Measuring poverty and wellbeing using additional yardsticks

Note by the Central Bureau of Statistics of Israel

Summary

The document describes the procedures and methodology applied to widen the formal definition of poverty and present a set of indicators of multidimensional poverty taken from the Social Survey of the Central Bureau of Statistics of Israel and other national sources. These indicators include financial and emotional hardship, health, social needs and education. The document concludes with a presentation of a set of annual publications at the national level that describe in detail the wellbeing of the economy in its many dimensions.

The document is presented to the Conference of European Statisticians’ seminar on “Measuring poverty” for discussion.
I. Introduction

1. The measurement of poverty in Israel is based on the measurement of monetary income available to the family and family size. Referred to as disposable income, this includes income from employment, property and income support after the deduction of direct taxes. This is the method used all across the western world and adopted by the Organisation for Economic Co-operation and Development (OECD). Nevertheless, there are additional components that define the resources of the household that could be taken into consideration.

2. In 2010, a national commission in Israel on “additional measurements for poverty” recommended expansion of the measurement of family resources in order to include the value of services and discounts provided to families through various services such as health, education, housing and special tax exemptions. This definition would provide a broader understanding of the family's resources and of the differences in economic wellbeing among families. It would also provide a broader base for monitoring the extent of families living in poverty.

3. In 2014, another national commission “for fighting poverty” recommended the additional broadening of the approach of measurement to include a multidimensional approach by measuring the lack of resources and opportunities that enable an individual or household to better their quality of living, plan their future and realize their chances of social mobility.

4. This document describes the procedures and methodology applied to widen the formal definition of poverty and presents a set of indicators of multidimensional poverty taken from the Social Survey of the Israel Central Bureau of Statistics (ICBS) and other national sources. These indicators include financial and emotional hardship, health, social needs and education. The document concludes by presenting a set of annual publications at the national level that describe the wellbeing of the economy in its many dimensions. These are publications of ICBS on Society in Israel and Wellbeing Indicators in Israel.

II. Definitions of poverty

5. Poverty is a multidimensional social phenomenon that affects people, families and communities that experience it in the present and in the future.

A. The relative approach and definition of poverty line

6. The official definition of the State of Israel, as manifested in the annual publication of the National Insurance Institute, is as follows: “The measuring of poverty in Israel, similar to most western countries and international organizations, is based on the relative approach according to which poverty is a phenomenon of relative distress that must be evaluated in relation to the standard of living that characterizes the society. Specifically, a family is defined as poor if its standard of living, as reflected by the disposable income per standard adult, is lower than half the median of this income.” The National Insurance Institute’s annual publication on poverty is based on surveys of annual income and expenses conducted by ICBS on an ongoing basis.
B. Family income

7. In measuring poverty, two definitions of family income apply:

   (a) Economic income: Including gross income from work (independent or salaried), assets, pension from work, and support from other households. This definition reflects mainly the income from the economic activities of a family. The reduction of economic poverty identifies with the objective of leading people to independence, in the sense of a level of income above the poverty line based on their economic activities;

   (b) Disposable income: Economic income plus transfer payments, deducting direct taxes (income tax and National Insurance Institute fees). In other words, this is the income of a family to satisfy its needs. The reduction of poverty in terms of disposable income reflects the economic activities of the family as well as the redistribution of income by the tax and pensions system. The measure of payment transfers include, in addition to the National Insurance Institute’s pensions, additional types of financial support that are measured in the household expenditure survey, such as assistance in rent. Other components of financial support, such as employment grants to working families and others, are not yet measured.

8. According to the definition of relative poverty, the poverty line is updated every year according to the increase in the median per capita income of all families in the economy.

C. Definition of the unit for measuring of poverty

9. The basic unit for measuring poverty is the household, where the incomes of all individuals in the household are summed up.

