

Policy Program Paper

**The Middle Class in Israel**

Zoya Nisanov

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■ Internet edition

# The Middle Class in Israel

Zoya Nisanov\*

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## *Abstract*

*In most countries, it is customary to divide the socioeconomic classes into the lower (the poor), middle, and upper class (the rich). The controversy over the question whether "Riki Cohen from Hadera" – to whom Finance Minister Yair Lapid referred on his Facebook page – belongs to the middle class has made it necessary to redefine the boundaries of the three classes in Israeli society. Many saw the social protest movement of summer 2011 as attesting to the unification of the middle class in Israel, but the question remains: What is the middle class, and how ought it to be defined? Is the keyword here "class," i.e., individuals who share a similar social status, or is the reference to those in the middle of the income distribution, namely the only attribute that unites the individuals belonging to it is income level? The difficulty in identifying and precisely defining the middle class may explain the fact that this article does not focus on any particular definition, but examines the development of the middle class in Israel over the past decade, with reference to a variety of aspects and employing a selection of measuring tools.*

*The study is based on data from the Household Income Surveys 2002-2011, as collected by the Central Bureau of Statistics (CBS).<sup>1</sup>*

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<sup>1</sup> Prior to 2002, the population of East Jerusalem was not included in the *Household Income Survey*.

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## ***1. Changes in the Share of the Middle Class in the General Population in Israel, 2002-2011***

Many researchers emphasize the existence of a large and strong middle class as a vital element in economic development (Birdsall, 2010; Easterly, 2001; Foster and Wolfson, 2010; Landes, 1998; Thurow, 1984). Analyzing changes in the size of the middle class is therefore of great importance, both to economists and to policymakers interested in political stability and economic growth. Nonetheless, there is no consensus on the definition of the middle class; different researchers suggest different definitions and methods for measuring the relative size of this group in the population.

Since changes in the middle class are reflected in change in income polarization, the question of whether Israeli society is inclined to split into two poles – rich and poor – will be examined. A rise in bipolarity – i.e., the tendency of a certain society to split into two poles – occurs in two cases, together or separately: 1) incomes of the two groups diverge further apart, i.e., the rich get richer and the poor get poorer; and 2) incomes within each of the groups converge.

The conclusion which follows is that there is a connection between bipolarity and inequality: a rise in the level of inequality between the two groups brings with it a rise both in the level of inequality in the general population and in the level of bipolarity. On the other hand, a rise in the level of inequality within the groups leads to a rise in general inequality, but a drop in the level of bipolarity.

Figure 1 presents the trends in the average standardized per capita (net) monthly disposable income<sup>2</sup> for the two groups in the years 2002-2011. The poor in this case are defined as those with income lower than the median income, and the rich as those with income higher than the median income, such that each group represents 50 percent of the

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<sup>2</sup> Weighted per capita real income (in 2001 prices) is standardized according to the CBS definition.

population. The figure shows the growing distance between the classes in Israel over the period.

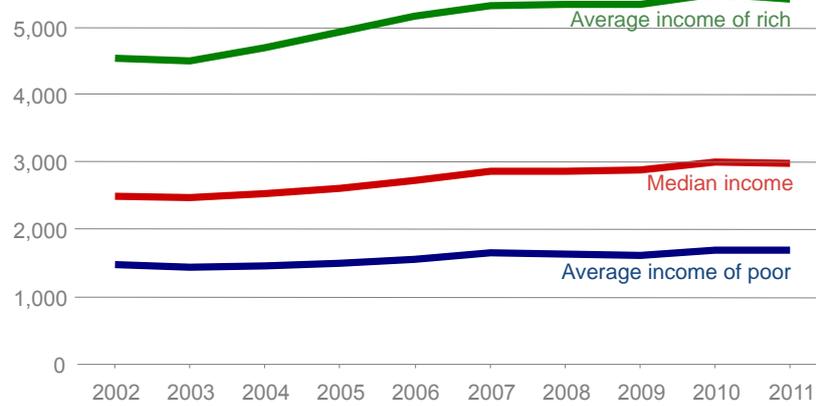
Between 2002 and 2005 the ratio between the two groups' incomes rose from 3.1 to 3.3, mainly due to a rise in the incomes of the rich. In this context, it is important to note that although the years 2001-2003 are known as a recession period, it was evident after the emergence from the recession that the growth rate of average income for the poor group was much lower than that of the rich group, perhaps due among other things to the cutbacks in welfare transfers. The gaps in income growth rates during the years 2002-2005 are the reason for the rise in inequality between the groups, following which the level of bipolarity rose as well.<sup>3</sup> Afterwards the distance between the groups narrowed slightly, but the economic crisis of 2009, which came in the wake of the world crisis, again hit the poor harder. In 2010 the situation was reversed, and incomes among the poor grew more. The income ratio between rich and poor declined to 3.2, and the change over the entire period, from 2002 to 2011, led to a rise – small but statistically significant – in the measure of bipolarity<sup>4</sup> of net incomes.

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<sup>3</sup> The level of bipolarity was measured using the measure proposed by Foster and Wolfson (2010).

<sup>4</sup> A similar trend was found when the level of bipolarity was measured using the measure proposed by Deutsch et al. (2007).

Figure 1  
**Average income per standardized person\*, 2002-2011**  
in 2001 shekels



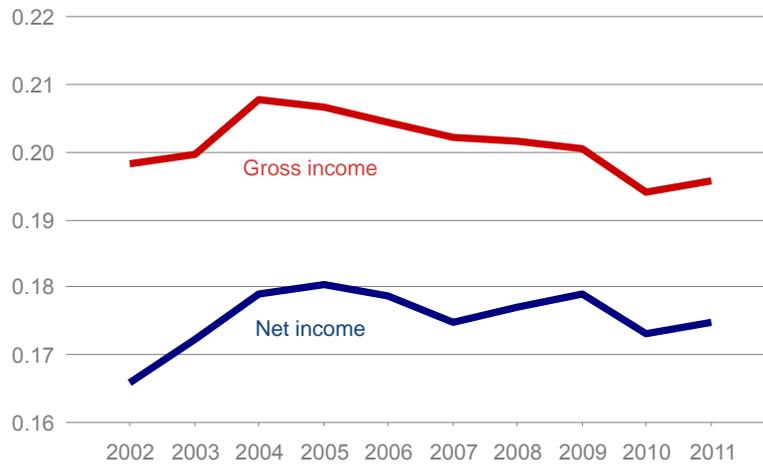
\* The poor are classified as having income below the median income, while the rich have incomes above the median.

