat.

[29] Unemployment is measured by place of residence and therefore an improvement in commuting conditions will enable greater integration among areas, because it will help divert the excess labor supply to areas with appropriate demand.

[30] "Full employment" typically refers to employment of everyone in the labor force, that is, employed individuals and job seekers.

finding employment and, in contrast, discuss how formerly unemployed individuals have reintegrated into the work force: did they manage to find a job that matches their preferences in terms of working hours? Does their new job match their education and training? And did they find a suitable job in proximity to their place of residence or do they commute to another geographic region?[31]

a. Regional differences in the composition of the labor force

The labor market potentially contains two types of equilibria between competencies and jobs, and the type of equilibrium in each geographic region stems from the long-term developments that concurrently determine supply and demand.[32] Low-skilled workers concentrate in the peripheral regions, where housing is less expensive. This concentration leads to lower investment in industry and services that require highly developed skills. At the same time, high-skilled workers leave or refrain from relocating to the peripheries due to the shortage of suitable jobs, and those who remain have no incentives to acquire higher education. This situation, which the OECD economists call a "low skills trap," has been the focus of their recent reports on employment and local economic development.[33] The inverse situation, known as a "high skills equilibrium," exists in the central region due to economic agglomeration processes that stem from economies of scale, knowledge spillover, etc.

The low skills trap is a risk factor even if unemployment is low, because it involves a shortage of skills both in the supply side of workers and in the demand for workers. This shortage is accompanied by low productivity and wages, which affect the socioeconomic conditions in the entire region. This shortage is also worrisome from a long-term perspective because technological developments may increase man-machine substitutability in simple, routine jobs in low-technology sectors.[34,35] Since the periphery contains a high concentration of workers of this type, there is a risk that such structural changes will create pockets of unemployment in the future.

The low-skills trap is a risk factor even if unemployment is low, because it involves a shortage of skills both in the supply of workers and in the demand for workers. This shortage is accompanied by low labor productivity and wages, which affect the socioeconomic conditions of the entire region.

Figure 8.13 illustrates the analytical method proposed by the OECD to identity the type of equilibrium that exists in the various regions in Israel. Since we do not

[31] Throughout this chapter we consider commuting as work outside one's area of residence. See footnote 25.

[32] Arguably, there are no regional labor markets in Israel. Israel is a small country in terms of territory, and therefore extensive commuting takes place between regions, and these patterns have expanded in recent decades as trains and highways have developed. The increasing integration of areas provides a partial solution for excess demand and supply by employing workers outside their area of residence through commuting. However, it appears that there is justification for referring to Israel's regional labor markets because many individuals work within their region of residence (76—95 percent of all employed individuals).

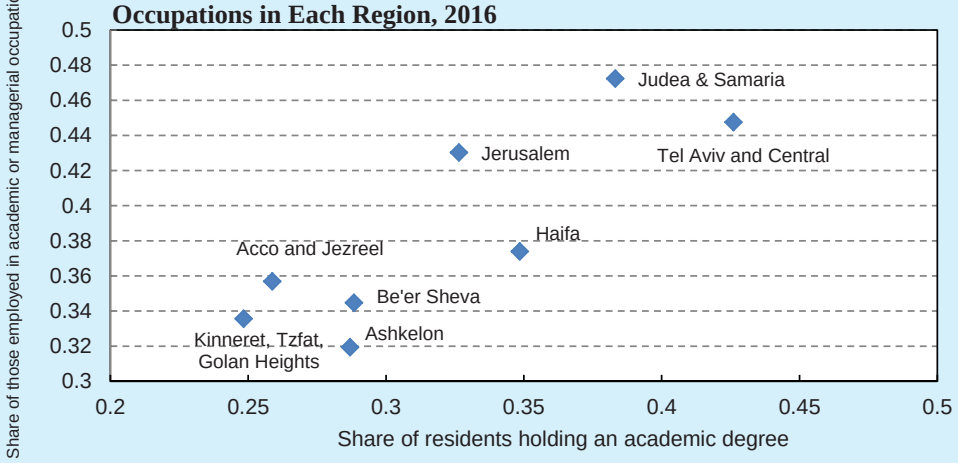
[33] See OECD, *Job Creation and Local Economic Development 2016*.

[34] Cortes, G. M., Jaimovich, N., & Siu, H. E (2017). Disappearing routine jobs: Who, how, and why? *Journal of Monetary Economics*, 91, 69-87

[35] In contrast, highly skilled individuals have a lower risk. Madhala-Brik classified jobs by the risk of replacement with computerization or automation, and found that no academic occupations are at a high risk. See Madhala-Brik, S. (2016), "Occupations at risk: Computerization Trends in the Israeli Labor Market." in A. Weiss and D. Chernichovsky (eds.), "State of the Nation Report 2015," Taub Center.

have precise data on the supply of skilled workers and the demand for them in each region, we present (1) an approximation of the composition of supply—the proportion of residents who have an academic degree—and (2), an approximation of the composition of demand—the proportion of individuals employed in academic and managerial occupations[36] of all employed individuals in the region (whether they are residents of the region or not). Figure 8.13 indicates a high proportion of educated individuals and a high proportion of jobs for educated individuals in the Tel Aviv and central region. Judea and Samaria surpasses this region in terms of employment opportunities for educated individuals, due to the large number of teaching positions. In Haifa, there is a relatively large proportion of educated individuals but a small proportion of employment opportunities for them, and this finding is consistent with the extensive commuting patterns from Haifa to Tel Aviv and the Central region. In contrast, Jerusalem offers extensive employment opportunities to educated individuals (mainly in the public sector), but the region has only a small concentration of educated residents. In the southern and northern regions, the proportion of educated individuals is small and the proportion of employees in jobs that require academic education is also small, which reflects a low skills trap.

Figure 8.13
Academics in Prime Working Ages and Academic or Managerial Occupations in Each Region, 2016



[a] The analysis used the method utilized in OECD (2016) "Job Creation and Local Economic Development". The horizontal axis presents the share of individuals with an academic degree out of all the residents in the region, and the vertical axis presents the share of those employed in academic or managerial occupations out of all the region's employed people (residents and commuters).
SOURCE: Based on the Labor Force Survey for 2016 conducted by the Central Bureau of Statistics.

In addition to the fact that individuals in Israel are geographically concentrated by education levels, the population is also geographically segregated by ethnic/cultural/religious groups (non-ultra-Orthodox Jews, ultra-Orthodox Jews, Arabs). The minority groups tend to concentrate in peripheral regions, which impedes their access to areas

[36] Categories 1 and 2 in the Israeli Central Bureau of Statistics classification of occupations, 2011.

of employment in the country's center.[37] The differences between these groups, both in terms of human capital and in terms of demographic features, also create within-region variance in unemployment rates. Therefore, we examined whether unemployment rates in the peripheral regions are higher because disadvantaged populations are concentrated there, and whether these unemployment rates characterize these groups only or whether they apply to all the groups in those regions as a result of structural factors.

Minority groups tend to concentrate in the periphery, which prevents their access to employment centers in the center of the country. The gaps between these groups, in terms of human capital and demographic features, also create within-region variance in unemployment rates.

