### **Chapter 2 Poverty and Social Gaps**

### 1. Introduction

The year 2007 was characterized by stability and even a decline in the dimensions of poverty and inequality compared with 2006. For the first time in about a decade, the incidence of child poverty decreased, after a continuous, steep rise in this index. The inequality indices in the various types of income also showed a decrease. Similarly, in 2007, the fruits of growth, which had been unequally distributed during the three years of growth (from mid-2003 to 2006) – began to benefit **all** population groups, including the weaker segments. These positive developments were the outcome of positive changes in the labor market – the increase in employment and in real wages – from which even the weaker groups benefited. Nevertheless, even after four continuous years of growth, the dimensions of poverty and inequality were still high. About one fifth of the families in Israel were defined as poor – a statistic that has not changed significantly since 2004. Indices of the severity and depth of poverty show that the situation of the poor has deteriorated. From an international perspective, Israel is usually placed high in the poverty scale, alongside countries whose levels of poverty and inequality are higher than those of developed countries, as the findings presented below in Section 2 show.

The measurement of poverty in Israel is based on the relative approach, which sees poverty as a state of relative hardship, which must be assessed with reference to the typical standard of living in this society. A family is defined as poor if its standard of living, as reflected by its income, is significantly inferior to that of society as a whole, and specifically: if its disposable income per standard person is less than half the median value for such income. The findings presented in the reports and in this chapter of the survey – which were produced by the Research and Planning Administration of the National Insurance Institute (NII) – are based on the Annual Surveys of income and expenditure that are prepared regularly by the Central Bureau of Statistics.<sup>1</sup>

Since 2008, the annual findings concerning the extent of poverty per calendar year are published in a new, expanded format in the **Report on Poverty and Social Gaps**. The first edition of this report in its new format was published in relation to data for 2007<sup>2</sup>. The expanded report contains additional indices and new population groups that were not included in previous reports. In addition to findings on poverty and social gaps using the relative measurement method adopted by the National Insurance Institute, the report includes a chapter presenting additional indices, as formulated in the report of the Development Team for Additional Poverty Indices<sup>3</sup> – those indices that were recommended for immediate implementation. The same chapter of the report presents a broad analysis of the standard of living by quintiles, a calculation of poverty indices using the OECD approach, a presentation of data on Israel compared with international data, and a calculation of the proportion of poor families and persons (family members) whose consumption is below the poverty line from the perspective of its income, as an indication of persistent

<sup>1</sup> For further details of the system of measurement and the data sources, see the **Appendix: Poverty Measurement and Data Sources** in this publication.

<sup>2</sup> See **Report on Poverty and Social Gaps for 2007** – on the National Insurance Institute website, under the "**Publications**" tab – www.btl.gov.il.

<sup>3</sup> **Report of the Development Team for Additional Poverty Indices**, headed by Shlomo Yitzhaki (2008), Israel Central Bureau of Statistics.

("permanent") poverty. A separate chapter in the report in its new format is devoted to an analysis of the issue of the causes of poverty<sup>4</sup> and poverty-reduction policies<sup>5</sup>.

This chapter presents the findings on the dimensions of poverty and social gaps in 2007, compared with 2006 and previous years, while maintaining a balance between two, sometimes conflicting, aims: (1) maintaining the continuity of publication as in the previous Annual Surveys; (2) amplifying the existing information in the Report on Poverty and Social Gaps and covering new areas that had not previously been included. Therefore, although there is a partial overlap between the information in the annual Report on Poverty and Social Gaps and the contents of this chapter, there is no repetition of whole distinct sections that were provided in the report (such as: "Additional poverty indices" and "The factors affecting poverty and the policy for reducing it"); although we are here amplifying the information included in the report, as specified below.

The chapter begins with Israel's status in terms of public expenditure on welfare, and the dimensions of poverty and inequality<sup>6</sup> compared with OECD countries (Section 2), in light of the findings presented recently by the Organization concerning these issues, referring to the mid-2000s. Section 3 of the chapter presents the main findings on the dimensions of poverty and the standard of living of the population as a whole, and Section 4 surveys the trends in the various population groups. In Section 5 (and later in Box 5) there are details of the findings on poverty measured from the aspect of expenditure for the year 2007, according to an approach developed by the National Insurance Institute<sup>7</sup>, which was based on the recommendations of an American committee of experts from the 1990s. Section 6 concludes with the findings concerning inequality in the distribution of income, dividing the population into deciles (rather than into quintiles as in the annual report).

Three boxes are included in this chapter: Box 3 amplifies the view of the focuses of poverty in Israel, using innovative data mining software tools; Box 4 presents a summary of data on poverty for the second half of 2007 and the first half of 2008 (July 2007 – June 2008)<sup>8</sup>. Box 5 presents, as mentioned above, the dimensions of poverty measured from the aspect of expenditure. The tables given in the Poverty and Inequality Table Appendix add to the information concerning the findings on poverty and inequality.

<sup>4</sup> Such as workers earning less than the minimum wage, family size, etc.

<sup>5</sup> Through benefits, proactive labor market programs, and more.

<sup>6</sup> See Growing Unequal? Income Distribution and Poverty in OECD Countries, OECD, 2008.

<sup>7</sup> M. Sabag-Endweld and L. Achdut (2004), **An Experimental Poverty Measure from the Perspective of Expenditure in Israel**, publication No. 82, Research and Planning Administration, the National Insurance Institute.

<sup>8</sup> For more details on the data for 2007/8, see **Dimensions of Poverty and Social Gaps 2007/8** – **Interim Report**, on the National Insurance Institute's website (www.btl.gov.il). See also the **Poverty Measurement and Data Sources** appendix in this publication.

### 2. The social indices in Israel compared with international indices

The data on public expenditure on welfare and its components, and the data on poverty and inequality in the mid-2000s, published in detail recently by the OECD, enable us to place Israel in relationship to the OECD countries during the corresponding period<sup>9</sup>.

The three diagrams presented at the start of the survey show Israel's relative position in the international comparison in terms of the total support, and its two components: outlay in cash and outlay in kind.

The ratios of expenditure on welfare as a proportion of the GDP divide the developed countries into three blocs: countries whose welfare expenditure is higher than the average, countries close to the average, and countries that are below the average. At the top end, we find most of the countries in Western Europe, headed by Sweden and France; in the middle bloc are European countries, such as Switzerland, Great Britain, the Netherlands and Poland, along with Japan and New Zealand. Ranked in the lowest bloc are countries whose welfare expenditure is 17% of their GDP, or less. This bloc includes the largest English-speaking countries (the United States, Canada, Australia), Ireland, Iceland and Turkey, Israel, and also Mexico and Korea, which are ranked at the bottom, considerably below even the other countries in this bloc, with some 7% of their GDP allocated to public expenditure on welfare.

Israel, in the third bloc of countries, slipped even further down the list in 2005-2008, from seventh from the bottom to fourth from the bottom. In the ranking according to the element of monetary support, which is the main welfare expenditure in all the countries, Israel improved its position and (in the two years shown in the diagram) is at the top of the third bloc of countries (in ninth and tenth place respectively), ahead of the largest English-speaking countries (the United States, Canada, Australia), Ireland and Turkey. Table 1 below and Diagram 1 that follows show the development of public expenditure on welfare in Israel by its various components, between 2000-2008, as a percentage of the GDP.

<sup>9</sup> See footnote 6 to this chapter.

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total public expenditure on welfare	16.90	18.29	18.52	18.11	16.81	16.08	15.59	15.48	15.58
Total financial support	9.76	10.80	10.73	10.41	9.54	9.06	8.90	8.77	8.76
Support for working-age population	5.18	5.73	5.67	5.19	4.58	4.28	4.20	4.08	4.10
National Insurance	4.19	4.74	4.68	4.26	3.72	3.47	3.43	3.34	3.36
War and hostilities	0.47	0.53	0.55	0.56	0.54	0.51	0.50	0.49	0.48
Other **	0.52	0.46	0.44	0.37	0.32	0.30	0.27	0.26	0.26
Support for the elderly	4.58	5.07	5.06	5.22	4.96	4.78	4.70	4.68	4.66
National Insurance	2.64	2.94	2.88	2.86	2.77	2.69	2.65	2.55	2.51
Civil servants' pension	1.52	1.67	1.72	1.88	1.80	1.74	1.74	1.83	1.86
Other ***	0.42	0.46	0.46	0.48	0.40	0.35	0.31	0.30	0.29
Total in-kind support	7.13	7.49	7.79	7.70	7.27	7.02	6.69	6.71	6.82
Health and long-term care	5.05	5.28	5.39	5.25	5.06	4.95	4.74	4.80	4.93
Other ****	2.09	2.20	2.39	2.45	2.21	2.08	1.95	1.91	1.89

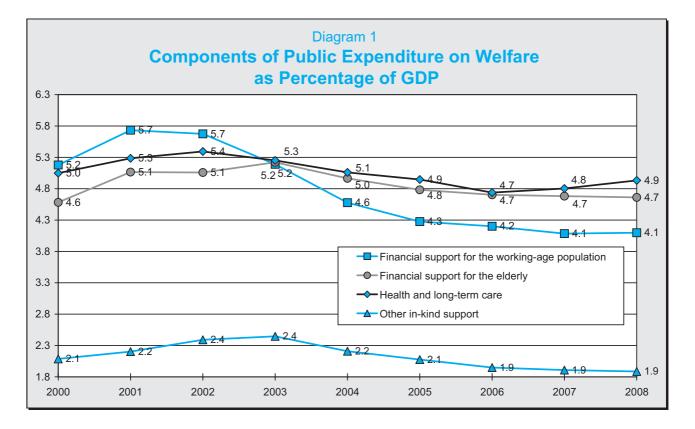
## Table 1 Public Expenditure on Welfare, 2000-2008 (percentage of GDP)\*

\* Source: data from the National Insurance Institute of Israel and the Israel Central Bureau of Statistics, processed by the Research and Planning Administration according to the OECD rules of classification.

