Chapter 8
Issues in Welfare Policy

- The incidence of poverty, based on the relative index customarily used in Israel – according to which the income of the poor households' population is less than half the median income adjusted for family size – has been rising in recent years. In the year ending June 2005, it reached a peak of 24.1 percent. The relative incidence of poverty in Israel is high also by international comparison.
- Poverty grew significantly also according to alternative measures based on a definition by which households are considered poor if their net income from all resources falls short of the amount needed to consume a basket of basic needs. The data indicate that poverty rose from 2002 to 2004, after a fall in the two preceding years mainly due to economic growth.
- Poverty has risen since 2002 according to all indices – relative, absolute and mixed measures of basic needs – due, partly, to the recession and, in the last two years, to the budget cuts in social benefits,
- The incidence of poverty is high according to all methods among Arabs, the Jewish ultra-orthodox, large families, the low skilled and families without an income earner.
- The indices of poverty emphasize the need for a continued policy to reduce poverty, consistent with fiscal discipline that ensures sustainable growth. The policy should operate to encourage the integration in the work force of those capable of working, by increasing the return to work of low-income earners, and to assist the poor whose earning power is severely limited with direct support. At the same time, employability- and means-tests should be further improved.

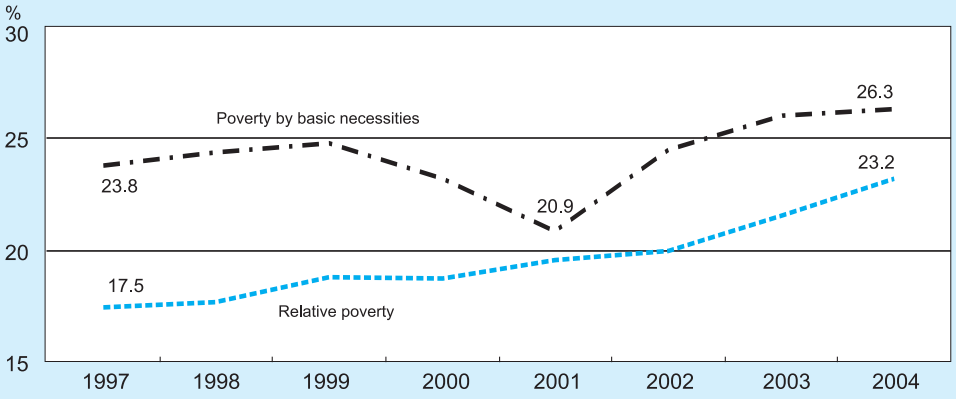
1. INTRODUCTION

The incidence of poverty in Israel is high, relative to the past and to other countries.

Poverty in Israel has reached a high level in recent years: the population's incidence of poverty according to the customarily used relative definition[1] rose to 24.1 percent in the year to the middle of 2005. Poverty incidence has risen in recent years according to various definitions: the relative index has followed an upward trend since 1997; the measure that reflects the ability to consume a basket of essential goods and services has risen since 2002, after a fall in the two previous years partly due to economic growth

[1] This method identifies households as poor if their disposable income is less than half the median income, adjusted for family size.

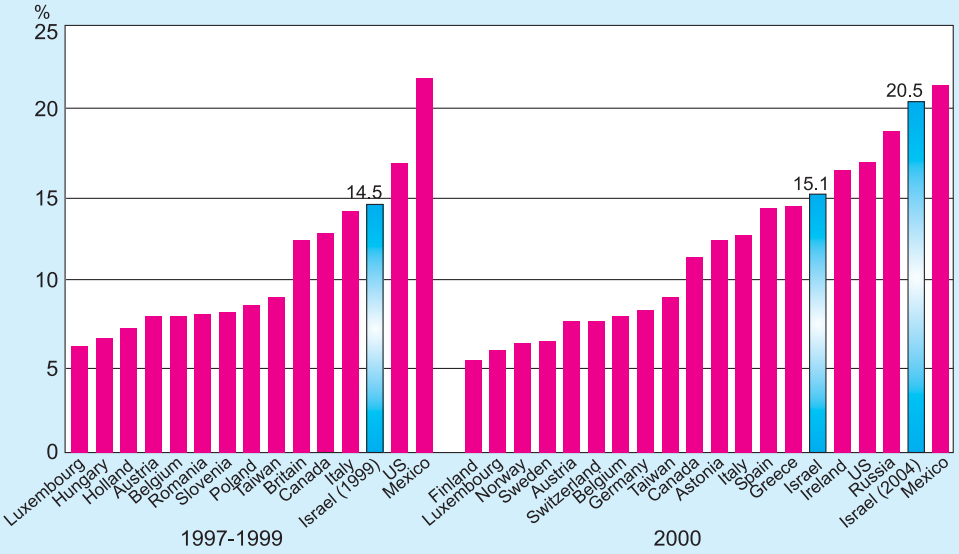
Figure 8.1
Incidence of Poverty among Individuals; Relative Poverty Approach and the Basic Needs Approach,[a] 1997 to 2004



[a] The relative poverty line is calculated according to half the median equivalized income. The basic needs poverty line is that defined by the Canadian Market Basket Measure (MBM). This includes spending on food, accommodation, education, transport and products for the individual. Disposable income includes income from all sources and is after tax and essential family health expenses, which are not included in the poverty line and associated expenses.

SOURCE: Based on Central Bureau of Statistics' income and expenditure surveys.

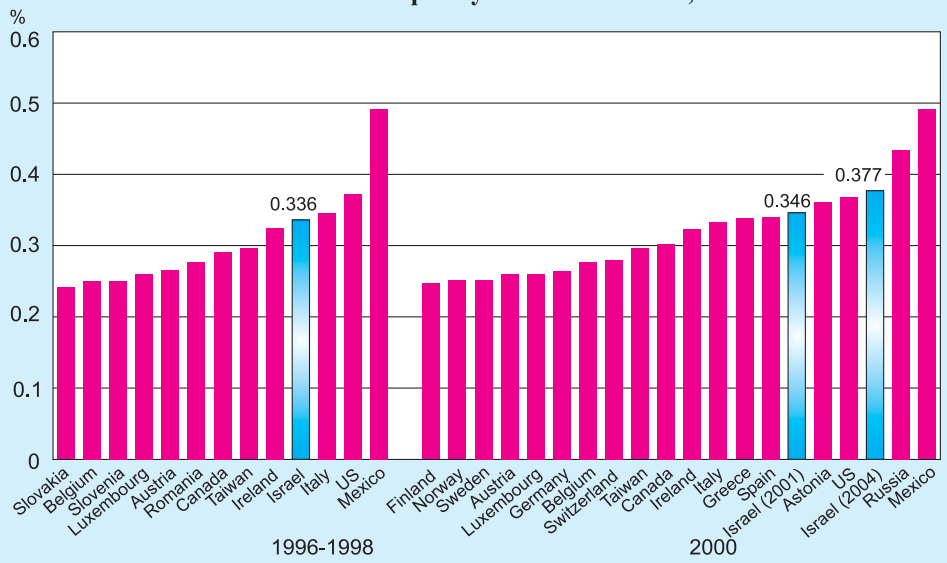
Figure 8.2
Incidence of Poverty[a] among Individuals in Israel and Selected Countries,[b] 1997–1999 and 2000



[a] The poverty line is defined here as 50 percent of the median disposable income based on the OECD equivalence scale, which attributes greater returns to scale of household size than those attributed by the National Insurance Institute, and therefore the incidence of poverty for Israel shown here is lower than that calculated by the National Insurance Institute. In the period 1997-1999, the latest data were taken for each country.
[b] All countries included in the Luxembourg Income Studies.

SOURCE: Luxembourg Income Studies and various annual income surveys by the Central Bureau of Statistics.

Figure 8.3
Gini Coefficient of Income Inequality[a] in Israel and US,[b] 1996–1998 and 2000



[a] Income after taxes and transfer payments, according to the OECD equivalence scale of individuals' income within households, which attributes greater returns to scale of household size than those attributed by the Israeli scale. For the period 1996-1998, the latest data available were taken for each country.
[b] All countries included in the Luxembourg Income Studies.

SOURCE: Luxembourg Income Studies and various annual income surveys by the Central Bureau of Statistics.

(Figure 8.1)[2]. An international comparison of relative poverty shows that poverty in Israel is high compared to the other countries (Illustration 8-2). The extent of poverty requires the need to adopt a coherent policy of poverty reduction, consistent with a fiscal policy that is supportive of sustainable growth. The policy must operate to encourage the integration in work of those capable of working and to provide direct support (by means of transfer payments and transfers in kind) to those whose earning power is severely limited.

Inequality in net incomes (after transfer payments and taxes) is high by international comparison and also compared to past performance (Figures 8.3 and 8.4).

The increase in poverty and inequality was influenced, among other things, by the process of globalization in trade and in labor markets: while globalization had a favorable general impact on the growth potential and the standard of living in Israel it also affected low-skilled workers' opportunities in the labor market negatively compared to the higher-skilled. This was due to intensified competition in traditional

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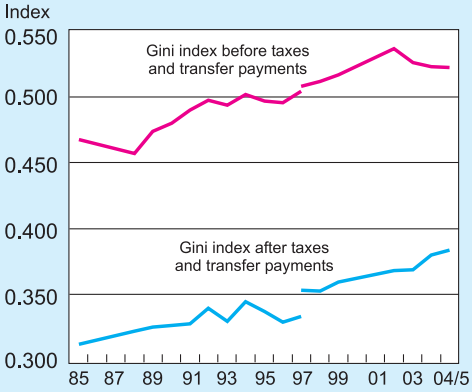
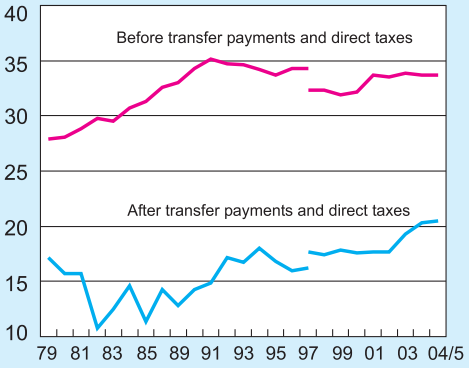
[2] Absolute poverty throughout the entire period, fixed at the level of the relative measure for 1997 or at the value of a needs-based basket of goods and services for that year, adjusted for price changes over the period, also indicates a decrease in the incidence of poverty until 2001 and a subsequent increase. The level of poverty according to the absolute index is lower than that of essential needs (see the discussion below).

