

LiTS Survey Documentation

This annex outlines the sampling methodology employed for the survey. This methodology was designed to make the sample nationally representative. In order to achieve this, a two-stage clustered stratified sampling procedure was used to select the households to be included in the sample. In 25 transition countries, France, Germany, Italy and Sweden, the survey was conducted face-to-face in 1,000 randomly chosen households. In Russia, Ukraine, Uzbekistan, Serbia, Poland and the United Kingdom there were 1,500 household interviews in order to allow for a reasonably large sample for a follow-up telephone survey, which will be based on a shortened version of the current questionnaire and which will be conducted one year after the face-to-face survey, i.e., in autumn 2011.

The sampling guidance issued for this survey and followed by all data collection agencies participating in the project is based on the random probability principles as formulated below (the full sampling guidance can be found in the appendices):

1. **All residents (universe units) had a chance of being included in the sample.** Selections at each stage were completed using a random method.
2. **Known probability of selection of each sampling member.**
3. **No substitutions were allowed.** The key requirement for the random approach is that the interview is carried out with the person randomly selected in the household.
4. **Repeat visits.** If an interviewer did not manage to conduct an interview (either because nobody answered the door or the randomly selected respondent was not at home), they conducted repeat visits (a minimum of three) to increase the likelihood that the selected respondent takes part in the survey.

First stage: establishing sample frame of Primary Sampling Units

In all countries, the most recent available sample frame of Primary Sampling Units (PSUs) was selected as the starting point. Local electoral territorial units were used as PSUs wherever it was possible, as they tend to carry the most up-to-date information about household addresses. The following sampling frames were used (see also Table 1):

Electoral districts: Bulgaria, Hungary, Poland, Romania, Serbia.

Polling station territories: Albania, Armenia, Belarus, Bosnia and Herzegovina, Moldova, Montenegro.

Census Enumeration Districts: Slovak Republic, Sweden, Tajikistan, Turkey.

Geo-administrative divisions: all remaining countries.

The total number of PSU sample frames per country varied from 182 in the case of Mongolia to over 48,000 in the case of Turkey. In order to ensure an even distribution across regions and type of settlement, PSUs were ordered by geographical region and levels of urbanity or rurality.¹ Then, 50 PSUs in most countries and 75 PSUs in Russia, Ukraine, Uzbekistan, Serbia, Poland and the UK were selected from these lists, with probability of selection proportional to PSU size. The size was measured as the number of households in the PSU. If that information was not available, size was taken as the adult population or total population.

Second stage: selection of households

¹ Some PSUs were excluded in Mongolia, Russia and Turkey because they were too geographically remote. Eight PSUs were replaced with similar PSUs in Italy as a result of incomplete geographical coverage. Additional PSUs were selected in the UK due to lower than expected response rates.

The second stage in sampling consisted of selecting households within each PSU, as reported in Table 1 below. The aim was to make sure that each household was selected with an equal probability within any given PSU and hence all households in the country had the same probability of being selected.