\*\* Including support for discharged soldiers, the immigrant absorption basket and financial support to assist with rent.

\*\*\* Including support for victims of the Nazis, and financial support to assist with rent.

\*\*\*\* Including in-kind support from the National Insurance Institute, local authorities, national institutions, government non-profit organizations and the Ministry of Labor and Social Affairs.

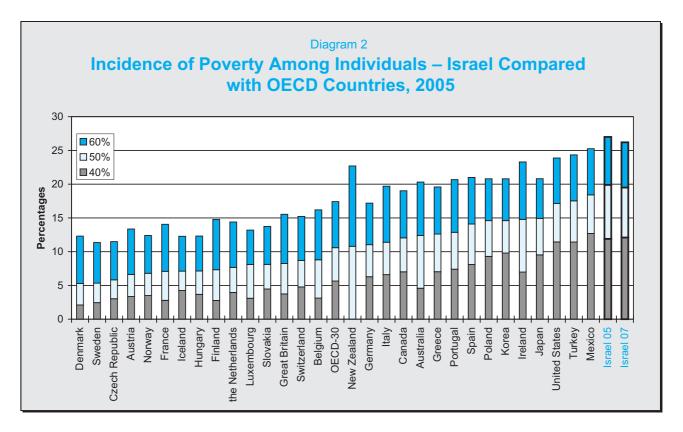


The findings for Israel show that, during 2002-2006, there was a consistent decline in total welfare expenditure as a percentage of the GDP, and that, since 2006, the rate has more or less stabilized at the same level (15.5%-15.6% of the GDP). In 2003-2005, all of the components of public expenditure on welfare declined; however, the steepest drop during these years was in financial support for the working-age population, a downtrend that had already started in 2002. As of 2006, all components shown in the diagram began to stabilize, with the "health and long-term care" component even showing a slight upward trend.

Israel's position, in terms of welfare expenditure, after expenditure per capita is corrected in partial population groups (the elderly, working age) is improving vis-à-vis the countries under comparison. This is due to Israel's unique demographic composition, which is characterized by a relatively low percentage of the elderly, which also influences the ratio between the elderly and those of working age. A particularly significant improvement is obtained in relation to support for the elderly, where Israel ranks close to average among OECD countries.

In relation to the dimensions of poverty and inequality, an examination of Israel's position from an international perspective shows similar results. In OECD countries, as in Israel, poverty is calculated using a relative approach, with a family being defined as poor when its disposable income per standard person falls below half of the median disposable income per standard person of the entire population. The equivalence scale used is the scale whereby the number of standard persons in each family is equivalent to the square root of the number of persons in the family.

Diagram 2 below shows the incidence of poverty among individuals in Israel in 2005 and in Israel in 2007, compared with OECD countries in the mid-2000s (usually 2004 or 2005). The data presented relates to three poverty lines: 40%, 50% and 60% of the median disposable income per standard person. Israel is at the top of the scale in terms of the ratio of poor individuals, calculated according to 50% of the median, at quite a distance even from other countries placed at the top of the scale (other than Israel): Mexico, Turkey and the United States. The percentage of poor individuals in Israel reached 19.9% in 2005, compared with 18.4% in Mexico, 17.5% in Turkey and 17.1% in the United States. Compared with the average percentage in OECD countries (10.6%), the poverty levels in Israel were nearly twice as high. The diagram also shows that there was a moderate change in Israel's poverty figures, albeit in a positive direction, which started in 2005–2007. The findings for 2007 showed a certain improvement, although still insufficient to change the picture of Israel's poverty ranking.

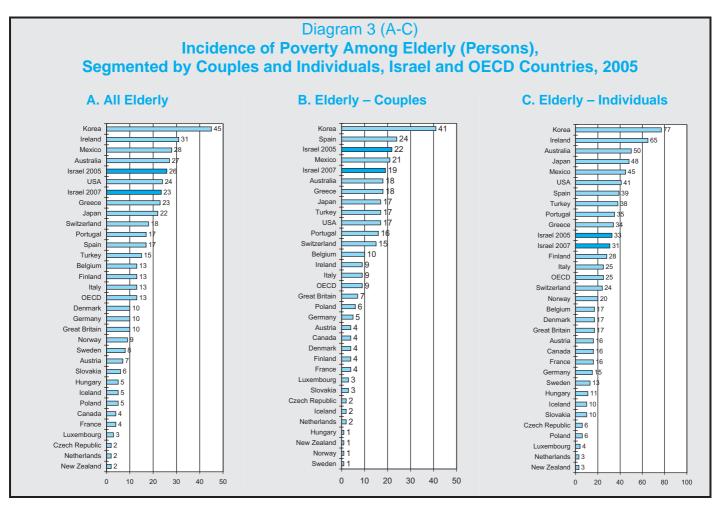


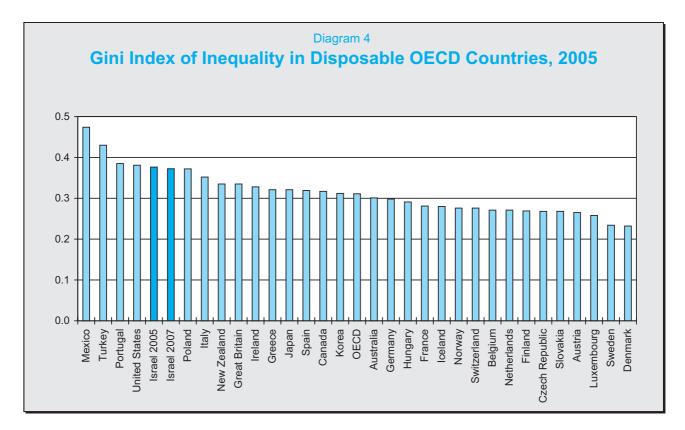
Diagrams 3.A-3.C present a comparative view of the incidence of poverty among the elderly (according to households consisting of elderly persons)<sup>10</sup>. Diagram 3.A shows that, in terms of poverty among the elderly, although Israel is indeed ranked high, it does not lead the list. Korea is in the lead, with an incidence of poverty among the elderly of 45%, followed by Ireland and Mexico, with incidences of poverty of 31% and 28%, respectively. At the next stage, Israel 2005 is positioned, along with Australia, with an incidence of poverty of 27% among the elderly – at twice the average in OECD countries, which is 13%. In 2007, Israel dropped a rung to a percentage of 23% and was placed with Greece, lower than the United States. Diagrams 3.B and 3.C show the situation in relation to elderly individuals who are the only members of a household, and elderly couples who maintain a household together. The data also shows that, on average among the countries under comparison (not including Israel), the incidence of poverty among elderly people living alone was nearly three times higher than among elderly couples living together. In Israel, this ratio was lower: the incidence of poverty among elderly people living alone was some 50% higher than the incidence of poverty among elderly people living as couples.

In the ranking of countries showing the incidence of poverty among elderly couples, Israel is positioned high (although a long way away from Mexico, which leads the list). On the other hand, in the ranking relating to elderly individuals, Israel is situated in the middle of the list and not at the top, with an incidence of poverty that is less than half that of Mexico and Ireland, which lead the list. One may conclude from this that the welfare policy concerning extrication from poverty is more efficient in its handling of elderly individuals than in its handling of other populations.

<sup>10</sup> The calculation for Israel was prepared according to the OECD calculation rules.

The situation after comparing the Gini Indices for inequality in disposable income (Diagram 4) in the various countries shows three main blocs: countries in which inequality is significantly lower than average, countries close to the average, and countries in which the inequality is significantly higher than the average. Among the countries in the first group are Denmark and Sweden (25% under the average), and other countries from northern and central Europe, including France, Switzerland and Belgium – for all of these, the Gini Index is lower than the average in OECD countries by 10% or more. The second bloc (those countries whose index level is quite close to the average) includes some of the Western European countries (Germany, Spain) as well as Australia, Canada, Japan and others. In the third bloc are those countries whose level of inequality is higher than the average by more than 10%. Leading this bracket is Mexico, with an index that is more than 50% higher than the Gini Index of the average in OECD countries, followed by Turkey (some 40% higher than the average), and, placed at quite a distance in descending order are Portugal, the United States, Israel and Poland, with an index level that is higher than the average by some 20%.





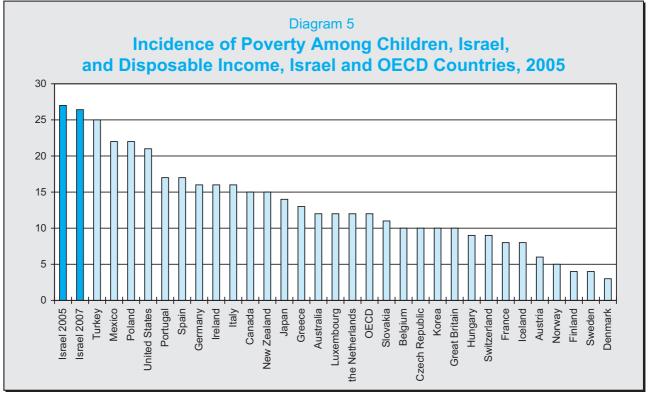
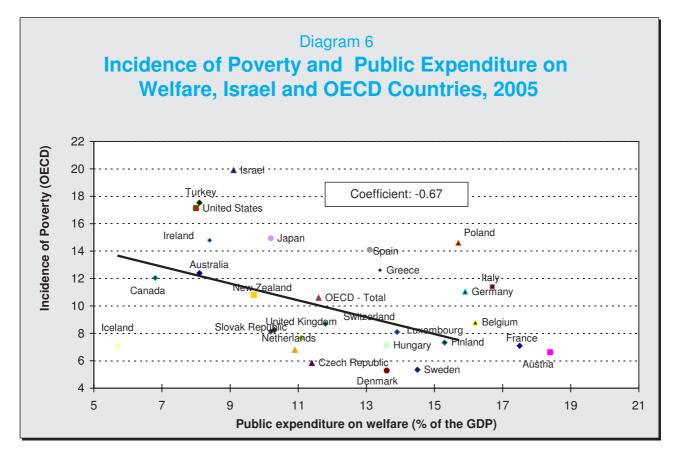


Diagram 5 shows the percentages of poverty among children in the various countries. In relation to this population segment, Israel once again tops the table, with an incidence of poverty among 27% of Israel's children (in 2006), compared with 12% on average in the countries under comparison

(other than Israel). There are a number of reasons why Israel is placed so high in the poverty scale, particularly regarding children. One reason relates to the demographic structure of Israeli society, which is characterized by quite a high percentage of large families. Thus, for example, about one third of the families in Israel have at least three children, compared with one fifth and less in most of the developed countries. Another reason lies in the extent of public support being provided to families, which is lower than in most western countries. Another possible reason could be related to the high level of cultural heterogeneity in Israel.