Source: Zoya Nisanov and Taub Center

Data: Central Bureau of Statistics

Figure 2 presents the measure of bipolarity, of both net disposable income and gross income, including transfer payments (stipends paid by government to its citizens). As expected, the measure according to net income is lower, but the distance between the two measures narrows over the entire period. The drop in the ratio between the curves representing the measures of the two kinds of income attests to a decline in the efficiency of taxes in narrowing the gaps between rich and poor.

Figure 2  
**Bipolarity measure\*, 2002-2011**  
 by gross and net income



\* The difference between the level of inequality between the groups and the level of inequality within the groups, times the ratio between the average income and the median income. The range is usually between 0 and 1.

Source: Zoya Nisanov and Taub Center

Data: Central Bureau of Statistics

The greatest significance of the rise in bipolarity is a decline in the size of the middle class. Nonetheless, the answer to the question regarding what the middle class's relative share of the general population is depends on the measurement method. The most common methods are the relative methods. The Bank of Israel uses one of them to define the range of the middle class: "The middle class includes those whose income is 75 percent higher than the median income and less than than 125 percent of it. The upper-middle class includes those whose income is between 125 percent of the median income and twice the median income" (Bank of Israel Report 2011, p. 306). Another possible measurement

method is to define an income range between 50 percent and 150 percent of the median income. It is necessary to take into account, however, that there is no point to comparing the two measurement methods, but only to comparing the changes over time in each of them, because in general the larger the income range the larger the middle class's share of the general population. Therefore, the middle class deriving from a range of 50-150 percent may be expected to be smaller than the sum of the two groups (75-125 percent and 125-200 percent) which the Bank of Israel's definition yields.

It is interesting to note that if the middle class is defined as the central three quintiles, i.e., 60 percent of the population, this class's share of the income distribution represents 52 percent.

Table 1 shows that both relative methods of measuring the share of households belonging to the middle class point to a mixed trend: a decline between 2002 and 2005, a rise during the years 2005-2010, and again a small decline in 2011. The findings reflect the changes in the level of bipolarity as presented. Evident over the entire period is a decline in both groups' (the middle class and the upper-middle class) relative share, especially due to a drop in the share of households whose income is in the 75-125 percent (of median income) range. The steeper decline in the case of the second measurement method (50-150 percent) stems from a drop in the share of households at the bottom of the class (in the 50-75 percent of median income range).

As the table makes clear, despite the expectation, the middle class as defined according to the 50-150 percent of median income range was found to be larger than that yielded by the sum of the two groups using the second measurement method. The reason for this is that the 50-75 percent range includes more households than does the 150-200 percent range, i.e., the middle class in Israel is not symmetrical.

Table 1. **Size of the middle class according to relative measurement methods**

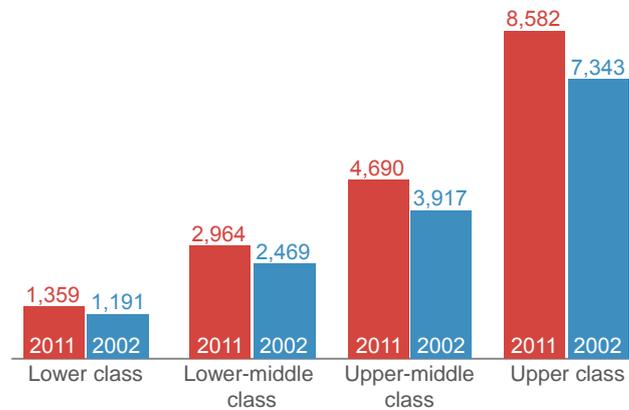
Year	Measurement method 1			Measurement method 2
	Middle class (75%-25% of median income)	Upper-middle class (125%-200% of median income)	Total size of middle class by Bank of Israel definition	50%-150% of median income
2002	28.1%	23.5%	51.6%	55.1%
2003	26.2%	24.0%	50.2%	53.9%
2004	27.4%	23.3%	40.8%	52.1%
2005	26.2%	23.1%	49.3%	52.5%
2006	26.8%	23.0%	49.8%	52.5%
2007	26.95	23.4%	50.3%	53.2%
2008	26.7%	22.9%	49.6%	53.0%
2009	26.6%	23.1%	49.7%	52.9%
2010	27.2%	23.6%	50.8%	54.3%
2011	26.9%	23.3%	50.2%	53.5%

Source: Zoya Nisanov and Taub Center

Data: Central Bureau of Statistics

Figure 3 shows that the average income of each of the two groups – the middle class and the upper-middle class – rose by about 20 percent between 2002 and 2011. Furthermore, the rates of growth in income among these groups are higher than those of the rich (17 percent) and the poor (14 percent).

Figure 3  
**Average monthly income per standardized person, 2002 and 2011**  
by economic class, in 2001 shekels



Source: Zoya Nisanov and Taub Center  
Data: Central Bureau of Statistics

However, if the middle class's economic situation did indeed improve over the course of the last decade, the question that arises is what caused members of that class to fill the streets and demonstrate in the summer of 2011.

In order to answer the question, and for the purpose of comparison, in this study a new method<sup>5</sup> has been used to define the middle class (hereinafter: "the mixture method"). The method makes it possible to identify classes in a certain society in cases where the number of groups in the population and their attributes are not predetermined. Using a mathematical algorithm developed for this purpose, the method chooses the model in which the number of groups is best suited to the given population. In this case, the results point to the existence of four classes in Israeli society.<sup>6</sup> In other words, the middle class is not homogeneous but rather divided into two groups: a lower-middle and an upper-middle class, with significant differences between them.

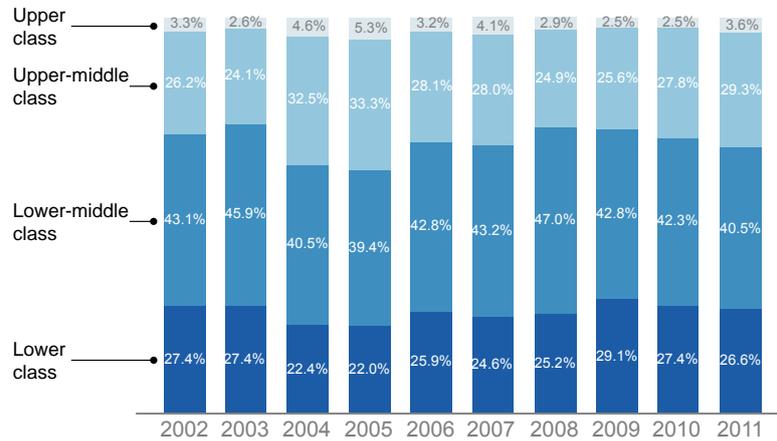
Figure 4 shows the changes in the size of the groups during the years 2002-2011 according to the mixture model. It can be seen that the two lower classes shrank at the expense of the higher classes, and that the relative share of the two middle groups rose by 0.5 percent, although this is not a statistically significant change.

