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The Economic Background of the Social Protest of Summer 2011

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Abstract

The social protest of summer 2011 was largely one of younger Israeliborn Jews. The centrality of this group in the protests may be explained by trends in their socioeconomic position. Analysis of the period between 1995 and 2010 shows that in the five years prior to the summer of 2011, the income of the typical working family headed by a young Israeli-born Jew, relative to all Israeli households, declined to unprecedented levels. The main cause was wage erosion among young adults. This decline also occurred among those with higher education, and their chances of attaining an income in the highest quintile fell substantially, especially among women. Among young Arabs and ultra-Orthodox Jews, both individual wages and household income already very low in earlier years - declined even further. Of all the population groups, only Russian-speaking immigrants improved their relative income position. Overall in the period studied, there was a decline in the value of those advantages that previously assisted young families in Israel to attain a middle-class standard of living: higher education, two working partners, residence in the Tel-Aviv area, and being an Israeli-born Jew. At the same time, the rising cost of housing has made income erosion a bigger problem. The proportion of young adults living in their parents' homes increased, and the share of young home-owning families fell.

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Summer 2011 was an exceptional time in Israeli history. What began as a "tent protest" focused on housing costs expanded quite quickly into profound criticism of public policy in education, health, taxation, transportation, and more. Central to the protest leaders' demands was the reshaping of social priorities in order to reduce economic inequality in Israel. At the same time, the protests appeared to be indicative of economic hardship among younger Israelis, especially in the middle class. These young people as well as their parents expressed frustration, anger, and disappointment at their inability to meet the rising cost of living and a growing sense that the State of Israel had abandoned them.

This chapter examines changes in the living standards of young Israeli adults (aged 25-34) from the mid-1990s to the present. The analysis is based on two main variables that reflect standard of living: income and housing. Income is measured both by individual earnings and household income; and the housing indicators relate to individual living arrangements (e.g., with parents vs. independent) as well as the question of home ownership (versus rental) among young families.

The results consistently point to declining living standards among younger individuals and families. Some of the measures indicate a steady long-term decline whereas in others the decline is more recent, yet all analyses show a clear decline in the year or two preceding the protest. Moreover, a major impetus for the protest was the sense that economic hardships had reached the mainstream of Israeli society. This widespread sense is confirmed by the results, which show that the decline has affected even those young Israelis who are relatively advantaged – Israeli-born Jewish university graduates from central Israel – a fact likely to explain their intense involvement in the protests.

1. Data and Measures

This study is based on the annual income surveys conducted by the Central Bureau of Statistics (CBS) between 1995 and 2010. Each annual survey samples about 6,000 individuals and 1,300 young families (with "families" defined as households consisting of a married couple with children, "young families" as families headed by an individual aged 25-34). In addition to having a wide sampling that allows breaking the population down by separate variables, the income survey includes individual income information within households allowing an analysis of within household incomes. Since the income information on the self-employed was not included for the first years of the income survey, all of the empirical analyses in the chapter relate to salaried employees only – for both individual and household incomes (i.e., only families headed by a salaried employee were included).²

Social and political cleavages within Israeli society influenced individuals' degree of participation in the social protest. The protest was largely driven by secular, Israeli-born (non-immigrant) young people. Public opinion polls (Haber, Heller, and Hermann 2011) indicate that members of certain groups — Arabs, Haredim (ultra-Orthodox Jews), immigrants from the former Soviet Union (FSU) — expressed reservations about the protest despite these groups' relatively limited access to economic resources.

¹ The information collected in the income survey does not enable identification of cohabiting couples with children or same-sex relationships.

Samples since 1997 have ranged from 5,500 to 6,400 individuals and from 1,200 to 1,400 families (rounded to 100s). The 1995 and 1996 surveys were more limited, sampling only 3,000 individuals and 700 families. Data for East Jerusalem residents are missing for certain years and therefore excluded from this study.

³ The terms Arabs and Arab Israelis are used interchangeably to refer to the same population.

Most of the following analyses will distinguish between Israeli-born Jews, Arabs, and immigrants from the FSU. In addition, Israeli-born Haredim will, for the most part, be treated as a separate group.⁴ Young immigrants who were not part of the mass wave of immigration from the FSU have not been included in the study due to their heterogeneity.

Table 1 shows the relative size of the groups at various points in time. As the data indicate, the population of non-Haredi Israeli-born Jews has declined in relative size due to growing numbers of immigrants and Haredim, although it still constitutes nearly 60 percent of the younger population.

Table 1. Major groups in Israel's young population (ages 25-34)

	1995-1996	2002-2003	2009-2010
Israeli-born Jews (not including. Haredim)	63.9%	60.9%	58.9%
FSU immigrants	11.0%	13.4%	13.1%
Haredim	4.4%	4.7%	5.9%
Arab Israelis	17.8%	16.8%	16.8%
Other immigrants	2.8%	4.2%	5.2%

Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

⁴ The CBS data underlying this study do not make it possible to identify Haredi individuals with certainty. Included in this category were all people living in a household in which at least one male member's last educational framework was a yeshiva. Because the population of FSU immigrants barely includes Haredi Jews, no distinction was made between Haredi and non-Haredi individuals within that population.

This study's reliance on CBS income surveys presented several challenges. First, some variables were not included in the survey, or were included but only partially. An example of a variable not available in the surveys is current educational status, without which employed students could not be distinguished from employees who had already graduated. Two examples of variables for which only partial information is available in the surveys are Haredim and household living arrangements.

Another difficulty was that over the research period, some 15 years, a variety of changes occurred: in the sample, the variables included in the questionnaire, and their definitions (details are provided later in the chapter, when appropriate). In addition, even though the samples are relatively large, breaking down the findings by age, education, survey year, and other variables could decrease the accuracy of results with regard to the total population. For this reason, the study's findings are best approached cautiously, with an eye to general trends rather than detailed findings for specific years. To minimize the effects of sample errors and technical changes on long-term trends, in most comparisons the annual results have been grouped into sub-periods.

2. Preliminary Findings and Division into Sub-Periods

The approach adopted here assumes that the degree to which individuals experience satisfaction or a sense of deprivation in relation to their income depend on two variables: relative attainments and purchasing power. People judge themselves relative to others and are sensitive to the purchasing power provided by their income, relative to their aspirations and expectations. Expectations are not studied here directly, although towards the end of the chapter the issue of housing – which figures heavily in young people's complaints about the cost of living in Israel – is examined. The main part of the study deals with changes in individual and family incomes relative to the total population, making it possible to

assess differences between groups of young people as well as where each group is situated in the overall income distribution of the population.

The relative income position of young working families was calculated in two stages. In the first, the typical young family was identified, defined as the household with the median income relative to all young families. In the second stage, this median income was located in the income distribution of all Israeli households. For these purposes, all households (excluding pensioners) were divided into one hundred equal groups according to their income. The method is similar to that used in creating income deciles except that in this case, percentiles are created. In 2010, for example, the median income of young families was NIS 5,917. In the same year this level of income was in the 47th percentile of all families (the income of the families found in this percentile ranged from NIS 5,871 to NIS 5,979). As in other studies of household income inequality, all calculations were adjusted for family size by calculating standardized per capita income.⁵

To illustrate the importance of a relative perspective in understanding trends in young working family incomes in Israel, Figure 1 compares the trends obtained using our preferred measure ("relative income") with the standard approach, based on average real income in shekels ("absolute income"). The method used in this research replaces the average with the median, since the mean is always skewed upward by those with high earnings, thereby failing to reflect typical group members. In addition, the proposed method (based, as noted, on relative calculations) takes into consideration the possibility that even if a given group enjoys a rise in income that exceeds the inflation rate, satisfaction with income is determined by gains relative to other groups.

The analysis in Figure 1 relates to Israeli-born Jews and does not include Arabs, FSU immigrants or Haredim. Comparison of the trends that are found using each of the two income measures reveals strikingly

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The OECD's equivalence scale has been adopted in this study, in which the standardized number of persons per household is the square root of the actual number.

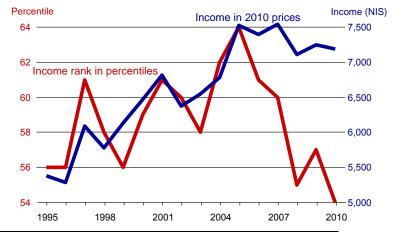
divergent results over the past few years. Since 2005 the real income of younger families has remained stagnant followed by a slight decline, whereas their relative income over the same time period fell dramatically – by ten percentiles – to a level previously unseen in the series.

In contrast to the moderate decline indicated by the absolute measure, Figure 1⁶ shows that in relative terms the incomes of young Israeli-born Jewish families eroded. It follows that on average, the incomes of the rest of the population were rising faster than consumer prices.

Figure 1

Real income versus relative ranking – young working families

non-Haredi Israeli-born Jews, 1995-2010



Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

⁶ In this figure and in all additional tables and charts in this chapter "young" refers to ages 25-34. Data relating to household income represent disposable income per standard person (as noted, using the equivalence scale of the OECD). The data refer to households consisting of a married couple with at least one child, in which the head of the household is a salaried employee between the ages of 25 and 34. Total income by percentile was ranked relative to all Israeli households headed by an individual under age 65.