To summarize this section, the dispersion diagram below (Diagram 6) shows the link between the public expenditure on welfare and the dimensions of poverty in OECD countries in 2005. The correlation between the two factors indicates an inverse correlation of high intensity – nearly 70%.



### 3. The main findings on poverty

Since mid-2003, and up until the period of the last Annual Survey, in 2007, the Israeli economy benefited from economic growth. The standard of living rose between 2006 and 2007 – in terms of disposable income per standard person on average for a family – at the real rate of 3.6%, and, since 2005, there was a real rise of some 8%. As Table 2 shows, the median of disposable income per standard person, from which the poverty line is derived, rose between 2006 and 2007 at a rate of 4.6% (about 9% cumulatively since 2005).

The rise in disposable income in 2007 is attributed more to the positive developments in the labor market and less to the other factors affecting disposable income (transfer payments and direct taxes): the data for all households shows that, between 2006 and 2007, the number of salaried positions rose on average by a rate of some 5%, after a rise of 4% in the preceding year. The wage for a salaried position rose between the two periods of the survey by 2.3% in nominal terms and by 1.8% in real terms. The 2007 income survey data also reflects the boom in the labor market and attests to a picture that is similar to that depicted by the employment statistics for all households: earnings from salaried employment per household rose at a real rate of 8.5%. This sharp rise is explained by the combination of the rise in the real wages of salaried employees and the expansion of employment, which was also reflected in the survey statistics: the number of salaried employees rose by some 5% between the two surveys.

#### Table 2

### Average and Median Income per Standard Person After Transfer Payments and Direct Taxes, and Poverty Line (NIS), 2005-2007

				Real grow	vth rates
	2005	2006	2007	From 2005 to 2006	From 2006 to 2007
Average	3,666.0	3,914.0	4,078.0	4.6	3.6
Median	2,986.0	3,184.0	3,349.0	4.4	4.6
Poverty line	1,493.1	1,592.0	1,674.5	4.4	4.6

As stated, the transfer payments and direct taxes slightly offset the real rise in disposable income. The survey data indicates a real rise of some 9% in the total payments payable by the National Insurance Institute in 2007 (compared with a rise of 2.4% according to the administrative data of the Institute). When the demographic growth in the population is taken into account, it shows that the average income per family from National Insurance benefits declined slightly in 2007. And indeed, the survey data shows that the National Insurance benefits to households decreased on average by 1.2% in 2007, compared with 2006. This decrease is the combined result of the real decrease of 1.2% in the child allowance and the sharp drop (some 11%) in income support payable to families of working age, vis-à-vis the rise in the payments for old-age pensions, survivors' pensions and disability pensions. Similarly to the trends indicated in the administrative data, the total payments for old-age pensions and survivors' benefits rose at a real rate of about 2%, while the number of recipients remained almost unchanged; in other words, the average pension for an elderly person also rose at a real rate of about 2% (a lower rate than the rise in the general standard of living). The total payments of disability pensions rose by some 3%, as a result of an increase of some 7% in the number of recipients of this pension.

According to the survey data, the direct taxes increased on average per family, at a rate of some 8% between 2006 and 2007. (The data from the State Revenue Administration shows a rise of some 7% between these two years.) The payments to the Income Tax Authority rose at a rate of some 9%, while the national and health insurance contributions rose at an average rate of some 7%. This rise in collection of direct taxes, which is explained by the expansion of employment and

the rise in wages, curbed the growth rate in the net income of households, relative to gross income.

Table 3 shows the poverty line for 2006 and 2007, as well as the poverty line as a percentage of the average wage for the corresponding survey period. The poverty line for a family of four, for example, is just below 70% of the average wage. A family of six, with one wage earner who is earning a wage equivalent to the average wage, is above the poverty line.

Tables 4 and 5 show the dimensions of poverty during the years 2005-2007 in absolute numbers and according to selected indices, which show a trend of continued stability in the dimensions of poverty in Israel. The percentage of families whose disposable income fell below the poverty line reached 19.9% in 2007 (compared with 20% in 2006), while the percentage of persons living in poor families decreased from 24.5% to 23.8%<sup>11</sup>. A marked drop was recorded, for the first time in recent years, in the incidence of poverty among children: from 35.8% in 2006, to 34.3% in 2007.

#### Table 3 Number of Standard Persons and Poverty Line per Family\*, by Number of Persons in Family, 2006-2007

Number of	Number of standard		ne for family 2006	Poverty line fo	or family in 2007
persons in family	persons in family	NIS per month	Percent of average wage	NIS per month	Percent of average wage
1	1.25	1,990	26.4	2,093	27.1
2	2	3,184	42.3	3,349	43.4
3	2.65	4,219	56.0	4,437	57.5
4	3.2	5,094	67.6	5,358	69.4
5	3.75	5,970	79.2	6,279	81.3
6	4.25	6,766	89.8	7,117	92.1
7	4.75	7,562	100.4	7,954	103.0
8	5.2	8,278	109.9	8,707	112.7
9**	5.6	8,915	118.3	9,377	121.4

\* The average wage that was calculated for 2006 and 2007 is the weighted average of the average wage for a salaried employee (Israeli employees) during the period adjusted to the period of each survey.

\*\* The weighting of each additional person is 0.40. Thus, for example, in a family of 10, there are 6 standard persons.

The incidence of poverty, which is measured according to disposable income, is an outcome of the transfer payments and direct taxes that "correct" the economic income, which is defined as earnings from employment and from capital before taxes. The transfer payments, the majority of which are the National Insurance benefits, increase the family income, while the direct taxes reduce it. The lower the amount of direct tax that a poor family pays, the higher is its disposable income and the better are its chances of escaping from poverty.

<sup>11</sup> The change in the incidence of poverty among persons and children was found to be statistically significant.

	Before transfer payments and direct taxes	After transfer payments only	After transfer payments and direct taxes
2005			
Poor population			
Families	668,200	340,400	410,700
Persons	2,235,800	1,411,700	1,631,500
Children	899,600	686,500	768,800
2006			
Poor population			
Families	665,800	345,700	404,400
Persons	2,254,800	1,455,700	1,649,800
Children	921,900	718,600	796,100
2007			
Poor population			
Families	669,100	353,800	412,900
Persons	2,225,700	1,434,600	1,630,400
Children	901,000	697,000	773,900

#### Table 4 Dimensions of Poverty in Total Population (absolute numbers), 2005-2007

The data from the tables shows the continuing gradual downtrend in the incidence of poverty among families and persons (family members) according to economic income. This trend is a result of the developments in the labor market – increased employment and a rise in the real wages of employees, even in the traditional sectors. In Table 6, it can be seen that the transfer payments and direct taxes during the 2007 survey period extricated 38% of the poor families from the cycle of poverty<sup>12</sup>. For the sake of comparison, in 2002, about half of the poor families were extricated from poverty thanks to government intervention. The contribution of the systems of direct taxation and transfer payments towards extricating persons (family members) from poverty was lower, only some 27% of persons, and was even lower for children: only about 14% of the poor children were extracted from poverty as a result of the government's intervention (compared with about 25% of the children in 2002).

<sup>12</sup> It is reasonable to assume that, were it not for the existence of the system of financial support and direct taxation, the behavior of individuals would have been different. Therefore, the contribution of these systems to their extrication from poverty may be upwardly biased.

Poverty Index	Before transfer payments and direct taxes		After transfer payments and direct taxes
2005	tuxco	Only	luxoo
Incidence of poverty (%)			
Families	33.6	17.1	20.6
Persons	33.8		
Children	41.1		
Income gap ratio of the poor (%)*	62.5	32.8	33.1
FGT Index*	0.1739	0.0345	0.0407
SEN Index*	0.278	0.098	0.114
Gini Index of inequality in the income distribution of the poor*	0.5246	0.1923	0.1953
2006			
Incidence of poverty (%)			
Families	32.9	17.1	20.0
Persons	33.5	21.6	24.5
Children	41.5	32.3	35.8
Income gap ratio of the poor (%)*	61.8	33.5	33.8
FGT Index*	0.1682	0.0354	0.0412
SEN Index*	0.272	0.100	0.115
Gini Index of inequality in the income distribution of the poor*	0.5106	0.1895	0.1952
2007			
Incidence of poverty (%)			
Families	32.3	17.1	
Persons	32.5		
Children	39.9	30.8	34.2
Income gap ratio of the poor (%)*	60.7		
FGT Index*	0.1591		
SEN Index*	0.261	0.099	
Gini Index for inequality in the income distribution of the poor*	0.5000	0.2021	0.2045

#### Table 5 Dimensions of Poverty in Total Population, by Selected Poverty Indices, 2005-2007

\* The weight assigned to each family when calculating the index is equivalent to the number of persons in the family.

The income gap ratio of the poor ("the poverty gap ratio.")(which expresses the depth of poverty) continued to rise, from 33.8% in 2006 to 34.3% in 2007. This means that the disposable income per standard person in a poor family has decreased below the poverty line by more than one third, on average. For the sake of comparison, in 1999, the poverty gap ratio was about 26%. Similarly, the FGT Index (see footnote 3 in Box 2) of the severity of poverty (which is calculated so that the depth of poverty of poorer families receives greater weight than that of families who are less impoverished) also indicates a continuous gradual upward trend. Concurrent with this trend of

increasing depth and severity of poverty, the impact of the transfer payments in reducing the depth of poverty has diminished. In relation to the income gap ratio, for example, this impact decreased from 47.1% in 2005 to 45.2% in 2006, and to 43.6% in 2007.