To address these questions, a logit regression model was used to estimate the probability of an individual being employed[38] relative to a given benchmark group. A coefficient greater than 1 (smaller than 1) means that the probability of being employed is higher (lower) than the probability in the benchmark group.[39] This estimation controls for features such as age, education, year, employment of spouse, family status, number of children under the age of 18, continent of origin, and intercept. The main variable in the analysis is the individual's region of residence: We use this variable to calculate the marginal change in the probability of being employed in each region compared to the benchmark region.[40] The estimation is carried out for three main population groups: non-ultra-Orthodox Jews, ultra-Orthodox Jews, and Arabs; and for each group, a separate estimation is made for men and women.

Findings, presented in Table 8.2, indicate that even after controlling for individual attributes, variations in regional employment rates are still evident.[41] As expected, Tel Aviv tops the list: most groups have the highest probability of being employed. Tel Aviv is followed closely by Judea and Samaria.[42] In Ashkelon, Jewish (ultra-Orthodox and non-ultra-Orthodox) men enjoy an excellent employment situation compared to Jewish men in other regions (other than the central region), but the situation is very different for Jewish women. Their employment rates are lower in Ashkelon than in

[37] For additional information see Bank of Israel (2017), Annual Report 2016, Chapter 8: The residential distribution and socioeconomic characteristics of ultra-Orthodox Jews and Israeli Arabs.

[38] The complement, that is to say the unemployed group, includes unemployed individuals and non-participating individuals.

[39] The benchmark region is Acco and the Jezreel Valley, benchmark education level – attainment of no more than a high-school matriculation certificate, and benchmark year is 2012.

[40] We performed the estimation several times with a different region used as the benchmark in each estimation, in order to test the statistical significance of the difference between the regional coefficients. Table 8.2 presents only the results of the estimation in which the Acco and Jezreel region is used as the basis of comparison, but the differences in colors in each column represent statistically significant differences between the various regions. The different colors in each row represent statistically significant differences between the various groups within each region.

[41] Notably, this finding points to a correlation and not causality, as individuals' choices to live in a specific area are apparently correlated with unobserved factors that may affect employment status. To illustrate, ultra-Orthodox men living in the center participate in the labor market at a higher rate than ultra-Orthodox men living in Jerusalem. This may result from the fact that certain ultra-Orthodox sects that tend to participate in the labor market are also concentrated in the center. Consequently it can be concluded that had these groups been concentrated in Jerusalem, participation rates of those ultra-Orthodox men would have been higher than others.

[42] This argument refers to the Israeli population in Judea and Samaria.

other regions.[43] In Be'er Sheva, the employment rates of ultra-Orthodox men and Arabs (men and women, most of whom are Bedouin) are lower than the employment rates for these groups in all other regions with the exception of Jerusalem. Finally, Jerusalem is at the bottom of this list with respect to Jewish (ultra-Orthodox and non-ultra-Orthodox) men and Arab women (most of whom are residents of East Jerusalem), but Arab men and Jewish non-ultra-Orthodox women benefit from a better employment situation compared to their counterparts in the northern, Haifa, and southern regions.

Table 8.2

Ratio of probability of being employed to the probability of being unemployed, relative to the ratio in the benchmark group[a]

	Men			Women		
Independent variable	**Jewish, non-ultra-Orthodox**	**Ultra-Orthodox**	**Arab**	**Jewish, non-ultra-Orthodox**	**Ultra-Orthodox**	**Arab**
Region of residence						
Kinneret, Tzfat, Golan Heights	0.98	0.91	0.91*	1.03	0.90	1.09*
Acco & Jezreel (benchmark)	1.00	1.00	1.00	1.00	1.00	1.00
Haifa	0.97	0.76**	1.12***	1.05**	1.59***	1.15***
Tel Aviv and Central	1.27***	0.77**	1.21***	1.24***	1.64***	1.38***
Judea & Samaria	1.02	0.80**		1.34***	1.37***	
Jerusalem	0.92**	0.50***	1.16***	1.10***	0.92	0.30***
Ashkelon	1.07**	1.21		0.92***	1.02	
Be'er Sheva	0.99	0.63***	0.53***	1.01	1.04	0.89**
Highest diploma						
Up to 12 years of schooling (inclusive)	0.78***	0.54***	0.59***	0.67***	0.61***	0.42***
"Bagrut" high-school diploma (benchmark)	1.00	1.00	1.00	1.00	1.00	1.00
Non-academic, post-high school	1.51***	1.39***	1.38***	1.21***	1.72***	2.49***
Academic degree	1.69***	1.93***	1.82***	1.73***	3.91***	6.91***
Year						
2012 (benchmark)	1.00	1.00	1.00	1.00	1.00	1.00
2013	1.02	0.97	1.08**	1.02	1.21***	1.02
2014	1.05**	1.09**	1.10***	1.11***	1.28***	1.12***
2015	1.11***	1.25***	1.16***	1.15***	1.48***	1.08**
2016	1.12***	1.32***	1.22***	1.23***	1.40***	1.02
Number of observations	281,866	29,944	60,273	318,970	28,155	63,457
Pseudo R^2	0.11	0.08	0.12	0.09	0.11	0.24

Highest probability of being employed

Lowest probability of being employed[b]

[a] The coefficients (probability ratios) were generated by a logit model. The estimation includes additional control variables: age group, employed spouse, continent of origin, family status, number of children younger than 18, and an intercept. The sample includes all individuals (participating and nonparticipating) in the prime working ages (25–64) in 2012–16. We deleted the coefficients of Arabs in the Ashkelon area due to the small number of observations.

[b] The ranking refers top each variable separately.

*** Significant at 1% level; ** significant at 5% level; * significant at 10% level.

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

[43] In Ashkelon, few observations involve Arab men and women, and therefore their estimates do not appear in columns 3 and 6.

Thus, it appears that there is no single region in which all groups suffer from a general problem, but an analysis by sector and gender allows us to identify the region in which each group encounters the most significant barriers to employment. This information makes it possible to develop focused and effective intervention programs both for the unemployed and for individuals who do not participate in the labor market.

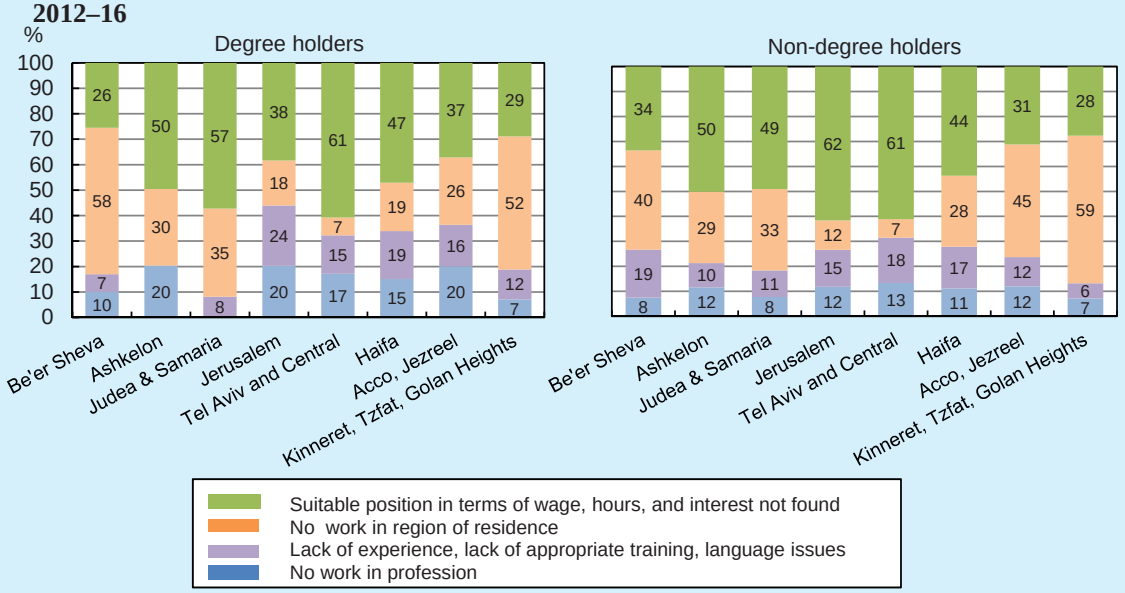
b. Regional differences in barriers to employment