Most of the families that did better than the young families analyzed in Figure 1 belonged to older age groups, although as will be shown later in the chapter, one segment of the younger population – immigrants from the FSU – were able to improve their relative position significantly. It is important to emphasize that the erosion in the incomes of young Israeliborn Jews relative to the rest of society occurred in a period characterized, according to their claims, by particularly steep increases in the prices of products and services relevant to young families, especially – and most sensitively – in housing (a subject that will be looked at more closely later in the chapter).

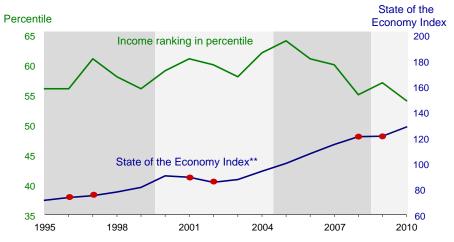
Another component of the method of analysis that is worth noting is the division of the 16 years into time periods. An important element in this division is not to give undue weight to years of economic plenty or scarcity, which naturally can affect the relative achievements of the younger population.

Figure 2 reproduces the trend over time in the relative income (in percentiles) of young families, but with the addition of the composite State of the Economy Index calculated annually by the Bank of Israel. This measure (shown in the lower portion of the figure) is an indicator of economic activity in Israel.

In the chart substantial differences can be seen in changes in the relative income of young families in the first two and last two periods (1995-2004 versus 2005-2010). The first two periods are characterized by short-term fluctuations (probably induced by recessions, indicated in Figure 2 by red dots) but a rising trend. Despite cyclical declines, between 1995 and 2005 the relative position of young families rose from the 56th percentile to the 64th. The third period (2005-2008) is characterized by the steep erosion noted earlier, and cannot be explained by macroeconomic factors, whereas the final two years (2009-2010) show no change. By 2010, the year before the social protests erupted, the relative income position of young families had reached an all-time low, and stood at the 54th percentile.

Figure 2

Changes in the income of young working families income of Israeli-born Jews*, in national percentiles, 1995-2010



- * Not including Haredim.
- ** Red dots signify years of economic recession.

Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

3. Developments in Individual Wages

For most young working parents, the main determinant of the household standard of living is their income from work.

According to the Bank of Israel, in the course of the last two decades, the real wages of Israelis rose steadily between 1993 and 2001, then fell sharply as a result of a recession.⁷ Since 2002, average real wages have

⁷ Bank of Israel, 2011 Annual Report.

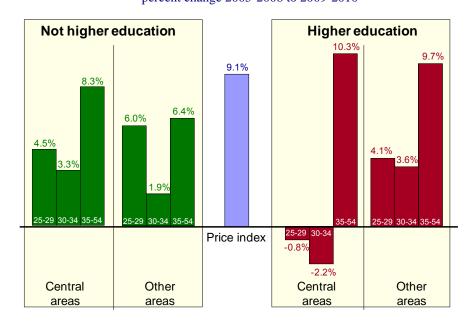
remained unchanged, except for minor cyclical fluctuations. How did the wages of young people fare in this situation? To see the complete picture, factors that influence wages in Israel – like education and geographic location (Tel-Aviv and the center where nearly half of young households are found, versus other areas) – must be considered. The analyses that follow encompass all wage earners, including those employed part-time (common among mothers and students). Consequently, the calculations therefore refer to hourly wages.

Figure 3 presents the rate of change between the two last periods of the study (2005-2008, 2009-2010) in two variables: nominal earnings per hour and actual inflation. It shows clear indications of erosion of the wages of young people – in particular those with higher education in the center of the country, whose nominal earnings actually declined by a few percentage points at a time of significant price rises (9 percent). In contrast, among older workers (35-54 years-old), the average rise in wages was similar to the price rises in all areas. Also amongst those without a higher education there is a gap between generations, although more moderate, and the value of the earnings of young people eroded more than that of the older groups. It should be noted that if the changes are calculated from an earlier point (starting in 2000; results not shown) a similar picture emerges, although it is even clearer. While the cumulative inflation rate went up by some 17 percent, only the hourly wage rate of those with higher education between the ages of 35-54 rose at a similar rate – while the earnings of all other groups declined. It is reasonable to assume that this changed the relative position of young people in the wage structure.

Individuals with higher education are defined as ones who attended an accredited institution of higher education and completed at least 15 years of study. The reason for this indirect definition is that not all income surveys included a detailed question about the highest diploma acquired. Central Israel was defined as including the following districts: Sharon, Petach Tikva, Ramla, Rehovot, Tel-Aviv, Ramat Gan, and Holon.

Figure 3

Recent trends in wages and prices
hourly wages of salaried employees,
percent change 2005-2008 to 2009-2010



Source: Michael Shalev, Taub Center and Hebrew University.

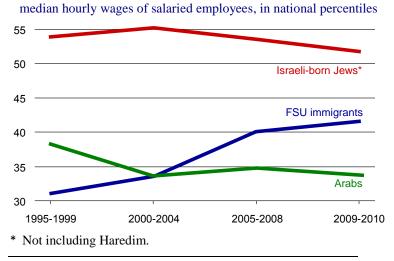
Data: Central Bureau of Statistics.

The position of the typical young wage earner in the overall hierarchy of hourly wages can be estimated using the same approach used earlier to evaluate the position of the typical young family. The income of the typical younger worker is defined as the median income of young workers. This median is compared with the incomes of other Israelis divided into percentiles. The division into years and population groups is the same as before, with one exception: since the sample did not include enough young Haredi wage earners, this group was not included in the current comparison.

Figure 4 shows that young Jews who are not immigrants or Haredim have the highest position in the national wage hierarchy and Arabs are positioned lowest. Over the last decade, these two sectors experienced little change in their relative position: the situation of Arabs remained fairly constant, while the highest group experienced a measure of erosion (by three percentiles) but remained in a relatively high percentile. At the same time, the hourly wages of young FSU immigrants increased substantially – their position on the earnings scale rose by 11 percentiles.

Figure 4

Relative earnings of young adults



Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

Alongside the findings in Figure 4, it should be remembered that every sector is comprised of many parts, and individual education is highly important for wage levels. Figure 5 separates the data for each group of young people (with the above-noted exception of Haredim) by education level (with or without higher education) and by gender. The

overall trend is clear. Over the fifteen years examined, Israeli-born Jews and Arabs at all education levels and of both genders experienced declines in their relative wages. In contrast, immigrants from the FSU, especially those with higher education (about one-third of this group), experienced the opposite trend. Whereas in the late 1990s the wages of FSU-born men and women with higher education were lower by 20-30 percentiles than those of their Israeli-born counterparts, two decades later the gap had nearly closed, falling to 4-5 percentiles.

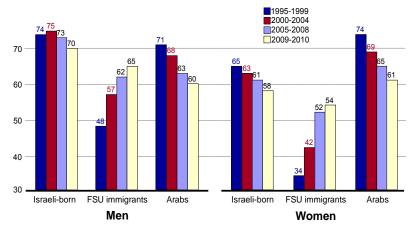
What does the data reveal about the Arab minority? Here the results are very different for those with and without academic studies. In the first period, the academically-trained group was very small and selective (less than 10 percent in the first five-year period) and presumably had the advantage of filling senior positions. As a result, this group began at a similar or even higher relative position than Israeli-born Jews. Since then, however, Arab professionals of both genders suffered a steeper decline than their Jewish counterparts, although among women with higher education, Arabs still enjoy a slight advantage over Jews. Meanwhile, Arabs without higher education have always been located far below Jews in the wage hierarchy.

Returning to immigrants from the FSU, what can explain their remarkable advances, so exceptional against the general background of declining relative incomes among young people?

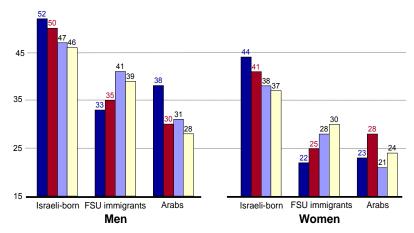
Figure 5 **Earnings rankings – ages 25-34**

per work-hour, percentile of median person, by gender and sector*

A. With higher education



B. Without higher education



* Not including Haredim.

Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

The 1990s wave of immigration from the FSU included many academically educated individuals. In addition to employment difficulties stemming from language deficits, many immigrants were employed in occupations in their country of origin that were unsuited to the needs of the Israeli economy. Others with more compatible occupations (like doctors) were often relegated to less attractive segments of the Israeli labor market (Sussman and Zakai 1998). Many had to undergo occupational retraining to find employment, while others resigned themselves to less lucrative jobs for which they were overqualified (Raijman and Semyonov 1998). For these reasons and others (for example, the fact that many immigrants from the FSU resided in geographically peripheral areas), many immigrants, regardless of gender or education, began low on the wage scale but had ample potential to improve their position once they had mastered the language and become better acquainted with the local labor market.