The Gini Index of inequality in the distribution of disposable income among the poor (Table 5) also indicates a slight increase between 2006 and 2007. On the other hand, the Gini Index of inequality in the distribution of the economic income is continuing the downtrend that began in 2004. Between 2004 and 2007, the decline in this index totalled some 8%, and is explained mainly by the positive developments in the labor market, from which even the poor population benefited.

in Total Population, by Selected Poverty Indices, 2005-2007 Percentage of decline deriving from transfer payments								
		nsfer paym		and direct taxes				
Poverty index	2005	2006	2007	2005	2006	2007		
Incidence of poverty (%)								
Families	49.1	48.1	47.1	38.5	39.3	38.3		
Persons	36.9	35.4	35.5	27.0	26.8	26.7		
Children	23.7	22.1	22.6	14.5	13.6	14.1		
FGT Index*	80.2	78.9	77.2	76.6	75.5	73.8		
Income gap ratio of the poor (%)*	47.5	45.7	43.8	47.1	45.2	43.6		

## Table 6 Impact of Transfer Payments and Direct Taxes on Dimensions of Poverty in Total Population, by Selected Poverty Indices, 2005-2007

\* The weight given to each family when calculating the index is equivalent to the number of persons included in the family.

The SEN Index reflects the combined impact of the incidence of poverty index, the poverty gap index and the position of the poor individual in the poverty scale; that is, the inequality in the income distribution among the poor. The SEN Index according to disposable income, which increased slightly between 2005 and 2006, recorded a decline of some 2% between 2006 and 2007. This decline was influenced mainly by the decline in the incidence of poverty among persons (family members).

## 4. The dimensions of poverty by population groups, and the composition of the poor population

The various population groups are differentiated in terms of the trends and changes in the dimensions of their poverty during the years surveyed. Tables 7-11 describe the dimensions of poverty by various population groups. Tables 7 and 8 show the incidence of poverty according to the economic income and disposable income in various population groups in 2006 and 2007, respectively, while Table 9 shows the percentage of these groups in the entire population and in the poor population. Table 10 shows the values of the income gap ratio of the poor by population

groups, while Table 11 shows the percentages by which the dimensions of poverty were reduced as a result of the transfer payments and direct taxes.

The trend towards stability in the incidence of poverty was not shared by all population groups. Certain groups reduced the dimensions of their poverty, while for others, the incidence of poverty increased (Table 7). The incidence of poverty among families with children decreased slightly, from 25.5% to 24.8%. This reduction was more significant among large families: from 60% in 2006 to 56.5% in 2007. The incidence of poverty among Arabs, a population that largely overlaps the population of large families, decreased by 2.6 percentage points, from 54% in 2006 to 51.4% in 2007. This significant decrease is explained by the significant rise in the economic income of Arab households: the economic income per standard person of working age in the Arab population skyrocketed by some 9% between 2006 and 2007. On the other hand, among families with up to three children, there was no change in the incidence of poverty measured by disposable income, and the downtrend in the impact of the transfer payments on extrication from poverty continued also in 2007.

The incidence of poverty among the elderly increased by about one percentage point, from 21.5% in 2006 to 22.6% in 2007. This rise (which is not statistically significant) is explained by the fact that the rise in the standard of living among the elderly did not keep abreast with the rise in the overall standard of living, which derived for the most part from developments in the labor market.

The incidence of poverty among working families remained stable, at a level of 12.2%<sup>13</sup>. Poor working families comprise some 46% of all poor families, and some 60% of poor families of working age.

The exceedingly high percentages of poverty among the unemployed population of working age continued to rise in 2007: in 2006, 89% of these families were considered poor according to their economic income, and 66% of them were considered poor according to their disposable income. In 2007, the percentages continued to rise, to 91% and 70%, respectively. Since the rise in the standard of living in recent years derived from changes that occurred in the labor market, the relative situation of families that did not participate in the work force continued to deteriorate. These families comprise less than one tenth of all families in Israel, but they comprise one third of all poor families.

As would be expected, the education of the head of the household and the incidence of poverty are inversely related. Measured according to economic income, the incidence of poverty among the poorly educated (8 years of education or less) reached nearly 70% – a finding that indicates their wage-earning difficulties. Measured according to disposable income, the incidence of poverty among this group reached some 44% – compared with 13% among those with higher education (13 years of education and more). The incidence of poverty among the poorly educated and the

<sup>13</sup> For more detailed information on the situation of poor working families, see the Report on Poverty and Social Gaps for 2007, Chapter 4 – The causes of poverty and policies to reduce it, on the National Insurance Institute's website (www.btl.gov.il).

highly educated increased between 2006 and 2007. On the other hand, the percentage of poor families with a medium-length (high school) education (9 to 12 years of education) decreased.

The reduction in the incidence of poverty among Arabs was also expressed by the reduction in this population's share of the poor population, from 46.6% of persons (members of families) in 2006 to 45.2% in 2007 (Tables 8 and 9). This reduction expresses a slight improvement in the situation of Arab families, but does not suffice to change the overall picture, whereby there is a large, almost threefold gap between the Arab families' share of the entire population and their share of the poor population. Concurrently, the Jewish population's share of the poor population increased slightly. The percentage of families whose working-age head of household did not work continued to drop between 2006 and 2007, from 34.5% to 31.9% of these families; the main reason for this is the relative reduction in the percentage of these families in the population – from some 10.8% in 2006 to 9.5% in 2007.

		2006			2007	
Population group (families)	Economic income	Disposable income	Incidence ratio*	Economic income	Disposable income	Incidence ratio*
Total population	32.9	20.0	1.00	32.3	19.9	1.00
Jews**	28.8	14.7	0.74	28.3	15.0	0.75
Arabs	59.5	54.0	2.71	58.3	51.4	2.58
Elderly	56.1	21.5	1.08	55.9	22.6	1.14
New immigrants	39.9	18.1	0.90	40.2	18.8	0.94
Families with children – total	31.6	25.5	1.28	30.5	24.8	1.25
1-3 children	24.7	18.3	0.92	23.8	18.4	0.92
4 + children	65.2	60.0	3.00	63.2	56.5	2.84
5 + children	74.4	68.1	3.41	74.9	66.7	3.35
Single-parent families	51.1	29.5	1.48	46.9	29.8	1.50
Employment status of the head of household						
Employed	18.6	12.4	0.62	18.2	12.2	0.61
Salaried	19.1	12.3	0.62	18.8	12.2	0.61
Self-employed	16.3	13.9	0.69	15.4	12.4	0.62
Unemployed (of working age)	88.9	66.6	3.33	91.2	69.8	3.50
Sole wage earner	35.0	23.4	1.17	35.2	23.5	1.18
Two + wage earners	4.4	2.9	0.15	4.1	2.8	0.14
Age group of the head of household						
Up to 30	35.1	23.7	1.19	35.7	25.7	1.29
31-45	27.7	22.0	1.10	26.6	20.5	1.03
46 to retirement age	23.1	14.3	0.72	22.0	14.1	0.71
Retirement age by law	58.3	22.0	1.10	59.3	23.5	1.18
Years of education of the head of household						
Up to 8 years of education	68.0	41.3	2.07	69.4	44.3	2.22
9 -12 years of education	33.9	22.2	1.11	32.6	20.9	1.05
13 and more years of education	23.0	12.7	0.64	23.2	13.4	0.67

#### Table 7 Incidence of Poverty in Specific Population Groups, 2006 and 2007

\* The incidence ratio relates to disposable income, and indicates the ratio between the incidence of poverty of the group and the incidence of poverty in the overall population. Tables that present data on Jews: Non-Jews who are not Arabs are also included in the Jewish

\*\* population.

			Poor population					
	Total population		payme	Before transfer payments and direct taxes		ransfer nts and taxes		
Population group (families)	Families	Persons	Families	Persons	Families	Persons		
Jews	86.6	80.2	75.8	63.1	68.8	53.4		
Arabs	13.4	19.8	24.2	36.9	36.2	46.6		
Elderly	19.4	9.6	33.1	15.4	20.9	8.6		
New immigrants	19.0	16.3	23.1	16.8	17.2	12.0		
Families with children – total	46.2	66.7	44.5	71.6	59.0	82.1		
1-3 children	38.2	49.1	28.7	36.3	35.1	38.0		
4 or more children	8.0	17.7	15.8	35.3	23.9	44.0		
5 or more children	3.9	10.0	8.8	22.4	13.2	27.7		
Single-parent families	5.6	6.0	8.7	9.5	8.3	7.8		
Employment status of head of household								
Employed	73.8	81.7	41.7	55.8	45.9	57.2		
Salaried employee	62.8	69.2	36.6	48.7	38.8	48.2		
Self-employed	10.0	11.5	5.0	6.9	7.0	8.7		
Unemployed (of working age)	10.1	10.8	27.2	30.0	33.6	34.5		
Sole wage earner	34.2	33.3	36.4	46.8	40.1	48.8		
Two or more wage earners	39.6	48.4	5.3	9.0	5.8	8.3		
Age group of the head of household								
Up to 30	19.0	18.8	20.3	22.6	22.6	21.7		
45-31	33.6	42.1	28.3	42.5	37.0	49.4		
46 to retirement age	29.3	30.5	19.8	20.4	20.8	21.0		
Retirement age by law	18.1	8.7	31.6	14.5	19.6	7.9		
Years of education of head of household								
Up to 8 years of education	12.5	11.0	25.9	22.7	25.9	23.2		
9-12 years of education	38.8	42.1	40.0	45.1	43.1	47.5		
13 or more years of education	48.7	46.8	34.1	32.3	31.0	29.3		