We have seen that employment rates vary across regions. Now we turn to examine the barriers to employment in these areas, in order to understand and identify the risk groups in each area and what prevents them from finding employment: The findings will allow us to address employment concerns in a focused, effective manner.

In the annual social survey conducted by Israel's Central Bureau of Statistics, unemployed individuals are asked about the main reason that they have not found suitable employment, and non-participants are asked about the reason that they have not searched for a job. An analysis of responses given in the period between 2012 and 2016 (Figure 8.14) indicates that in the center of the country, the main reason is related to the unavailability of jobs that are suitable in terms of wages, hours, and interest. As the distance between the center of the country and respondents' place of residence increases, this response is increasingly replaced by the response that no work is available in the respondents' region of residence. This response is especially dominant in the Kinneret, Tzfat, Golan Heights region and the Be'er Sheva region.

The Social Survey asks unemployed persons what the main reason they haven't found work is. The findings indicate that in the center, the reasons are unsuitable supply of jobs in terms of wage, hours, and interest. Moving away from the center, the reason switches more to lack of work in the region of residence.

Figure 8.14
The Reasons Why the Unemployed do Not Seek/Find Suitable Employment, by Region, 2012–16



SOURCE: Based on the Social Survey conducted by the Central Bureau of Statistics.

When respondents are divided by level of education, we find that individuals with an academic degree find it more difficult to find employment in their professions in the Jerusalem, Ashkelon, Acco and the Jezreel regions. For individuals who do not hold an academic degree, inexperience and a lack of suitable skills play a more important role in explaining the difficulty in finding employment in most regions.

Employed individuals with post-secondary education are asked about the extent to which their job in the primary place of employment is related to their field of academic or post-secondary studies. In most regions, 65 percent of the respondents stated that there is some connection or a strong connection, but in the southern region only 56 percent stated that their job matches their education. Since unemployment is low, and unemployed individuals in the south of the country state that there is no work in their region of residence, the latter finding suggests that employed individuals compromise and accept less suitable jobs that are closer to their region of residence. This compromise becomes more significant when individuals transition from unemployment to employment, as shown in the following section.

c. From unemployment to employment: The alternatives available to the unemployed

When examining the status of the unemployed 1 year after first being surveyed as unemployed, it is found that those in Jerusalem (mostly non-degree holders) find it particularly difficult to return to work and they leave the workforce at higher rates than others. The unemployed in the North and Ashkelon regions also find it difficult, but to a lesser degree.

Persistent unemployment increases individuals' discouragement and leads individuals to compromise by accepting less suitable employment.[44] Persistent unemployment also erodes human capital, and as the duration of unemployment lengthens, it becomes more difficult to reintegrate into the work force.[45] Areas vary in the variables that are relevant for coping with unemployment. To illustrate, job search duration varies by area, and is longer in the northern regions and in the Be'er Sheva region.[46] In this section, we examine the alternatives to unemployment in the different areas, in order to determine whether unemployment declined in each region because unemployed individuals found employment, or because they left the labor market despite their preference for finding employment. In the first case we will also try to determine the nature of the integration of formerly unemployed individuals.

Unemployed individuals have several options in the labor market: (1) find suitable employment in their area of residence; (2) find suitable employment outside their area of residence (commuting); (3) find unsuitable employment[47] either in or outside their

[44] This emerges from an examination we performed according to the Labor Force Survey Data for the years 2012–16.

[45] Bank of Israel (2014), Annual Report for 2013, Chapter 5: The Labor Market.

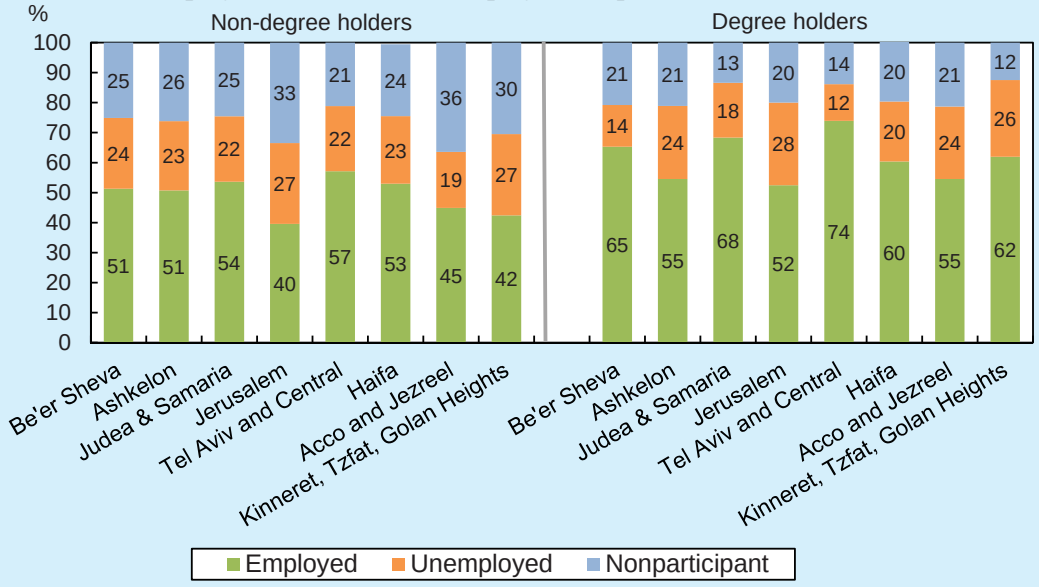
[46] Labor Force Survey Data for the Year 2016.

[47] A non-academic job for an individual with an academic education, a job that is not commensurate with the individual's vocational training, or an involuntary part-time job.

area of residence; (4) continue to search for work (unemployed); and (5) leave the labor force (discouraged/non-participants).[48]

We used the existing panel in the Labor Force Survey Data to examine the state of employment of individuals one year after they were initially sampled as unemployed.[49] Figure 8.15 presents the distribution of former unemployed individuals by status one year later: employed, unemployed or non-participating. In Jerusalem, unemployed individuals, with or without an academic degree, have the highest probability of remaining unemployed. In addition, in Jerusalem and in Acco and the Jezreel region, unemployed individuals suffer from the highest discouragement rate. Consequently, unemployed individuals in Jerusalem show the lowest rate of re-integration into employment, and this phenomenon is evident primarily among non-degree-holders. Jerusalem is followed by the northern region, and to some degree the Ashkelon region: Fewer than 50 percent of non-degree-holding unemployed individuals are working in the following year to come.