Note, however, that rather than following the members of one age cohort over time, the current analysis examines the same age group (25-34) in different periods. Since the relevant age group spans ten years while each sub-period spans only two to five years, the study population at any given time consists of individuals from several consecutive cohorts. The findings therefore reflect the characteristics of new cohorts, as well as processes of immigrant absorption experienced by members of earlier cohorts.

It is fair to assume that cohort succession had a positive effect on the wage attainments of young immigrants from the FSU. Earlier cohorts, whose members arrived in Israel as adults, and thus were Russian-speaking and Russian-educated, were replaced over time by later cohorts whose members arrived at a younger age and were partly raised and educated in Israel. By the mid-2000s, most academically-educated immigrants aged 25-34 had studied in Israeli high schools or universities or colleges. In addition, by that time many immigrants had moved away from the periphery, increasing the percentage of FSU immigrants living

in the country's central regions from 38 percent in 1995-1999 to 48 percent in 2009-2010.

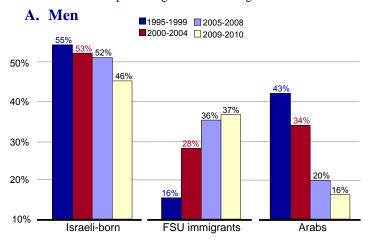
This analysis of the percentile rank of the typical wage-earner in each group is based on the median young person's salary. However, changes in the median do not necessarily reflect what is going on with all members of a group. Theoretically, it is possible that the median earnings of Israeli-born Jews fell mainly because of the growth of low-wage employment, leaving the more advantaged members of this group undisturbed. To find out whether high-achievers also suffered a decline in their relative wage, the percentage of young adults whose hourly wages are high enough to be included in the top 20 percentiles (the top quintile) of all employees is examined. This analysis is limited to those best positioned to succeed: those with higher education, aged in their early thirties (i.e., old enough to be on the road to success).

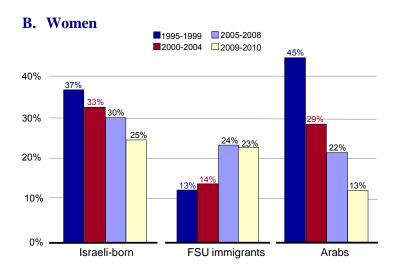
Figure 6 shows trends in the position of those aged 30-34 in different population sectors, for men and women separately. The most striking results pertain to well-educated Arabs: there was a tremendous decline in the proportion of young Arabs in the top wage quintile, especially among women (from one out of two to one in eight). Israeli-born Jews experienced a much more moderate but still significant decline throughout the survey period, which became more severe in the last two years of the study, just before the social protests. By contrast, immigrants from the FSU experienced sharp increases. This rising trend stopped recently, but without turning into a decline.

Figure 6

Young adults with higher education in the top quintile of hourly wages

as a percentage of all those aged 30-34*





* Not including Haredim.

Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

Even more striking are the gender-related aspects of the results. Not only did the percentage of women making it to the top quintile decline in each successive period (with the exception of Arab women over some of the periods), but the decline was steeper for women than for men. (In the case of immigrants from the FSU, women's advance to the top quintile was slower than men's.) The decline experienced by Israeli-born Jewish women was double that of their male counterparts; and similarly, the increase enjoyed by male FSU immigrants was almost double that of their fellow female immigrants. At least for those women born in Israel, this result may help explain their central role in the social protests.

The differences between sectors are especially striking in the case of Arabs and immigrants from the FSU. Among Arabs, the decline is explained in large part by the contrast between the rapid growth in the percentage of academically educated individuals and the fact that job opportunities are largely restricted to the Arab communities, increasing competition among educated applicants and causing some (especially men) to accept relatively low-paying jobs offered by Jewish employers. By contrast, the higher education acquired by immigrants from the FSU increased in value over time, among other reasons because they now have a better range of opportunities, because they face less discrimination than their Arab counterparts and because more of them now live in the center of the country.

Several factors may explain the decline in the relative earnings of young professionals in their early thirties (Shwed and Shavit 2006). First, the doubling of the percentage of young adults with higher education means that some of these individuals have less ability and motivation than in the past. In addition, a growing proportion are now educated at colleges whose degrees confer less value in the labor market than do those of universities. Second, over time some occupations (e.g., primary school teachers) now require degrees, without experiencing comparable increases in relative pay. Third, as there are more educated workers in the labor force, competition is likely to drive down their wages. Fourth, since age at graduation and the age at which stable careers begin have

both risen, members of more recent cohorts are likely to have less work experience and tenure. Finally, simply having a diploma no longer meets the requirements of an advanced economy. It is possible that some graduates of colleges and universities suffer from a mismatch between their skills and those sought by employers.

4. Developments in Family Income

The findings presented early in this chapter revealed that there has been serious erosion in the relative earnings of young working families over time. For several reasons it is important to focus on the situation of families when analyzing the young population. First, young adults with their own families constitute the largest group in Israel's young population, totaling 51 percent (on average over the 15-year period). Second, based on past trends, most young adults who have yet to start families of their own are likely to do so in the future. Third, this group is the most homogeneous. It is more difficult to analyze the earnings of all households headed by a young person because of their heterogeneity there are households of singles, cohabitants, couples without children, single parents, and more (for further details see Section 5). Fourth, focusing on this group is of paramount social importance because they are likely to be the most economically vulnerable. As the social protests underlined, difficulties of coping with the cost of housing and education are likely to be especially pronounced for families with young children.

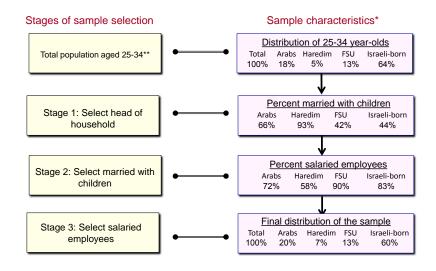
This section provides additional information on how the young families included in the survey were identified in practice. It also introduces several important factors – in addition to wages that were analyzed in the previous section – which determine the incomes of young households.

The young working families included in this survey were selected using a three-stage process (left-hand side of Figure 7). First, all households headed by a young adult (aged 25-34) were identified. Second, only households headed by a married individual with children were selected. Finally, only households headed by currently employed salaried employees were selected. This excluded from the survey young families headed by non-salaried members of the labor force (including the self-employed).

The right-hand column of Figure 7 presents key characteristics of the sample (divided by sector) at different stages of the selection process. The results show that Haredim (and to a lesser extent Arabs) were disproportionately included in the final sample because they tend to start families at younger ages. Nevertheless, they were also more likely to be excluded because of their low rates of employment for the head of household, especially among Haredim. In the end, the share of Arabs and Haredim in the sample was higher than their initial share while the share of Israeli-born Jews was lower and the share of immigrants from the FSU was proportionate to their share in the population.

In households with a married couple, the head of the family is usually defined by the Central Bureau of Statistics as the higher-earning spouse, regardless of gender.

Figure 7
Selection stages and characteristics of the sample of young working families



- * Averages for 1995-2010.
- ** Not including immigrants who were not from the FSU.

Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

Table 2 provides data on some important determinants of family income. The analysis presented in the previous section focused on the earning power of individuals, but earning power is only one determinant of the earnings of families with children. The data in the table relates to several additional features of households that may influence their earnings. First it relates to total working hours which depends primarily on whether both spouses work or not. Second, since household income is adjusted for family size, having more children in the family dilutes the earning power of the parents. Finally, gainful employment is not the only

potential source of household income. For most families, transfer payments from the government are the most likely additional source.

Table 2. The attributes of different sectors of young working families*

Characteristics	Israeli- born	FSU**	Haredim	Arabs
Working partner	67%	69%	21%	17%
Median number of work-hours (per couple)	72	75	36	51
Mean number of children	1.9	1.5	3.5	2.5
Transfer payments as percent of household income	9%	12%	33%	13%

^{*} Averages for 1995-2010.

Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

The figures show that the incomes of both young Israeli-born families and FSU families benefit from their relatively low number of children and high likelihood (more than two-thirds) of being dual-earner households. The opposite is true of young Haredi and Arab families (they have relatively large families and both spouses are less likely to work) and serves to drive their family incomes down, although to some extent this is compensated (mainly among Haredim) by enhanced transfer payments.

^{**} Immigrants from countries other than the FSU.

Trends in the Relative Income of Young Families

This section presents trends in the incomes of young working families relative to disposable household income in the total population (in percentiles). Household income is defined as total income from all sources, after tax and other mandatory deductions, divided by the standardized number of persons in the household. The analysis begins by comparing trends in wages and trends in household income for each of the four population groups included in the study.¹⁰

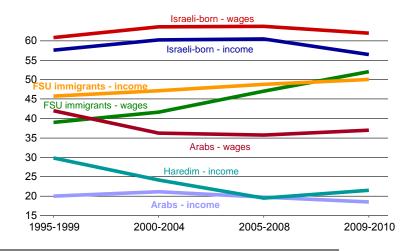
As Figure 8 shows, the relative position of young Israeli-born Jewish families in the household income hierarchy is six percentiles lower than the relative position of heads of household from the same group in the individual wage hierarchy. Nevertheless, the two indicators exhibit a very similar trend of moderate increases followed more recently by decline.