# Table 8Share of Specific Groups in Total Population and in Poor Population<br/>(percentages), 2006

			Poor population					
	Total population direct taxes		nts and	payme	ansfer nts and taxes			
Population group (families)	Families	Persons	Families	Persons	Families	Persons		
Jews	86.6	80.3	75.8	63.6	65.4	54.8		
Arabs	13.4	19.7	24.2	36.4	34.6	45.2		
Elderly	19.6	9.8	34.0	16.4	22.3	9.5		
New immigrants	19.0	16.2	23.6	16.9	17.9	12.3		
Families with children – total	46.1	66.9	43.5	70.6	57.5	81.2		
1-3 children	38.3	49.6	28.2	36.2	35.3	39.1		
4 or more children	7.8	17.3	15.3	34.4	22.2	42.1		
5 or more children	3.9	9.8	9.0	22.5	12.9	27.4		
Single-parent families	5.4	5.9	7.8	9.0	8.0	8.2		
Employment status of head of household								
Employed	74.7	82.9	42.1	57.7	45.7	58.9		
Salaried employee	64.1	70.9	37.2	50.9	39.4	51.2		
Self-employed	9.5	10.9	4.5	6.2	5.9	7.2		
Unemployed (of working age)	9.3	9.5	26.3	27.5	32.6	31.9		
Sole wage earner	33.9	33.2	37.0	49.4	39.9	50.9		
2 or more wage earners	40.8	49.7	5.1	8.3	5.8	8.0		
Age group of head of household								
Up to 30	18.1	18.0	20.0	23.0	23.3	23.9		
31-45	34.3	42.9	28.2	43.1	35.3	48.6		
46 to retirement age	29.9	30.5	19.8	18.8	21.0	19.0		
Retirement age by law	17.7	8.6	32.0	15.1	20.5	8.5		
Years of education of head of household								
Up to 8 years of education	11.9	10.6	25.6	23.0	26.5	24.1		
9-12 years of education	38.4	41.1	38.7	43.0	40.2	44.7		
13 or more years of education	49.7	48.3	35.7	34.0	33.3	31.2		

# Table 9Share of Specific Groups in Total Population and in Poor Population(percentages), 2007

In the segmentation by level of education, it transpires that the population group that reduced its share of the poor population actually consisted of heads of household with moderate-length (high-school) education – from 47.5% in 2006, to 44.7% in 2007. The other two groups – heads of household with particularly low education (up to 8 years of study) and those with higher education – increased their share in the poor population slightly.

The income gap ratio of the poor, which continued its gradual rise of recent years in the entire poor population, rose especially among households whose head of household was age 46 and over, including the elderly, and whose head of household was of working age but was unemployed. On the other hand, this ratio dropped significantly among single-parent families – from 35.2% in 2006,

to 32.8% in 2007. The other population groups usually experienced moderate fluctuations in the depth of poverty among families.

The impact of the transfer payments on extrication from poverty (Table 11) continued to decrease, from 39.3% in 2006, to 38.3% in 2007. On the other hand, this effect increased among Arab families: in 2006, 9% of Arab families were extricated from poverty due to transfer payments, and, in 2007, this percentage rose to some 12%. Since there was no real increase in financial support from government sources in 2007, there is a different reason for this finding: the decrease in the incidence of poverty among Arab families was accompanied by a change in the composition of the poor Arab population. For example, the percentage of poor families whose head of household was elderly increased (from 10.6% in 2006, to 11.9% in 2007), and at the same time there was a reduction in the percentage of the poor population of working age. The poor Arab families in 2007 were those families in which the financial support component was larger than in 2006.

The degree of concentration of families around the poverty line related to the sources of their income. Table 12 shows the dispersion of the various population groups around the poverty line. The largest concentration around the poverty line, of families whose head of household is elderly, derives from the fact that the minimum subsistence income, which is guaranteed under the Income Support Law to the elderly and to survivors having almost no income from another source, more or less coincides with the poverty line. Therefore, an increment, even a small one, in the level of minimum income would significantly reduce the number of poor families with an elderly head of household, whose income would indeed remain very close to the poverty line, but, nonetheless, would be above it. On the other hand, even a slight erosion in the level of minimum income would significantly reduce the ratio of poor families by a quarter, compared with a corresponding reduction of one tenth in the entire population.

		2006			2007	
Population group (families)	Economic income	Disposable income	Incidence ratio**	Economic income	Disposable income	Incidence ratio**
Total population	61.8	33.8	1.00	60.7	34.3	1.01
Jews	63.6	31.3	0.93	63.6	32.0	0.94
Arabs	58.6	36.7	1.09	55.6	37.0	1.09
Elderly	81.2	21.8	0.64	80.4	23.4	0.69
New immigrants	70.2	26.2	0.77	71.4	27.6	0.82
Families with children – total	57.9	34.9	1.03	55.9	35.2	1.04
1-3 children	55.2	34.0	1.01	53.3	33.2	0.98
4 or more children	60.6	35.6	1.05	58.7	37.1	1.10
5 or more children	62.8	36.4	1.08	61.6	37.6	1.11
Single-parent families	67.8	35.2	1.04	69.1	32.8	0.97
Employment status of head of household						
Employed	39.2	27.2	0.81	38.9	26.9	0.80
Salaried employee	38.6	25.8	0.76	39.4	26.6	0.79
Self-employed	43.1	35.0	1.04	36.5	30.4	0.90
Unemployed (of working age)	93.1	47.8	1.41	93.9	50.9	1.50
Sole wage earner	41.1	28.1	0.83	40.8	27.8	0.82
2 or more wage earners	29.5	22.2	0.66	27.8	21.3	0.63
Age group of head of household						
Up to 30	55.7	35.5	1.05	56.7	34.9	1.03
31-45	58.1	35.1	1.04	54.3	35.1	1.04
46 to retirement age	62.2	34.0	1.00	64.1	37.0	1.09
Retirement age by law	81.5	20.6	0.61	80.7	21.6	0.64
Years of education of the head of household						
Up to 8 years of study	70.5	34.9	1.03	70.2	38.6	1.14
9-12 years of study	56.5	34.4	1.02	54.5	33.1	0.98
13 or more years of study	63.0	32.1	0.95	62.0	32.5	0.96

## Table 10Income Gap Ratio of the Poor\* in Specific Population Groups, 2006- 2007

\* The weight given to each family when calculating the index is equivalent to the number of persons in the family.

\*\* The incidence ratio relates to the disposable income, and indicates the ratio between the incidence of poverty in the group and that of the entire population.

	Pe	ercentage fro	of povert m transfe and diree	r paymen		g
	Incide	ence of po	verty		ome gap r of the poo	
Population group (families	2005 2006 2007 2005 200				2006	2007
Total population	38.5	39.3	38.3	47.1	45.2	43.6
Jews	46.8	48.9	46.8	51.6	50.8	49.7
Arabs	11.0	9.2	11.8	39.8	37.4	33.4
Elderly	57.1	61.7	59.5	76.3	73.2	70.9
New immigrants	52.8	54.7	53.2	62.0	62.7	61.3
Families with children – total	19.1	19.4	18.5	41.3	39.7	37.0
1-3 children	23.5	25.7	22.9	40.6	38.3	37.6
4 or more children	9.6	8.0	10.5	42.2	41.2	36.8
5 or more children	11.3	8.5	10.9	43.6	42.1	38.9
Single-parent families	39.0	42.2	36.5	52.7	48.1	52.5
Employment status of head of household						
Employed	33.6	33.1	33.1	32.5	30.5	30.8
Salaried employee	35.8	35.6	34.7	34.9	33.2	32.5
Self-employed	15.4	15.2	19.3	21.1	18.6	16.6
Unemployed (of working age)	27.3	25.1	23.5	48.8	48.7	45.8
Sole wage earner	33.7	33.0	33.4	34.8	31.6	31.8
2 or more wage earners	32.4	33.7	30.9	13.0	24.8	23.5
Age group of head of household						
Up to 30	32.5	32.5	28.1	38.5	36.2	38.4
31-45	21.5	20.5	23.0	41.3	39.6	35.4
46 to retirement age	38.0	36.3	34.5	44.0	45.4	42.3
Retirement age by law	57.6	62.2	60.5	77.0	74.7	73.3
Years of education of head of household						
Up to 8 years of education	37.4	39.3	36.2	51.9	50.4	45.1
9-12 years of education	35.1	34.6	35.9	43.7	39.2	39.2
13 + years of education	43.5	44.7	42.4	47.5	49.1	47.6

### Table 11 Impact of Transfer Payments and Direct Taxes on Dimensions of Poverty in Specific Population Groups, 2005-2007

Population group (families)	75%	90%	95%	100%	105%	110%	125%	150%
Total population	10.4	15.4	17.6	19.9	21.7	22.8	27.6	35.8
Jews	7.2	10.9	12.9	15.0	16.5	17.5	21.8	29.8
Arabs	31.1	44.1	47.8	51.4	54.7	56.9	64.8	74.7
Elderly	6.3	12.4	17.3	22.6	24.9	26.2	32.6	43.1
New immigrants	6.8	11.4	14.6	18.8	21.1	22.4	28.6	40.8
Families with children – total	14.5	21.1	23.0	24.8	27.1	28.5	33.8	42.9
1-3 children	10.0	15.3	16.7	18.4	20.1	21.5	26.7	35.8
4 or more children	36.4	49.7	53.9	56.5	61.1	62.6	68.3	77.7
5 or more children	45.0	59.0	63.2	66.7	71.0	72.2	78.9	86.4
Single-parent families	16.5	25.4	27.2	29.8	32.0	34.7	42.8	54.9
Employment status of head of household								
Employed	5.7	9.6	10.8	12.2	13.7	14.7	19.1	27.0
Salaried employee	5.6	9.6	10.8	12.2	13.6	14.7	19.0	27.2
Self-employed	6.5	10.5	11.3	12.4	14.7	15.6	20.5	27.5
Unemployed (of working age)	53.3	62.8	66.5	69.8	71.7	72.8	77.2	83.3
Sole wage earner	11.4	18.8	21.0	23.5	25.9	27.8	34.5	45.3
2 or more wage earners	0.9	2.0	2.4	2.8	3.5	3.8	6.3	11.8
Age group of head of household								
Up to 30	15.7	21.2	23.1	25.7	27.5	28.8	34.6	44.1
31-45	11.9	17.5	19.0	20.5	22.3	23.4	27.8	35.6
46 to retirement age	8.2	11.3	12.7	14.0	15.2	16.1	19.5	26.0
Retirement age by law	5.8	12.2	17.4	23.1	25.4	26.8	33.6	44.5
Years of education of head of household								
Up to 8 years of education	23.3	34.8	39.8	44.3	46.9	48.6	55.8	66.3
9-12 years of education	11.1	16.4	18.4	20.9	22.8	24.1	30.0	39.9
13 or more years of education	6.8	9.9	11.6	13.4	14.7	15.6	19.0	25.4

# Table 12 Percentage of Families Whose Disposable Income does not Exceed Given Income (in Terms of Poverty Line), 2007

#### Box 1

### Focuses of Poverty in Israel – Findings, Using the Data Mining Method

In this box, we will review the main focuses of poverty in Israeli society, which were processed using advanced software for examining the characteristic differences between population groups, using the Data Mining method. The analysis is based on the index of the incidence of poverty in families<sup>1</sup>.