Figure 8.15
The Employment Status of Unemployed People after 1 Year, 2012–16

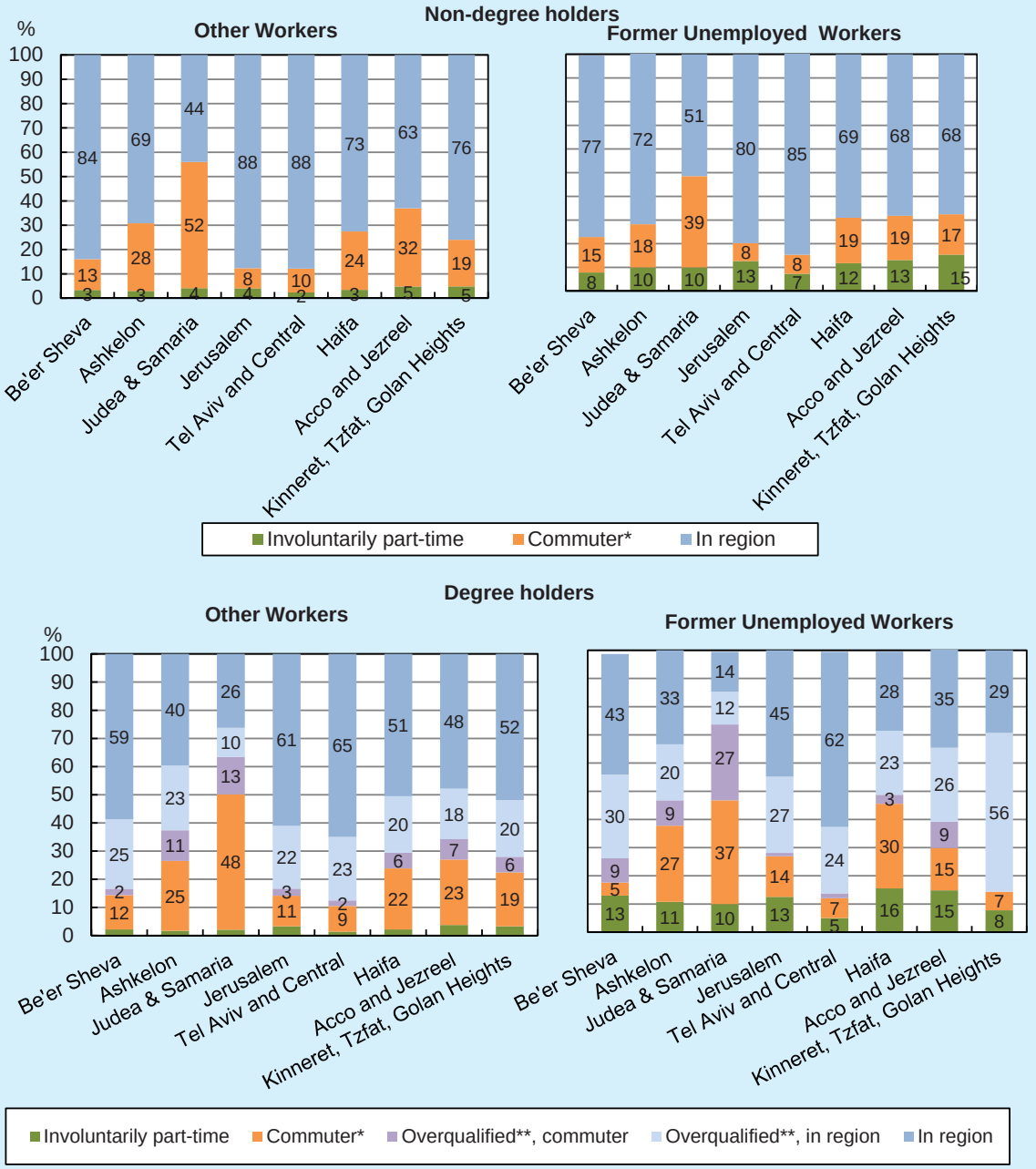


SOURCE: Based on Labor Force Surveys conducted by the Central Bureau of Statistics.

[48] It is impossible to order the alternatives by the level of welfare that they add to the individual, but we can assume that individuals prefer some alternatives over others. To illustrate, we can assume that individuals prefer a job in their area of residence over a comparable job outside their area of residence; and that within that area, they prefer a job that corresponds with their education over a job that does not match their education.

[49] The panel may be biased because it resamples only individuals who did not switch apartments in the preceding year. Nevertheless, we assume that this does not have a significant effect on the general distribution in the region. We also examined whether the results vary when we control for individual attributes, as we did in Table 8.2. However, it seems that this has no considerable effect and therefore the distribution may be presented as it is.

Figure 8.16
Distribution among Various Employment Alternatives: Former Unemployed Workers Compared With Other Workers, 2012–16



* We define commuting as work outside the region of residence.
** Overqualification is when individuals with post-high-school degrees do not work in an academic or managerial occupation.

We focused on unemployed individuals who found a job (marked green in Figure 8.15) and examined whether the jobs are in or outside the employees' residential area, and whether the jobs are compatible or incompatible with their education. We compared this information to the data on individuals in the same area who were employed when initially surveyed.[50] Figure 8.16 shows how formerly unemployed individuals and other employed individuals are distributed over the employment alternatives described above. This figure indicates that formerly unemployed individuals find it more difficult to find a job that is consistent with their preferences or education. Among formerly unemployed individuals with no academic degree, the proportion of commuters is the lowest of all other employed groups. That is to say, commuting is not a viable option for them in view of the employment opportunities available to them outside their area of residence. Re-entering the work force by commuting is more prevalent among degree-holding individuals, especially those who live in Haifa and Ashkelon, because they are closer to the center of the country and commuting is an option involving relatively low costs in monetary terms and in terms of time. In the more distant regions (northern and Be'er Sheva regions), commuting is less convenient, and there is a low demand for degree-holding individuals: For these reasons, it appears that degree-holding individuals who live in these regions have a greater probability of working in a job that is not compatible with their education. For non-degree-holding individuals, their lack of access to centers of employment is reflected in the fact that they involuntarily accept part-time work, and apparently prefer this situation to full-time employment in another region.

The former unemployed find it more difficult to find suitable work, and they have a higher share of those involuntarily employed part time or in a position that is not suitable to their schooling.

Reintegration into employment via commuting is more common among degree holders, particularly those living in Haifa and Ashkelon.

d. Summary of findings by region

Jerusalem

In the long term, unemployment rates in Jerusalem are stable and less sensitive to business cycles, due to the large number of public sector jobs. However, while in other regions unemployment levels have dropped significantly since the mid-2000s, Jerusalem has lagged behind. This region offers jobs that require high qualifications, but its labor force includes a high proportion of Arabs and ultra-Orthodox persons, whose training is not suitable for these jobs. Degree-holding individuals in this region also don't find the appropriate jobs that are suitable to their qualifications, and for the unemployed, the search for employment extends over a very long period, and they are characterized by the highest probability to leave the labor force entirely. In Jerusalem, the proportion of commuters is low, the lowest proportion after Tel Aviv and the Central region, but it is reasonable to assume that this rate will increase when the rapid train to Tel Aviv becomes operational. The train could contribute to a

The unemployed in Jerusalem search for work much longer and have a higher probability of completely leaving the work force.