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<sup>5</sup> According to the mixture model proposed by McLachlan and Peel (2000).

<sup>6</sup> The number of groups is determined by means of Bayesian and Akaike information criteria. When the division was into five groups, one of the groups included less than 1 percent of the population. When the division was into three groups, the poor included 35-45 percent of the population, the middle class 47-52 percent, and the rich 7-13 percent.

Figure 4  
**Israel's population distribution by economic class,  
 2002 and 2011**  
 by the mixture model



Source: Zoya Nisanov and Taub Center

Data: Central Bureau of Statistics

These developments ostensibly point to an improved situation, but as Figure 5 shows, the ratio between the real incomes of the two middle groups rose between 2002 and 2005, and despite dropping afterwards did not return to its level at the start of the period. In other words, over the entire period the distance between the two groups increased, and the lower-middle class became poorer relative to the upper-middle class.

Figure 5  
**Middle class average monthly income, 2002-2011**  
 in 2001 shekels



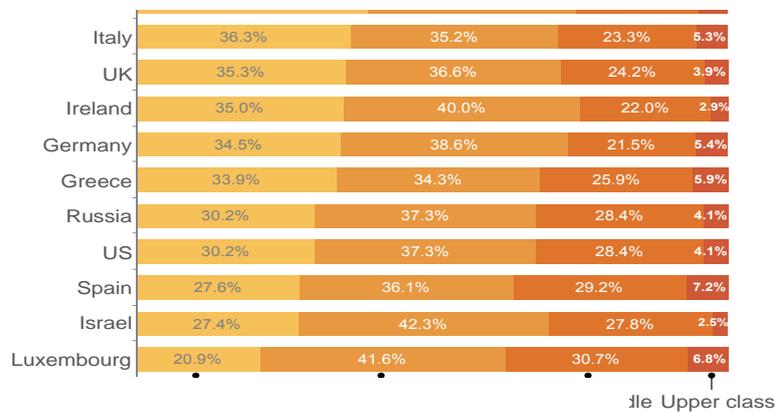
Source: Zoya Nisanov and Taub Center

Data: Central Bureau of Statistics

It was found that the lower-middle class includes the households whose per capita standardized income ranged between NIS 1,950 and NIS 5,100 (according to 2011 data, at current prices), i.e., 50-130 percent of the median income in the population; while those whose per capita standardized income is greater than NIS 5,100 but less than NIS 12,540 belong to the upper-middle class.

Figure 6 presents a comparison between Israel and other countries by descending order of poverty rate in the population, on the basis of the 2010 data in the LIS (Luxemburg Income Study) database.<sup>7</sup> The largest rich group and the smallest poor group were found in Luxemburg. In most of the countries the lower-middle class is the largest. The middle class in Israel (the sum of the two middle groups in Figure 6) is the second largest after Luxemburg, but the figure demonstrates that this comes at the expense of the size of the rich group, which in Israel is the smallest among the 11 countries included in the comparison.

Figure 6  
Distribution of economic classes in selected countries, 2010

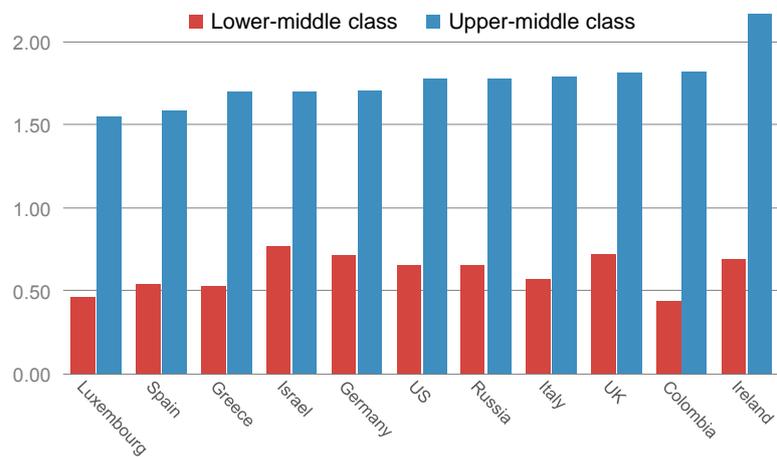


Source: Zoya Nisanov and Taub Center  
Data: Luxembourg Income Study (LIS)

<sup>7</sup> Some of the countries whose data are found in the LIS (2010) database are not included in this sample, as the four-group model is unsuited to their class structure. For example, it was found that in Japan and in Slovenia the population is divided into no more than three groups. As regards the countries included in the analysis, the four-group model may not necessarily be optimal, but it can be used as required.

According to the results shown in Figure 7, in most of the countries the income of the upper-middle class is in the range of 160-180 percent of the average income. In Ireland this class is the richest relative to the average income of the country's population. The income of the lower-middle class relative to the income of the entire population in most of the countries is in the range of 50-70 percent of average income, although in Israel, Britain and Germany this class is slightly richer.

Figure 7  
**Middle class income relative to average  
 income in the population, 2010**  
 in selected countries

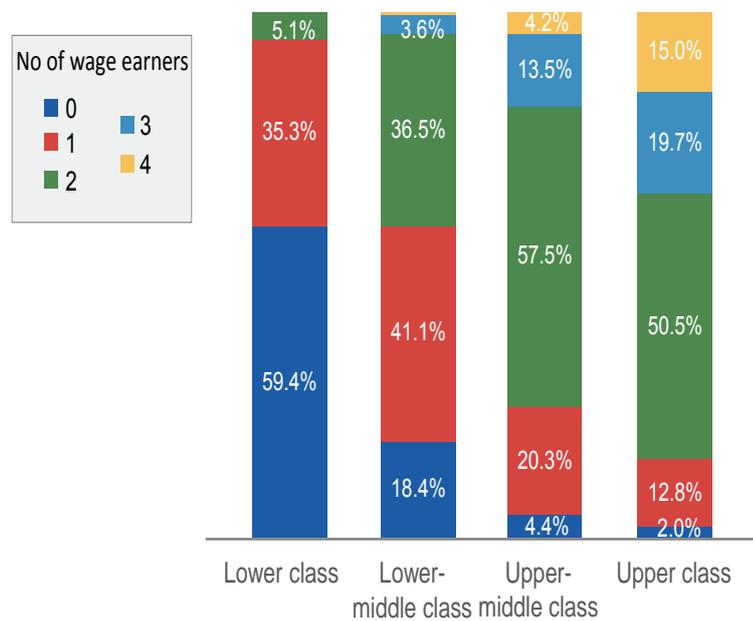


Source: Zoya Nisanov and Taub Center  
 Data: Luxembourg Income Study (LIS)