Figure 8.4
Income Inequality, Gini Index, 1985–2004/5



SOURCE: National Insurance Institute.

Figure 8.5
Incidence of Poverty among Families, 1979–2004/5



SOURCE: National Insurance Institute.

sectors' export markets and to increased exposure to labor-intensive competition from countries with low wages. This encouraged a process of high-tech oriented economic growth, weakening the demand for low-skilled workers relatively to that of skilled workers. This development was exacerbated by the policy concerning foreign workers. In Israel, as in other advanced countries, globalization was also characterized by the opening up of the economy to foreign workers. Employers typically hire them at a low cost, relatively to comparable Israeli workers. In Israel, the influx of foreign workers has been sizeable due to permissive government policy concerning their access to Israel's labor market and, paticularly in their case, inadequate enforcement of labor laws. Consequently the demand for low-skilled Israeli workers was reduced and work incentives were affected negatively because of the fall in the return to work, relatively to the government's support to those out of work. As a result of these processes, a widening gap has opened in the rate of unemployment and wages based on levels of education, and many Israeli workers dropped out of the labor market (see also Chapter 5).

The deep cuts in transfer payments in the last few years exacerbated poverty and inequality, but in the long run will act to reduce poverty by increasing employment.

Another cause of recently exacerbated poverty and increasing inequality, especially in the short run, is related to the extensive budget cuts in transfer payments (Table 8.1)[3]. These cuts were implemented on the background of economic recession, in an attempt to reduce the government deficit that had exceeded its target and to reintegrate people into employment. In the long run, the reduction of transfer payments may raise employment among the low-skilled and thereby ease their poverty situation. However, the cuts were implemented in a sweeping, and on occasion, severe manner, without being sufficiently accompanied by active labor market policies to encourage employment. Consequently inequality and

[3] See also Chapter 4, in the Bank of Israel Annual Report for 2004, section on Welfare Policy, Research Department.

Table 8.1
Social Expenditure, 1980–2005

(percent)

	Welfare expenditure[a]		Transfer payments to households[b]
	Share of expenditure of government[c]	Share of GDP	Share of GDP
1980	32.3	23.9	7.6
1985	34.5	23.4	8.6
1990	44.3	25.5	10.4
1995	52.1	28.5	10.3
1996	53.5	29.0	10.6
1997	54.0	28.6	10.7
1998	54.2	28.4	10.9
1999	54.4	28.1	11.0
2000	55.2	27.7	11.1
2001	56.4	29.7	12.1
2002	55.4	30.0	12.2
2003	55.1	29.2	11.7
2004	54.3	27.8	10.9
2005	54.9	26.9	10.6
		current NIS million	
2005	149,271		58,562

[a] Community social services: education, health, social insurance and welfare, housing, community services, culture, entertainment, sport and religious services.
[b] See Appendix Table1A14.3(1).
[c] Including national institutions, municipalities, and nonprofit organizations most of whose expenses are financed by the government.
SOURCE: Based on Central Bureau of Statistics data.

poverty (after taxes and transfers) have risen in recent years. This happened despite the economic growth that occurred since mid 2003 and the reduction in the number of foreign workers, that improved the situation of Israeli low-skilled workers; their wages increased and the rate of unemployment among them dropped. Consequently the increase in economic inequality (before taxes and transfers) came to a halt and even began to fall, while the population's poverty incidence on the basis of economic income (before taxes and transfers) remained unchanged (Figures 8.4, 8.5).

Poverty and inequality (of net income) continued to widen in the year ending in June 2005, though at a diminishing rate. However, poverty and inequality as measured by economic incomes (before taxes and transfers), remained stable at their 2004 level, due to accelerated economic growth and its unemployment-reducing effect among low skilled workers (Table 5.6). The effect on unemployment was partly compensated by a recent increase in the number of foreign workers after having fallen over the previous two-year period.

Taxes and transfer payments significantly contributed to the reduction in poverty and inequality. National Insurance calculations show that in the year ending in June 2005, their contribution to the reduction of inequality (before taxes and transfers) was 26.6 percent. Their effect on the population's poverty incidence was a reduction of 28.7

percent[4]. Similarly to the two preceding years, also in 2005 transfer payments and taxes contributed less to the reduction of poverty and inequality. The total amount of benefit payments continued to fall by 3.1 percent per capita, mainly due to the gradual cuts in child allowances and income support since 2003 (and to be completed by 2009) and due to the reduction in unemployment benefits. The decline in unemployment benefits and income support was partly due to improved labor market conditions and the operation of four employment centers for income support recipients (the "MEHALEV" project). Old age allowances and income supplements for elderly people were raised during 2005, somewhat alleviating their poverty situation. A tax reduction, implemented in 2005, raised disposable incomes in high deciles and also inequality.

Poverty is highest among the non-Jewish, mainly Arab, and the Jewish ultra-orthodox populations, large families, those with low educational levels, and families without an income earner.

Poverty in Israel is concentrated in specific population groups. Nevertheless, most of the poor share a number of occupational, demographic and other characteristics. In certain instances the characteristics interact with each other, thereby intensifying their effect on poverty. The most prominent occupational characteristic among poor households is the low number or lack of income earners. In 2004, poor households (with the head of the household under the age of 65) lacking an income earner comprised 37 percent of all poor households. Nevertheless, more than half the poor lived in homes with earners, mostly single earners. Another major characteristic is low education: 40 percent of the poor have an education of 10 years or less while their population share is only 22 percent. Large families are particularly likely to be poor: Child poverty incidence has reached 34.1 percent, a high level both by historical and international comparison. The non-Jewish, mainly Arab, and the Jewish ultra-orthodox populations, account for more than half of the poor population in 2004. For population groups with a high poverty incidence, poverty needs to be evaluated also by the intensity of poverty. This has been rising over recent years and is exceptionally high for the low skilled, large families, families without income earners, and for the Ultra-orthodox and the Arab households (Table 8.2). Poverty is affected, among other things, by individual decisions concerning labor force participation or family size. Such decisions reflect to some extent a choice by the household, but often this choice is strongly influenced by a specific cultural environment prevailing in the relevant society.

The problem of poverty and its causes emphasize the need for a continued policy of poverty reduction[5]. Economic growth is a necessary but not sufficient condition for a sustainable anti-poverty policy. It raises the demand for workers and acts to reduce unemployment. This causes wages of low-income earners to rise, as has happened in Israel over recent years. However, growth permeates only partially and slowly to the

[4] This calculation does not take into account the long-term effect of the existing taxation and benefit system on individual behavior in the labor market – a hypothetical elimination of the tax and benefit system, as implied by this calculation, would obviously convince many people to return to work and poverty incidence based on economic incomes would be lower than the outcome under the present system.

[5] For policy recommendations, see Gottlieb, Daniel and Nitsa (Kaliner) Kasir, 2004, "Poverty in Israel and a Strategy for its Reduction", Bank of Israel, July.

Table 8.2
Poverty Indices by Various Measures and Selected Sectors of the Population

(percent of the population, 2004)[a]

	Poverty indices			Distribution, percentage of	
	Incidence of poverty	Income gap	Sen index[b]	the poor	the population
Total	42	33	0.111		
Years of education					
up to 8	48	33	0.220	24	12
9–10	37	34	0.171	16	10
11–12	24	34	0.116	33	32
13–15	19	32	0.087	16	13
16+	11	34	0.054	11	24
Family size					
1 person	24	26	0.095	5	5
2–4 persons	14	31	0.066	30	49
5–6 persons	25	35	0.123	32	31
7–8 persons	48	35	0.231	19	10
9 or more persons	57	33	0.254	12	5
Number of wage earners[c]	76	47	0.454	37	12
1	32	26	0.119	45	33
2+	4	29	0.017	8	46
Householder aged 65+	25	18	0.072	10	9
Population group					
Ultra-orthodox[d]	57	36	0.278	14	6
Arabs	52	36	0.257	41	19
Single-parent families	35	32	0.156	7	4
Immigrants	81	72	0.071	31	61

[a] Including the Arabs in east Jerusalem.
[b] The Sen index combinesthe extent of poverty, the income gap and inequality among the poor.
[c] In families where the head of the household is less than 65 years old.
[d] There is a problem regarding identifying the ultra-orthodox in the Income Survey. Here they are identified as families in which the last educational institute attended by one or more members of the family was a post-secondary school talmudic college
SOURCE: Central Bureau of Statistics Incomes Survey, 2004.

economically weak sectors. Active government policy is thus called for to enhance the effects of growth to earners of low incomes. Such intervention must include active steps to improve the integration of economically weak persons in the labor market and raise the return on their work effort. That includes for example an introduction of a negative tax, occupational training, sensitive to employers' needs, subsidies to reduce the cost of child care during the mother's working hours, enforcement of the Minimum Wage Law and of quotas on foreign workers. This will increase the labor cost of foreign workers and thus improve Israeli low-skilled workers' competitiveness. Another important tool is a more extensive use of employment centers ("MEHALEV"), after an improvement of their functioning, based on the accumulated experience so far (see Box 5.1 in this report). The use of active tools has until now been modest in Israel compared to the experience in other western countries[6]. A major instrument of long-

Policy to reduce poverty must act to encourage the integration into the labor market of those able to work, and to directly assist those with low earning ability.

term poverty-reduction is to raise the standard of education and skills among poor children to help strengthen their future earning ability. The high number of children in poor families and inadequacies in their education necessitate the channeling of substantial resources to their benefit. Furthermore special programs need to be designed for specific poor groups. These programs must be sensitive to the specific cultural values of the group. Thus the chances of successful integration in employment can be significantly improved. (See also Chapter 1 for Policy Recommendations.)