In general, there is a high correlation between poverty and geographical areas, on the one hand, and between poverty and distinct groups in Israeli society, on the other hand. The analysis selected by the researcher in this box is based on population groups and not on geographical areas (although within the groups, reference is made to certain areas). The four main population groups are: Israeli Arabs, Ultra-Orthodox<sup>2</sup>, new immigrants and veteran Jewish Israelis.

The main focuses of poverty in Israeli society as found by this process are:

## a. Focuses of poverty among the veteran Jewish population (excluding the Ultra-Orthodox):

- Families headed by an individual of working age (31 to pension age) with less than 8 years of schooling: in this group, about 30% of families were defined as poor in 2007. When the head of the family does not work, this percentage jumps to 61%.
- Young families headed by an individual who is aged 30 or less: there is a clear gap between the Jerusalem area (26.6%) and the center of the country (11.5%) and the remaining regions (20.4%). Further analysis leads to the conclusion that the most significant factor contributing to poverty is the number of children in the family. In families with two or more children, the incidence of poverty reaches 33%, compared with 13.6% in other families. (It is possible that some of these families are in fact Ultra-Orthodox who were not identified as such by the definition used in the study.)<sup>3</sup>
- The elderly: there is a difference between the incidence of poverty among old people living in the south of the country -25.7% and those in other areas -14.5%.

#### b. Ultra-Orthodox

• Among the Ultra-Orthodox population there is a big gap, which is the reverse of that in other populations, between families headed by an old person (poverty incidence of 19.2%) and other families (poverty incidence of 51.4%).

<sup>1</sup> Obviously, the data could also be analyzed on the basis of other poverty indices.

<sup>2</sup> The "Ultra-Orthodox" are defined as families in which one member studied in a yeshiva as the last place of study. This definition does not precisely define the Ultra-Orthodox population in the survey, but comes close to it.

<sup>3</sup> See note 2, above.

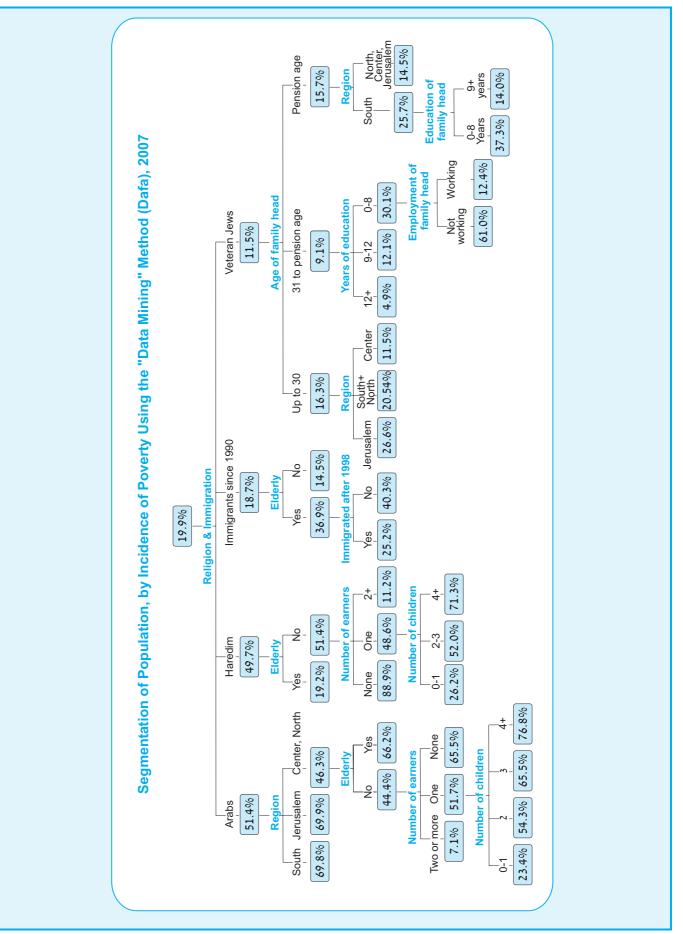
- In Ultra-Orthodox families headed by a person of working age, a significant factor in extricating themselves from poverty is participation in the work force. 88.9% of families without an earner are classified as poor, compared with 48.6% of families with one earner, and 11.2% of families with two or more earners.
- As would be expected, in large families with one earner, the incidence of poverty among those with two and three children is 52% and with four or more children 71.3%, compared with 26.2% of families with one or no children.

#### c. Israeli Arabs

- In the southern and Jerusalem regions, the incidence of poverty is higher (69.8% and 69.9% respectively) compared with 46.3% in other regions.
- In the central and northern regions, there is a difference between families headed by an old person (66.2%) and other families (44.4%), where in other regions incidence of poverty ranges from 88.4% in families without earners, to 51.7% of families with one earner and 7.1% in families with two earners.
- There is a fairly high correlation between poverty and area of residence: the incidence of poverty among the total population of the southern region is 33.3%, but it is particularly high among the Arabs.

#### d. Immigrants

• Among immigrants who arrived in Israel after 1990, the most striking focus of poverty is the elderly population (36.6% compared with 14.4% among other immigrants), with a clear difference between those who immigrated from 1998 onwards (25.2%) and those who immigrated before 1998 (40.3%).



#### Box 2

#### **Dimensions of Poverty and Income Gaps in 2007/81**

The growth in the economy continued during the first half of 2008 as well, and was expressed in the expansion of employment and in a real rise in wages. The macro-economic data shows that, between 2007 and 2007/8, the number of employed increased by an average of about 2%, while the wage paid to a salaried employee increased by less than one percent in real terms. The minimum wage increased at a nominal rate close to one percent; however, in real terms, it decreased by a similar percent. The survey data shows that, compared with 2007, the total payments of National Insurance Institute benefits per family decreased by about half of one percent and by an average of 1.4% in real terms, while a family's compulsory payments decreased on average by a rate of 1.4%, between the two periods being surveyed.

## Following are the key findings arising from the 2007/8 survey, compared with the 2007 survey:

- The standard of living, as reflected in the adjusted median disposable income, from which the poverty line is also derived, improved in real terms by about half of one percent compared with 2007. The average disposable income per family and per standard individual increased by a real rate of one percent (in annual terms, the net income per family increased by some 4%).
- The incidence of poverty among families is 20% (compared with 19.9% in 2007). The income gap ratio of the poor<sup>2</sup>, which expresses the distance of the poor family's income from the poverty line, continued to rise, from 34.4% in 2007, to 34.8% in 2007/8.
- The incidence of poverty per capita remained stable between the two periods: the ratio of poor persons went up from 23.6% in 2007, to 23.8% in 2007/8. The incidence of poverty among children also remained at a high level 34.1% (compared with 34.2% in 2007). The index of the severity of poverty, the FGT Index<sup>3</sup>, increased by some 2%. Between 2005 and 2007/8 years when the incidence of poverty among families remained more or less stable and the incidence of poverty among persons (members of families) and children even declined slightly the indices of the depth and severity of poverty increased at rates of between 5% and 6%; in other words, the population that was not extricated from poverty became poorer.
- During the period of the survey, 2007/8, there were 418,000 poor families in Israel, consisting of 1,631,000 persons, of whom 777,400 were children.

<sup>1</sup> This box presents the findings during the period that includes the second half of 2007 and the first half of 2008 (2007/8).

<sup>2</sup> Formerly known as "the poverty gap ratio."

<sup>3</sup> The FGT Index was developed by Thorbecke, Foster and Greer in 1989. In recent years, it has become the most accepted index of the severity of poverty. This index can obtain values between zero (when the income of the poor is very close to the poverty line) and the incidence of poverty (when the income of the poor is zero). The index is calculated according to the following formula: (n\*Σ((zi-yi)/zi)1 2, where zi is poverty-line income and yi is the income of the family.

- The incidence of poverty according to economic income indicates that the downtrend that has characterized recent years is continuing. The incidence of poverty according to economic income declined from 33% in 2006/7 to 32.3% in 2007 and to 31.8% in 2007/8.
- The incidence of poverty among the elderly decreased, from 22.6% in 2007 to 22.2% in 2007/8. This decline was anticipated, since the slowdown in the growth of earned income versus the increase in the old-age pension improved the relative situation of the elderly.
- The incidence of poverty among families with children remained stable (24.7%); however, while the incidence of poverty among families with up to three children decreased slightly, the incidence of poverty among large families (with 4 or more children), increased, from 56.5% to 58.1%.
- The incidence of poverty among working families remained more or less at the same level as in 2007. The share of working families in the poor population increased slightly, from 45.7% in 2007 to 46.4% in 2007/8.
- O The share of transfer payments and direct taxes in the reduction of poverty decreased, from 38.3% in 2007, to 37.2% in 2007/8. 26.5% of the persons (members of families) and 14.4% of the children were extricated from poverty subsequent to government intervention in the field of transfer payments and direct taxes.

