

Israel 2001: Survey Information

Summary table

Generic information	
Name of survey	Household Expenditure Survey
Institution responsible	Central Bureau of Statistics
Frequency	Annual (since 1997, every 5 years from 1950 to 1997)
Survey year / Wave	2001 survey
Collection period	January 2001 to January 2002
Survey structure	Cross-sectional
Coverage	Entire urban and non-urban population except for kibbutzim, collective moshavim, Bedouins living outside of cities, and residents of institutions.
Geographic information	Sub district level
Files delivered	3 files: one person file with demographic characteristics and two household level files (one with general characteristics and the other with expenditure and income components)
Sample size	
Households	5,787 households
Individuals	19,550 (of which 5,445 children under 15)
Sampling	
Sampling design	A two-phase sample: in the first phase, a sample of localities was selected; and in the second phase, dwellings were sampled from the chosen localities, with a uniform final sampling probability for all dwellings in the population - 1:249.
Sampling frame	Sampling frames prepared from local municipal property tax files of local authorities or from lists of households obtained from municipal secretariats, plus additional sampling frames for complementary samples of not covered dwellings
Questionnaires	A questionnaire on household structure, a biweekly diary of daily expenditures, and a questionnaire on large or exceptional expenditures and on income.
Standard classifications	
Education	Years of schooling
Occupation	1-digit ISCO-88
Industry	1-digit NACE
Income	
Reference period	Three-month period preceding the interview (i.e. from October 2000 to December 2001)
Unit of collection	Household for all income sources (plus individual incomes for income from employed work, self-employed work and work related pensions)
Period of collection	Three-month period preceding the interview (data are delivered in monthly amounts though)
Gross/net	Amounts are collected gross of incomes and contributions, and income taxes and social security contributions are also collected.
Data editing / processing	
Consistency checks	The entry process consisted in keying in, editing, logical and quality checks, and coding of commodities. The checks were performed on-line during keying, and the commodities were coded automatically.
Weighting	Inflation household coefficient, whereby the distribution of the "inflated" sample is adjusted to ensure consistency with external distributions according to selected distribution variables (sex*age groups, geographic cross-sections).
Imputation	Extensive imputation carried out for expenditure data; full imputation for compulsory payments (social security contributions and income taxes).

This document is based upon a note on survey methods sent by the National Insurance Institute.

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A. General characteristics

Official name of the survey/data source:

Household Expenditure Survey

Administrative Unit responsible for the survey:

Central Bureau of Statistics http://www.cbs.gov.il/engindex.htm

The Household Expenditure Survey aims to obtain data on the components of household budgets, as well as additional data that characterize various aspects of the living standard of households, such as consumption patterns, leisure activities and entertainment, level and composition of nutrition, level and composition of income and housing conditions. In addition, the survey is also used for market research, for construction of models to predict consumer behaviour, for research on the incidence of indirect tax among various population groups, etc. One of the most important uses of the survey is to determine weights for the consumption “basket” of the Consumer Price Index.

The survey was first conducted at the beginning of the 1950s, and until 1997 was conducted every 5 years; since 1997, the survey has been conducted annually.

B. Population, sampling size and sampling methods

Population coverage

As of 1997, the survey population includes the entire urban and non-urban population except for kibbutzim, collective moshavim, Bedouins living outside of cities, and residents of institutions. In the years 2000 and 2001 the population of East Jerusalem was not surveyed due to difficulties encountered in investigating that population.

Sample size

A total of 7,509 dwellings were sampled. The final sample size was of 5,787 (see Results of field work).

Sampling design

Sampling Model and Probability - A two-phase sample was drawn for the survey: in the first phase, a sample of localities was selected; and in the second phase, dwellings were sampled from the chosen localities. The final sampling probability was uniform for all dwellings in the population - 1:249. The sampling probability was determined on the basis of estimates of the anticipated proportion of non-respondents in the survey, the planned size of the sample, and the total number of households in the survey population in the middle of the survey year.

Sampling of Localities - The size of each locality in the survey population was calculated – an estimate of the total number of households expected in the middle of the survey investigation period. A total of 169 localities were included in the sample. The 61 largest localities, where 80 percent of households of the survey population reside, were included in the survey with certainty. Each locality constituted a separate sampling stratum. The remaining 785 localities that fit the definition of the survey were placed in 37 sampling strata on the basis of their similarity in terms of variables such as locality type, socio-economic characteristics, and geographic proximity to one another. Interviewing quotas were allocated to each sampling stratum (each quota comprised about 13 dwellings in the gross sample), in accordance with its size. The localities were arranged separately for each stratum on the basis of various characteristics, and a random-systematic sample of localities was drawn in accordance with their size. Altogether, 108 probability localities were sampled.