In contrast, until recently the relative incomes of young FSU-immigrant families were superior to the relative wages earned by the heads of these families. During the 2000s, however, this superior position was undermined; as a result, the rapid labor market advances made by young FSU immigrants are only modestly reflected in their relative household income.

Due to a limited number of cases, the analysis excludes Haredi wage earners. To make wage and household income data commensurable, the present analysis (unlike the previous analysis of wages) does not include all wage-earners aged 25-34, only those who are household heads.

Figure 8

Relative earnings and family income among young people
median individual and household in each sector, in national percentiles



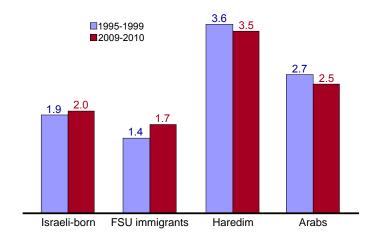
Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

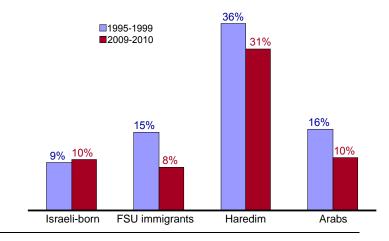
The data in Figure 9A-9D may help clarify this trend. On the one hand, as more FSU-immigrant households moved to the center of the country and continued to work long hours, one could expect their family income to increase. On the other hand, changes in the other two determinants of family income caused that income to fall. First, the number of children in households headed by an FSU immigrant increased. Second, the percentage of FSU immigrants eligible for special benefits earmarked for new immigrants fell over time, shrinking household income from transfer payments among this group.

Figure 9
Characteristics of young working families, by sector

A. Average number of children



B. Transfer payments, as a percent of disposable income



Source: Michael Shalev, Taub Center and Hebrew University.

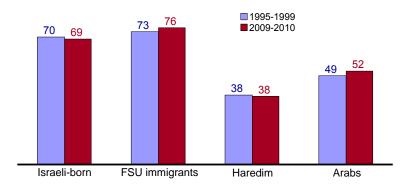
Data: Central Bureau of Statistics.

Figure 9 (continued)

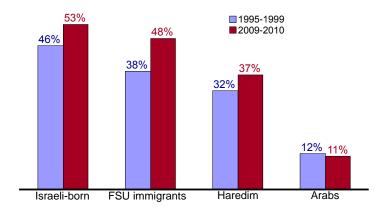
Characteristics of young working families, by sector

C. Average number of working hours per week

both partners work



D. Residence in center of country, as a percent of all working young families



Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

Among the two economically disadvantaged sectors, Arabs and Haredim, relative household income has been much lower than relative wages. This has been the combined effect of their low percentage of dual-earner households and their high birthrates. The two groups also differ, however, in several important respects. As Figure 9A shows, members of Haredi households work considerably fewer hours than their Arabs counterparts, and their families are significantly larger. Had it not been for the very substantial contribution of transfer payments, household income would be much lower for working Haredi families than for their Arab counterparts.

Turning now to trends in the household income of young working families, Figure 8 shows that over the last 15 years, young Israeli-born Jew and FSU immigrants experienced continuous improvements, though this trend was reversed in the two years prior to the social protest of 2011. However, since the long-term improvement was greater for FSU immigrants and the recent erosion smaller, the gap between this group and (non-Haredi) Israeli-born Jews fell from 12 percentiles in the late 1990s to only 8 percentiles in 2009-2010. Far below both of these groups in the household income hierarchy are the Arab and Haredi populations, which occupy similarly disadvantaged positions. Whereas Haredim started out significantly higher in the late 1990s, young Arab families experienced remarkably little change.

Figures 9A to 9D illustrate the many contrasts between the four population sectors with respect to the various determinants of household income (other than wage levels): average number of children per household, transfer payments as a share of total family income, total hours worked by the spouses, and place of residence in Israel. As already noted, some of these determinants changed over time. An interesting question remains: would the four groups still differ in terms of income

As already noted, estimated hourly wages are not shown for Haredim due to small sample sizes. However, data for the two most recent periods (when samples were more representative) place Haredi employees (many of whom are female teachers) 7-10 percentiles higher than their Arabs counterparts.

and relative ranking if they all shared the same characteristics except wage levels? This will be the final topic of the present analysis after an examination of several important issues relating to changes in the earnings of young working families over time.

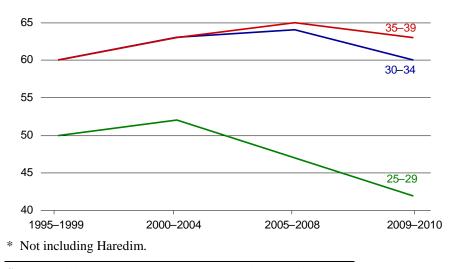
Is Declining Income Limited Mainly to the Youngest Families?

In choosing to define "young" as ages 25-34, this research may have exaggerated the situation of most young families, which are headed by persons in the upper levels of this age range. Due to the tendency for age at marriage and at the birth of a first child to rise, by 2009-2010 fewer than 30 percent of the heads of young working families were under the age of 30. Declines were especially large among Russians and Arabs; among Israeli-born Jews the fall was less severe (from 28 percent to 24 percent) and among Haredim there was actually an increase. In view of the numerical importance of young families headed by Israeli-born Jews, if the economic situation of the very young families in this group has been deteriorating faster than in the older age group, this might be responsible for the overall decline found in the 25-34 year-old age group as a whole.

To assess this possibility, trends in the relative position of young (non-Haredi) Israeli-born Jewish families were measured separately for the 25-29 and 30-34 age groups, and compared with the next age group (35-39). As Figure 10 shows, the decline in family income began earlier and was much steeper for families in the youngest age group. In all three age groups, family income increased between the first and the second periods and fell between the second and the third, but only the 25-29 age group suffered a dramatic decline: a fall of 10 percentiles since 2000-2004. This important finding may imply that most (though not all) of the rising economic vulnerability of very young families is actually a temporary setback, which becomes much less severe after the heads of these households reach their thirties. To test this possibility requires following cohorts of new families over the course of the life cycle.

Figure 10

Relative income of young working families by age groups
median Israeli-born Jewish family*, in national percentiles



Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

Does the Relative Income of Young Families Improve as They Get Older?

Because the sample of families investigated in the income surveys changes each year, it is not possible to follow the same members of a cohort as they age. But a good indication can be obtained by tracking adult family members from the same birth cohort in different survey years. Starting in 1995 (the first year of the study), in each five-year period all those aged 25-29 in the first year constitute a birth cohort, and so on – making for a total of four cohorts, the first one of which is observed in all 15 years and the last one (those who were 25-29 years-old in 2010) only in the final year. The only population group which is large enough for this to be technically feasible is Israeli-born Jews (excluding Haredim). For the purpose of this analysis the selection of households was based on identifying young families by the age of the female spouse.¹²

In order to increase the number of cases per cohort and minimize "contamination" of cohorts over time by the addition of couples who married and had children after the first year in which the cohort was observed, instead of selecting households in which the head was aged 25-29 the selection was based on wives in the same age range, whether or not the wife was classified as the household head. (Note however that the results of a parallel analysis based on household heads were substantively similar to those reported here.) This procedure takes advantage of the fact that most women marry at a younger age than men. As a result both spouses in the selected households tended to be older than those who would have been obtained by selecting according to the age of household heads. This in turn raised the household income level, mainly for newly-observed cohorts which would otherwise have been composed of younger individuals. In an attempt to avoid the aforementioned problem of "contamination," in principle households were only selected if the couple was already married in the first year the cohort was observed. However, due to the way year of marriage is grouped in the source data, the desired restriction could only be fully implemented for the first and last cohorts. The cohort that joined in 2000 includes newly married members through 2003, and the 2005 cohort includes them through 2006. The analysis is based on roughly 400-600 cases per year, except for the most recent cohort observed in 2010, with only 245 cases.

In order to understand Figure 11, consider the four bars indicating household income for households in the first cohort of females aged 25-29 in 1995 (meaning they were born in 1966-1970). The bar on the left (in pale yellow) shows that the median income of these households during the first observation period (1995-1999) was in the 59th percentile of all Israeli households. The bars to its right show that in later periods the median income of these households climbed to higher percentiles, probably as a result of higher pay due to more experience and, possibly, additional formal training.

Figure 11
Relative income of young working families: tracking four cohorts

median Israeli-born Jewish family*, in national percentiles

1995-1999 67 ■2000-2004 65 2005-2009 64 64 63 <u>2010</u> 61 60 59 59 60 50 47

* Not including Haredim. Young families were selected on the basis of the age of the woman in the household.