## 2. Socio-Demographic Attributes of the Middle Class

Figures 8-15 present the socio-demographic attributes by division into the four classes in Israel, according to 2011 data. The figures demonstrate the prominent differences between the classes on almost every attribute examined. One of the most important attributes is the number of wage earners (aged 15 or above, living in the household and participating in the labor force) (Figure 8). On average, among the poor households there are fewer than 0.5 earners; among the lower-middle class, 1.3; among the upper-middle class, 1.9; and among the rich there are more than two wage earners.

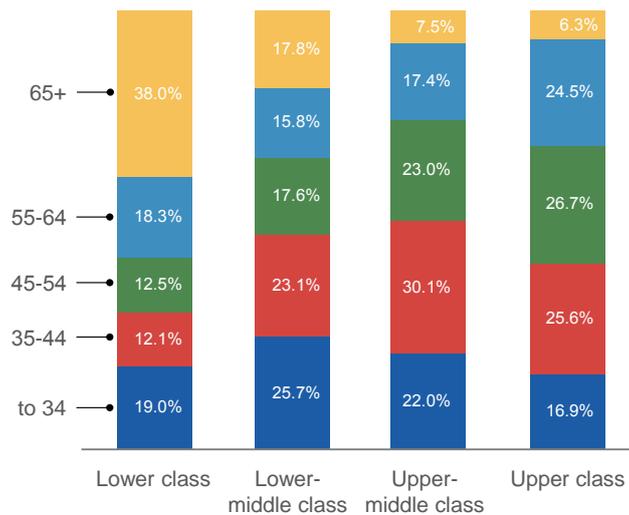
Figure 8  
**Distribution of households by number  
of wage earners, 2011**  
by economic class



Source: Zoya Nisanov and Taub Center  
Data: Central Bureau of Statistics

As regards the age of the household head (Figure 9), the lower-middle class has more elderly (aged 55 and above), whereas more heads of families aged 35-54 belong to the upper-middle class. The upper-middle class is the youngest class (45 on average), and the age of the head of household in it is lower by almost three years on average than in the lower-middle class. The poor group is the oldest group (it has the most household heads aged 55 and above). The household heads belonging to the lower-middle class are a year older than those belonging to the rich group. The conclusion is that the chances of belonging to a high-income group rise up to a certain age, and thereafter decline.

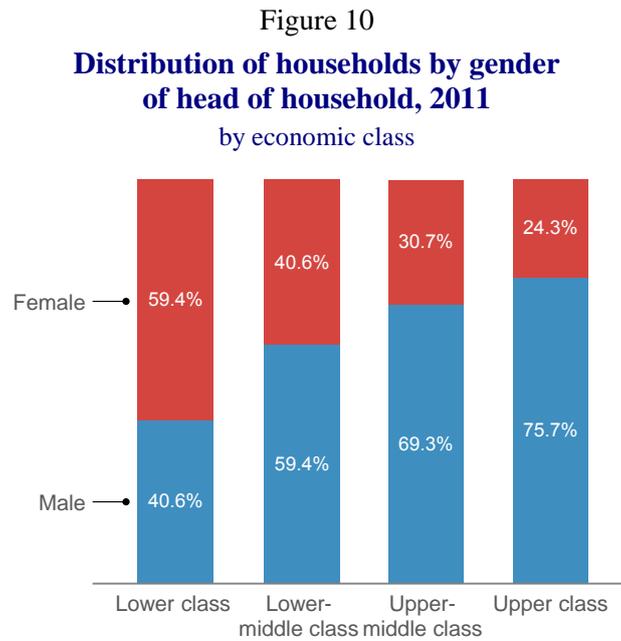
Figure 9  
**Distribution of households by age  
of head of household, 2011**  
by economic class



Source: Zoya Nisanov and Taub Center

Data: Central Bureau of Statistics

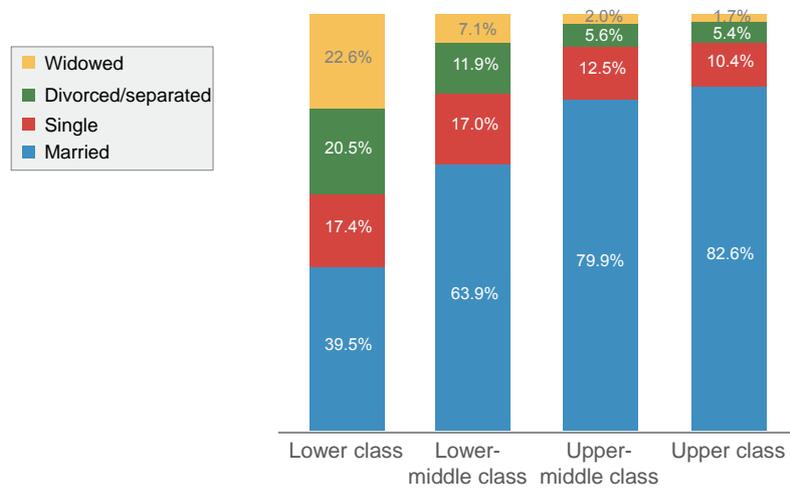
The differences among the income groups by gender (Figure 10) reflect the fact that the households headed by women mostly have only one wage earner: widows, single mothers, and Haredi (ultra-Orthodox) women. For example, it was found that one-third of the women heading poor households are widows.