Sampling of Dwellings in Sample Localities - A sample of dwellings was drawn in each of the sampled localities, usually from sampling frames that were prepared from local municipal property tax files of local authorities (Arnona lists of the local authorities) or from lists of households obtained from municipal secretariats (usually in small localities). In each locality, the dwellings in the sample were sorted, when possible, within the sampling frame according to geographic characteristics in the property tax files before the sample was drawn. This was done in order to maximize the geographic distribution of the sample across the locality. Afterwards, a random-systematic sample of dwellings was drawn on the basis of parameters that would ensure a final sampling probability for each dwelling corresponding to the planned ratio – 1:249. In all, 7,301 dwellings were sampled from the property tax files, or from household lists in small localities.

Complementary Samples - The property-tax files and household lists (for small localities) do not cover all dwellings inhabited by households that belong to the survey population. In order to reduce this non-coverage, complementary samples were taken from additional sampling frames for the following subgroups:

- New dwellings occupied after the last update of the property tax files - 160 dwellings in all.
- Dwelling units in dormitories of the seven largest universities - 20 dwellings in all.
- Dwelling units in immigrant absorption centers - 10 dwellings in all
- Dwelling units in sheltered-housing projects that are not covered in the property tax files - 18 dwellings in all.
- Dwellings sampled in field samples in East Jerusalem - 112 dwellings in all. (Essentially, in East Jerusalem only 12 households were surveyed out of 112 sampled dwellings. Therefore, it was decided to exclude East Jerusalem from the population of the Household Expenditure Survey in 2001.)

Altogether, the number of additional dwellings was 208, bringing the final sample to 7,509 dwellings.

Allocation of the Sample across the Survey Investigation Year - In addition to population groups, the survey aims to represent the various periods of the investigation year. Therefore, the interviewing quotas were allocated so that a balanced sample would be obtained for each quarter-year, according to various socio-economic and geographic characteristics.

C. Data collection and acquisition

Collection period

The data were collected “in the field” over a 13-month period beginning in January of the survey year and ending in January of the subsequent year. Investigation of the sample was spread across the survey period, so that all weeks in the investigation period would be represented.

Reference period

Estimates of expenditures obtained from the diary refer approximately to the survey year. Estimates of expenditures and incomes obtained from the questionnaire pertain to a 15-month period (from October 2000 to December 2001 for the 2001 survey) or a 24-month period (from January 2000 to December 2001), according to the type of expenditure/income.

Questionnaires

Data were collected from each household in an integrated fashion, in the following ways:

- (1) *A questionnaire on household structure* - filled out by the **interviewer**, providing basic demographic and economic data on each member of the household (age, sex, country of birth, year of immigration, status at work, etc.).

- (2) *A biweekly diary* - in which the household recorded each member's daily expenditures over a period of two weeks.
- (3) *A questionnaire on large or exceptional expenditures and on income* - filled out by the interviewer on the basis of reporting by the household, related to the 3 or 12 month period preceding the interview date (depending on the rarity of expenditures for the items investigated).

D. Definition of the survey units

Household

The investigation unit is the household, i.e., a group of persons living in one dwelling on a permanent basis most of the week and having a common expense budget for food. A household may include one person or more, or persons who are not relatives.

Family

A family is defined as two persons or more who share the same household and are related to one another as husband and wife, as an unmarried couple, or as a parent and child.

Head of household

Head of household is the economic head of household. As of 1995, the definition of head of household was changed and determined by the degree of belonging to the labour force, without regard of age or sex, according to the following rules:

- the head of household is the main wage earner of the household, i.e. an employed person who usually works 35 hours or more per week (including soldiers in the permanent army), and precedes an employed person who works up to 34 hours a week, who precedes an unemployed person;
- if more than one person in the household fits the definition of head of household, the head is determined by the interviewee;
- if there is no wage earner in the household, the head of household is determined by the interviewee.

The head of household is a person aged 18 or over (except households where the only wage earner is aged 15-17 and households where there are only 15-17 year old persons).

E. Contents

The survey mainly collects data on the components of household budgets, as well as additional data that characterize various aspects of the living standard of households, such as consumption patterns, leisure activities and entertainment, level and composition of nutrition, level and composition of income and housing conditions.

Individual socio-demographic characteristics:

- main demographics: person's family relation, gender, age, family status year of marriage, continent of birth, year of immigration, father's continent of birth;
- education: last schooling institute, years of schooling;
- labour market: worked in the last 3 months, working hours per week, working weeks per month, economic activity, occupation, working status, gross wage, self-employment income, income from work related pension (occupational pensions);
- whether received some benefits: child allowances, old-age pension for a couple, old-age income supplement pension for a couple, old-age pension (for one person), old age income supplement (for one person), survivors pension, survivors income supplement, work injury allowance, disability allowance, unemployment benefit, income support benefits, other benefits.