10. Based on the guidelines of the ICBS, the type of household is defined by the characteristics of the head of the household in terms of age, origin, etc. Therefore, the practice is to depict the scope of poverty in terms of the number of households below the poverty line. Furthermore, it is also customary to present poverty in terms of the number of individuals in poor households.

D. Depth of poverty

11. The main definition of depth of poverty is the increment between the income of a family living in poverty and the poverty line in terms of the family’s size. This difference is divided by the poverty line to express the gap in percentage – it is called ‘income gap ratio’.

E. Multidimensional definition

12. Many references exist in the literature to the fact that poverty is not only an issue of low income but also a broader, multidimensional problem. There is no single agreed-upon manner to define multidimensional poverty. It is only possible to indicate the components that are highlighted and common to different definitions in the literature. Each component has a unique importance to understand the experience of people living in poverty.

13. Upon treating these components, a distinction is made between the characteristics of the individual and various components of the systems that affect the individual’s life. In this context, there is a separation between gaps in resources and results and gaps in opportunities.
14. Different approaches were developed which referred to capabilities and exclusion and refer to poverty as the lack of accessibility to social resources.

15. Another angle refers to poverty as the continuous lack of different sources of capital (like financial, physical, human, social, and communal). In other words, lack of resources and opportunities that enable an individual in a household to better their quality of living, plan their future, and realize their chances of social mobility. According to this definition, people living in poverty face structural barriers that do not allow them to accumulate new capital and realize the capital at their disposal.

16. Around the world, there are attempts to create a policy for coping with poverty based on the multidimensional approach.

17. These approaches refer not only to the practical impact of the opportunities, but also to the ideological significance of ensuring equal opportunity and the importance of this objective for both adults and according to these approaches, the government is heavily responsible for removing the barriers for equal opportunity.

III. Dimensions of poverty

18. Upon examining the issue of poverty, we must refer to the variety of characteristics that affect those living in poverty, which create the need for a multidimensional perspective.

A. Characteristics at the individual and family level

1. Broader perspective of financial aspirations (financial capital)

19. Financial resources beyond income (assets, savings, liabilities, financial support from the extended family).

2. Broader perspective of the concrete significance of standard of living

20. Specific components of standard of living, such as nutrition level, housing level, or environmental conditions in the neighbourhood.

3. Integrated perspective of financial, health and social problems

21. Additional problems of the family (health-related or social) among parents or children, such as physical limitations, learning disabilities, emotional difficulties and problems, addictions and other non-normative activities, difficulties in familial relationships, a child at risk due to developmental, behavioural or learning issues.

4. Broader perspective of social resources (social capital)

22. Social network and social support (extended family, neighbours and friends).

5. Ability to cope (human capital)

23. Capabilities, strengths and motivation of the family to cope actively with its difficulties; recognition of the potential for changing the situation and their ability to affect it.
B. Characteristics at the public and economic systems level (opportunities and barriers)

1. Labour market
   24. Opportunities for employment, for developing human capital, salary structure and equality of opportunity.

2. Symbolic public dialogue
   25. Conceptualization of poverty in terms of recognition - in other words, the fact that poverty elicits in people suffering from it a sensation of embarrassment, stigma, and lack of recognition of their knowledge. A social policy for the treatment of poverty must, therefore, be based on the recognition of the strengths, capabilities and knowledge of people experiencing poverty and not on blaming them for being poor.

3. Social services (education, health, employment, social services, etc.)
   26. Accessibility, quality and compatibility.