Source: Zoya Nisanov and Taub Center  
Data: Central Bureau of Statistics

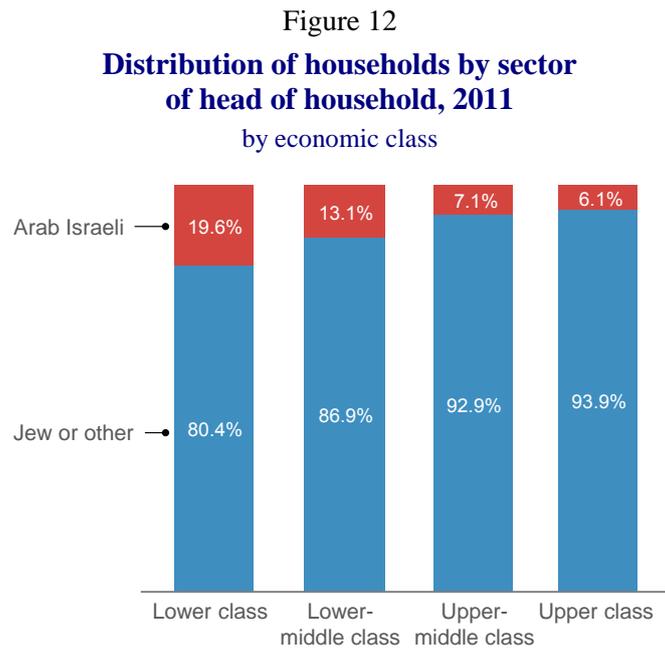
It follows that the number of wage earners per household is of importance from a gender aspect as well. The effect of this attribute is evident also when the data are broken down by family status (Figure 11): among married couples the chances of belonging to a high-income group are higher.

Figure 11  
**Distribution of households by family status  
of head of household, 2011**  
by economic class



Source: Zoya Nisanov and Taub Center  
Data: Central Bureau of Statistics

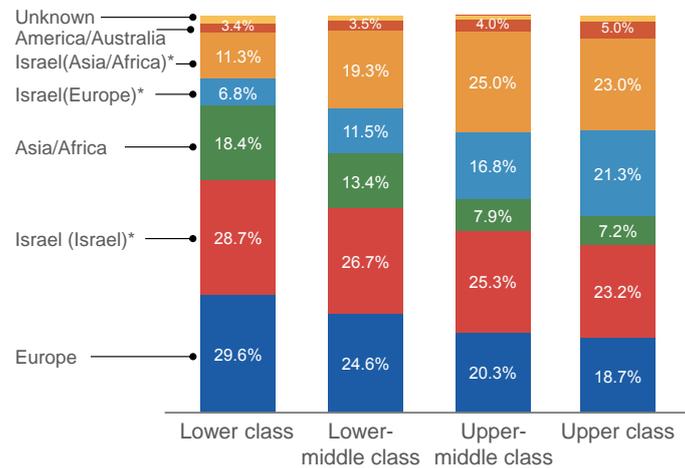
Another important variable is sector. As shown in Figure 12, Arab Israelis belong more to the low-income groups. Reflected here too is the importance of the number of wage earners per family, for according to the findings only 31 percent of the Arab Israeli households have more than one wage earner.



Source: Zoya Nisanov and Taub Center  
Data: Central Bureau of Statistics

Figure 13 presents the division into income groups by continent of birth. It was found that among those born in Africa or Asia the chances of belonging to the lower classes are higher, but among their Israeli-born children the chances of being among the higher classes rise. In this context, it is important to note the fact that the household heads who are not native-born Israeli were, or still are, new immigrants who encounter difficulties in absorption, and against this background their standard of living usually is relatively low.

Figure 13  
**Distribution of households by continent of birth  
of head of household, 2011**  
by economic class

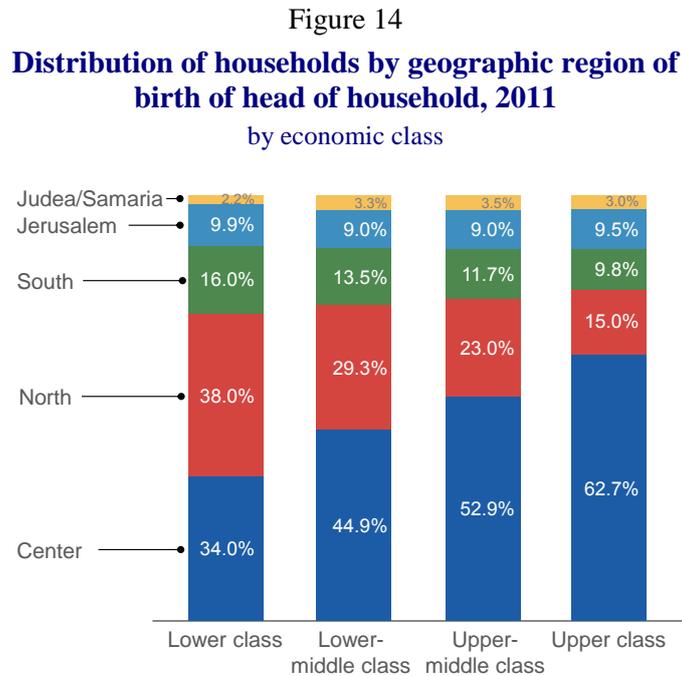


\* Father's continent of birth is in parentheses

Source: Zoya Nisanov and Taub Center

Data: Central Bureau of Statistics

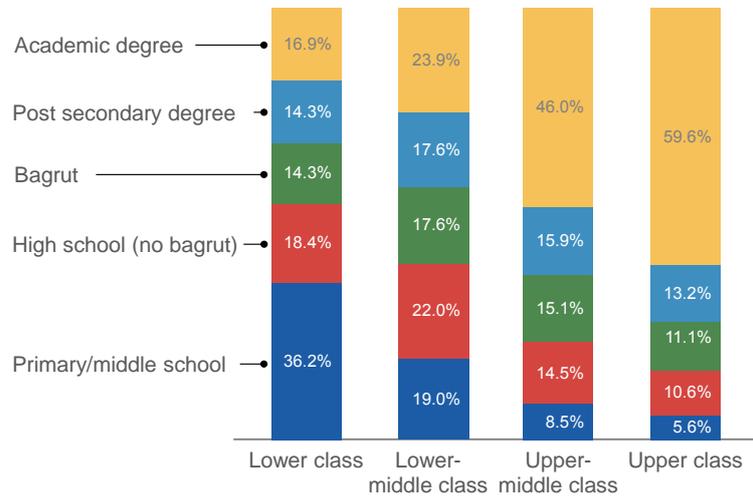
Regarding place of residence (Figure 14), residents of the country's geographic center have better chances of being among the higher classes compared to households residing in the country's north and south.



Source: Zoya Nisanov and Taub Center  
Data: Central Bureau of Statistics

Figure 15 present the education level of the head of household according to type of last school certificate. It is evident that the rich group is also the most highly educated group relative to the poor group, which features the highest rate of household heads who did not attend high school.