For anyone who is unable to work or whose earning ability is limited, transfer payments are part of the solution; the structure of benefits, their extent and the criteria for their receipt need to be re-examined. In particular it would be appropriate to ease the criteria for the receipt of unemployment benefits, since they are harsh by international comparison. The level of the welfare benefits should be adjusted to developments in the standard of living (by linking them either to median income or to some definition of essential needs) and the structure of income support benefits should be amended to take better account of family size. Such changes need to be accompanied by an improvement of the means test and the employment test.

The steps of poverty-reduction need to be accompanied by a framework of social targets, such as a target for poverty reduction, an employment target and targets in the field of education. The setting of targets will strengthen the government's commitment to sustained poverty reduction. It will influence budget priorities, enable an improved public assessment of the government's progress in achieving the stated goals and eventually it will improve social welfare.

This Chapter discusses two issues of welfare policy: (1) Various alternatives of poverty measurement and (2) the school-lunch program. The discussion on poverty measures is important for the understanding of poverty, for setting a policy target and for the shaping of anti-poverty policy. The school-lunch program is presented because of its importance as a possible tool in providing for poor children and in application of the long school day. Recognition of its importance has led to the enactment of the Daily-Lunch Law for school children in 2004.

2. POVERTY INDICES

a. Introduction

Poverty is multi-dimensional; it is reflected in financial deprivation, poor health and inadequate education.

Poverty is multi-dimensional; it is reflected in financial deprivation, inadequate health and education and often in a subjective feeling of economic and social hardship. Poverty measurement is therefore a complex issue that raises both principal and practical questions and its treatment here is obviously influenced by value judgments concerning the essence of what poverty is about.

[6] The International Monetary Fund (Israel Selected Issues, SM/05/74. March 2005) states that active labor market policies in Israel (0.2 percent of GDP) fall short of the effort spent in OECD countries (0.7 percent of GDP).

The discussion of various poverty measures is particularly important in view of the sizeable extent poverty has reached in Israel also when compared internationally. Hence there is a need to formulate a policy of poverty reduction. The selection of a suitable poverty measure is of considerable importance to the formulation of a coherent and efficient strategy of poverty reduction. The multi-dimensional nature of poverty calls for an examination of poverty from several angles.

The discussion of various poverty measures is important for an understanding of poverty, and setting a target and formulating a policy for its reduction.

The professional economic literature on poverty focuses on measures that can be translated into financial terms[7]. This literature typically distinguishes between relative poverty, based on some definition of the general standard of living in the economy and absolute poverty, reflecting the ability to provide the household with essential needs. According to the relative approach, anyone living below the standard of living deemed minimal when compared to a generally accepted standard, is deemed poor. In contrast to this the absolute approach considers a household to be poor if he is unable to provide for a basket of basic needs. In recent years, a third class of measures has been developed, that combines between the two approaches (the mixed approach). Similarly to the absolute approach, such measures focus on the ability to provide basic needs, however the level of their components are at least partly determined based on the relative approach.

Poverty can be measured relative to the standard of living in the country, or by the ability to provide a basket of essential needs.

A further distinction can be made between poverty measures based on calculations and criteria determined by the society (an objective approach) and poverty measures based on the individual's perception of poverty as reflected in his foregone consumption due to economic hardship (a subjective approach).

The differences in value judgments are reflected not only in the choice of the preferred approach to poverty measurement but also in various specific choices within the selected approach. In the relative approach for example, various issues arise: should the going standard of living be approximated by income or alternatively by consumption expenditure and should the poverty line relate to the median or the average of the chosen variable. Given a decision about the previous issues, what should the specific level of the poverty line be? In the basic-needs approach, the question arises as to which needs should be considered essential – food, clothing and accommodation or should health, education and other expenses also be added. Once the basic needs are chosen, a decision must be taken regarding the appropriate quantity of each of them to be included in the poverty line.

Any poverty measure should address the following aspects: the poverty line, defining the concept of poverty chosen by the society; the sources of income[8] deemed available to the household to finance its consumption; the equivalence scale, reflecting

[7] A theoretical approach that is not satisfied with only the financial aspects of poverty is the capabilities approach: It examines a person's ability to be adequately integrated in society. For details, see: Amartya K. Sen (1985), *Commodities and Capabilities,* Amsterdam: North Holland, pp. 1-130.

[8] There is also an approach that refers to potential income as a source of income. This approach estimates the earning ability of a family instead of focusing only on its effective income. See:

Robert Haveman and Andrew Bershadker (1998). "The 'Inability to be Self-Reliant' as an Indicator of Poverty: Trends for the U.S. 1975-1995." Discussion Paper no. 1171-98, Institute for Research on Poverty, University of Wisconsin-Madison.

the relevant parameters for adjusting the poverty line to family size, an adjustment that is aimed at enabling a comparison of the standard of living of families of various sizes (reference to the returns to scale in consumption).

After selecting the preferred approach for calculating the poverty line and the income resources the individual household's poverty situation can be assessed. There still remains the issue of aggregating the poverty information of all households into one aggregate poverty index. One common way of aggregation is the poverty incidence index, i.e. the ratio of poor households to total households. However, that measure disregards the issue of poverty intensity among poor households[9]. An anti-poverty policy intended not only to reduce poverty but also to improve the lot of the poorest requires a poverty measure that is sensitive to each household's poverty intensity[10]. Later in the chapter, we will relate to both poverty incidence and poverty intensity, but due to lack of space, that discussion will mainly focus on poverty incidence.

Box 8.1
Methods of measuring poverty from an international point of view

In different countries and international institutions, the methods for measuring poverty are varied. All of them refer to objective poverty measures. The differences in the approach to poverty measurement between the various countries relate to differences in value judgments and also to the extent of the desire for simplicity of the measurement.

a. Relative poverty indices

The relative approach is common in Western Europe and also in Israel. The European Union uses a number of social indicators to monitor social developments, among them a relative poverty line of 60 percent of median income[1]. The focus of the relative approach derives, among other things, from the importance attributed to the concept of social inclusion that relates to the general standard of living in the society. The selection of a comparatively high percent of the income is intended to include in the index not only the poor but

[1] See the report of the Social Protection Committee, 2001, "Report on Indicators in the Field of Poverty and Social Exclusion" curopa.eu.int/comm./employment_social/social_protection_committee.

[9] There are various aggregate poverty measures that reflect the intensity of poverty. See for example the "Sen poverty measure", the "Foster-Greer-Thorbecke measure" and the "Watts measure" discussed in Amartya K. Sen and James E. Foster (1997) "On Economic Inequality", Oxford University Press.

[10] In the article by Daniel Gottlieb and Roy Manor (2005), "Selection of a Poverty Index as a Policy Target" www.bgu.ac.il/econ (Discussion Paper Series, Monaster Center for Economic Research, Ben Gurion University), the entire discussion is done using the Sen poverty measure, that does take account of poverty intensity.

also those at a high risk of falling into poverty. The member countries of the European Union are required to prepare a yearly report on the social situation in a consensually defined format that includes a detailed report and analysis of the social targets and the means adopted to achieve the targets. That document called "National Action Plan" describes in detail the social situation of the population as a whole and of specific sub-groups and discusses past, current and intended policies to ameliorate social and economic hardship. These reports emphasize the relative poverty index, mostly specified as 60 percent of median equivalized income[2]. Some also report on the basis of other rates, such as 50 percent and 70 percent of median income, and some add calculations on the basis of average income[3].

The Scandinavian countries do not publish any official poverty index, and indeed poverty incidence there is low. They do typically report on relative poverty as measured by 50 and 60 percent of median income.

Since the eighties, Canada has also been publishing a relative poverty index called the Low Income Measure (LIM). Like in Israel its poverty line is defined by half the median (equivalized) income. Moreover, Canada adds two mixed poverty measures – the LICO (Low Income Cut-Off Rates) and the MBM (Market Basket Measure) that are described below.

In emerging and developing economies, the relative index is less customary. Nevertheless, one of the indices mentioned is the relative index based on consumption according to which a family is defined as poor if its consumption is less than 60 percent of median consumption[4]. This poverty index reflects a more permanent poverty than the index based on current income, since a family's consumption is based on permanent rather than current income, which includes also a transitory component. In any case, a consumption based relative index ignores to some extent the aspect of less permanent poverty that, on occasion, may also require intervention.

b. Absolute indices

The absolute approach to poverty is often chosen in less developed countries, but also in the USA. Less developed countries that fight poverty with the assistance of the World Bank, focus mainly on extreme poverty, with the poverty line

[2] The total net income of each household is calculated by adding together the income received by all the members of the household from all sources. For each person, the 'equivalised total net income' is calculated as its household total net income divided by equivalised household size according to the modified OECD scale. This scale gives a weight of 1.0 to the first adult, 0.5 to other persons aged 14 or over who are living in the household and 0.3 to each child aged less than 14.

[3] See also National Action Plan for Social Inclusion, UK, 2003-2005, and the Annexes, www.dwp.gov/uk/publications/dwp/2003/map/index.asp

[4] One of the two official indices in Azerbaijan.

defined as a per capita daily income of less than one, or sometimes two dollars a day. The UN's Millennium Development Goals also refer to a poverty index based on one dollar a day in its target for reducing world poverty by year 2015 to half its 1990 level[5]

These indices however suffer from the disadvantage that they do not relate to the question, whether the specified amount is consistent with a minimally adequate existence.

The US government chose an absolute poverty index in its 1964 program for the war on poverty and has been adhering to this approach until the present[6]. Nevertheless, the US Government has recently published a mixed index as well (see the following discussion). The official absolute index is based on the basic needs approach. The poverty line is calculated according to the cost of a minimal food basket, that is multiplied by 3. This food basket is based on the American Ministry of Agriculture's minimal food requirements, based on food availability and basic health considerations[7]; the multiplier of 3 is based on an American expenditure survey dating from the late 1959s, according to which it appears that the share of food expenses of total expenditure of a representative American family, of 2 adults and 2 children ages less than 18, was one third. The poverty line is revised annually according to the consumer price index but not to the standard of living as reflected in more updated expenditure surveys. Adjustment of the poverty line to family size reflects returns to scale and the families' age-composition. A family is identified as poor if its gross financial income falls below the poverty line. This approach ignores compulsory payments such as taxes that reduce disposable income, or benefits, monetary or in kind, that raise disposable income. The main shortcoming of the official American measure is the large weight of the multiplier in the poverty-line calculation, which attributes non-food expenditures automatically without any examination of their degree of necessity[8].