4. Characteristics of the living environment: violence, recreational opportunities, commercial services;

5. Knowledge and information: Access to information and knowledge, and assistance in realizing rights and opportunities.
   27. The following four meanings are added to these dimensions:
      (a) Cumulative effect: The more the individual or the family are negatively affected by more dimensions, the deeper the distress and the lower the quality of living;
      (b) Living conditions: Many dimensions affect also the standard of living. For example, a family with debts and special expenses (like health expenses) will live at a lower standard than a family without such expenses;
      (c) Causality and the dynamics between the various dimensions at the individual level: Some of the dimensions at the individual level lead by themselves to a lower income, some are affected by income, and yet others both lead and are affected by the income. When characteristics like health, personal social condition and personal security pose challenges, they may make it difficult to realize opportunities and thus lead to entering into or deepening poverty. These characteristics may also worsen as a result of living in poverty. For example, a health problem may lead to a lower participation in the workforce and reduced income, thus entering a condition of poverty. Living in poverty by itself may later make it difficult to treat the health issues, and thus deepen poverty and make it difficult to come out of it;
      (d) Role of public and financial systems: The process of falling into poverty is affected by the opportunities and barriers presented by the society and its institutions, including, of course, the public service systems. These systems are designed to create opportunities and help the individual realize them. Therefore, accessibility to these systems and their quality are critical. Opportunities may help them come out of poverty, whereas barriers may deepen it.
   28. Looking at poverty as a multidimensional phenomenon has many repercussions in terms of planning how to cope with it.
IV. Indicators of multidimensional poverty

29. This chapter presents the statistical indicators to measure the relationship between various social needs and the economic situation of families. The indicators give expression to the multiple dimensions of poverty and expand the understanding on life in poverty in Israel. The indicators are based in part on situations (e.g. delays in payment of bills, for example), and in part on feelings (e.g. depression or the sense of ability to cope with problems). In general, there is lack of systematic data about the various dimensions of poverty. Furthermore, it is not possible to present the data in relation to a standard single measure of economic status and we make use of several measures. Thus, the data presented in this part gives a partial and selective picture of the multiple dimensions of poverty.

A. Data sources

30. The data are taken from a number of data sources.

31. Some of the data were taken from the 2013 Social Survey of ICBS which included special questions about the social welfare of the population. Some came from other sources: other ICBS surveys, the Myers-JDC-Brookdale Institute Public Opinion Survey of the Performance of the Healthcare System, and data from the National Authority for Measurement and Evaluation in Education (NAMEE).

1. Indicators of financial and emotional hardship

32. These are taken from the Social Survey, and presented by total disposable income. It should be noted that the Social Survey cannot at present be used to identify populations that live in poverty according to the official definition of income per standard adult of a family, as defined by the National Insurance Institute but we use instead a rougher proxy.

33. All income levels are presented in the tables; however in most cases, the findings in the text are presented for the group with the lowest income (which represents 17 per cent of the families), and the group with the highest income (which represents approximately 40 per cent of the families).

34. In the tables, we present the two extremes. The questions in the Social Survey offer a series of response categories on the continuum between “Very good”, and “Not good at all”, or between “Very often” and “Never”.

2. Health indicators

35. These are taken from the Myers-JDC-Brookdale Institute Public Opinion Survey of the Performance of the Healthcare System and are presented according to quintiles of income per standard adult.

3. Social needs indicators

36. These are taken from the ICBS Statistical Abstract, in which the tables are based on data from the Ministry of Social Affairs and Social Services, and presented by the ICBS socio-economic index of municipalities.

4. Educational indicators

37. These are taken from NAMEE and from the ICBS Statistical Abstract, and presented by the socio-economic index of municipalities or according to Ministry of Education index of the socio-economic status of the family.
B. **Financial difficulties-dimension**

1. **Housing expenditures services – delays in payments and disconnection of services due to economic difficulties in the last 12 months**

38. The lower the income level, the greater the number of respondents reporting delays in rent or mortgage payments (17 per cent with income up to New Israeli Sheqel (NIS) 5,000, versus less than 2 per cent with income above NIS 17,000), delays in payment of bills such as electricity, municipal taxes, telephone or water (44 per cent versus 4 per cent), and on disconnection of services like telephone or water due to economic difficulties in the last 12 months (20 per cent with income up to NIS 5,000 versus 1 per cent with income over NIS 17,000).

2. **Concern about the ability to save for the future**

39. The lower the income level, the more worried the respondents are about not being able to save money for the future (39 per cent with income up to NIS 5,000 versus 12 per cent with income above NIS 17,000).