Figure 15  
**Distribution of households by highest diploma  
of head of household, 2011**  
by economic class



Source: Zoya Nisanov and Taub Center

Data: Central Bureau of Statistics

As regards employment, about 59 percent of the poor household heads do not work at all (Figure 16). One prominent finding is that the relative share of the self-employed rises, the higher the economic class. Figure 17 shows that more than half of the rich household heads who work are managers and academic professionals.

Figure 16  
**Distribution of households by employment status of head of household, 2011**  
 by economic class

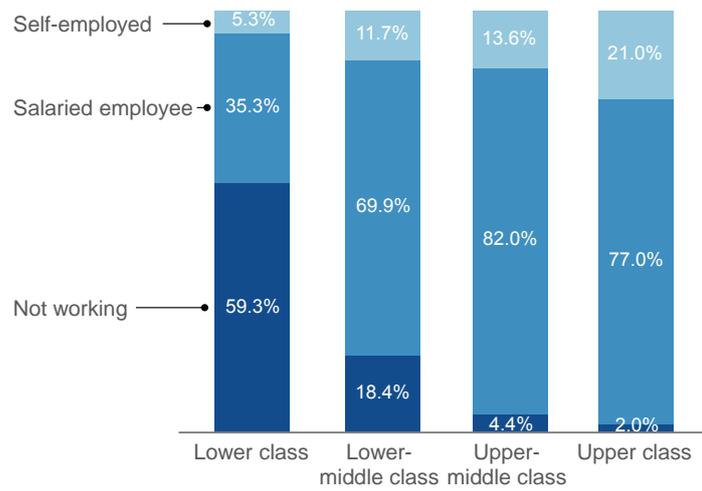
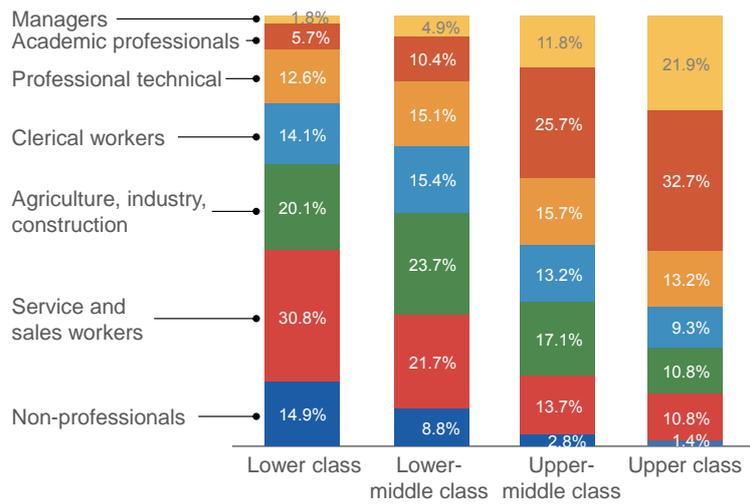


Figure 17  
**Distribution of households by occupation of head of household, 2011**  
 by economic class



Source(for both figures): Zoya Nisanov and Taub Center  
 Data (for both figures): Central Bureau of Statistics

Estimation of the probabilities<sup>8</sup> of households belonging to each of the income groups according to a selection of socio-demographic factors reveals that heads of households born in Africa have higher chances of belonging to low-income groups as opposed to those born in other continents, whereas those of European origin have better chances of belonging to the higher classes. Furthermore, a household residing in the country's geographic center whose head of household is male, self-employed or an academic professional, has better chances of belonging to the higher-income groups. On the other hand, retirees, new immigrants (who arrived in Israel after 1990), Arab Israelis, and households in the country's north have better chances of being among the low-income groups. Every additional child up to the age of 18 increases the probability that a household will belong to the lower classes. In contrast, each additional year of schooling reduces that probability. Married couples have better chances of belonging to the higher classes, although young families tend more to belong to the low-income groups.

Table 2 presents the differences in the predicted probabilities of the classes according to various socio-demographic variables. In calculating the probabilities, the effect of each variable on a household with average attributes was examined, and the percentages in each column represent the difference in the likelihood of being included in a given class between one population group and another.<sup>9</sup> The table's figures show that three population groups stand out in belonging mainly to the poor group:<sup>10</sup> Arab Israelis, Haredim and new immigrants. Merely by being defined as belonging to these population groups, households have a lower likelihood of belonging to the higher classes and even to the lower-middle class.

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<sup>8</sup> Estimation of the ordered probit regression type, which estimates the effect of each attribute on the chances of belonging to a higher class.

<sup>9</sup> For example, the chances for a household headed by a male of being in the poorest class are 12 percent lower than for a household headed by a woman.

<sup>10</sup> The differences in the predicted probabilities according to these three factors (marginal effects, after the ordered probit regression) are positive in the case of the poor group only.

**Table 2. Predicted effects of socio-demographic variables\* on likelihood of being included in the upper classes**

for families with average attributes

<b>Attribute of head of household</b>	<b>Lower class</b>	<b>Lower-middle class</b>	<b>Upper-middle class</b>	<b>Upper class</b>
Male	-12.0%	-1.0%	12.0%	1.0%
Self-employed	-2.0%	-0.3%	2.0%	0.2%
Retiree	3.0%	0.3%	-3.0%	-0.4%
New immigrant	15.0%	-0.9%	-13.0%	-1.0%
Arab Israeli	18.0%	-2.0%	-15.0%	-1.0%
Born in Africa**	3.0%	0.2%	-3.0%	-0.3%
Born in Europe**	-4.0%	-0.8%	4.0%	1.0%
Resident of center***	-6.0%	-1.0%	6.0%	1.0%
Resident of north***	5.0%	0.4%	-5.0%	-1.0%
Married	-16.0%	-0.7%	15.0%	2.0%
Haredi	42.0%	-18.0%	-23.0%	-1.0%
Academic professional	-14.0%	-7.0%	17.0%	3.0%
Years of schooling (effect for each year)	-1.0%	-0.2%	1.0%	0.1%
Head of young family	7.0%	1.0%	-7.0%	-1.0%
Children under 15 (effect for each child)	2.0%	0.3%	-2.0%	-0.3%

\* All of the coefficients are statistically significant.