Other countries, most of them less developed countries have recently begun to define poverty in the spirit of the American approach[9] - among them

[5] See the Millennium Targets for the War on Poverty (MDG) as approved in September 2000 by Heads of State at the UN Millennium Summit. There the member states agreed to commit themselves to the achievement of 8 goals, quantitatively specified in 18 operating targets. Specific indices were approved to help monitor progress in policy implementation concerning issues such as income, food, education, health, environment, etc..

[6] Gordon M. Fisher (1997), "The Development and History of the U.S. Poverty Thresholds – A brief Overview", Department of Health and Human Services, United States of America.

[7] Center for Nutrition Policy (1999). "The Thrifty Food Plan", United States Department of Agriculture, CNPP-7A, pp. 1-15.

[8] This weight would be even greater if the calculation were to be repeated using an updated version of the expenditure survey, given the secular fall in the consumption expenditure's food share due to the continued increase in the standard of living.

Azerbaijan, Indonesia, Vietnam, China, Singapore, Sri Lanka, the Philippines, Cambodia and Thailand[10]. In these countries, the cost of a minimal food basket is calculated. This basked is based on a commonly accepted definition according to which a balanced consumption of approximately 2,100 calories per capita per day is essential (after gender and age have been considered). The composition of the food products in the food basket in each country is adapted to local eating habits. In some of these countries, the cost of the food basket serves to define a line of nutritional poverty. An existence below that level is defined as extreme poverty. These countries also recognize the basic need for other products such as clothing and housing. The non-food component has not been uniformly fixed: most of the above-mentioned, less developed countries derive this component from the actual level of non-food consumption by the population, whose food consumption equals that of the nutritional poverty line, i.e. the food consumption of families at the threshold between the poor and the non-poor. This calculation assumes, that households select, within their budgetary limits, what they view as their optimal composition of food consumption and other essential needs. The general poverty line is then calculated as the sum of the two.

The weight of food in the basic needs basket in the above mentioned countries constitutes about 60 to 80 percent, in contrast to the share of one third in the official US measurement. This difference reflects the empirical relationship called Engel's Law, according to which the share of food expenditure in total expenditure decreases with a rising standard of living. The gap in the weights reflects the differences in the standard of living in the USA at the end of the fifties and that of other countries today as well as the fact that the American calculation is based on the expenditure composition of an average family of two adults and two children while the calculation in most of the other countries is based only on the expenditure of families that are to be found around the poverty line. Some of these countries take account of the differences in price levels of the essential basket in different areas (urban and rural areas).

c. Mixed poverty indices

Mixed poverty indices were developed over the years in Canada and the USA. These indices focus on provision of basic needs, following the absolute approach; the quantification, especially of the non-food component is determined using the distribution of the expenditure on each item in the economy, following the relative approach.

[9] See the articles from the end of the nineties on www.unescap.org/stat/meet/povstat/povstat.asp and from 2004 on www.nscb/gov.ph/poverty/conference/papers

[10] Azerbaijan and Singapore also publish a relative poverty index.

Such a mixed index was developed for the USA by the National Academy of Science (hereafter the NAS index) on request of the American Congress in 1992[11]. As in the absolute approach, described above, this poverty line is based on an expenditure basket of essential goods and services. However, the various items of consumption are quantified in a relative manner based on the distribution of the specific expenditure in the population. The poverty line comprises a basket of essential needs of a representative family (2 adults and 2 children) – food products, clothing, shelter and utilities. Some allowance is made for a small amount of personal expenditure, such as transportation and personal items, by means of a (small) multiplier. Expenditure on education and health was not included in the American poverty line[12]. The share of each component in the basic needs basket was determined by the average amount spent on it by families between the 30th and 35th percentiles. It should be pointed out that a computation of basic needs based on studies of minimal family expenditures[13] yielded a similar result. In the mixed approach the food item is attributed a larger weight than in the official US poverty measure. The poverty line is computed according to a three-yearly moving average in order to moderate year to year volatility. The committee recommended that, once every ten years, the basket of basic needs should be re-examined to take account of changes in the standard of living.

Another unique characteristic in the mixed American approach is the treatment of income sources: they constitute the basis for determining whether or not a family is to be considered poor. This approach takes into account all sources of income, including income in kind, as well as various deductions in the calculation of net disposable income. That includes statutory deductions, such as taxes, alimonies, child care costs in case of families with small children with both parents or the single mother working, expenses on transportation to work and essential out-of-pocket health expenditures, etc.

In Canada, a mixed poverty index known as the LICO has been computed since the seventies. According to this poverty line, a family is defined as being poor if the expenditure share of basic needs (food, clothing and shelter) of its pre-tax income exceeds 70 percent. This rate is based on a calculation from 1959

[11] Citro Constance F, and Robert T, Michael, eds. (1995), "Measuring Poverty: a New Approach", National Research Council, N.A.S., Washington, DC.

[12] There is a lively discussion in the USA on the question of whether to include health expenses in the NAS poverty line.

See http://www.census.gov/hhes/www/povmeas/ji%20asa%presentation%208-2005.pdf.

[13] Barbara R. Bergmann and Trudi Renwick, 1993, "A Budget-Based Definition of Poverty with an Application to Single-Parent Families", *The Journal of Human Resources, 28,* No. 1, Winter University of Wisconsin, Madison, W1, USA 1-24.

according to which the weight of essential expenditure in disposable income amounted to an average of 50 percent for the entire population. Following the continued rise in the standard of living the mentioned share of basic needs expenditure fell gradually from 70 percent in 1959 to 54.7 percent in 1992.

Following the development of the NAS approach, a similar approach was developed in Canada, the "Market Basket Measure" (MBM). This approach differs from the NAS in two respects: (1) the food basket is derived from medical health considerations of adequate nutrition[14]; (2) the non-food components of the basic needs basket are calculated from the average expenditure of the 21st to the 40th percentile. This range is wider than in the NAS definition.

In all countries that have adopted a mixed or absolute approach based on basic needs, poverty calculations are based on household expenditure surveys. Poverty calculations based on such data may be sensitive to, possibly systematic, biases.

The mixed indices, while taking account of several non-cash income sources, do not include basic government services such as free public education and health as well as social infrastructure, supplied to the citizen by the government, local authorities and other public bodies. Disregarding such governmentally provided basic needs potentially causes poverty measurement to be upward biased, particularly so if the distribution of such in-kind benefits is progressive.

[14] Human Resources Development Canada (2003), "Understanding the 2000 Low Income Statistics Based on the Market Basket Measure", May, Applied Research Branch, Strategic Policy, SP-569-03-03E, Canada.

b. Alternative approaches to poverty measurement in Israel – 1997 to 2004

All the approaches—relative, absolute, and mixed—indicate that Israel has a poverty problem.

Poverty in Israel has reached significant dimensions in recent years. The complexity of the concept of poverty requires an examination by various approaches. The calculations point to the conclusion that poverty in Israel is substantial by all of the definitions considered, though the levels and dynamics of poverty differ.

The social survey of 2003 enables certain calculations of subjective poverty. The results are described extensively in Box 1.2 of the 2004 Bank of Israel Report. Only about 13 percent of those aged 20 and older considered themselves poor, compared to an official rate of 18 percent. This may imply that the objective measurement of poverty is exaggerated or else that people flinch from declaring themselves poor. Only one quarter of adults, whose income was below the poverty line, deemed themselves as poor[11]. About 8 percent of those who deemed themselves as poor reported on

an income above the poverty line, but their rate declined, with an increase in per-capita income. Poverty may also be calculated by foregone consumption. About one seventh of adults renounced food. Electricity or water of approximately one third of adults had been disconnected and a similar proportion gave up on the purchase of medication. Approximately two thirds of the poor did not have adequate home heating or cooling.

Poverty and its development according to the objective approach are examined here according to the approaches described above (see Table 8.3).

(i) The relative approach

The official poverty line of the National Insurance Institute is computed as half the net median equivalized income. This definition includes only monetary income – from work, capital[12] and income support from private and government sources, net of income taxes. Other important sources of income, such as imputed income for dwelling in one's own apartment, are not accounted for in this definition. The same is true for freely provided public services in education and health as well as various other benefits and reductions[13].

In 2005–05 the number of poor in Israel reached 1.58 million persons, 24.1 percent of the total population.

In the year ending in June 2005, the official poverty line for a single person was NIS 1,804 per month, or approximately 25 percent of the average wage and approximately 54 percent of the minimum wage. In that year, the poverty index reached 20.5 percent – approximately 403,000 families (including Arabs from East Jerusalem). These poor families accounted for 24.1 percent of the total population (approximately 1.58 million) and 34.1 percent of all children in the population (approximately 738 thousand children).

According to the official rate poverty has been increasing over recent years. The proportion of poor families has risen since 2003 after a period of relative stability from 1997; however from 1999 onwards, poverty incidence has risen, particularly among children. The reduction of child allowances since 2003 has reinforced this trend (Figure 8.6). Poverty intensity as measured by the Sen Index increased between 2001 and 2004 by 50 percent while poverty incidence increased by only 10 percent over the same period[14].

The difference in the relative poverty index from one year to the next can be split into two factors: an "absolute" component (due to changes in individual incomes at the

[11] The social survey reports gross income from all sources, whereas the poverty line is defined in terms of disposable income. Since the gap between gross and net income from work is usually small among low-income earners, the error in the definition of the poor population based on the social survey is not significant.

[12] Data regarding capital income are partial and not so reliable.

[13] Disregarding these forms of income in the official definition creates an error and affects the composition of the poor. On account of the importance of these forms of income, there are countries that include them in the computation of poverty (for example Ireland).