[50] The employed individuals in a given region are indicative of the options available in that region, however, we should note that the employed individuals do not constitute a comparison group that is entirely comparable to formerly unemployed individuals. It is very probable that a portion of the formerly unemployed individuals have attributes that are unique to that group, and these attributes led them to unemployment and make it more difficult for them to find high quality employment.

reduction in unemployment in Jerusalem by increasing the availability of accessible jobs, both for degree-holding individuals and all other job-seekers, and may improve the welfare of the city's residents.

The North

The skills of the population in the North are relatively low, as is the number of jobs for those with degrees. This low-skills trap does not allow the region to develop economically, and many unemployed people report that there is no work there.

The north is home to a large Arab population, in which the male employment rate is significantly higher than the female employment rate. The qualifications of the population in the north are relatively low, as is the number of jobs for educated workers. This low-skills trap prevents the economic development of this region, and many unemployed individuals report that there are no available jobs in the area. As a result, workers who are residents of the north commute to neighboring areas, and educated workers settle for non-academic jobs or migrate from the region. When the northern region is divided into sub-regions by peripherality, the division effectively draws the unseen boundary of commuting—the boundary beyond which commuting is not a viable option. This indicates that the local economy should be reinforced and the diversity of jobs should be increased in those areas in which commuting is not an adequate solution. Similarly to Jerusalem, the proportion of discouraged workers is higher among non-degree-holding unemployed individuals, and therefore vocational training programs in this area should be expanded to help them reintegrate into the labor market in employment that is commensurate with their abilities.

The South

The Be'er Sheva region is an example of a distant region in which local economic development plans succeeded, and today it provides employment for the majority of its residents, at all schooling levels, while maintaining an unemployment rate that is low relative to the other peripheral regions.

In the 1990s, the Ashkelon region suffered from unemployment rates that were significantly higher than the unemployment rates in Be'er Sheva, although the relative situation in Ashkelon improved in the 2000s. Be'er Sheva has since become a metropolitan center, a process that contributed to its economic development, while the Ashkelon region remained in an intermediate state between Be'er Sheva and the country's center. The Ashkelon area has been unable to provide employment to unskilled workers, which drives up unemployment rates, especially among women. It also fails to offer sufficient employment opportunities for degree-holding individuals and individuals with professional qualifications, yet commuting conditions in this area have improved significantly in recent years, and nowadays a large proportion of workers are employed outside the area. In contrast, the Be'er Sheva region is an example of a remote region in which local economic development plans have succeeded and the area now offers sufficient employment opportunities for its residents of all education levels, and maintains a lower unemployment rate compared to other peripheral regions. Nonetheless, degree-holding unemployed individuals still have a relatively high chance of settling for a non-academic job or involuntary part-time employment, and therefore additional incentives are required to create more local jobs for them. Attention should also be given to the intra-regional differences, specifically in Be'er Sheva: While the area offers a better solution for its better qualified workers than before, there is no appropriate solution for its weaker groups—ultra-Orthodox, Bedouins, chronically unemployed, and individuals with no high school education

Box 8.1

The National Long-Term Care Program

In January 2018, the government approved a reform of public long-term care insurance for the elderly—the National Long-Term Care Program. The components that are meant to provide the elderly with long-term care will have an annual cost of about NIS 1.4 billion when the program reaches full implementation in 2021. In that year, the public expenditure on long-term care insurance for the elderly will have increased by 18 percent relative to the level of expenditure in 2015.

This is an important reform as it improves service to citizens and its affordability for households. However, the reform does not deal with many of the problems in the system for long-term care services in Israel and in some cases it is unclear whether the allocated budget is compatible with its goals. Furthermore, some of the solutions proposed by the program do not take into account forecasts for future trends.

The importance of long-term care insurance will grow in coming years due to the aging of the population. The system of public and private services for the elderly who need long-term care should be reassessed by a committee of experts who will relate, in particular, to the following issues: preparing for forecasted future trends in the demand for long-term care and the expected growth in public and private expenditure as a result of demographic trends; improvement in home-care and services in the community, including supervision, training, professional guidance and work relations between caregivers and elderly patients; issues related to private long-term care insurance, including the structured underinsurance that exists in the indexation of insurance benefits to the CPI; and the full utilization of rights in the system.

In January 2018, the government approved a reform of public long-term care (LTC) insurance for the elderly—the National Long-Term Care Program. The cost of the plan is about NIS 1.4 billion annually[1] (Table 1) and when fully implemented—in 2021—it will increase public expenditure on LTC by about 18 percent relative to 2015. The reform includes several important elements and its implementation will improve service to the citizens and its affordability for some of the households with an elderly LTC member. However, the program does not deal with all of the problems of long-term health care services in Israel, which it would like to expand, nor does it include long-term planning. This box will briefly present the economic and institutional background for the reform and a survey of its components and their implications. Additionally, we herewith examine some issues the reform neglects.

[1] Government Decision 3379 of January 11th, 2018. In addition, the government decided that as part of the reform NIS 400 million per year would be added to cover dental care for the elderly, whether or not they are LTC patients.

Table 1

Components of the National Long-Term Care Program, their implications and the budget allocated to them[a]

Description	Addition to the budget
The size of the LTC benefit will be divided into 6 levels (as opposed to 3 today) and public funding will be increased, particularly for those with multiple needs. The new mechanism will create a better match between the value of services and patients needs.	NIS 500 million on full implementation in 2021.
The bundle of at-home and community services will be broadened and additional services will be developed.	NIS 100 million on full implementation in 2021.
A workgroup will be established to reduce the bureaucracy that the elderly and their families have to deal with and a new function of care coordinator will be created who will assist in the full utilization of rights.	There is no budget source for this component.
The quality of home-care will be improved by increasing the budgets for supervision of home care services and for the training LTC caregivers in the community.	NIS 335 million on full implementation in 2021.
Institutional care will be upgraded by improving the working conditions of the caregivers.	NIS 45 million starting from 2019.
The mechanism that requires the patient's family to participate in the cost of institutional care for their relatives will be cancelled. This measure will reduce the cost burden borne by the families and will increase the State's subsidization.	NIS 400 million on full implementation in 2021.
Rehabilitation in the community, which is meant to prevent the decline in the patient's situation, will be broadened.	NIS 100 million on full implementation in 2020.

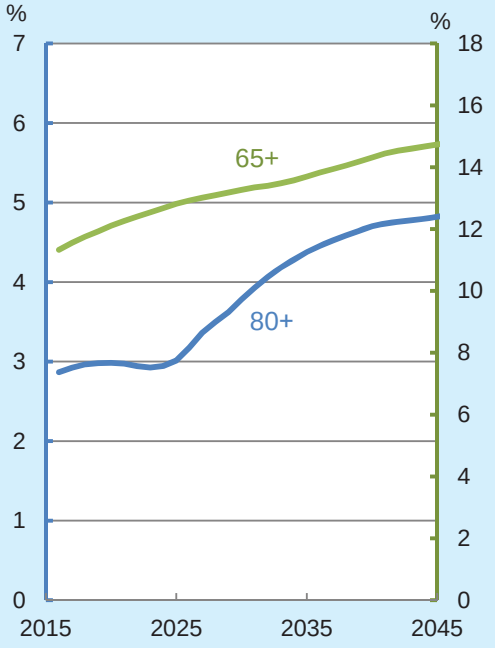
[a] In addition, the reform allocates NIS 400 million annually to add dental care treatments for the elderly to the healthcare basket. However, since this component does not relate only to LTC elderly patients, it was not included in the table. The detailed budget for the program and its distribution to the various sections is subject to the approval of the budget by the Knesset.