2006/	/7, 2007 a	nd 2007/8	8			
	Income before transfer payments and taxes 2006/7 2007/8		tran payn	e after Isfer nents taxes 2007/8	i the inc of pove tran payn and dire	decrease n idence rty after sfer nents ect taxes ntage) 2007/8
Total population	33.0	31.8	20.5	20.0	38.0	37.2
Jews	28.7	27.9	15.2	15.2	47.0	45.5
Arabs	61.3	56.5	54.8	50.1	10.6	11.3
Elderly	56.4	53.1	23.5	22.2	58.4	58.1
New immigrants	40.7	39.5	19.0	19.0	53.2	52.0
Families with children	31.6	30.6	25.9	24.7	18.1	19.2
1-3 children	24.7	23.7	18.8	18.0	23.9	24.2
4 or more children	65.0	64.5	60.0	58.1	7.7	10.0
5 or more children	75.8	76.1	69.0	67.9	9.0	10.8
Single-parent families	47.6	48.4	28.9	30.3	39.3	37.3
Employment status of head of household						
Working	18.8	18.4	12.6	12.3	32.9	33.2
Salaried employee	19.2	19.1	12.5	12.3	35.2	35.3
Self-employed	17.1	15.6	14.2	13.0	16.6	16.9
Not working (of working age)	90.6	90.6	68.9	71.4	24.0	21.1
Sole wage earner	35.5	35.1	23.9	23.6	32.9	32.8
2 or more wage earners	4.3	4.6	2.9	2.9	32.9	35.8
Age group of head of household						
Up to 30	35.6	37.4	24.5	26.1	31.3	30.2
31-45	27.6	26.5	22.0	20.5	20.4	22.4
46 to retirement age	23.4	21.1	14.6	14.2	37.4	32.9
Retirement age by law	59.1	56.7	24.1	23.2	59.3	59.0
Years of education of head of household						
Up to 8 years of study	69.2	66.9	43.2	44.1	37.6	34.1
9-12 years of study	33.8	32.8	22.3	21.3	34.0	35.1
13 + years of study	23.5	22.8	13.4	13.3	42.8	41.7

## Incidence of Poverty in Families, by Various Characteristics (percentages), 2006/7, 2007 and 2007/8

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#### 5. Measuring poverty from the perspective of expenditure, 2006-2007

In a study published by the National Insurance Institute in 2004<sup>14</sup>, an attempt was made to measure poverty according to the approach developed by a U.S. committee of experts, established in the 1990s (the National Research Council – NRC). This committee proposed the approach of creating an alternative index to the official poverty index in the United States. This approach is based mainly on a calculation of a "threshold expenditure" for a "representative family" (consisting of two adults and two children), which is calculated using the consumption data of the population itself, as reflected in the expenditure surveys performed by the Central Bureau of Statistics. The basket, which serves as the basis for calculating the "threshold expenditure," includes products and services pertaining to food, clothing and footwear and housing, plus associated essential products. The threshold expenditure is adjusted to other family compositions using an equivalence scale, which takes into account the composition of the family, in terms of the number of adults and the number of children. The income compared with the threshold expenditure is the disposable income available to the household (the gross income from all sources, net of direct taxes). If the family receives public housing and pays reduced rent relative to the market price, then the component of "in-kind income" is added to this income. At the recommendation of the NRC, in addition to the deduction of direct taxes, work-related transportation expenses and the expenses for working families of sending children to day-care centers, kindergartens and child-minders are also deducted from the income. A family is defined as poor if its disposable income is insufficient to finance the expenditure on this basket.

In the study, two alternatives were presented for calculating the threshold expenditure and the income to which it is compared per family category, when the difference between the two alternatives is the definition of expenditure for housing. In the first alternative, the expenditure for housing is obtained according to the total current payments for accommodation in an apartment (loans and mortgages, rent, etc.); in the second alternative, the expenditure for housing is calculated according to the actual rent for a person living in a rented apartment, and according to the rent credited in favor of a person who owns an apartment. In the second alternative, a family residing in an apartment that they own is compensated on the income side. The component added to the income side is the difference between the rent credited to the apartment and the total current expenditure on the apartment ("the net rent"); in the majority of families who own an apartment, this difference is positive. In both alternatives, the calculation of the income that is being compared with the threshold expenditure also takes into account the benefit inherent in public housing services – a family living in public housing (such as the Amidar, Amigur housing companies) is compensated on its income side, to the level of the difference between the rent on the open market (which is credited to the apartment according to its characteristics<sup>15</sup>) and the rent that the family actually pays.

As stated above, the basket that is used to calculate a family's "threshold expenditure" is based on

<sup>14</sup> See footnote 7 in this chapter.

<sup>15</sup> An estimate of the "free" rent that is credited to public housing was made by the researchers, on the basis of the characteristics of the apartments (size and geographic district), as received from the housing companies.

products and services relating to food, clothing, footwear and housing. The representative family's median expenditure on the basic basket is multiplied by two multiplication coefficients: (a) the median multiplication coefficient, whose value ranges between 0 and 1, which represents the viewpoint that the standard of living of a poor family is lower than that of the median family; (b) an additional multiplier, which represents the value of a supplementary basket of essential products and services from the areas of education, health and transportation (not including work-related transportation, which was deducted from the income side). The multiplication coefficients, which the NRC recommends updating about once every decade, were left at the same level as prescribed in the study. The multiplication coefficient of the median stands at 80% and 85% for alternatives (a) and (b), respectively, while the multiplier representing the increment for the accompanying basket of products and services stands at 1.35 and 1.25 for alternatives (a) and (b), respectively.

It is clear that the findings are influenced by the macro-economic developments and changes in the social policy over the three years of the survey, which are at the basis of the moving average for each of the years in respect of which the dimensions of poverty were calculated. It should be emphasized that the poverty and inequality indices, which are calculated in relation to household income (like the Gini Index and the SEC Index) were calculated on the basis of the income defined for the purposes of calculation according to this approach; i.e., the income, net of direct taxes and work expenses, and with the addition of an in-kind transfer component that is inherent in public housing. For alternative (b), the credited rent component is also added to the income.

Box 5 below shows findings on the dimensions of poverty during 2006-2007, according to the two alternatives specified above. It should be emphasized that, according to the recommendations of the NRC, the poverty indices are not based on the consumption and income data of a single year, but rather on a moving average of three years. The findings for 2006 relate to data on the household expenditure surveys for the years 2004–2006 (at 2006 prices), while the data for 2007 relates to the expenditure surveys for the years 2005-2007 (at 2007 prices)<sup>16</sup>. For the sake of simplicity of presentation, we will refer below to the data of those three years at 2006 prices as "the year 2006," and similarly, as "the year 2007."

<sup>16</sup> The surveys' income data used for processing the data for the year 2002 was adjusted by the rise in the general index. On the other hand, the relevant expenses (and the credited income added for apartment owners) were differentially adjusted according to the relevant price index. Corresponding data processing was performed for 2003 and 2004.

#### Box 3

### The Dimensions of Poverty from the Perspective of Expenditure: Updated Findings for 2007

The findings concerning the incidence of poverty indicate stability in the scope of poverty among families in 2007 compared with 2006 (Table 1) according to the first calculation alternative, and a slight rise – mainly among families and children – according to the second alternative. (For an explanation of the difference between the two approaches, see section 5 of this chapter.)

The income gap ratio among the poor, which expresses the degree of distance of the threshold expenditure from the relevant income, according to both the calculation alternatives, reached 32% in 2007 according to the first calculation alternative and 28% according to the second alternative. These ratios express a slight decrease compared with the corresponding figure in 2006 – contrary to the slight upward trend in the incidence of poverty among poor families and persons (members of families). The Gini Indices of inequality in income rose slightly (0.2% according to the first alternative and 0.4% according to the second alternative). On the other hand, the SEN Index rose at a higher rate, of 2% and 3% in both alternatives.

# Table 1 Incidence of Poverty among Families, Persons and Children, 2003-2007

Alternative	2003	2004	2005	2006	2007
Alternative A: Housing by the payments approach					
Families	23.9	22.6	22.6	21.2	21.4
Persons	27.0	26.2	26.6	25.4	25.5
Children*	34.9	35.0	35.8	35.0	35.3
Alternative B: Housing by the credited rent approach					
Families	19.9	19.6	19.7	18.4	18.9
Persons	24.1	24.6	24.9	23.7	23.9
Children	32.5	34.0	34.8	33.9	34.5

The poverty lines deriving from both alternatives are, in essence, the "threshold expenditures" of the families for the basic consumption components; that is to say, a family is considered poor if its disposable income is insufficient to cover these expenses. The results of the threshold expenditures and the incidence of poverty for the various family compositions according to Alternative A and Alternative B of the calculation are shown in Table 2. The poverty lines according to Alternative B are higher than those of Alternative A, since they include an additional component that isn't present in Alternative A – a credited expense for housing owned by the residents. Therefore, the threshold expenditure per capita, for example, was some NIS 2,300 in 2007 – nearly NIS 500 less than the threshold expenditure according to Alternative B.

#### Table 2

#### Threshold Expenditure and Incidence of Poverty Among Families, for Selected Family Compositions, Alternatives A and B, 2006-2007

	200	)6	200	)7
Family Composition *	Threshold expenditure (NIS)	Incidence of poverty (%)	Threshold expenditure (NIS)	Incidence of poverty (%)
Alternative A				
Single adult	2,214	22.0	2,299	22.0
Two adults	3,597	15.3	3,735	16.3
Two adults + 1 child	4,438	16.4	4,608	15.6
Two adults + 2 children	5,215	18.0	5,415	18.9
Two adults + 3 children	5,946	24.6	6,174	25.9
Two adults + 4 children	6,639	49.9	6,894	49.5
Two adults + 5 children	7,302	63.6	7,583	65.8
Adult + 2 children	4,086	34.1	4,244	30.8
Alternative B				
Single adult	2,580	12.6	2,678	13.8
Two adults	4,192	12.6	4,350	13.3
Two adults + 1 child	5,172	15.5	5,367	15.5
Two adults + 2 children	6,078	18.2	6,307	19.6
Two adults + 3 children	6,928	24.5	7,190	25.6
Two adults + 4 children	7,737	46.9	8,029	45.8
Two adults + 5 children	8,510	61.9	8,831	64.2
Adult + 2 children	4,762	34.4	4,924	31.4

\* Although the calculation is based on three survey years, due to the small number of observations, it was not possible to calculate the data for single-parent families except for one adult with two children; the data on families of this type also suffer from quite substantial fluctuations.