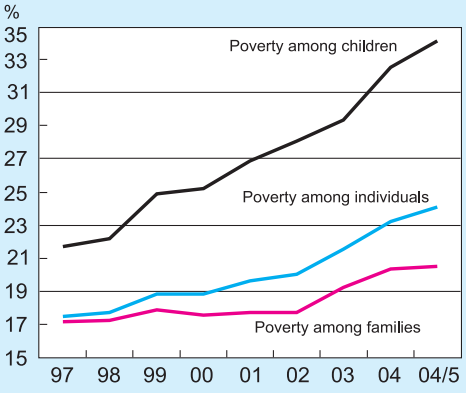
[14] The Sen index measures not only poverty incidence, but combines it with the average income gap and also attaches a greater weight, to the household, the poorer it is.

Table 8.3
Poverty in 2004 by Incidence, the Income Gap and the Sen Index, Using Different Measures[a]

	Poverty line equivalized[b] (NIS)	Sources of income equivalized[b]	Incidence of poverty (percent)		Income gap (percent)	Sen Index
			Families	Population		
Relative index						
Half of median disposable income	1,422	2,843	20.3	23.6	33.3	0.111
Absolute index						
Half of median disposable income—1997 poverty line	1,261	2,843	14.5	18.5	33.6	0.087
Expenditure on basic needs (MBM)[c]—1997 poverty line	2,324	3,028	19.1	23.6	31.2	0.103
Mixed index						
Expenditure on basic needs (MBM)[c]—current poverty line	2,579	3,028	21.9	26.8	32.6	0.121

[a] Including East Jerusalem Arabs.
[b] See footnote a to Figure 8.3 above.
[c] Market basket measure.
SOURCE: Based on Central Bureau of Statistics income and expenditure surveys, 2004.

Figure 8.6
Incidence of Relative Poverty,[a] 1997–2004/5



[a] Index of the National Insurance Institute, excluding Arabs of East Jerusalem; 2004/5 refers to July 2004 to June 2005

SOURCE: Based on income surveys by the Central Bureau of Statistics and the National Insurance Institute's Index of Poverty and Income Gaps 2004/5.

previous year's poverty line calculated in real terms) and a "relative" component (due to the real change in the poverty line from the previous year). The absolute component reflects the change in the individual household's ability to purchase the value of the goods and services as represented in the real terms of the previous year's poverty line. The relative component reflects the difference in the standard of living in the economy as represented by the change in median income, assuming individuals' personal incomes are fixed[15]. In most years, the relative component had an expansionary effect on the poverty incidence whereas the absolute component had a

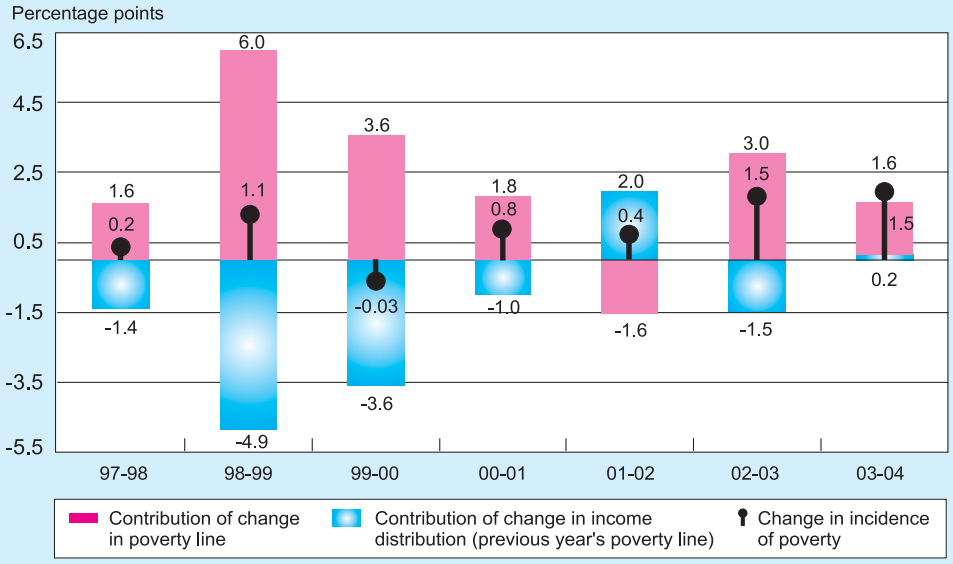
The difference in the relative poverty index from one year to the next can be split into an absolute component and a relative component. In the last few years the relative component was the stronger.

[15] The full breakdown of the change in the incidence of poverty includes three components: an absolute one, a relative one and a combined effect of both. This third (combined) component is negligible. It is included in our calculations in the relative component.

contractionary effect. The relative impact was mostly stronger and therefore relative poverty has grown over time. In the year 2002 the relative contributions were reversed, mainly because of a fall in wages during the deep recession (Figure 8.7).

(ii) The absolute approach

Figure 8.7
Contribution to Changes in Incidence of Poverty among Individuals according to the Relative Poverty Measure,[a] 1997–2004



[a] The contributing effect of changes in income distribution and a change in the real poverty line. Data do not include Arabs of East Jerusalem due to difficulties in data collection in 2000 and 2001.

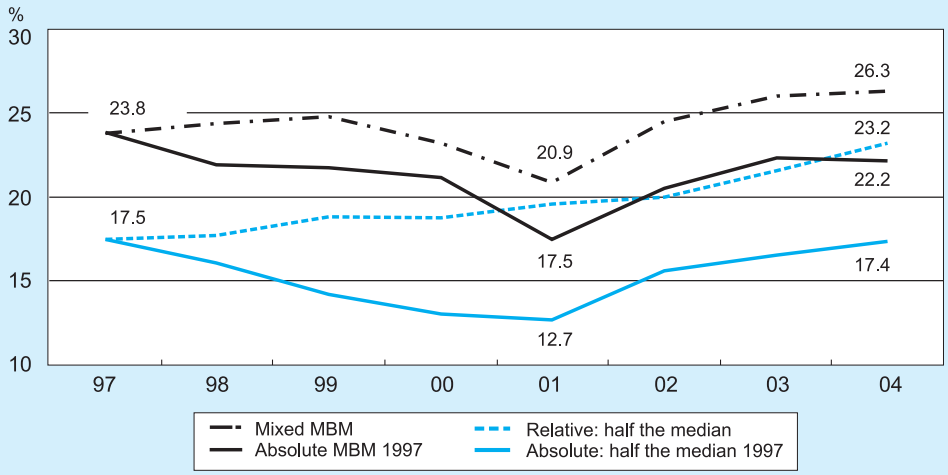
SOURCE: Based on Central Bureau of Statistics' income surveys 1997–2004.

An absolute and simple poverty measure defines poverty incidence as the proportion of people below some poverty line that remains fixed in real terms at the level of a chosen base year. It is of course preferable, if the poverty line can be fixed at a level that reflects an economic significance, in view of the chosen perception of poverty.

The incidence of absolute poverty, as measured in terms of a poverty line set at the relative poverty line in 1997, was lower than that of relative poverty; it declined in 2001, and has risen since then.

One possible way is to fix the level of the relative poverty line in real terms at the beginning of the period under review (1997). A comparison of this absolute index with the current relative index shows that the incidence of absolute poverty was lower for all years than that of relative poverty (Figure 8.8). This is due to the cumulative economic growth over this period. In a period of deep and prolonged recession, the result is likely to be reversed. The two indices did not develop in a uniform manner over the period under review: the relative incidence of poverty rose throughout the period while the absolute version decreased rapidly at first (from 17.5 percent in 1997 to 12.7 percent in 2001), as a result of economic growth, but later turned around

Figure 8.8
Poverty among Individuals by Absolute and Other Approaches to Poverty Definition, 1997–2004



[a] Data do not include East Jerusalem Arabs.

SOURCE: Central Bureau of Statistics' surveys on income and spending.

and rose sharply in 2002 and 2003, due to the recession and the ensuing increased unemployment and fall in wages, particularly among low skilled workers, and also due to the budget cuts in various welfare benefits, starting in 2002. Despite the recovery in economic activity from the second half of 2003, poverty incidence continued to rise in 2004, mainly because of continued cuts in the welfare system.

Poverty in terms of an absolute basket of essential needs changed in a similar manner to the change in the relative index, but at a higher level.

The main disadvantage of the absolute index is that its economic or social significance is unspecified. An example of an absolute index that does consider basic needs by addressing the question of the economic minimum needed for existence, is an absolute index (i.e., pegged to its level in 1997), based on a goods and services basket value comprising essential expenditures on food, clothing, housing and other needs (see Box 8.1). Such an index indeed refers to the required economic minimum of existence, but it does so relating to an arbitrarily selected base year, but it is not adjusted over time, except for price changes. The dynamic behavior of the poverty incidence according to the absolute basket of basic needs is not much different from the absolute index based on the relative index's base level, except for the level of poverty incidence, which is much higher, 22.2 percent compared to 17.4 percent in 2004.

c. The mixed approach

The mixed approach to the measurement of poverty focuses on a basket of essential needs that is adjusted according to changes in the standard of living.

The methodological development of poverty measures in recent years has led to the calculation of mixed poverty measures that focus on a basket of basic needs, adjusted to changes in the standard of living over time. This methodological advancement and

its application in developed nations emphasizes the importance of examining this approach also for Israel.

The incidence of poverty according to the mixed approach is higher than that according to the relative approach. Both approaches point to a rise in poverty in the last few years, but the mixed approach indicates that the rise was preceded by a downward trend.

Poverty incidence in Israel according to the mixed approach yields a higher level of poverty for each of the reviewed years, compared to the official relative index. Poverty incidence according to the MBM-version dropped from 23.8 in 1997 to 20.9 in 2001 and rose again to 26.3 by 2004 (Figure 8.8). In contrast to the more or less constantly rising relative index, the mixed index diminished during times of growth and increased during the economic slowdown and recession, similar to the development of the absolute indices. Similarly to the other indices, the mixed index was also affected by changes in transfer payments.