SOURCE: Government Decision 3379 of January 11th, 2018.

Economic and institutional background to the LTC insurance reform[2]

The population in Israel is aging, as in other advanced economies. This process is expected to accelerate in the future and will increase the proportion of the very elderly in the population (Figure 1). The probability of requiring LTC increases markedly with age. According to Bank of Israel estimates, in 2015 about one-quarter of the 65+ age group,[3] 64 percent of the 80+ age group and 88 percent of the 90+ age group required LTC. Since the elderly population is expected to grow in the future and since is it is reasonable to assume that the proportion of LTC patients among them will not decline significantly, it is reasonable that the LTC population will grow accordingly.

Figure 1
Share of the 65+ and 80+ Age Groups in the Population; 2015 and Forecast



SOURCE: Central Bureau of Statistics (2017), *Forecast of Israel's Population up to 2065.*

The national expenditure (both private and public) on LTC services in 2015 was NIS 14.5 billion (approximately 1.2 percent of GDP), and this includes only an estimate of the expenditure on care provided for payment (formal services).[4] The share of public expenditure was about one-half of the national expenditure. Relative to the OECD, this is a low level of expenditure, even if one takes account of the fact that the population in Israel is younger. However, in view of the large variation between countries and the level of GDP in Israel, the level of expenditure in Israel is not exceptionally low.

The elderly in long-term care in Israel generally receive care in the community (in their homes or in sheltered housing). A minority of about 15 percent are in LTC institutions (Figure 2). The major share of public services in the community is under the responsibility of the National Insurance Institute and the major share of public services in geriatric

[2] We present only a summary of the institutional and economic background to the reform. Further details can be found in Cohen-Kovacs, G., M. Haran-Rosen and T. Ramot-Nyska (2018), "LTC Insurance in Israel", Bank of Israel [Hebrew]. Most of the data relate to 2015, the year to which the aforementioned policy paper relates and for which we obtained the most data. Additional background to the reform can be found in Ministry of Health (2011), "Public long-term care insurance: a plan for reform".

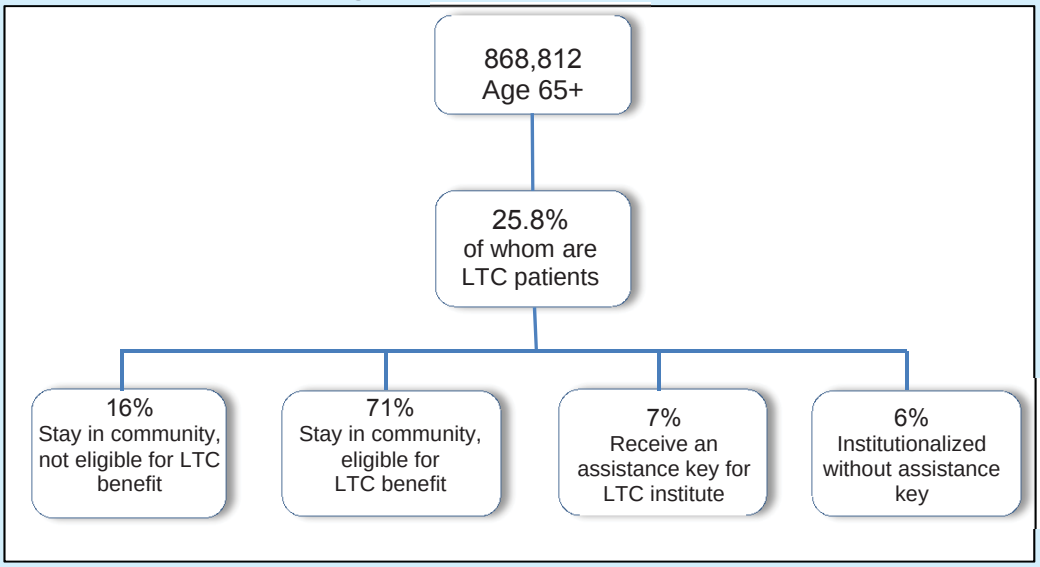
[3] An individual is considered to be in need of LTC when his day-to-day activities are dependent to a large extent on other people and the dependence is a result of a chronic illness or permanent disability. We include in the definition also the mentally frail, i.e., elderly individuals who are able to walk on their own but whose functioning suffers from loss of memory, inability to navigate or lack of judgement and as a result they are in need of supervision and assistance in day-to-day activities. The dependence level of the elderly is determined by means of a test that quantifies the extent to which they are able to carry out day-to-day activities (ADL – Activities of Daily Living).

[4] We did not take into account the economic price of care that is provided by family members (including the loss of income and output) and the households' expenditure on LTC insurance.

institutions is under the responsibility of the Ministry of Health.[5] These bodies determine the policy for the supply of services under their responsibility and supervise their provision. The notable decline in the tendency to hospitalize the elderly who are in need of LTC is the result of two factors: First, the perception among the public and the professional community that care in the community is more beneficial for the elderly since it is provided in the home and close to their relatives and social environment. Second, the cost of hospitalization is high for those who are not eligible for state support.

The expansion during the last decade in LTC services in the community is manifested in the rapid growth in the number of those eligible for LTC benefits from the National Insurance Institute (without there having been any easing of eligibility conditions) and the growth in the number of homecare givers, both Israeli and foreign. During some of the period, the number of homecare givers grew more rapidly than the number of elderly (75+), although during the last four years the rates of growth have been similar. In this context, it should be mentioned that in addition to the aging of the population, other factors have contributed to this growth, some of which are social, such as: (1) the drop in the proportion of family members caring for an elderly individual in the home due to the increased labor force participation rate among women, particularly older women; and (2) the increase in household income, some of which was directed to the purchase of services.

Figure 2
LTC Patients among the 65+ Age Group: Breakdown by Place of Care (in the Community or in an Institution) and According to Eligibility for Public Assistance in the Financing of LTC, 2015



SOURCE: Based on Cohen-Kovacs, et al. (2018).

[5] In addition, there are government bodies with secondary functions, such as the healthcare funds, the municipalities, the Ministry of Welfare and the Ministry of the Interior (the Population Authority). The latter is responsible for providing permits to employ foreign care-givers. The permits are also considered to be public support.

According to the National Insurance Institute, about one-quarter of the elderly LTC patients in the community in 2015 were completely dependent on assistance from a caregiver and were in need of supervision and assistance around the clock.[6] The rest were more independent though they were also in need of assistance in carrying out activities of daily living, at least during part of the day. The elderly in need of LTC in the community (both those who are eligible according to the LTC Law and those that are not) were cared for in that year by about 80,000 Israeli caregivers and about 50,000 foreign ones. The foreign caregivers are employed in households on a fulltime basis and usually care for only one elderly patient. The Israeli caregivers are employed part-time and usually take care of several elderly patients and rotate between their homes.