Household characteristics:

- household composition: number of persons, number of earners, number of persons by age groups and sex;
- household durables: cooking and baking stove, microwave, refrigerator, deep-freezer, dish-washer, washing machine, clothes dryer, vacuum cleaner, air conditioner, colour television, DVD, video cassette, personal computer, central heating, flat heating, number of phone lines, number of cellular phones, cable or satellite TV, internet, number and value of cars;
- dwelling characteristics: tenure (incl. value if owned, mortgage payments and other loan payments), number of rooms, locality (type, code, whether developing), sub-district.

Household income:

- income from work: employed, self-employed and occasional work;
- capital income: imputed value of housing, imputed value of vehicles, rent, property, dividends;
- income from private pensions and funds: occupational pensions, foreign pensions, continuing education fund, etc.;
- income allowances and assistance: income from National Insurance (child allowances, old-age pensions, survivors' pensions, work injury allowances, disability allowances, unemployment benefits, support benefits, other), other public support (income from Defence Ministry, from other public institutes), private support (from other persons, from charitable organisations).

Household expenditure:

- non consumption expenditure: compulsory payments (income tax, National Insurance and National Health Insurance) and transfers to other households;
- consumption expenditure: food, vegetable and fruits, housing (including government taxes and imputed rents), dwelling and household maintenance (including municipal taxes), furniture and household equipment, clothing and footwear, health (including private health insurance contributions), education, culture and entertainment, transport and communications (including imputed value of vehicles owned), miscellaneous goods and services.

F. Quality of data

Results of the Field Work

Of the 7,509 dwellings sampled, 685 (9.1 percent) should not have been investigated:

	Absolute Numbers	Percent
Total dwellings that should not have been investigated	685	100.0
Thereof: Empty	376	54.9
Tenants have another permanent address in Israel	92	13.4
Tenants are households that do not belong to the survey population	32	4.7
Tenants are businesses, institutions, etc.	93	13.5
Demolished, abandoned, or under construction	62	9.1
Errors in sampling frames	30	4.4

The 6,824 dwellings that met the investigation criteria were occupied by 6,938 households that belonged to the survey population. As expected, most of the dwellings were inhabited by one household, and only 1.5 percent were inhabited by two households or more. About one sixth of the 6,938 households that met the investigation criteria were not included directly in the survey estimates. These include 1,109 households that were not investigated and 42 households that were disqualified at the editing stage. The breakdown of the 1,151 households that were not included directly in the estimates is as follows:

	Absolute Numbers	Percent	
Total households for investigation	<u>6,938</u>	<u>100.0</u>	
Not investigated – total	1,109	16.0	100.0
Thereof: Refused	674	9.7	60.8
Not at home	156	2.3	14.1
Communication difficulties, illness, etc.	180	2.6	16.2
Not located and other difficulties	99	1.4	8.9
Investigated – total	5,829	84.0	100.0
Thereof: Disqualified in editing	42	0.6	0.7
Chosen to participate in survey estimates	5,787	83.4	99.3

Among the households that were not investigated, some refused to participate in the survey, some provided only limited information on household characteristics in Questionnaire A, and a few began to fill out a diary but did not complete the task.

	Absolute Numbers	Percent
Households not investigated – total	1,109	100.0
Thereof: Did not respond at all	726	65.5
Responded to Questionnaire A only	314	28.3
Filled out diary for at least one day but without summarizing questionnaire	69	6.2

Editing and coding

Diaries submitted by households underwent an initial editing at the district offices of the Central Bureau of Statistics. Afterwards, the diaries and the questionnaires were forwarded to the relevant unit at the main office for data entry which included keying in, editing, logical and quality checks, and coding of commodities. The entry process was performed on PCs. The checks were performed on-line during keying, and the commodities were coded automatically.

Imputation

Most estimates of consumption were obtained on the basis of net expenditure for the commodity purchased, i.e., the positive difference between the household's expenditure for the commodity and its receipts (if any) from the sale of the same type of commodity. For example, the difference between a household's expenditure for a new refrigerator and its receipts from the sale of an old refrigerator constitutes that household's estimated expenditure for the purchase of a refrigerator. This method was used for most commodities and services in the survey.

Other methods were used to estimate expenditure on housing and motor vehicles:

- 1) *Housing* - The two main components of housing expenditure are rent in rented dwellings and housing services consumption in owned dwellings. For rented dwellings, the rent expenditure was obtained directly from the households that inhabited the dwellings. For owned dwellings, consumption of housing services was imputed on the basis of the rent in other dwellings of the same size, in similar parts of the country and at similar times of the year. The imputed data on rentals in 2001 were obtained from three sources (the current survey of rentals conducted the framework of the Consumer Price Index, rental data on households living in rented dwellings, from the Household Expenditure Survey and outside sources). For key-money dwellings, housing services consumption was calculated by imputing the difference between actual rent paid and the full amount of rent, according to the average rental rates on the free market, as obtained from the three above-mentioned sources.