\*\* Relative to Asian-born and Israeli-born whose father was born in Israel, Asia or Africa

\*\*\* Relative to residents of the south

Source: Zoya Nisanov

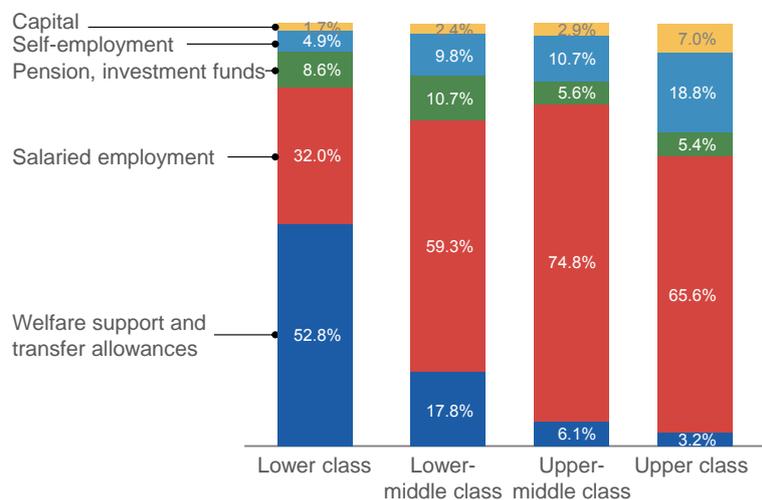
Data: Central Bureau of Statistics

### 3. Household Income Sources According to Economic Class

The latest cut in child benefits went into effect in August 2013 and sparked a huge outcry. Some claim that the cut will hurt the middle class and take some families down below the poverty line. According to the National Insurance Institute, the cut in child benefits "constitutes a step opposed to reducing the dimensions of poverty and inequality," because in its wake the rate of poor children will rise by about 4 percent (*Ha'aretz*, 2013). This section will examine, among other things, the effect of child benefits on the probabilities of households belonging to the middle class.

Figure 18 presents the distribution of income sources divided by classes, according to the 2011 data. It shows that the largest income source among the poor group is government support and transfer allowances, whereas households belonging to the other groups derive their income mainly from paid employment. As expected, the highest income rate from capital and self-employment is among the rich.

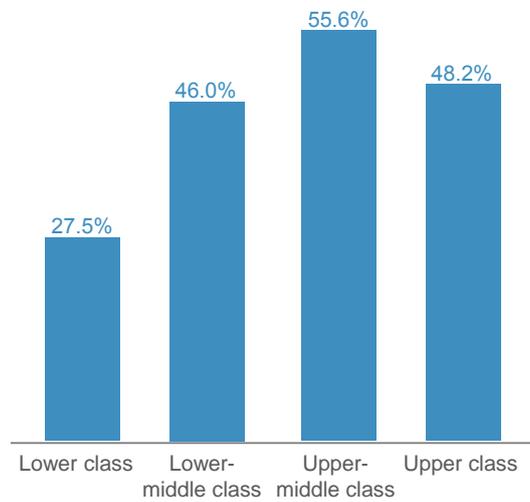
Figure 18  
**Distribution of households by source of gross income, 2011**  
 by economic class



Source: Zoya Nisanov and Taub Center  
 Data: Central Bureau of Statistics

As can be seen in Figure 19, the highest rates of households receiving child benefits were found among the higher classes. The results presented in Figure 9 in section 2 may provide an explanation for this finding: as noted there, the poor group is also the oldest group, therefore, in a large part of the households belonging to this class the children are over 18. In contrast, among the upper-middle class, which is also the youngest class, the rate of households with children up to the age of 18 is the highest.

Figure 19  
**Percent of households receiving child allowance**  
out of all in the economic class

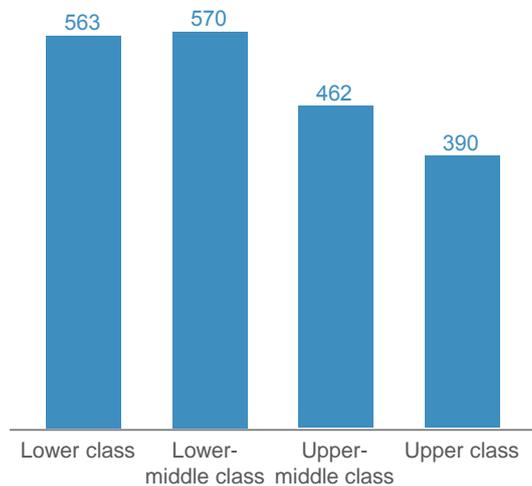


Source: Zoya Nisanov and Taub Center  
Data: Central Bureau of Statistics

Despite these data, however, it was found that the income from child benefits is higher among transfer allowance recipients belonging to the lower classes (Figure 20). The reason for this is the larger average number of children per household among the lower classes, to which more Arab Israelis and Haredim belong. In other words, among the high-income groups the share of households that have children is higher, although the average number of children among the households that have children is higher among the low-income groups.

Figure 20

**Average income from child allowance**  
out of allowance recipients, in 2011 shekels



Source: Zoya Nisanov and Taub Center  
Data: Central Bureau of Statistics

Estimation of the probabilities<sup>11</sup> supports the results presented in Figure 19 and shows that households receiving relatively large sums from child benefits have a higher likelihood of belonging to the low-income groups (Figure 20).

The simplest method to examine the effect of the transfer allowances on the income gaps is to analyze the income level before and after receipt of the allowance and to compare the results. The differences in the level of bipolarity within the net incomes with and without the child benefits were found to be statistically significant only in the years 2002-2003, i.e., before the change in policy regarding child benefits in 2003 and before the cancellation of the benefits granted by the "Halpert Large Family Law." From 2004 onwards, the differences in the measure of bipolarity before and after the allowance become not significant.<sup>12</sup> The differences in the level of inequality, measured by the Gini coefficient, become insignificant one year later, in 2005. The conclusion from this is that since the cut, which went into effect in June 2003, child benefits do not contribute to narrowing the income gaps.<sup>13</sup>

On the other hand, it has been proven that old-age benefits contribute to narrowing the gaps between rich and poor, and the differences in the level of bipolarity in income before and after this allowance were found to be statistically significant over the entire period. Furthermore, as shown in Table 3, according to the 2011 data, if old-age benefits were not granted, the relative drop in income would be more evident than in the

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<sup>11</sup> In order to examine the effect of the transfer allowance, the variable "number of children up to the age of 18" was replaced by the variable "child benefits" in estimating the probabilities for households of belonging to each of the income groups according to a selection of socio-demographic factors, as was done in the previous chapter. According to the results, it may be concluded that recipients of a high transfer allowance tend to belong to the lower classes.