The food component of the basic needs basket contains the minimum nutritional values, by gender and age, needed to maintain health over time[16]. The other essential goods and services were calculated by use of the average expenditure on each of these items of the households in the range between the 30th and 35th percentile. The share of the components of equivalized expenditure on food, shelter and clothing amounts to slightly more than three quarters of the expenditure on basic needs (Table 8.4). The absolute, medically determined, food component, as employed in the MBM, raises the equivalized poverty line by about NIS 80, compared to the relative component, as calculated in the NAS. This gap broadens with the size of households, since the returns to scale on food are rather small.

Recently, there has been some research in mixed poverty indices for Israel: some use a medically determined food basket (Gottlieb and Manor, 2005 and Alfanderi and Kaplan, 2003) and others use a relative food expenditure (Sabag-Endweld and others, 2004 and Gottlieb and Manor, 2005)[17]. In all methods, poverty incidence turns out to be higher than the official relative rate. (Table 8.5).

Table 8.4
Components of the Poverty Line by the Market Basket Measure (MBM), 2004

Basic needs	NIS	Percent
Food	698	27.7
Accommodation	1,232	48.8
Clothing and footwear	119	4.7
Education, transport and personal items	474	18.8
Poverty line	2,522	100.0

SOURCE: Central Bureau of Statistics Household Expenditure Survey, 2004.

[16] See Dorit Nitzan-Kalusky (2004) "Protocol for the Preparation of a Calculation of the Cost of Essential Food for Infants, Children and Adults according to Age Groups and Gender," Ministry of Health, Jerusalem, 1-9.

[17] Yafit Alfandari and Tom Kaplan (2003). "Proposal for an Absolute Measurement of the Poor in Israel", August, 1 to 57; Miri Sabag-Endweld and Lea Achdut (2004) "Developing An Experimental Poverty Index In Israel Based On Household Expenditure" Special Research and Surveys, the National Insurance Institute, No. 82.

Table 8.5
Incidence of Poverty, by Various Mixed Indices, 2001[a]

	Incidence of poverty (%)	
	Families	Persons
Objective food basket		
MBM (Bank of Israel Annual Report 2005)	18.8	20.9
MBM combined with LICO (Alfandari and Kaplan)	23.0	24.5
MBM (Gottlieb and Manor)	21.8	24.9
Relative food basket		
NAS (Sabag-Endweld and Achdut)	19.0	22.4
NAS (Gottlieb and Manor)	20.9	23.7
Half median (relative index, National Insurance Institute)	17.7	19.6

[a] 2001 is the only year common to all the research papers.

Box 8.2
A few comments on possible biases in the poverty indices

Poverty indices in Israel and elsewhere are calculated from data, collected on survey responding households. The interference in the household's privacy is likely to cause a certain reticence in providing details. Moreover, underreporting households may hesitate to reveal their true income for fear of getting implicated. This may cause a certain reporting bias in the calculated poverty indices based on income data.

Another bias may occur concerning the relative index based on the median income: The incentive to underreport income is probably quite small around the median household, because their potential gains from both tax evasion and welfare benefits are expected to be low, compared to the incentive of low income-earners just above eligibility for welfare payments[1]. If such a bias is significant, this may imply an upward bias on the relative poverty measure.

The calculation according to the absolute approach, based on essential consumption, and the calculation according to the mixed approach are based on the households' reports of their consumption and income. The poverty line, in these approaches, is calculated from expenditure data, while the classification of households as poor or non-poor is based on the income data. It may be that there is a difference in the systematic biases of reports on income and expenditure. The fact that expenditures in the low deciles and particularly in the bottom decile exceed income raises the possibility of stronger underreporting in income

[1] There is also a strong incentive to underreport income among high-income earners, for tax evasion purposes.

than in expenditure among low-income earners[2]. This may tilt the poverty incidence according to these approaches upwards. However, the phenomenon of consumption expenditure exceeding income at low income levels may also be explained by borrowing or asset reduction by people who wish to maintain their previous consumption level during a temporary fall in income.

[2]An examination of the poor according to age groups shows that the percentage of people whose expenditure is greater than their incomes is high in all age groups – 65 to 75 percent.

Not all those who are identified as being poor according to one approach will necessarily be viewed as poor in another approach, although a large part of the poor are identified as poor according to all approaches.

d. The composition of the poor population under the different approaches

The methodological differences affect the identification of the poor. This not only creates a difference in the level of poverty but also in the composition of the poor. Not all those who are identified as being poor according to one approach will necessarily be viewed as poor in another approach, even though the extremely poor tend to be identified as poor by more than one definition. According to all methods discussed, the

Table 8.6
Composition of the Poor

(percent of persons, 2004)

	Relative index	Absolute index		Mixed index
	by half median of disposable income		by expenditure on basic needs (MBM)	
	by current poverty line	by poverty line set at 1997 level	by poverty line set at 1997 level	by current poverty line
Years of education				
0–8	23.9	23.3	27.5	26.3
9–10	16.2	16.6	17.7	17.1
11–12	32.6	33.0	29.5	29.9
13–15	16.0	15.9	13.5	14.2
16+	11.3	11.2	11.7	12.5
No. of breadwinners[b]	37.7	46.5	32.6	30.5
1	45.2	41.1	44.3	45.2
2+	7.5	6.9	13.3	14.1
Head of household aged 65+	9.6	5.6	9.9	10.2
Population sector				
Ultra-orthodox[c]	14.0	14.5	9.2	16.8
Arabs	41.2	43.9	40.5	38.6
Single parent	6.5	6.7	6.5	6.2
Immigrants (since 1990)	12.7	11.0	17.4	17.6

[a] Including Arabs of East Jerusalem.
[b] Families in which the head of the household is aged less than 65.
[c]There is a problem regarding identifying the ultra-orthodox in the Income Survey. Here they are identified as families in which the last educational institute attended by one or more members of the family was a post-secondary school talmudic college.
SOURCE: Based on Central Bureau of Statistics income and expenditure surveys, 2004.

Table 8.7
Incidence of Poverty in Different Sectors of the Population

(percent of persons, 2004)

	Relative index		Absolute index	Mixed index
	by half median of disposable income		by expenditure on basic needs (MBM)	
	by current poverty line	by poverty line set at 1997 level	by poverty line set at 1997 level	by current poverty line
Total	23.6	18.5	23.6	26.8
Years of education				
0–8	47.8	35.6	42.8	46.5
9–10	36.8	28.6	39.3	43.2
11–12	24.3	18.0	23.7	27.3
13–15	19.3	12.3	16.2	19.3
16+	11.2	8.0	11.0	13.3
No. of breadwinners[b]	75.6	68.9	68.2	72.6
1	32.4	22.2	32.6	37.9
2+	3.8	2.5	7.1	8.6
Head of household aged 65+	25.4	11.0	19.4	22.7
Population sector				
Ultra-orthodox[c]	57.4	46.2	43.2	55.0
Arabs	51.6	43.0	52.9	57.3
Single parent	35.1	28.2	35.5	38.6
Immigrants (since 1990)	18.4	12.4	26.2	30.1

[a] Including Arabs of East Jerusalem.
[b] Families in which the head of th household is aged less than 65.
[c]There is a problem regarding identifying the ultra-orthodox in the Income Survey. Here they are identified as families in which the last educational institute attended by one or more members of the family was a post-secondary school talmudic college.
SOURCE: Based on Central Bureau of Statistics income and expenditure surveys, 2004.

poverty incidence is high among Arabs[18], the Jewish ultra-orthodox, large families, the low skilled and families with no earners.

A notable finding is that the distribution of poverty by education does not vary much between the different approaches (table 8-6): all approaches point to a significant negative correlation between education and poverty (table 8-7). This correlation points to low education as a main cause of poverty[19], particularly in an era of globalization that has led to a continued reduction in demand for low skilled workers. The negative correlation between poverty and education reflects, also, the low consumption of education services by the poor.

The poverty incidence differs remarkably between the different methods among families with two or more earners. According to the relative approach, poverty

[18] Poverty is particularly severe among the Bedouin population. It is difficult to estimate the poverty of those Bedouins who live in unrecognized localities, since they are not included in the relevant surveys of the Central Bureau of Statistics, given that the sample is drawn from the book of addresses.

[19] See for example, the connection between relative poverty and education by Karnit Flug and Nitsa (Kaliner) Kasir (2001), "Poverty and Employment and the Gulf That Lies Between Them" Economic Quarterly, 4, Year 48, December, pp. 516-543.

According to the relative method, the existence of two income earners in a family in most cases ensures that the family is above the poverty line; this does not apply in the methods based on essential needs.

incidence is about 7 percent, compared to 14 percent according to the basic needs approach. This result stems from the consideration given to work related costs in families with both parents or single mothers working (child-care during the parents' working hours and transportation costs to and from work). Among new immigrants, poverty incidence according to the basic needs approach is significantly higher than in the relative approach. This is because of the low ownership of housing among this population – a fact accounted for in the basic needs approach but not in the relative approach.

3. THE SCHOOL-LUNCH PROGRAM

The school-lunch program existed before the establishment of the State of Israel and was extended in the sixties and seventies, focusing on pupils in need. However, this program died out over time and only recently has it been revived—as a result of implementation of the Long School Day Law, the widening of the incidence of poverty and the attention drawn to the food insecurity. These led eventually to legislation prescribing a daily hot meal for pupils before the start of the 5765 school year (2004/2005).

About a third of the children in Israel are poor, and food insecurity exists in not inconsiderable measures.

In the period July 2004 to June 2005 there were approximately 738,000 poor children in Israel, about one third of all children, while at that time approximately one quarter of the total population was poor—a disparity that is explained by the positive correlation between poverty and the number of children. Food insecurity—defined as the inability to purchase sufficient food in a reliable and regular manner in the accepted social way, because of economic difficulties, is prevalent among populations with a low socioeconomic status. A nationwide survey that was conducted at the start of 2003[20] shows that 22 percent of all households suffered from food insecurity; in the lower decile of per capita disposable income, the incidence of food insecurity reached 58 percent and among families with four and more children, 49 percent (21 percent suffered from severe food insecurity, including for example, missing meals). In a representative sample of first grade children in the Negev (southern district) it was found that 15 percent of Bedouin children and approximately 8 percent of Jewish children were suffering from malnutrition[21]. In recent years, transfer payments

[20] N. Nirel and Others (2005), *Food Security in Israel in 2003 and the Connection with Nutritional Behavior,* Joint, Brookdale Institute, Research Report, DM-05-444 (Hebrew).