The eligibility for public financing of LTC in the community is based on the level of the patient's functioning, and the value of the benefit is also dependent on a means test. Elderly individuals whose income is higher than the lower threshold are eligible for only one-half of the benefit and those whose income is higher than the upper threshold are not eligible at all. About 24 percent of the elderly in need of LTC in 2015 did not receive any financial assistance from the National Insurance Institute because their income exceeded the upper threshold. About 82 percent of the elderly in need of LTC that lived in the community (71 percent of all the elderly in need of LTC) were eligible for some financial assistance to pay for their care. Most of the assistance is provided as services (in kind) rather than as a financial benefit, according to one of three levels of payment. The lowest level finances 9.75 weekly hours of care and about one-half of the eligible individuals belonged to this category. The highest level finances 18 weekly hours of care,[7] and the elderly individuals eligible for it are dependent on round-the-clock supervision.

Among the elderly hospitalized in geriatric institutions, only 46 percent receive any financial support from the State to pay for the hospitalization (according to a Ministry of Health assistance key)[8] and the monthly costs they bear range from NIS 750 to about NIS 12,900 (the latter figure is equal to the amount paid by the Ministry of Health for hospitalization). The size of the out-of-pocket payment is also affected by the income level of the LTC patients and of their children. Since public insurance provides low-income LTC patients with more generous coverage in geriatric institutions, they have a financial incentive to prefer institutional care over community care, even when that is not their care preference.

The ability of households to finance LTC services is dependent on several factors: the cost of the LTC services; the scope of LTC care required and its duration; the elderly individual's income and assets; the eligibility for public insurance; and the possession of private LTC insurance. In order to determine the ability of elderly individuals to finance LTC services in the community, given that the public services

[6] We do not have data on the level of dependence among the elderly in general. Therefore, we assume that the proportion of those in need of round-the-clock assistance in this population is identical to their proportion of those eligible for the LTC benefit.

[7] The patients receive all, half or none of the hours, according to their household income. If individuals at intermediate and high levels of dependence choose to employ an Israeli worker rather than a foreign one, their benefit is increased by about 20 percent.

[8] The Ministry of Health issues a tender for LTC institutional services, but its maximum price is lower than the market price of LTC institutionalization. The number of hospital beds in the closed tender is the number of beds that will be offered to the elderly LTC patients who are found to be eligible for hospitalization based on their level of functionality. If the elderly patients and their families request this service, they must pass a means test and based on its results they will pay an amount that ranges from a minimal out-of-pocket amount (NIS 750 monthly) to the maximum that equals the amount which the Ministry of Health pays to the geriatric hospital institutions as part of the tender (NIS 12,900 monthly).

exist, we compared the costs of LTC service to the net income of households according to net income deciles, on the assumption that the expenditure on personal LTC in the community totals about NIS 8,000 per month.[9] The simulations that we carried out related to full dependence (elderly patients who are in need of assistance or supervision around the clock),[10] and are based on data from the Survey of Household Expenditure.

We found that care in the community places a heavy financial burden on the elderly patient's household and for a significant proportion of the population the costs involved exceed net current income. Many of the elderly in need of LTC will find it difficult to finance care on their own in the absence of savings or other sources of income, such as income from capital or from property, transfers from other households or designated insurance.[11] The financial burden can be met, whether fully or partially, by means of private LTC insurance of the type marketed by the healthcare funds as supplementary insurance, when the beneficiary meets the functionality criterion for activating the insurance. This conclusion also applies to the elderly in the lowest income decile. However, households in the lowest income tertile possess very little of this type of insurance relative to households in the upper tertile (Table 2).

Table 2
An estimate of the percentage of holders of private LTC insurance in the form of supplementary insurance from the healthcare funds and other private frameworks, by income tertiles, 2015[a]

Household's place in equivalized income distribution	LTC insurance from healthcare funds	Other private LTC insurance
Lowest tertile	24.7	4.0
Middle tertile	43.3	14.0
Highest tertile	57.7	33.1
Overall population	48.5	15.2

[a] The data relates to the entire adult population surveyed in the Social Survey.
SOURCE: The Social Survey for 2010 carried out by the Central Bureau of Statistics and data from the Capital Market, Insurance and Saving Authority.

[9] This amount includes the cost of employing a caregiver on the assumption that the family members fill in for him on his days off and also the cost of equipment and services required for the elderly patient to function (such as transportation, mobility devices, drugs and diapers). The amount does not include normal living expenses. It is possible that this amount is an underestimate.

[10] Research recently carried out by the OECD took a similar approach in order to determine the accessibility of LTC services in 14 of its members and/or members of the EU. See Muir, T. (2017), "Measuring Social Protection for Long Term Care", OECD Health Working Paper, no. 93.

[11] On the basis of the Expenditures Survey carried out by the Central Bureau of Statistics, we estimate that 16 percent of the 45+ age group do not own a home and do not have private LTC insurance and that below the median income this figure rises to 28 percent.

The National Long-Term Care Program: the planned reform of the LTC sector in 2018-21

The government approved the National Long-Term Care Program in January 2018 and its implementation and final details are subject to the approval of the Knesset. The program is based on enhancing the existing array of services and their financing by the public system, as opposed to the alternative that includes development of a private insurance system that includes the option of partial public funding.[12] The components of the reform are described in Table 1 and they involve some welcome changes into the system which are to be implemented through a significant addition to the budget for public LTC insurance. However, the reform neglects some of the lacunae in the LTC insurance system and in other cases deals with them only partially. For some of its components, it is unclear what measures are planned and whether the budget is compatible with the targets – transparency should be increased in these cases.

In the following, we present the main issues that do not receive attention in the components of the reform that were approved:

1. A long-term view of future trends in the demand for LTC services for the elderly and their internalization in the planning of the system of public and private services: The reform relates to the current problems in the system but does not discuss the steps needed to restrain public expenditure growth in view of demographic and economic trends. It is important that the government estimate the public cost and determine the policy measures needed to maintain a reasonable level of services in the future, based on the demographic and economic forecasts.13 Furthermore, there is currently no single government unit that is taking a leading role as policy-planner in the LTC sector. Planning of policy for the short or the long term remains overlooked, especially regarding issues such as the supply of public and private services, their quality and their financing; the formulation of policy regarding human resources in the sector; and the assimilation of technological developments and innovation in general.
2. The LTC burden on households: The National Long-Term Care Program significantly increases the affordability of LTC services for households with a highly dependent elderly member. Thus, their LTC benefit (in terms of service units) will grow by 36 to 44 percent[14], an increase which is dependent on the level of the benefit that they are eligible for after the reform. The reform is not expected to significantly improve the ability of elderly patients at low to intermediate levels of dependence to finance LTC.[15] Figure 3 presents a simulation of disposable income after the deduction of expenses for

[12] A comparison of public and private insurance schemes and an analysis of the justification of state intervention in LTC insurance can be found in Cohen-Kovacs, G., M. Haran-Rosen and T. Ramot-Nyska (2018), "LTC insurance in Israel", Bank of Israel [Hebrew].