3. **Urgent appeal for NIS 5,000 urgently to cover an important need that arises**

40. Among the lower income levels, more respondents reported that if they urgently had to raise NIS 5,000 for an important need, they would not ask anybody (26 per cent with income up to NIS 5,000 versus 11 per cent with income above NIS 17,000).

C. **Emotional dimension**

1. **Depression**

41. The lower the income, the greater the number of respondents who reported that they always or frequently feel depressed (19 per cent with income up to NIS 5,000 versus 3 per cent with income above NIS 17,000), and fewer reported that they never feel depressed (33 per cent versus 56 per cent, respectively).

2. **Sleep disturbances**

42. The lower the income level, the greater the number of respondents reporting that, in the previous 12 months, they had worries that always or frequently kept them awake (34 per cent with income up to NIS 5,000 versus 11 per cent with income above NIS 17,000). Fewer reported that they never feel that way (22 per cent versus 34 per cent, respectively).

3. **Ability to cope with problems**

43. The lower the income level, the fewer the respondents who reported that in the last 12 months they felt they could always or frequently cope with their problems (only 45 per cent with income up to NIS 5,000 versus 86 per cent with income above NIS 17,000).

D. **Social dimension**

1. **Individuals registered with the social services departments**

44. The lower the socio-economic level of the locality, the higher the percentage of individuals registered with the social services departments (32 per cent in the lowest cluster versus 7 per cent in the highest cluster).
E. Health dimension

1. Assessment of health status

45. In this section, the data are presented by income per standard adult.

46. The lower the economic status, the greater the prevalence of health problems: 25 per cent in the lowest quintile versus 15 per cent in the highest quintile reported moderate or poor health status, 29 per cent versus 21 per cent reported emotional distress.

2. Forgoing treatment or medication for various reasons

47. The percentage of the population who went without treatment or medication for any reason (cost, waiting time, distance, etc.), is 44 per cent among the lower quintile compared to 30 per cent in the upper quintile. The gap is even higher among those who went without due to difficulties making the payment (21 per cent compared with 6 per cent.).

F. Educational dimension: achievements (children)

1. Growth and effectiveness measures for schools (GEMS) 2012/2013

48. Children from a lower socio-economic background had lower GEMS scores in all subjects (Hebrew, mathematics, English and sciences), in two age groups (fifth and eighth grades), and in both examination languages (Hebrew and Arabic).

2. High school matriculation that meets university admission requirements

49. There is a large gap in the percentage of students eligible for matriculation certificates that meet university admission requirements between localities in low and high socio-economic clusters. The gap is particularly noticeable within the Jewish population with 7 per cent in localities in clusters 1-2 and 27 per cent in clusters 3-4, compared with 76 per cent in localities in clusters 9-10.

3. International examinations (PISA, TIMSS)

50. As reported NAMEE, the gap in achievements in international examinations in Israel by the socio-economic background of the students is among the highest among the countries participating in the examinations.

G. Summary on multidimensional indicators

51. In summary, we learn from the multidimensional poverty indicators that there is a strong connection between all the indicators and the socio-economic level of the household being that the lower the socio-economic status, the greater the percentage of families reporting problems. Thus, a significant percentage of families living in poverty have at least one other problem that requires special attention, beyond their lack of income and usually more than one. As described earlier, some of the indicators examined not only constitute an additional problem, but may also be a cause of the decline into poverty. Some are also both. At the same time, we see that not all families living in poverty have to contend with problems in all dimensions.