- 2) *Motor Vehicles* - Motor vehicle expenditures were estimated on the basis of the “value of services” obtained from the vehicle. Thus, the value of services obtained from the car was estimated for every car-owning household on the basis of the depreciation of the car and the alternative interest on the capital invested in it. The alternative interest was also imputed as income for the household.

Imputations from outside sources were performed on several budget components when the households did not provide data. Such imputations were also conducted for items that usually have uniform prices or have a fixed method of calculation: fees (such as radio, television, and motor vehicle licenses), the value of motor-vehicle, and compulsory payments (income tax, National Insurance, and National Health Insurance).

Compulsory payments (Income Tax, National Insurance and National Health Insurance) were calculated according to the various tax rules and were not obtained directly from households.

Common denominator

All budget components for each household were reduced to a common denominator: an estimate per month at a uniform price level of the mean of the survey period. Hence, the expenditures culled from the diary were multiplied by approximately 2.17 to convert them to a monthly value, and the estimates based on the questionnaire were obtained by dividing by 12 or by 3, depending on the period to which the question referred. The average price index was 111.97 points for the 2001 survey period with the base of 1998 = 100.

Weighing procedure

The method aims to reduce potential sampling errors and biases deriving from the fact that non-responding households may have characteristics that differ from those of the participating households. In order to obtain estimates for the entire survey population, an **inflation coefficient** was determined for each household investigated, with all members of a given household having the same inflation coefficient. A household’s inflation coefficient reflects the number of households and persons in the survey population that the household represents. The set of inflation coefficients was derived in a multi-stage process by the “raking” method, in which the distribution of the “inflated” sample is adjusted to ensure consistency with external distributions according to selected distribution variables. The adjustment was performed separately for characteristics of households and for individuals (without combining the two) in each of the distributions.

For households, the adjustment was done for three groups:

1. Population in Jewish and non-Jewish localities, without new immigrants.
2. Immigrants from 1998 and on.
3. Population in non-Jewish localities.

For these distributions the division differs according to the households' characteristics:

- Groups of households that are homogeneous in terms of income, as determined by statistical methods.
- Types of households, defined according household size and age composition of members (elderly living alone, young couples, households with children, etc.).
- Households grouped on the basis of the time they were investigated. These groups are meant to balance the “inflated” sample over the survey year and to prevent biases that might result from uneven distribution of the de facto survey sample over the months of the year due to fieldwork constraints.

The distributions by characteristics of households, to which the survey data were adjusted, are taken from the Labour Force Survey estimates that are based on a large sample. The inflation coefficients for the various groups of households were determined in a way that would also assure full correspondence between the survey estimates and the distribution of the survey population by sex*age groups, and geographic cross-sections based on the current demographic data of the Central Bureau of Statistics.

G. Uses of the survey

The survey aims to obtain data on the components of household budgets, as well as additional data that characterize various aspects of the living standard of households, such as consumption patterns, leisure activities and entertainment, level and composition of nutrition, level and composition of income and housing conditions. In addition, the survey is also used for market research, for construction of models to predict consumer behaviour, for research on the incidence of indirect tax among various population groups, etc. One of the most important uses of the survey is to determine weights for the consumption “basket” of the Consumer Price Index.

Publications

The main results of the Survey are published in “Household Expenditure Survey, 2001, General Summaries”, Central Bureau of Statistics.

Poverty and Income Distribution

According to the data published in the Statistical Abstract of Israel, 2003 (cf. Table 5.28, based on data from the Income Survey and the Household Expenditure Survey), 23.8% of persons in Israel were living in 2001 in households whose net equivalised income was lower than 56% of the median equivalised income. The same publications reports a Gini coefficient of 0.384 for households headed by employees and of 0.379 for households headed by not working persons (no figure reported for the total population). The

equivalence scale used (which establishes the two-person household as a base unit) considers the following coefficients for each person: 1.25 for the first adult, 0.75 for the second, 0.65 for the third, 0.55 for the 4th and 5th, 0.50 for the 6th and 7th, 0.45 for the 8th and 0.40 for each additional person.

In the Annual Survey of the National Insurance Institute, some indicators of poverty and income distribution are presented based on the combined Income Survey (based on both the current Income Survey of the LFS and the Household Expenditure Survey). The poverty rate for persons (calculated with the same equivalence scale as described above, and with the poverty line set at 50% of the median) was estimated to be at 18.8% in 2000, whereas the Gini index was estimated at 0.350.