[21] N. Bilenko *et al.* (2005), *Underweight and Obesity in Primary School Children in the Negev*, The S. Daniel Abraham International Center for Health, Ben-Gurion University of the Negev, Beer Sheba, Ministry of Health, Southern District, Beer Sheba, Israel.

In a preliminary survey that was conducted at the end of 2002 among families in need in the south of Israel (including Bedouin) it was found that half the children were suffering from food insecurity. See R. Kaufman and V. Slonim–Nevo (2004) "Food Insecurity and Hunger among Populations in Need in the Negev. Findings of the Preliminary Investigation" *Social Security, No. 65*, pp. 33-45 (Hebrew).

in general, child allowances in particular, have been significantly reduced and the incidence of food insecurity may have expanded even further.

Research conducted in the advanced economies, particularly in the US, points to a positive link between food security and the provision of breakfast and lunch to children in kindergartens and schools on the one hand, and indices of the child's quality of life and achievements on the other. This includes, an improvement in the state of health and nutritional habits (including moderation of obesity), in physical and cognitive development, in behavior patterns, in rates of absence from school and in achievements in their studies[22]. These were conspicuous among children from deprived families. Nevertheless, criticism was also leveled, principally in the US, on the poor quality of some of the meals and the access to schools given to commercial bodies—situations that in themselves reinforced such negative features as obesity.

Research points to a positive link between food security and the provision of meals to children in the education system, and the child's quality of life and achievements, particularly among the weaker sections of the population.

Another obvious advantage of the school-lunch program is that the resources that are directed to it are for a defined aim—similar to other transfers in kind (for example, in education and health), as well as food vouchers and soup kitchens—and make a direct contribution to the child's welfare; this is contrary to the monetary transfer payments that are liable to be used by the household for other less important aims. Moreover, even if the parents allocated resources to their children in the optimal way, this would be, in many cases, an under-allocation as the parents do not take account of the external positive effects of the welfare of the child on society, including in the long term. In addition, it may be estimated that the school-lunch program has at the most a minor negative effect on parents' labor supply—contrary, for example, to the benefits in kind that accompanied the income maintenance benefit[23]. Nevertheless, to a certain extent there is paternalism in the provision of hot meals to pupils.

The resources directed to the school-lunch program make a direct contribution to the child's welfare, in contrast to the monetary transfer payments that are liable to be used by the household for other, less important, aims.

The school-lunch program in kindergartens and schools is prevalent in advanced economies as part of the service provided to children by the education system[24]. The subject is regulated by the central government and the extent of involvement of the local authority and third sector organizations in the school-lunch program is extremely varied. Parents' contributions to funding of the program is not uniform, and the payment is usually progressive according to the socioeconomic status of the child's parents. School-meals programs provide, in the main, lunches and occasionally also

School-lunch programs are prevalent in advanced economies, and parents' contributions are usually progressive, according to their income.

[22] See for example:

K. Alaimo, C.M. Olson and E.A. Frongillo (2001), "Food Insufficiency and American School-Aged Children's Cognitive, Academic, and Psychosocial Development", *Pediatrics*, Vo. 108, No. 1, pp. 44-53.

J. Bhattacharya, J. Currie and S. Haider (2004), *Breakfast of Champions? The School Breakfast Program and the Nutrition of Children and Families*, NBER WP 10608.

Evaluation Study of the School Breakfast Program as Provided for Children in the Early Childhood Program in South Tel-Aviv, Israel Center for Disease Control, Sep. 2005.

[23] To the same extent, it is almost sure that the parents will not transfer their children to other schools for them to be eligible for a meal, as in the main this necessitates moving the place of residence—other than in a case of studies in one kind of ultra-orthodox Jewish institutions ("exempt institutions") that are not eligible for the school-lunch program—see further details below.

[24] For details see, *Survey of Food Models in the School Environment,* Ashalim—The Society for Planning and Development of Services to Children and Youth at Risk and their Families, April 2003(Hebrew).

breakfast and meals to children from distressed families between the school years. The most comprehensive program is that of the USA (the National School Lunch program) in which coverage of schools is almost complete and in excess of half the children who are eligible for a meal are exempt from payment or are subsidized as they belong to low-income families. In Britain, Ireland, Sweden and other developed nations comprehensive programs are operated in the schools while in other countries (such as France and Germany) the programs are relatively smaller in scale and focus on the provision of milk products to kindergartens while hot meals in the schools are usually provided for payment in full.

The Long School Day and Enrichment Studies Law (5757–1997) has been implemented gradually in Israel since the 5758 school year (1997/1998). The law applies to compulsory kindergartens and to elementary schools in municipalities that are at the lower end of the socioeconomic scale of the local authorities (Clusters 1-2), in rehabilitation neighborhoods, in settlements with a national priority 'A' rating and on the confrontation line as well as in settlements with a high unemployment rate. In effect, the law has been implemented only in one quarter of kindergartens and in the majority of schools that meet the conditions of the Law[25]. In total, in the 5766 school year (2005/2006), in all approximately 198 thousand children in elementary schools benefit from a long school day, representing approximately one quarter of all children and almost a third of them study in schools in local authorities in clusters 1-2. The longer school day and the poverty of many families gave rise to the need for a solution for meals for the children. Moreover, in the course of implementing the Law, difficulties were discovered in its implementation that derive, *inter alia*, from the lack of solutions to the issue of feeding children, financing arrangements needed, the infrastructure required, and the like—particularly in kindergartens[26].

About a quarter of children in elementary schools benefit from a long school day.

In the 5764 school year (2003/2004) an experimental school-lunch program was carried out for the provision of a hot meal by an external catering contractor in a number of kindergartens, elementary schools and junior high schools in low socioeconomic municipalities and neighborhoods—funded by the government, the Sacta-Rashi Foundation, the local authorities and parents. Assessment research[27] indicates a decrease of food insecurity among children, an improvement in their behavior inside and outside the educational institute (including a reduction in the phenomenon of violence), an increase in the concentration level during lessons and a drop in the extent of absence from school and in lateness. As a result of the success of the experiment and

[25] Starting from the 2004/2005 school year, the Law does not apply to new kindergartens; the Law applies in elementary schools only to children in the first to sixth grades but in fact in schools in which the Law was already applied, there has been no change.

[26] D. Gordon *et al.* (2001), *Research on Preparedness for Implementation of a 41 Hour School Week,* Ministry of Education, Culture and Sport, the Chief Scientist's Bureau (Hebrew). See also: N. Rasisi and V. Gil (2005), *Review of Preparedness on the Subject: Trial Conducted on Short School Week,* The Oranim Academic College, the Research and Assessment Unit (Hebrew).

[27] *The Food Program in Formal Frameworks* (2005), the National Insurance Institute, the Division for Development of Services, Special Enterprises, No. 94 (Hebrew).

the intention to implement the "National Education Program" (the "Dovrat Report", 2005)—that includes lengthening the school day and the recommendation for a school-lunch program—the Government of Israel decided at the beginning of August 2004 to extend the school-lunch program to all elementary schools that had implemented the Long School Day Law, during the three school years from the 2004/2005 school year, with funding from the Government (25 percent), the Sacta-Rashi Foundation (25 percent), the local authorities and the parents; in January 2005, the Hot Meals for Pupils Law was approved in the spirit of the Government decision.

From the 2004/05 school year the school-lunch program has operated in elementary schools that had implemented the Long School Day Law, with funding from the government, the Sacta-Rashi Foundation, the local authorities and the parents. In January 2005 the Hot Meals for Pupils Law was approved.

The apportionment of the funding between the local authority and the parents was regulated by the Education and Culture Committee of the Knesset. The local authority may collect at the most NIS 4.5 per meal from a pupil, but no more than the maximum contribution made by the authority. The rate of the parents' contribution is progressive and based on their income (2005/2006 data)—ranging from 10 percent for those whose per capita monthly income is NIS 1,039 to the full contribution of families with a per capita monthly income of NIS 1,774 or more (above half the poverty line for a family of four). Generally, an exemption of 20-30 percent from payment for hot meals is granted to parents—those who are in socioeconomic hardship—mainly as determined by the Welfare Office of local authorities.

The rate of the parents' contribution is progressive and based on their income.

The annual cost of hot lunches for a pupil is estimated at approximately NIS 1.3 thousand (on the basis of NIS 8.9 per meal and approximately 150 long school days per year)—in excess of 2 percent of the disposable income of a family of 4 of whom one is of elementary school age, that is on the poverty line and does not pay for the meals. It should be pointed out that the annual cost of the meal for the pupil and the standard child allowance are similar.

The annual cost of hot lunches for a pupil is estimated at approximately NIS 1,300, similar to the standard child allowance.

In the 5765 [2004/2005] school year it became clear that many local authorities that were at the bottom of the socioeconomic rating and were therefore eligible to take part in the school-lunch program did not take part because of budgetary problems and difficulties in collecting payment from the parents. It was determined therefore that in the 5766 [2005/2006] school year, a grant would be transferred to the local authorities to join the school-lunch program for each pupil that participated. Thus the effective share of weak local authorities (and the parents) in the funding was reduced and set to be: clusters 1-4—33 percent, clusters 5-6—45 percent; clusters 7-8—67 percent.

The rate of the local authorities' contribution is progressive, and is set according to their socioeconomic cluster.

In the 5766 [2005/2006] school year, the school-lunch program did indeed expand and it included (as at the end of January 2006) approximately 104 thousand children of whom approximately 100 thousand were elementary school pupils, approximately 50 percent of the total number of pupils eligible for hot meals under the Long School Day Law. The overall cost of the program is estimated at NIS 140 million. In addition, approximately 20 thousand pupils in schools that have implemented the "Dovrat Report" benefit from the school-lunch program even though the Long School Day Law does not apply to them, and the share of the Sacta-Rashi Foundation in funding their meals is paid by the State.

In the 2005/06 school year, approximately 100 thousand elementary school pupils are benefiting from the school-lunch program, about 50 percent of the total number eligible. The overall cost of the program is estimated at NIS 140 million.