Born 1971-1975

Born 1976-1980 Born 1981-1985

Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

Born 1966-1970

40

A similar pattern is observed for the next cohort (born 1971-1975), although the observation period was of course briefer. The two most recent cohorts that also have shorter observation periods displayed worse income trajectories for young families. Strikingly, the initial relative income position of the most recent cohort (born 1981-1985, observed in 2010 only) was 12-13 percentiles lower than those of all three preceding cohorts at the same stage. In addition, the second-to-last cohort (first observed in 2005) did not enjoy the same surge in relative income that earlier cohorts experienced between their first and second periods of observation.

Only time will tell whether future cohorts of young families will continue to suffer from lower initial incomes and less improvement over their life cycle compared with young families started before the 2000s. In the worst-case scenario, the economic opportunities facing successive cohorts of young families will continue to decline, without being offset by improved attainments over time.

Is There Less Room at the Top for Young Middle-Class Families?

A good deal of the public discussion started by the social protests of 2011 centered on what many defined as a crisis of the middle class. The focus of this chapter so far on the condition of the median young family fits a literal definition of "middle." An alternative approach is to focus on two characteristics often associated with the middle class: higher education and relatively high incomes. Accordingly, this section evaluates changes over time in the success of young families in reaching the highest income quintile, distinguishing between those with and without higher education. As explained earlier, any such analysis must take into account the fact that Israelis tend to complete their higher education relatively late in life.

¹³ This finding should be treated as tentative due to the relatively small number of cases on which it is based.

Figure 12 compares the percentage in the highest income quintile of families headed by 30-39-year-olds and of families headed by 40-49-year-olds, with and without higher education. As the figure shows, among (non-Haredi) Israeli-born Jews, the percentage of young academically educated families in the highest quintile fell by 12 percent – from 51 percent in 1995-1999 to 39 percent in 2009-2010 (Figure 12A).

By contrast, among immigrants from the FSU, the percentage increased over the same period by 11 percent – from 18 to 29 percent in 2009-2010 (Figure 12B). Half of the decline among Israeli-born Jews occurred in the final period observed, the same period during which families headed by older individuals (in their 40s) improved their condition. Among immigrants from the FSU, more of the younger families reached the highest income quintile than older families, supporting the claim that younger FSU immigrants are more likely to have enjoyed the advantages of growing up in Israel.

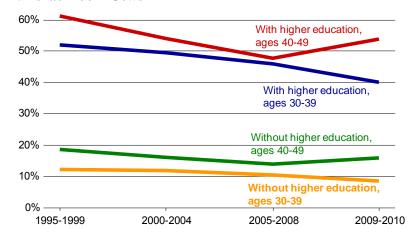
Not surprisingly, in both of the aforementioned sectors, only a small minority of families headed by an individual without higher education reached the top income quintile. Here again, however, the attainments of Israeli-born Jews deteriorated while those of immigrants from the FSU improved, leading to near-convergence between the two groups.

What of the two other population groups? Since among Haredim only women generally participate in higher education, and at comparatively low rates, Haredim were not included in the present analysis. Detailed results for Arabs are not presented, as they may not be accurate due to small samples of young families with an academically-educated head. Yet the broad picture is unmistakable. The proportion of young educated Arab families reaching the highest quintile is estimated to have fallen from 22 percent in 1995-1999 to only 3 percent in 2009-2010 – when 40 percent and 29 percent respectively of their Israeli-born and Russian counterparts enjoyed these high incomes. The rate of high-achieving families among Arabs lacking higher education is almost zero.

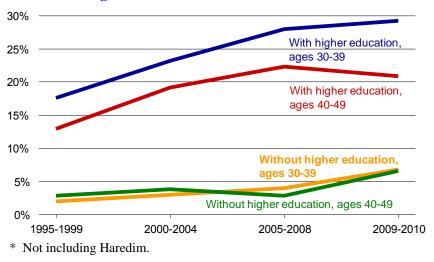
Figure 12

Young working families in the top income quintile
as a percent of all young households, by age and education of head

A. Israeli-born Jews*



B. FSU immigrants



Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

In sum, the chances of young families joining the (upper) middle class have fallen sharply among Israeli-born Jews and catastrophically among Arabs. At the same time, the chances of successive cohorts of Russian-speakers have improved substantially over time. Compared with the trends in median income discussed previously, those presented in Figure 12 are quite dramatic. This suggests that declining economic opportunities for young Arabs and Israeli-born Jews have had the most impact on families with the greatest income potential. Some of the reasons were mentioned earlier – erosion in the value of higher education due to its expansion and to inflation of job requirements. In addition, younger workers are the most likely to suffer from "insider-outsider" arrangements that effectively discriminate against them.

Would Differences Between Population Groups Be Smaller if They Were More Alike in Their Characteristics?

The evidence shows that young families from different backgrounds have experienced quite different trends in their economic wellbeing, as measured by relative income. At the same time, the background data presented earlier in Figures 7 and 9 shows that the four sectors analyzed here differ substantially in attributes that shape family incomes. Since family income depends even more on labor market earnings, it is important to consider sectoral differences in the determinants of wages, especially education and work experience (which is usually related to age). This section reports, in a non-technical way, the results of a statistical analysis which estimated what differences in incomes would have been expected if all young families – regardless of their background – had the same characteristics as the average young family. The goal is to simulate what would happen if the main sources of group advantages and disadvantages were eliminated.

The method used can be explained by way of a simple example. For convenience, suppose that families are equally split between single- and dual-income households. Further suppose that the average income of dual-income households is located ten percentiles higher than that of single-income households. To make all households equivalent, the incomes of single-earner households must be adjusted upward by five percentiles while dual-earner households must be adjusted downward by five percentiles. The statistical analysis offered here makes this adjustment simultaneously for several determinants of family income, taking into account the fact that the same determinant may have a different impact in different time periods.¹⁴

The analysis was carried out in two stages. In Stage 1, all four population groups were assigned average values of the most critical determinants of the ability of households to obtain income from paid work: the age and education of household heads, whether the spouse also works, and the extent of local opportunity (measured by whether the family lives in the Tel-Aviv region). In other words, for purposes of this calculation the between group-differences on these variables were removed, and the value for each group was based on the overall mean.

Not surprisingly, income gaps between the sectors in real life (Figure 13a) are larger than they would have been under the simulated conditions (Figure 13b). However, several differences between the real and simulated results are of interest. For the Israeli-born veterans, the simulated trend is one of steady erosion instead of what happened in reality – small improvements in the middle two time periods followed by recent decline, resulting in similar findings for the first and the last periods. The reason is that their educational level – the single most

¹⁴ The results were calculated in SPSS using ANOVA (Analysis of Variance) to estimate the mean response for each factor adjusted for all other variables in the model. All independent variables were categorical except for working hours, transfer payments and number of children, which were entered as covariates with effects calculated at their mean values. The model includes interactions between time period and all other variables. Note that because ANOVA is based on the calculation of averages, there are small differences between the results shown in Figure 12A (without controls) and those presented earlier which were based on the median rather than the mean household.

important influence on earnings – was relatively high to begin with, and improved rapidly. Had Israeli-born Jews been identical to the average young family in terms of education, that is, lower than they actually were, their income would have declined more steeply. In addition, as the earlier analysis of the earnings of men with higher education indicates (Figure 6), the effect of education on earnings decreased over time, especially in recent years. In effect, those belonging to this group find themselves going up the down staircase.

For immigrants from the FSU, the simulated results were also worse than their actual attainments. The percentage of FSU immigrants with the four advantages that are held constant in the simulation did not go down relative to the national average, and in two cases (residence in central Israel and average age) it even increased. This explains the improvement experienced by FSU immigrants in reality, even (though more moderately) in the recent difficult period which preceded the social protests of 2011.

In contrast to the two sectors just discussed, Arabs and Haredim would have vastly improved their attainments had they taken on the characteristics of the majority, since in nearly all cases their incomegenerating abilities are well below the average. In the late 1990s, adjusting these characteristics to the average would have placed both Arabs and Haredim at the same level with FSU immigrants, far above their true position in the income hierarchy. But while the simulated earnings of FSU immigrants increased over time, those of Arabs and Haredim fell sharply. Consequently, by the end of the survey period the gap between these sectors and FSU immigrants is estimated at 13-14 percentiles – still only about half of the real-world gaps.

Nevertheless, it would be a mistake to exaggerate the similarities between the Arab and Haredi sectors. Despite common features that set both of them apart from the other groups, there are also important differences. For young Haredi families, the biggest handicap observed is the very young age of the head of households (with the proportion under 30 exactly double their percentage in the general population). In

addition, the percentage of Haredi head of households with higher education is well below average. For Arabs, the latter problem constitutes the main difficulty. Despite recent increases in education levels, only a small minority of young heads of households have academic degrees. Both groups also suffer from their tendency to reside in regions with limited economic opportunities.

Specifically, in the last period observed (2009-2010) the percentage of young heads of households with higher education was 20 percent among Haredim and 16 percent among Arabs, in both cases well below the national average of 36 percent. The percentage of families residing in central Israel was 37 percent among Haredim and 11 percent among Arabs, compared with a 43 percent national average.