[13] The Bank of Israel prepared a forecast of LTC expenditure in Israel for the long term. The growth of the elderly population and of the cost of LTC services is expected to raise expenditure in any reasonable scenario. However, there is uncertainty with regard to a number of central parameters: (1) the extent of the expected drop in the proportion of those in need of LTC in each age group as life expectancy increases; (2) the price elasticity of demand for LTC services; and (3) the elasticity of the supply of informal care with respect to the increase in price of LTC services. Therefore, the range of the forecast is relatively wide. In the more moderate scenario, expenditure will increase from 1.2 percent of GDP in 2015 to 1.3 percent in 2030 and 1.4 percent in 2045. In the more extreme scenario, expenditure will grow to 2.1 percent of GDP in 2030 and 3.2 percent of GDP in 2045 (further details appear in Cohen-Kovacs, et al., forthcoming).

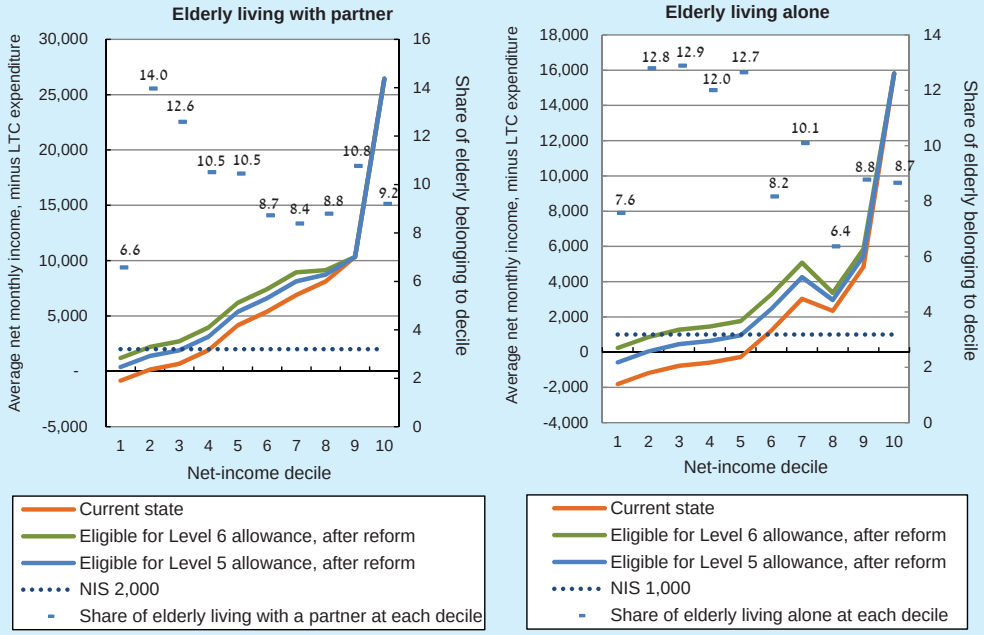
[14] Currently, they are eligible for 18 (22) units of service if they employ a foreign (Israeli) worker and the reform will increase their eligibility to 26 and 30 units respectively.

[15] The reform will not harm the eligibility of elderly patients who are already in the system.

LTC currently and after the full implementation of the reform. It focuses on LTC patients at the highest level of dependence and divides them according to income deciles. The graph shows that although the implementation of the reform will ameliorate the problem of financing LTC, in the lower part of the income distribution the problem will remain severe. The problem of financing LTC expenditure is even more severe among the elderly that live on their own and among those that do not own a home or do not have capital income. The need to implement further measures that will ensure the ability of households to finance LTC should be examined—for example, measures that encourage them to purchase private LTC insurance or to open a designated savings plan.

3. Home care—supervision, training, professional support and regulation of labor relations: Long-term care is labor-intensive and it is reasonable to assume that its efficiency will improve only slowly unless there is major technological improvement. Many of the caregivers in the household LTC sector do not receive any training or professional instruction, since the State demands this of only one-third of them. The caregivers are caring for patients with serious health problems; their work is physically and mentally strenuous and requires a high level of responsibility, reliability and compassion. Furthermore, they do

Figure 3
The Breakdown of the 75+ Age group, by Net Income Deciles[a] (2015), and Disposable Income Net of LTC Expenditure, Currently and After the Reform[b]



[a] The income deciles are determined according to equivalized income per capita in the general population.
[b] The simulation focuses on the elderly who are eligible for the highest level of assistance. It assumes that the elderly at the two highest levels of dependence after the reform (levels 5-6) and the highest level of dependence prior to the reform (total dependence) are in need of assistance or supervision around the clock and therefore they spend NIS 8,000 on long-term care.

SOURCE: Based on data from the Expenditure Survey of the Central Bureau of Statistics.

not belong to an organized social-professional network. The foreign caregivers sometimes do not enjoy work and living conditions that provide them with privacy and the gaps in culture and language are liable to be a problem both for the caregiver and the patient. In these situations, an uncomfortable relationship often develops between the caregiver and the patient and his family. Without appropriate training and professional guidance, the accumulation of problems is liable to harm the functioning of the caregivers and increase the chances of them developing compassion fatigue and becoming physically, emotionally and mentally exhausted. This is liable to affect the quality of their work and the quality of their lives and as a result the quality of life of the patients.[16]

4. The State Comptroller has pointed to the deficiencies in the mechanism for supervising the care provided by home caregivers in the community.[17] The State Comptroller devoted a major portion of his report to phenomena such as care hours that are not actually provided, deficient labor norms and insufficient supervision. Mechanisms are needed that will ensure the provision of LTC hours and will regulate the work relations between the caregiver and the patient, as well as enforcing the basic standards for reasonable care of elderly LTC patients and for the training of caregivers and professional guidance provided to them in their work. It may even be necessary to create salary scales that vary according to the caregiver's level of training and the complexity of his work. Although the National Long-Term Care Program relates to some of these issues, it is unclear what it will include, how the budget will be allocated and what will be the oversight mechanism to ensure that targets are met.
   Fitness of human resources and supervision in the geriatric institutions: The reform in the LTC sector needs to clearly determine the allocation of fitness of human resources at LTC institutions, the mechanisms for supervision of their workers and the care they provide and the character of their instruction and training. In addition, it would be worthwhile defining transparent measures to determine whether targets are being met.
5. Issues related to private LTC insurance: The National Long-Term Care Program does not relate to issues connected to private LTC insurance. The private insurance policies do not ensure sufficient coverage when the need arises, since they are characterized by under-insurance. This is due to two factors: First the insurance companies index premiums on policies purchased for a future period to the CPI, but the cost of LTC services increases at a higher rate since they are based on the cost of manpower (salaries). This is liable to erode the value of the insurance, particularly for the young who purchase insurance for their old age. Second, most of the LTC policies pay out for a period of at most five years, even though an individual can be in an LTC situation for a longer period. Finally, some of the population cannot purchase private insurance, such as those suffering from chronic health problems.
6. Ensuring the full utilization of rights in the system and in particular after the reform, as it encourages the elderly to shift from in-kind services (the situation today) to services in money. The shift to a cash benefit is liable to increase the bureaucratic burden involved in the acquisition of nursing services, particularly among elderly LTC patients at low levels of dependence, and the full realization of rights in the system should be ensured following the reform.

[16] See, for example, Pardes, A. and Y. Ben Nun (2014), "Compassion fatigue: manifestations, risk factors, prevention and treatment," *Gerontology and Geriatrics*, Vol. 41, no. 1. [Hebrew]
[17] State Comptroller (2017), "State care of elderly LTC patients at home: special report". [Hebrew]