An analysis of the application of the Long School Day Law and the school-lunch program according to the socioeconomic status of pupils in elementary schools is

presented in Figure 9. The analysis is based on the deprivation index for elementary school pupils that was outlined in the "Shoshani Report" (2002), where the individual educational needs index was defined that takes account of the pupil's background factors as follows (their weighting in brackets): father and mother's education (15 percent each), immigrated after 1984 (20 percent), number of siblings (10 percent), national priority area 'A' (20 percent), distances from the center of the country (10 percent). A pupil from the weakest background will receive a value of 10 in the deprivation index and a pupil from a stronger background—a value of 1.

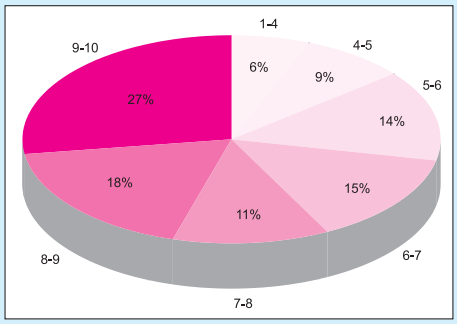
The application of the Long School Day Law is clearly inclined in favor of schools in which the pupils suffer from educational deficiencies but the proportion of pupils that benefit from the Law in high socioeconomic schools is far from negligible.

It appears from the figure that the application of the Long School Day Law is clearly inclined in the direction of schools in which the pupils suffer from educational deficiencies but the proportion of pupils that benefit from the Law in high socioeconomic schools is far from negligible. The main reason for this is that the Long School Day applies also to schools in settlements rated as national priority 'A' and on the confrontation line in which many pupils are not from weak social strata.

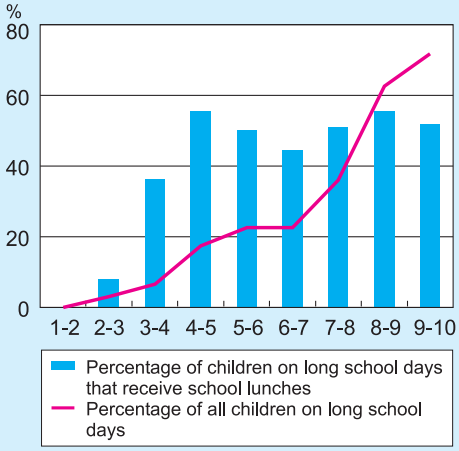
The proportion of pupils who are eligible for the school-lunch program of all pupils who benefit from a long school day increases with the deprivation decile, a finding that testifies that the school-lunch program is implemented as a first priority in schools with a relatively low socioeconomic status. However even in the upper deprivation deciles (the weaker pupils), the rate of utilization of the school-lunch program is still relatively low. The utilization rate in schools in the Arab sector is only about 35 percent compared to some 61 percent in schools in the Jewish sector while in mixed cities, the utilization rate in schools in the Arab sector falls to some 33 percentage points below that in the Jewish sector schools—*inter alia* because of the financing difficulties of Arab local authorities and/or Arab households.

The rate of utilization of the school-lunch program is still relatively low in the low socioeconomic schools, especially in the Arab sector.

Figure 8.9
Percentage of School Children that Enjoy a Long School Day, by Decile of Deprivation Index,[a] School Year 2005–6



Percentage of School Children that Enjoy a Long School Day and those that are Entitled to School Lunches, by Decile of Deprivation Index,[a] School Year 2005–6



[a] Average decile of deprivation index at the school. According to this index, the weakest child is in level 10 and the strongest in 1.

SOURCE: Based on data from Ministry of Education, Culture and Sport and The Association for Change in Education.

Different aspects of implementation of the school-lunch program require particular attention. As regards the target population—focusing on providing meals to elementary school pupils compared to the partial coverage of children in preschool compulsory education is undesirable as research proves that malnutrition in babies and infants has a significant negative impact on their development[28]. Nevertheless, the Ministry of Education and the Sacta-Rashi Foundation have operated the day-care center program since 1994 in which children at risk are eligible for a hot meal and in the 5765 [2004/2005] school year, it encompassed some 64 thousand pupils, approximately half of them in preschool compulsory kindergartens, some of which are included in the Long School Day Law.

The school-lunch program does not include preschool compulsory kindergartens and schools that do not implement the long school day—even those in which the pupils' parents are, on average, of a low socioeconomic status; this is because the legislator created an association between lengthening the school day and the need to provide hot meals during the day to facilitate the proper conditions for learning. This is also in relation to educational institutions that do implement a long school day but that do not meet the requirements of the Long Schools Day and Enrichment Studies Law[29]. On the assumption that the school-lunch program is intended first and foremost to prevent food insecurity among children, it is in place to consider extending its application to all preschool compulsory kindergartens and elementary schools in which, on average, pupils from low socioeconomic families learn. If the school-lunch program were to be extended, for example, to all elementary schools to which the Long School Day does not apply, and whose pupils are from an average deprivation decile of over 6 (7), at least an additional 180 (81) thousand pupils would benefit from hot meals at an annual cost of approximately NIS 240 (approximately 110) million. If the school lunch program were to be extended to all elementary school pupils in local authorities in socioeconomic clusters 1-3 (1-2) an additional 116 (62) thousand pupils would join the circle of those that receive hot meals at an annual cost of approximately NIS 155 (approximately 82) million.

On the assumption that the school-lunch program is intended first and foremost to prevent food insecurity among children, it is in place to consider extending its application to all preschool compulsory kindergartens and elementary schools in which, on average, pupils are from low socioeconomic families.

It is important to point out that in many local authorities there is considerable heterogeneity of schools according to the socioeconomic status of the pupils: thus, in local authorities in socioeconomic cluster 3 one third of the pupils study in schools that belong on average to a deprivation decile of less than 6, and the dispersion of the deprivation deciles increased as the cluster number rose as those clusters contain relatively large authorities with a diverse population. Hence, relying on the deprivation

[28] J. Winicki and K. Jemison (2003), "Food Insecurity and Hunger in the Kindergarten Classroom: Its Effect on Learning and Growth", *Contemporary Economic Policy*, Vol. 21, No. 2, pp. 145–157.

[29] This concerns in the main private "exempt institutions" that belong to the ultra-orthodox Jewish sector, in which the State's involvement is limited to administrative issues rather than educational aspects––for a more extensive discussion of this subject see High Court of Justice verdict 8133/05. In response, the Finance Committee of the Knesset (in its meeting of November 22, 2005) approved in the preliminary reading of a bill a proposal that gradually applies the school-lunch program to the above educational institutions, at an annual overall cost of approximately NIS 37 million.

Relying on the deprivation decile of the school as an indicator for implementation of the long school day and school-lunch program is preferable to reliance on the socioeconomic cluster of the local authority.

decile of the school as an indicator for implementation of the long school day is preferable to reliance on the socioeconomic cluster of the local authority[30].

In educational institutions that implement the school-lunch program, *all* children are eligible for hot meals without differentiating based on their parents' economic status and parents' contribution to the funding is, as has already been stated, progressive. This has many advantages compared to a selective implementation of the program in education institutions: it reduces the fear of stigma—that proved to be an obstacle to the school-lunch program when implemented during the first decades of the State's existence—it increases the availability of meals also in cases in which children forgo them for reasons other than economic ones (for example, children's faulty eating habits and parents' distorted consumption patterns), and it also provides all with a healthy and balanced meal while reinforcing social and communal coherence. Nevertheless, the advantage of a selective system is the ability to concentrate solely on children in greater need, to provide a richer meal at a lower total cost.

In regard to the partial funding of the school-lunch program by donations, such as that of the Sacta-Rashi Foundation—that has a welcome range of activities in areas of education, health and welfare—the apprehension arises that the contributors will not be able to maintain the donations over time[31], and it not clear why the State authorities are not responsible for the total funding (together with the parent), even though they recognize the major importance of the school-lunch program as supplying a primary need. The Association for Change in Education, founded by the Sacta-Rashi Foundation is responsible for the regular operation of the school-lunch program: and it would be appropriate to increase supervision and central control of the government (such as the Ministry of Education, Culture and Sport, the Ministry of Health and others) over this far-reaching public program and to anchor the pattern of its activity in the appropriate legislation[32].

It would be appropriate to increase the supervision and central control of the appropriate authorities over the implementation of the school-lunch program.

The nutritional composition of the meals was recommended by the Ministry of Health but because of lack of resources, the Ministry is unable to supervise the health/nutritional facet associated with the production of the food and its supply, its contents and hygiene in schools, as required and this is mainly carried out by the Association for Change in Education and the veterinary services. Moreover, the school-lunch program has not been accompanied, for the time being, by a comprehensive educational program on nutritional habits.

[30] Definition of the deprivation decile according "Shoshani Report" is not without problems. For details, see Bank of Israel, Research Department Report 2004, Welfare Policy, (Part IV), (2005).

[31] A similar criticism was heard in Canada. See: A. Papamandjaris (2000*), Breakfast and Learning in Children: A Review of the Effects of Breakfast on Scholastic Performance*, Canadian Living Foundation, Ontario.

[32] The Long School Day Law does not relate at all to important issues such as the ways of operating the school-lunch program, supervision of them, etc; contrary to the comprehensive legislation on this subject in the US (see for example: Child Nutrition Act of 1966).

At present, schoolchildren eat, mostly, in classrooms because of the absence of dining rooms. This is likely, therefore, to have negative consequences on eating habits and hygiene and this also obligates the teachers to supervise the children at close quarters—a task that is likely to involve additional salary component. Nevertheless, because of the heavy cost of setting up dining rooms, the present situation is almost certainly preferable to limiting the school-lunch program only to institutions with the proper infrastructure.

Despite the positive contribution of the school-lunch program to improving pupils' food security and welfare, it is not a substitute for a solution of the basic socioeconomic problems of the households that need it. These problems necessitate constitutional and comprehensive treatment with the aim of increasing the income from work of those parents that are capable of working and the transfer of payments to others, to improve the nutritional habits and patterns of consumption, and the like.