The second stage of the analysis demonstrates additional differences between Haredim and Arabs in the factors underlying their low average This stage takes into account three factors that directly determine income: hours worked by both spouses; transfer payments; and number of children (the latter being important since income is adjusted for family size). Comparing Figures 13B and 13C shows that the relative income of Arab families hardly changes when these additional factors are taken into account. In contrast, in all the four periods observed, the simulated income of Haredi families (Figure 13C) is about 10 percentiles higher than in the previous less comprehensive simulation (Figure 13B). This is especially significant given the adjustment for transfer payments in the second stage of the simulation, which, in itself, would have caused the simulated income of Haredim to fall considerably. This expected decrease is further offset by the opposite effects of two other characteristics unique to young Haredi families: an especially large number of children and limited work hours by the parents. Inter-sector differences with respect to these variables over time can be observed in Figures 9A to 9C.

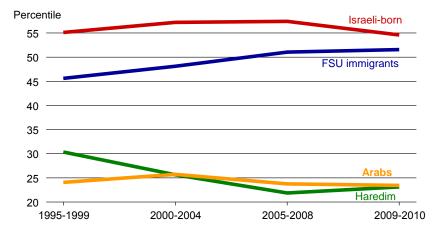
As for the other two sectors, (non-Haredi) Israeli-born Jews and FSU immigrants, the second stage of the simulation yields similar results to the first. The decline experienced by Israeli-born Jews remains unchanged because this group is similar to the national average with respect to the three variables added to the simulation. Among immigrants from the FSU, the more comprehensive simulation yields lower results than the less comprehensive one, although the difference is stable and quite small (about two percentiles). This stems from the fact that the members of this group have stable advantages (relative to the average) of the variables added to the simulation.

Figure 13

Comparing income percentiles of young working families

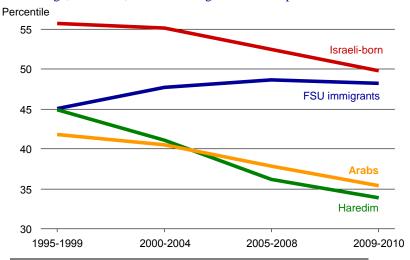
before and after simulations

A. Average income (without equalized characteristics)



B. Simulated income with equalized characteristics:

age, education, number of wage earners and place of residence



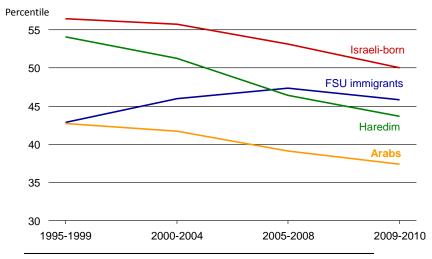
Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics

Figure 13 (continued)

C. Simulated income with equalized characteristics:

variables from previous simulation + hours of work, transfer payments and number of children



Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

In sum, the findings indicate that sectoral differences in the level and trends of the relative incomes of young families would indeed have changed had the groups been more alike in terms of their earning power, hours of work, and the other determinants of family income. The decline in the incomes of the largest and strongest group – non-Haredi Israeliborn Jews – would have been more pronounced, and the improvement experienced by FSU immigrants would have been less dramatic. Under full (second-stage) simulated conditions, Haredi Jews would have enjoyed the same starting point in the late 1990s as non-Haredi Israeliborn Jews, while Arabs would have started at the same income percentile as FSU immigrants. Later in the 2000s, both groups would have joined the non-Haredi Israeli-born Jews in experiencing a decline over time.

What, finally, does this analysis tell us about the changing situation of new cohorts of the middle class? On the basis of the full (second stage) simulation model it is possible to calculate the underlying effect of key variables that in the past facilitated a middle-class standard of living for families with children. These can be divided into three: (1) Factors shaping the earning power of individuals — education and work experience (the latter proxied by age). (2) Whether both partners participate in the paid labor market. (3) The earnings opportunities associated with a favorable location (living in the Tel-Aviv area) and family background (captured here by the distinction between Israeli-born Jews and all other groups). These influences are assessed in Table 3.

Table 3. Income differences (in percentiles) associated with "middle-class" advantages among young working families, 1995-2010 (simulation results)

	1995- 1999 Period A	2000- 2004 Period B	2005- 2008 Period C	2009- 2010 Period D	Difference between Periods A and C	Difference between Periods C and D
Higher education	19.2	18.2	17.1	15.6	-2.0	-1.5
Age (30+)	4.5	4.0	5.9	4.9	1.4	-1.0
Dual earners	15.0	14.1	12.5	11.0	-2.5	-1.5
Israeli- born Jews	7.5	7.1	6.6	5.8	-0.8	-0.8
Residence in central region	1.5	3.0	4.1	3.4	2.6	-0.7

Source: Michael Shalev, Taub Center and Hebrew University.

As these results show, the value of the three most important advantages – a head of household with higher education, a dual-earner household, and an Israeli-born Jewish head of household – declined continuously and considerably over time. The value of being 30 or over and of living in the Tel-Aviv area increased until 2009 but declined thereafter. (Note that these calculations hold constant the effects on family income of all other variables in the simulation.) It is worth noting that while Israeli-born Jews still enjoy a net advantage of almost 6 percentiles over the average young family, the value of that advantage has also declined.

To summarize, the economic value of all of the advantages which traditionally contributed to young families' ability to attain middle-class incomes has declined over the last 15 years, especially in the most recent period leading up to the 2011 protests. This represents a structural change which has undermined the attainments of both new and existing cohorts of young families. Moreover, the decline has continued in recent years, with the value of all five advantages falling sharply between 2005-2008 and 2009-2010.

5. Housing Trends Among Young Adults

The relative income of young people is an informative general indicator of their economic position in society, but it does not necessarily reflect their purchasing power. Young people face a number of start-up costs that are not shared to the same extent, if at all, by people at later stages of the lifecycle. The largest such cost is typically incurred when young people make the transition from living in the parental home to living independently and, subsequently, to purchasing their own homes.

The lack of affordable housing for young people was what sparked the initial social protest on the boulevards of Tel-Aviv and continued to be central to the wider protest movement. There is no doubt that housing prices rose steeply in the years preceding 2011. After a decade of stable

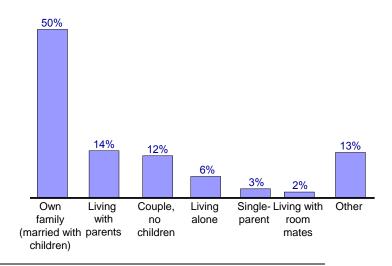
or falling prices, inflation-adjusted housing prices rose by nearly 40 percent in 2009 and 2010. More fine-grained data show that in Tel-Aviv and other areas of high demand prices began to rise earlier, in the mid-2000s (Sayag 2010).

This section of the chapter is based on data on living arrangements and home ownership collected in the same surveys used earlier to analyze wages and incomes. The goal is to see if there are indications of growing housing difficulties among young people aged 25-34.

Changes in Living Arrangements

The first analysis addresses changes in the prevalence of different living arrangements among young people. It is based on assigning individuals to six household types: independent households, living with parents, cohabiting without children, single-parent households, single-person households, shared apartments (roommates), and all other (Figure 14).

Figure 14 **Types of young households**as a percent all young people, average 1995-2010



Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

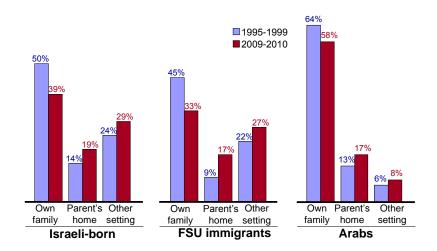
As can be seen, during the surveyed period half of those aged 25-34 had started their own families and were living in independent households while the remainder were organized in a variety of different living arrangements. About one-eighth of the participants in the sample were classified as "other" due to insufficient information or because of specialized arrangements, such as living with siblings or grandparents. (For further information on the categories see the Appendix.)

Since different population sectors display different housing patterns and have different access to economic resources, the analysis must be disaggregated by sector. As previously shown in Figure 7, the percentage of young people starting their own families is especially high among Haredi Jews; in other sectors, as Figure 15 indicates, the rising age of first marriage and parenthood has resulted in lower percentages of young people living as independent families, with the lowest percentages among non-Haredi Israeli-born Jews, followed by FSU immigrants and finally by Arabs. An obvious question is whether postponement of marriage and parenthood in these three sectors has led to changes in living arrangements among the growing number of young adults under 35 who are not married with children. And in addition, given the cost of making the transition to various forms of independent living, do these young adults tend to stay longer in the parental home?

Figure 15 shows that the percentage of young adults living with their parents has increased in all three sectors, particularly in recent years. Comparing the starting and ending figures shown in the charts, it has risen by 8 percentage points among Russians and 5 points among both Arabs and Israeli-born Jews (the increase among Haredim was only 2 points).