52. There are families that experience health difficulties and others that do not; those that feel that they can cope with their problems and those that cannot; whose children are successful in their studies and those that are not; and so on. Each family has its own nexus of problems.
V. Additional publications on the wellbeing of the economy

A. Well-being, sustainability, and national resilience indicators

1. The indicators and the process

54. In April 2015, the government of Israel adopted a resolution obligating the ICBS to publish well-being, sustainability, and national resilience indicators in the following domains: quality of employment; personal security; health; housing and infrastructure; education; higher education and skills; personal and social well-being; environment; civic engagement and governance; and material standard of living. It was also decided to develop two additional domains: information technology; and leisure, culture, and community. That is a total of 11 well-being domains were selected. For each domain 8 representative indicators were selected.

55. The first publication (2016) included 45 well-being indicators out of all of the indicators that were selected. These data and indicators were taken from the ICBS databases, and are based on administrative information and regular surveys conducted by the ICBS. The indicators present the trends from the beginning of the 21st century, and provide a basis for examining changes in well-being in Israel, as well as for comparisons of different population groups in Israel and international comparisons.

56. ICBS publishes these indicators annually as of 2016. The other indicators will be developed through various activities such as adding questions to existing surveys and conducting new surveys (such as the time use survey and savings survey). In addition, methodologies will be developed on the basis of existing data, as well as indicators that examine aspects of sustainability and national resilience.

2. Well-being indicators

57. A person’s well-being depends on many factors such as health, social contacts, trust, work, income, and sense of security. The more one's needs are met in various life domains, the better one's well-being is. The aim of well-being indicators is to present a multi-dimensional analysis of well-being, taking into account the overall economic, social, and environmental factors that affect a person's life. This measurement is a basis for developing statistics that complement data on economic growth, and provide a more comprehensive and complete indication of well-being among the population.

58. To accurately and appropriately measure well-being indicators, several characteristics were taken into account:

- Emphasis on the individual – based on the perspectives of individuals and households;
• Outcome indicators – indicators that portray the overall situation of individuals, with direct information about their life situation;
• Emphasis on distributions – presentation of differences and gaps between population groups based on various parameters;
• Balance between objective and subjective indicators – a person's subjective view supplements and enriches the general portrayal of the situation provided by objective indicators;
• The desired trend directions – indicators for which there is a consensus about the desired directions of progress. This enables decision-makers to use the indicators as a tool for making policies.

3. Selected indicators in the publication

59. Quality of employment indicators include the change in the employment rate, satisfaction with work, the rate of persons hurt in injuries and median income.

60. Personal security indicators include the rate of persons who felt safe walking alone after dark in their area of residence; the number of persons killed in road accidents and victims of terror.

61. Health indicators include life expectancy, infant mortality and the percentage of smokers out of the total population.

62. Housing and infrastructure indicators include the percentage of expenditure on housing out of disposable income per decile; satisfaction with the dwelling and residential environment, and satisfaction with public transportation.

63. Education and skills indicators include the rate of persons with post-secondary and higher education increased; the rate of persons who have difficulty with the PISA math tests; the percentage of persons aged 30 and over with post-secondary and higher education.

64. Personal and social well-being indicators include general life satisfaction, the percentage of people that feel that they can deal with their problems and the rate of loneliness.

65. Environment indicators include attitudes about cleanliness in the neighbourhood, about parks and open areas, and about noise in the neighbourhood.

66. Civic engagement and governance indicators include voter turnout rates in the general elections, and rate of participation in volunteer activities.

67. Material standard of living indicators include individual per capita consumption and net money income per capita, and satisfaction with the household's economic situation.

B. Annual reports on the society in Israel

68. The annual reports on the Society in Israel are one of the leading publications on the social status and wellbeing of the economy. The report has several objectives:
• Presentation and analysis of poverty and social exclusion that are not addressed solely by monetary support;
• International comparison to the social situation in other European Union (EU) and OECD countries on these subjects;
• Analysis over time of indicators on health, education, standard of living, employment, environment; transportation and welfare;
• Showcasing central social economic indicators to the policy makers to support evidence based decision making.

69. The report includes not only the constant set of indicators in the subject areas listed above but has a different main theme every year, focusing on the gaps in society by population groups, gender, geographic areas, age groups and different kinds of households.