<sup>12</sup> In the measure of gross income, the differences were not significant throughout the entire period.

<sup>13</sup> <sup>13</sup> Nonetheless, this is not to say that the additional cut will not lead to a rise in the level of bipolarity in the future.

case of the canceling of child benefits, especially among the lower classes.

On the other hand, it has been proven that old-age benefits contribute to narrowing the gaps between rich and poor, and the differences in the level of bipolarity in income before and after this allowance were found to be statistically significant over the entire period. Furthermore, as shown in Table 3, according to the 2011 data, if old-age benefits were not granted, the relative drop in income would be more evident than in the case of the canceling of child benefits, especially among the lower classes.

Table 3. **Rate of decline in income without child allowance and without old-age allowance, 2011**

Class	Relative change in income	
	Without child allowance	Without old-age benefits
Lower	-4.2%	-30.0%
Lower-middle	-2.7%	-7.0%
Upper-middle	-1.4%	-1.9%
Upper	-0.5%	-0.8%

Source: Zoya Nisanov

Data: Central Bureau of Statistics

Figure 21 shows that the highest rates of old-age benefits recipients belong to the lower classes, while the highest income from this allowance (among those who receive it) is among the households belonging to the middle class (Figure 22). The results reflect the fact that there is a higher rate of elderly among the lower classes. Nonetheless, among the poor there are more widowers and widows than among the middle class, which includes more couples; therefore, when calculated per household, their average income from old-age benefits is lower.

Figure 21  
**Percent of households receiving old-age benefits**  
out of all in the economic class

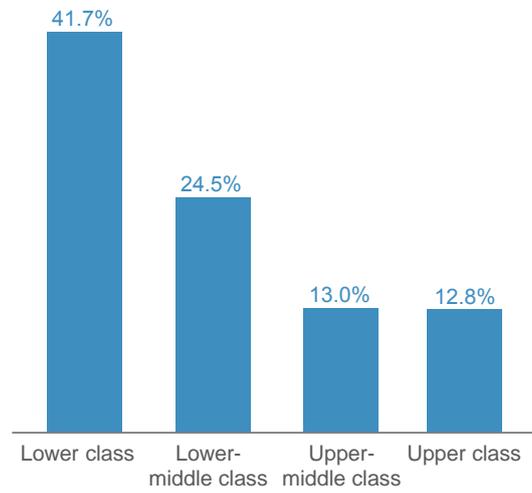
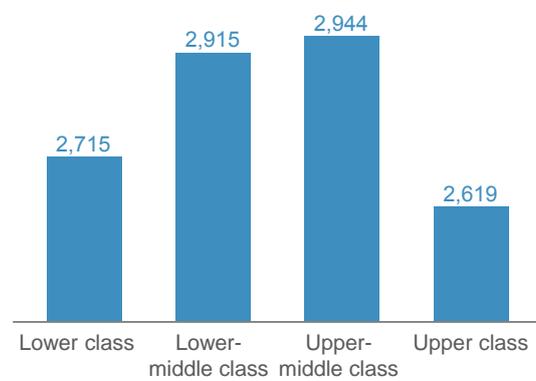


Figure 22  
**Average income from old-age benefits**  
out of allowance recipients, in 2011 shekels



Source (for both figures): Zoya Nisanov and Taub Center  
Data (for both figures): Central Bureau of Statistics

## 4. *Conclusions*

The results of the present study attest to a rise in the level of polarity between rich and poor in Israel over the years 2002-2011. The reason for this lies in the gaps in income growth: during the recession the poor experienced a considerable decline in income growth, whereas after the emergence from the recession the rich enjoyed higher growth rates.<sup>14</sup> There was also a decline in the efficiency of taxes in narrowing the gaps between rich and poor.

An analysis based on relative measurement methods points to the middle class having shrunk over the course of the period, alongside a rise in its average income. It should be noted that the middle class shrank mainly at the cost of expanding the share of poor in the population. However, the new method presented in this paper points to a rise in the share of households belonging to the middle class, but also shows that the middle class has gotten poorer. Both findings attest to a worsening of the situation: although the shrinking of the middle class, which is considered a vital factor for economic development, may be harmful to the welfare of the economy, while the growth of the middle class at the cost of a decline in its income does not constitute a solution.

This study's main finding is that the middle class in Israel is not homogeneous, but rather is comprised of two separate groups, distinguished from each other not only by income level but also by socio-demographic attributes. Therefore, it would be incorrect to divide the Israeli population into only three classes. The long-term goal should be to unite the two middle groups into a single large and strong middle class. For that purpose, it is necessary to reduce the gaps between the lower-middle class and the upper-middle class. On the basis of the results yielded by the estimation of the probabilities for households of belonging to each of the income groups according to a selection of socio-

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<sup>14</sup> With some reservations, it should be noted that towards the end of the period studied (2010-2011) the situation was reversed: the growth rate among the poor in 2010 was higher, whereas in 2011 the rich lost more.

demographic attributes, the conclusion is that increasing the years of schooling and improving professional training among the lower-middle class may contribute to narrowing the distance between the two classes.

The most important factor influencing the gaps between the groups is the number of wage earners per household. The importance of this attribute intersects also with the effects of other socio-demographic factors, such as sector, head of household's gender, and family status. Furthermore, this attribute may provide an explanation, at least partial, for the very low probabilities for Haredim, Arab Israelis, and new immigrants of belonging to the middle class. Another important factor is the number of children up to the age of 18 per household, which also plays a significant role in the economic condition of Haredim and Arab Israelis.

A policy aimed at growing the middle class must encourage participation in the labor force and offer employment opportunities, especially among Haredi men and Arab Israeli women. At the same time, however, it is necessary to provide appropriate training and to ensure that the Minimum Wage Law is enforced, to avoid increasing the gaps between the lower-middle class and the upper-middle class and a drop in the average standard of living of the middle class as a whole.

An international comparison shows that in most of the countries examined, the lower-middle class is the largest. Israel is special in that it has the smallest share of households belonging to the rich group.

Finally, nothing was found to support the notion that child benefits contribute to a decline in the level of bipolarity, at least not since the cut in 2003. Old-age benefits, on the other hand, have been shown to be a more effective income source in narrowing the income gaps. It should be kept in mind, though, that contrary to old-age benefits, which are more important to the lower class, about 80 percent of households that receive child allowances belong to the middle class. This finding ought to be taken into account among policy makers' considerations when they plan the next cut.

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