Figure 15

Types of young households*
as a percent of all young households in the sector



* Among Haredim there almost no changes between periods and so they are not included in the figure.

Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

With the rising rate of young people who are not starting families, independent living has also become more common. Among non-Haredi Israeli-born Jews, about 50 percent of young adults without families of their own live independently and about 30 percent live with their parents,

with the remaining 20 percent living in other arrangements.¹⁵ One major trend is the rising percentage of young couples, married or unmarried, who live together before having children (5 percent increase among both Israeli-born Jews and FSU immigrants). It is worth noting, however, that in most cases marriage and parenthood are only temporarily delayed; if past trends continue, the vast majority of young adults in Israel will marry and have children. This helps explain why concern about the high costs of home ownership (and of having children) is so widespread among young adults in Israel, including those who are still single.

An indication of the influence of cost considerations can be obtained by comparing the living arrangements of young adults who have higher and lower economic resources. Figure 16 shows trends in the prevalence of two types of living arrangements: new families (independent households headed by a young married couple with children); and unmarried young adults living with their parents. Separate results are presented for individuals with relatively high hourly earnings (those in the top two quintiles) and all others. Due to the high proportions of new families among Haredim and Arabs, the analysis is limited to veteran Jews and Russian-speaking immigrants.

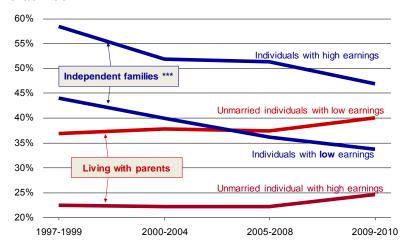
In both population groups, young adults with higher earnings are much more likely to establish families of their own (compare the top two blue lines in Figures 16A and 16B). By the same token, unmarried young adults with higher earnings could be expected to be less likely to live with their parents. This, however, turns out to be true of Israeli-born Jews but not of FSU immigrants. While among Israeli-born Jews the percentage of young adults living with their parents is 15 percentage points lower if they are high earners, among FSU immigrants the percentages are almost the same.

Some of those living with their parents may have returned after a period of independent living, either because they could not afford to continue or because their parents needed economic or other assistance.

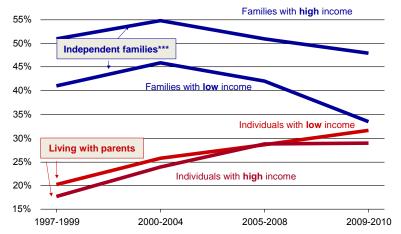
Figure 16

Changes in types of households of young people by income level*, as a percent of all households in the sector

A. Israeli-born**



B. Born in FSU



- * High earnings using top two quintiles of hourly wages.
- Low earnings using bottom three quintiles of hourly wages.
- ** Not including Haredim.
- *** Independent families are young families with children and who own a home.

Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

Over time, if the cost of family formation has risen it could be expected that the increased burden would have been relatively heavier for those with lower earnings. If this was the case, the gap between low and high earners living in independent households with families of their own would have increased. In fact, this is true only of FSU immigrants and only in recent years.¹⁶

These results may indicate that changes in living arrangements among young people have been influenced as much by changing social norms as by economic constraints. Yet the findings do not rule out the possibility that rising housing and other costs have put pressure on young adults to stay longer with their parents and postpone starting their own families.

Much of the frustration reflected in the social protests of 2011 was expressed by young adults with middle-class backgrounds, including those with relatively high incomes, who claimed that it is increasingly difficult to attain the same living standards they experienced in their parents' homes. If the cost of maintaining a middle-class lifestyle (including home ownership) has increased as steeply or even more steeply than the costs incurred by lower-class families, this would explain why even relatively advantaged young adults have been staying longer with their parents and postponing starting their own families. This issue is discussed in the next section.

The Decline in Home Ownership Among Young Families

Data on home ownership are available since 2001. The most important trends are presented in Table 4. Home ownership has declined significantly among non-Haredi Israeli-born Jews, and to a much lesser extent among Haredim and among FSU immigrants living outside of central Israel. Arabs constitute a special case, with at least 90 percent of young Arab families owning their own homes.

¹⁶ Among immigrants from the FSU, the percentage of young adults starting their own families was previously 9-10 percent higher among high earners than among low earners and rose to 14 percent higher in 2009-2010.

Table 4. Changes in home ownership rates among young working families

	2001-2004 Period A	2005-2008 Period B	2009-2010 Period C	Difference between Period C and A		
Israeli-born Jews	74%	67%	62%	-12		
FSU immigrants:						
Tel-Aviv	37%	42%	47%	+10		
Other	65%	56%	61%	-4		
Haredim	73%	71%	61%	-5		
Arabs	90%	93%	93%	+2		

Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

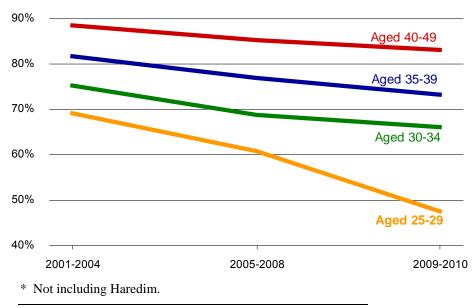
Unlike other groups, the housing situation of young families headed by an FSU immigrant is greatly influenced by where they live. The ownership rate today among those living outside of the Tel-Aviv region is similar to that of the Israeli-born group. But for those living in the center the rate started out very low and has been rising quite rapidly. In the early years many immigrants preferred or were encouraged to find cheaper housing outside of the central area of the country. The growing minority living in the Tel-Aviv region have difficulty buying their own homes, partly because of their parents' limited ability to assist them in paying for the expensive housing offered in that region.

To examine whether the sharp decline in home ownership among young Israeli-born Jews differed from home ownership trends for older cohorts, Figure 17 disaggregates home ownership data into detailed age groups. Home ownership has declined in all age groups, though less so among families headed by individuals in their forties (5 percent) than among those headed by individuals in their thirties (8-9 percent). The most dramatic decline has been in the 25-29 age group, where the rate of home ownership plunged in 2009-2010 from 61 percent to 48 percent.

Figure 17

Home ownership rates among working families

Israeli-born Jewish households*, by age of head of household



Source: Michael Shalev, Taub Center and Hebrew University.

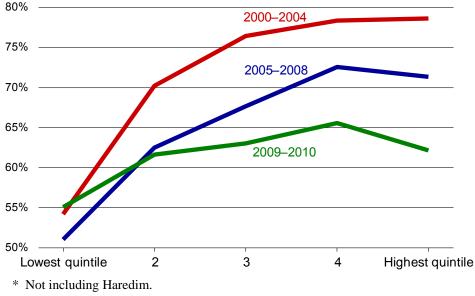
Data: Central Bureau of Statistics.

Finally, it should be asked whether the trend towards declining home ownership varies between young families with different economic situations. Is it more pronounced among those with lower income, who may have more difficulty coping with rising prices? Figure 18 presents rates of home ownership rate broken down by the household's position in the income distribution (in quintiles).

Figure 18

Home ownership rates among young working families, by income quintiles

Israeli-born Jewish households*



Source: Michael Shalev, Taub Center and Hebrew University.

Data: Central Bureau of Statistics.

It is not surprising that in all periods home ownership rates are the lowest among young people in the lowest quintile. However, this is a small group that includes only one tenth of the young families surveyed here. More significant is the fact that home ownership has declined in all other quintiles as well, with the decline more intense the higher one climbs in the income hierarchy. This trend is discernible throughout the last decade, but especially over the last few years.

What can explain the fact that home ownership has contracted the most (by over 20 percent) among the most economically advantaged young families? One possible explanation is that as a result of changing values, affluent young couples have come to prefer a more flexible lifestyle that does not involve "settling down" in a permanent home. In addition, given their high earnings and high likelihood of having relatively affluent parents, such couples may actually own an apartment for investment purposes rather than for their own accommodation.¹⁷ Another possible explanation is that the housing standards to which young adults aspire have risen to a greater extent among advantaged young adults than among other groups. It is possible, for example, that advantaged young adults are able to rent but not yet to buy apartments in the most desirable cities and neighborhoods. It is worth noting in this respect that CBS data for the population as a whole show that in recent years the estimated value of owner-occupied homes rose much faster at higher levels of family income. 18 Given that the burden of rising housing costs increases as one moves up the income distribution, it is quite possible that even affluent young families increasingly refrain from purchasing homes simply because they cannot afford to.

¹⁷ Unfortunately, CBS surveys do not provide information on home ownership other than concerning the household's current domicile.

From 2008 to 2010, the value of homes (unadjusted for inflation) rose by 23 percent for households at the median income, by 27 percent for households in the eighth decile, and by 39 percent in the tenth (top) decile. Data are from the CBS Household Expenditure Survey for 2010, Table 21.