The relevant income, for the calculation according to both alternatives, increased by about 3% in real terms, while the threshold expenditure increased by slightly more. It is for this reason that the dimensions of poverty increased slightly. Among most families, the incidence of poverty remained more or less stable between the two years according to Alternative A. On the other hand, in the calculation according to Alternative B, there were usually increases in the incidence of poverty. Prominent is the decrease in the incidence of poverty among single-parent families in both calculation alternatives. This decrease derives from the rise in earned income among these families, and not from an exceptional decline in their expenses.

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#### 6. Inequality in income distribution and the impact of policy measures

The progressive structure of transfer payments and direct taxes narrows income gaps in the population. The rate of transfer payments relative to economic income decreases with the rise in economic income, while the rate of direct taxes increases with the rise in economic income. The higher the progressive rate of transfer payments and direct taxes, the larger is the lower deciles' share of income subsequent to transfer payments and direct taxes, and the smaller is the upper deciles' share of the income.

Table 13 shows the average change in income, benefits and taxes per family during the survey periods. During the period 2002-2007, economic income increased at a rate of 12.5%, while disposable income increased at a higher rate, of 14.7%. The increase in economic income is a result of the expansion of employment and the real increase in wages between 2004 and 2007, which prevailed over the impact of the recession in 2001-2003. The higher growth in disposable income relative to economic income is a result of the tax reform, which, on the one hand, led to the sharp drop in direct taxes, by some 11%, while, on the other hand, led to a reduction of National Insurance benefits at a similar rate. However, since the weight of the taxes on the disposable income is more significant than the weight of the transfer payments on it, the impact of the reduction in taxes is more significant than the impact of the reduction in transfer payments.

# Table 13Average Income, Benefits and Taxes per Family<br/>(NIS per month, at 2007 prices), 2002-2007

	2002	2003	2004	2005	2006	2007	2007 versus 2002
Economic income	10,040	9,720	10,030	10,350	10,760	11,300	12.5
Total transfer payments	1,840	1,700	1,640	1,640	1,650	1,630	-11.4
National Insurance benefits	1,410	1,300	1,230	1,200	1,210	1,190	-15.6
Direct taxes	2,760	2,390	2,360	2,300	2,280	2,470	-10.5
Disposable income	9,120	9,030	9,320	9,690	10,130	10,460	14.7

Table 14 shows the average sums of transfer payments and direct taxes as a percentage of the average economic income per family in each decile, while Table 15 shows each decile's share (ranked according to economic income) in all transfer payments and in all direct taxes, in 2005, 2006 and 2007.

Table 14 shows that the reduction in transfer payments relative to economic income continued in 2007 as well – concurrent with the continuing trend of reducing direct taxes. Transfer payments as a share of average economic income decreased from 15.9% in 2005 to 14.4% in 2007. This reduction was reflected in all the deciles except for the top decile, but is particularly noticeable in the four lowest deciles, due to the erosion of transfer payments relative to increase in wages, and to new employees from these deciles joining the labor market, and the resulting increase in their economic income. Concurrently, the tax burden was increased slightly between 2006 and 2007: from 21.2% of the economic income of the entire population to 21.9%, and at variable rates in all

deciles (except for the second decile). This occurred after a continuous reduction of the tax burden between 2003 and 2006.

	Rate relative to average economic income										
	1	Transfer payments			Direct taxes						
Decile	2005	2006	2007	2005	2006	2007					
Bottom											
2	317.5	246.2	213.0	24.6	18.8	16.1					
3	58.0	52.4	49.3	10.5	9.1	9.2					
4	38.0	39.4	32.1	10.8	9.9	10.0					
5	23.5	23.2	21.6	11.7	10.9	10.9					
6	15.0	15.7	14.2	12.9	11.8	11.9					
7	10.0	11.5	9.4	14.7	13.3	14.1					
8	7.6	6.7	6.4	17.7	17.0	17.6					
9	4.8	4.2	3.9	22.4	21.3	22.1					
Тор	2.1	1.9	1.9	31.2	30.2	31.5					
Total	15.9	15.3	14.4	22.2	21.2	21.9					

# Table 14 Rates of Transfer Payments and Direct Taxes Relative to Average Economic Income in Each Decile\*, Total Population (Percentages), 2005-2007

\* For the purpose of determining the deciles, families were ranked according to the economic income per standard person. Each decile constitutes 10% of all persons in the population.

# Table 15 Share of Each Decile\* of Total Population in Total Transfer Payments and Direct Taxes (Percentages), 2005-2007

	Transfer payments					
Decile	2005	2006	2007	2005	2006	2007
Bottom	23.9	24.5	24.8	0.9	0.9	0.8
2	17.4	16.0	17.2	1.0	0.9	0.9
3	9.4	8.9	9.4	1.2	1.1	1.2
4	9.9	10.7	9.7	2.0	1.9	2.0
5	8.8	9.0	9.0	3.1	3.1	3.0
6	7.5	8.0	7.8	4.6	4.4	4.3
7	6.5	7.6	6.6	6.8	6.3	6.6
8	6.5	5.8	5.8	10.8	10.6	10.6
9	5.5	5.0	4.9	18.5	18.3	18.4
Тор	4.8	4.6	4.8	51.2	52.5	52.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

\* For the purpose of determining the deciles, families were ranked according to **economic income** per standard person. Each decile constitutes 10% of all persons in the population.

Table 15 shows that, when ranking the deciles according to economic income, the deciles from the bottom to the sixth decile receive transfer payments that are higher than their total payment for direct taxes. In the seventh decile, parity is obtained, and, as of the eighth decile, the ratio is inverted: the top decile pays more than half of the total taxes and receives about 5% of the total transfer payments. Table 16 shows the patterns of distribution of the various types of income in the entire population in 2005-2007<sup>17</sup>. The data in the table shows that, during these years, the share of the second to sixth deciles in the total disposable income increased, the share of the other deciles (except for the top decile) remained more or less the same, while the top decile's share declined from 28% of all disposable income to 27.2% of it. The ratio between the upper quintile's income to the bottom quintile's income slightly decreased, from 8.3% in 2006 to 8.0% in 2007. These developments, which point to more equality in income distribution in 2007, were also reflected in the Gini Index of disposable income, which declined by 2.3% between 2006 and 2007 (Table 17).

#### Table 16

Impact of Transfer Payments and Direct Taxes on Inequality in Income Distribution in Total Population (Percentages), 2005- 2007

	Share of each quintile in the total income (%)**									
	Before transfer payments and direct taxes				After transfer payments			After transfer payments and direct taxes		
Decile*	2005	2006	2007	2005	2006	2007	2005	2006	2007	
Bottom	0.0	0.0	0.0	1.7	1.7	1.7	1.9	1.9	1.9	
2	0.9	1.1	1.3	3.0	2.9	3.0	3.5	3.4	3.5	
3	2.9	2.9	3.0	4.0	4.0	4.1	4.5	4.5	4.7	
4	4.4	4.4	4.6	5.2	5.2	5.3	5.9	5.8	6.0	
5	6.2	6.2	6.3	6.6	6.6	6.7	7.3	7.3	7.4	
6	8.2	8.1	8.1	8.2	8.2	8.2	9.0	8.9	9.0	
7	10.5	10.3	10.4	10.2	10.1	10.1	10.8	10.8	10.8	
8	13.6	13.4	13.4	12.8	12.7	12.7	13.1	13.0	13.1	
9	18.4	18.2	18.2	16.9	16.8	16.8	16.5	16.3	16.3	
Тор	35.0	35.5	34.8	31.3	31.8	31.4	27.4	28.0	27.2	
Ratio between the income of the top quintile and the bottom quintile	56.7	49.2	41.5	10.3	10.5	10.3	8.1	8.3	8.0	

\* The families in each row were ranked according to the level of income corresponding to a standard person. Each decile represents 10% of the persons in the population.

\*\* In terms of income per standard person.

The contribution of the transfer payments and direct taxes to reducing inequality, which derives from the distribution of the economic income, increased slightly, from 25.1% in 2006 to 25.4% in 2007, and it declined by about 6 percentage points relative to 2002, when the rate was 31.5%.

<sup>17</sup> The data on inequality in income distribution among the working population is presented in Tables 18-19 in the Poverty and Inequality Tables appendix.

The picture of the socio-economic situation in 2007 attests, as a rule, to continued stability, which characterized the three preceding years, with a slight tendency towards a reduction in the dimensions of poverty and inequality, mainly in the population groups identified with focuses of poverty – Arabs and large families – and a parallel decline in the incidence of poverty among children, after many years of stability or rises. These developments in 2007 are attributed mainly to developments in the labor market.

Year	Before transfer payments and direct taxes	After transfer payments only	After transfer payments and direct taxes	Percentage of the decline in inequality deriving from transfer payments and direct taxes
2007	0.5134	0.4323	0.3831	25.4
2006	0.5237	0.4379	0.3923	25.1
2005	0.5225	0.4343	0.3878	25.8
2004	0.5234	0.4300	0.3799	27.4
2003	0.5265	0.4241	0.3685	30.0
2002	0.5372	0.4312	0.3679	31.5
1999	0.5167	0.4214	0.3593	30.5
Change in index (%)				
2007 versus 2006	-2.0	-1.3	-2.3	
2007 versus 2002	-4.4	0.3	4.1	
2007 versus 1999	-0.6	2.6	6.6	

## Table 17Gini Indices of Inequality in Income Distribution, 1999-2007