6. Summary and Conclusions

This chapter began by documenting the fact that since 2005 the earnings of the typical working family headed by an Israeli-born Jew aged 25-34 fell almost continuously relative to those of all other Israeli households, to a level unprecedented in the period covered by this research (1995-2010). The most important factor underlying changes in relative family income is the extent to which couples' earnings from paid work keep up with inflation. Since older workers were more successful in sustaining their real wages, the position of younger workers in the national wage hierarchy declined. This erosion in the wages of young people has been widespread, affecting men as well as women and those with as well as without higher education. (Immigrants from the FSU are a dramatic exception and will be discussed separately.) Even young adults at higher levels of the income hierarchy have been affected. Young workers with higher education are far less likely to be in the top hourly wage quintile now than they were in 1995. This is especially true for Jewish women and for Arabs of both genders.

The findings indicate that the massive expansion of higher education has had its disadvantages, including lower selectivity (not all graduates of institutions of higher learning are as talented or as highly motivated as in the past), greater incompatibility between job requirements and academic training, and increasing competition among those with an academic education for high-paying jobs. In addition, changes in institutional arrangements in the labor market have worked against many young professionals. Outsourcing and other wage-cutting practices, especially in the public sector, have lowered the incomes of many academically educated professionals, most notably in social services. Older workers in these professions have often managed to retain at least some of the privileges denied to the members of new cohorts.

Half of all young adults in Israel are married with children, and most others are likely to start families of their own once they reach their midthirties (the upper bound of the age group studied here). Any discussion of the economic circumstances of young adults must therefore focus on families with children. In addition, since more than 90 percent of such families are headed by salaried employees, the appropriate focus is on what has been referred to here as young working families. The earnings of such families depend not only on the earning power of the head of the household but on other factors as well. Income is significantly higher in dual-earner families, a category that includes 70 percent of all households headed by a young adult who is a (non-Haredi) Israeli-born Jew or an FSU immigrant, but only 25 percent of all young Arab and Haredi families. This is the main (though not the only) explanation for the fact that the position of families from the latter two groups in the household income hierarchy is dramatically lower than the position of the heads of these families in the individual wage hierarchy. In Haredi families this is offset for by a relatively high level of transfer payments, although the exceptionally large number of children in such families has the effect of decreasing their income after adjustment for family size.

Since this study is concerned with trends over time, the most important finding regarding young Arab and Haredi families is that in the course of the 2000s there was almost no change in their typical position in the national income hierarchy. It remained very low, roughly in the twentieth percentile. As for non-Haredi Israeli-born Jews, the typical young family from that sector was in the 60th percentile of the national family income hierarchy until the last two years of the decade, when its relative position fell by 4 percentiles.

By far the largest group of young families in Israel, this group is still the main source of middle- and upper-class households in Israel and its members are still relatively well-off economically, although as the study shows, even they have experienced economic difficulties. First, the decline in real wages significantly decreased the percentage of such families in the highest income quintile of Israeli households, especially during 2009-2010. The statistical analysis which was conducted as part of this study shows that had their level of education not risen so rapidly and had their work hours decreased, members of this group would have

suffered an even steeper decline in relative income. In fact, most of these families could be described as engaged in a struggle to find their place in the middle and upper-middle classes. This struggle has become progressively more difficult because the advantages which have always been crucial to attaining middle-class incomes and living standards have gradually declined in value. This is especially true of the two major cornerstones of middle-class success, higher education and two incomes, although recently the economic value of other characteristics (residence in central Israel, and a later age at marriage and parenthood) has declined as well.

It is reasonable to assume that even in the absence of the above advantages, Israeli-born Jews would still tend to enjoy superior incomes because they "know the system" better and have more valuable social capital. The statistical analysis shows, however, that the net value of being part of the Israeli-born Jewish majority has also been in decline. Furthermore, although it is difficult to predict how today's young families will fare in the future, the trends of the last 15 years suggest a weakening of the tendency of relative earnings to rise as the parents enter their late thirties and early forties.

In the meantime, rising housing costs have made income erosion an even greater problem for young families headed by Israeli-born Jews. This is probably one reason for the rising percentage of young adults who continue to live with their parents and for the rapidly falling home ownership rate among young families. Surprisingly, the decline in home ownership has been especially significant among the more affluent young families. Between the first half of the 2000s and the last two years of the decade, the share of owner-occupiers among young households in the highest income quintile fell by 17 percentage points. At the same time, housing prices rose most steeply at the upscale end of the housing market. This may explain why concern about housing costs has been shared by relatively advantaged young families and individuals. These income and housing trends may also explain why so many younger middle- and

upper-middle-class individuals (and their parents) became involved in and expressed support for the social protests of 2011.

In almost every respect, young immigrants from the FSU are a striking exception to the trends reviewed thus far. In the labor market, members of this group – especially those with higher education – have increased their earning power after a low starting point. Increasingly, young adults born in the FSU have received their education in Israel. Others, who had arrived with a profession, experienced downward mobility in Israel but improved their language skills and integration into the local labor market. Consequently, while the relative earnings of all other groups of young people declined over the last fifteen years, the average hourly wages of young FSU immigrants rose dramatically among those with higher education (up by about 20 percentiles for both men and women) and moderately but still significantly among the less educated.

The entry of large numbers of highly trained young FSU immigrants into the labor market, largely into low-paying positions, almost certainly contributed to wage erosion among members of other population groups with whom they competed for jobs. Because they started so low in the wage hierarchy but faced fewer barriers to upward mobility than did their Arab and their Haredi counterparts, younger FSU immigrants have gradually moved toward converging with the earnings of non-Haredi Israeli-born Jews. Thus, although most of the decline in the relative wages of young workers is probably due to the gains of older Israelis, some of the erosion reflects the progress of young FSU immigrants.

The income of households headed by FSU immigrants started much higher on the national hierarchy than did their relative individual wages, but rose only modestly over time. This unique pattern is at least partly explained by the fact that immigrant households initially benefited from transfer payments earmarked for new immigrants. With respect to housing, the percentage of young FSU immigrants living with families of their own (spouse and children) is lower than that of non-Haredi Israeliborn Jews (33 percent and 39 percent in recent years, respectively). Home ownership is also lower among young FSU immigrants. The

growing numbers of FSU immigrants now living in central Israel (nearly half of all young immigrants) experience the greatest difficulties in buying a home, although the percentage of owner-occupiers has been rising steadily. Greater competition for housing has doubtless contributed to rising housing prices for all groups.

In conclusion, this study supports the view that the social protests of 2011 were motivated by a decline in the purchasing power and the relative economic attainments of young individuals and families in Israel. While wage and income erosion has generally been the most severe among Arabs and Haredi Jews, who are located at the very bottom of Israel's economic hierarchy, for social and political reasons both of these sectors were on the margins of the protest movement. The material basis for mass unrest lies in the economic challenges facing the younger generation of Israeli-born Jews, whose members had expected to take their place in the middle and upper-middle classes.

Appendix

Identifying Household Type in Income Surveys

Individuals in the survey were classified by type of living arrangement. Due to data limitations the classification was based on certain assumptions, changes in which would have altered the estimates. Definitional consistency over time nevertheless makes it possible to recognize key trends.

The following living arrangements were identified (which include those presented in Figure 14):

Married couple with children: Married individuals living in a household with children under 18.

Living with parents: Young person over 17 defined neither as head of household nor his/her spouse; at least 16 years between the "minimum age" (the lower of the ages of the head of household and the spouse) and the age of the youngest individual living in the household; head of household and spouse are married. (The definition included young people living in households headed by a single parent.)

Co-residents: Young person over 17; unmarried; no children in the household; no more than ten years between the oldest and youngest individuals in the household.

Married couple without children: Two married individuals living alone in household.

Unmarried couple without children: Co-residents; only two unmarried opposite-sex individuals live in the household.

Couple without children: Married or unmarried couple without children.

Shared accommodation: Co-residents, excluding cohabiting couples.

Single-parent household: Based on National Insurance Institute definitions.

Single-person household: Person living alone.

Other: All individuals not meeting any of the above definitions.

References

English

Raijman, Rebeca and Moshe Semyonov (1998), "Best of Times, Worst of Times, and Occupational Mobility: The Case of Soviet Immigrants in Israel," *International Migration*, *36*, No. 3, pp. 291-312.

Shwed, Uri and Yossi Shavit (2006), "Occupational and Economic Attainments of College and University Graduates in Israel." *European Sociological Review*, 22, No. 4, pp. 431-442.

Hebrew

Bank of Israel, 2011 Annual Report.

Haber, Carmit, Ella Heller, and Tamar Hermann (2011), *Solidarity in the Protests of Summer 2011*, Israel Democracy Institute.

Sayag, Doron (2010), "Measuring Changes in Housing Prices by Region and Estimating Elasticity of Characteristics of Houses and Their Environment," Central Bureau of Statistics Working Paper No. 51, Central Bureau of Statistics and Hebrew University, July. cbs.gov.il/www/publications/pw51.

Sussman, Zvi and Dan Zakai (1998), "Paradox: An Ample Supply of Immigrant Physicians and Constant Increase in Veterans' Wages 1990-1995," *Economic Quarterly*, pp. 28-6.