Table 1: Sampling frames used in each country

Country	Sampling frame	Pre-selected or random walk	Units of selection
Albania	Polling Station Territories	Random walk	Addresses
Armenia	Polling stations	Random walk	Addresses
Azerbaijan	Geoadministrative area sample frame	Random walk	Addresses
Belarus	Polling station territories	Random walk	Addresses
Bosnia	Polling station territories	Random walk	Addresses
Bulgaria	Electoral areas	Random walk	Addresses
Croatia	Geoadministrative division	Random walk	Addresses
Czech Republic	Geoadministrative division	Random walk	Addresses
Estonia	Geoadministrative division	Random walk	Addresses
France	Geoadministrative division	Random walk	Addresses
Georgia	Geoadministrative area sample frame	Random walk	Addresses
Germany	Arbeitsgemeinschaft ADM-Stichproben	Random walk	Addresses
Great Britain	Postcode Address File	Pre-selected	Addresses
Hungary	Electoral Districts	Pre-selected	Addresses
Italy	Geoadministrative division	Random walk	Addresses
Kazakhstan	Geoadministrative area sample frame	Random walk	Addresses
Kosovo	Polling station territories	Random walk	Addresses
Kyrgyzstan	Geoadministrative division	Random walk	Addresses
Latvia	Geoadministrative division	Random walk	Addresses
Lithuania	Geoadministrative	Pre-selected	Addresses
Macedonia	Geoadministrative division	Random walk	Addresses
Moldova	Polling station territories	Random walk	Addresses
Mongolia	Geoadministrative area sample frame	Random walk	Addresses
Montenegro	Polling station territories	Random walk	Addresses
Poland	Electoral Districts	Random walk	Addresses
Romania	List of electoral territorial units from 22 November 2009 presidential election	Random walk	Addresses
Russia	Geoadministrative area sample frame	Random walk	Addresses
Serbia	Polling station territories	Random walk	Addresses
Slovakia	based on data of The Slovak Statistical Office (Region, City size)	Random walk	Addresses
Slovenia	Central Population Register (CPR)	Pre-selected	Individuals
Sweden	Total Population Register	Pre-selected	Addresses
Tajikistan	Geoadministrative	Random walk	Addresses
Turkey	ABPRS District list	Random walk	Addresses
Ukraine	Geoadministrative division	Random walk	Addresses
Uzbekistan	Geoadministrative area sample frame	Random walk	Addresses

Two sampling procedures were used. In the majority of countries, a random walk fieldwork procedure was used: the fieldwork coordinator selected the first address to be sampled, and the interviewer was given clear instructions on how to select remaining addresses within the PSUs. For a small number of countries – Hungary, Lithuania, Slovenia and Sweden and the United Kingdom – the sample was pre-selected to ensure that the probability of any household's inclusion was always equivalent to the probability generated by random selection.

If more than one household was resident at a particular address, interviewers were instructed to produce a list of all households in the contact sheet and randomly select one household. In order to select a household randomly, they were asked to use the same instructions as for the selection of a respondent in a household.

Selection of respondents within households

Interviewers were instructed to explain the purpose of their visit when first making contact with the household, and to attempt to make contact with the head of the household.² Interviewers then completed a household roster. All people living under the same roof in the household and sharing their meals together were included in the roster.³

In order to select a respondent from a household randomly interviewers used a selection grid.⁴ These grids used sets of randomly ordered numbers 1 to 12, which were generated by the central coordinating office. Interviewers were provided with a random grid for each address which they visited. Using these selection grids, interviewers made a random selection of individuals to be interviewed. The interviewer read the numbers from left to right until they found the ID code of a household member 18 years old or older. This person was selected to be the respondent for sections 3-7 of the questionnaire. If the selected respondent was also the head of household or knowledgeable member they completed all sections (including section 1 – contact sheet and section 2 – housing and expenses).

The standard interview method called for each selected household to be visited at least three times before being replaced. In the majority of cases (79 per cent), however, the interviews were completed on the first visit. In 61 per cent of cases, the head of the household and the principal respondent were the same person; in the remaining 39 per cent, two different interviews were required to be carried out in the same household. The profile of the principal respondents is depicted in Table 1.

² In Sweden interview subjects were recruited over the phone and the interviews were then conducted face-to-face.

³ Household members who were away for a period of one month or longer on work or study in another geographical location or country were excluded from the selection.

⁴ In LiTS I the “last birthday” method and Kish grids were used.

Profile of principal respondents in LiTS 2010

	Gender		Age			Location		OECD equivalised household expenditure (USD)		
	Male	Female	18-39	40-59	60+	Urban/Metro	Rural	<4000	4000-6000	>6000
Albania	44.7	55.3	45.3	39.7	15.0	61.8	38.2	33.8	23.8	42.4
Armenia	34.6	65.4	41.1	35.4	23.4	71.7	28.3	62.0	21.9	16.1
Azerbaijan	35.5	64.5	54.3	35.3	10.4	66.1	33.9	34.0	29.0	37.0
Belarus	38.0	62.0	56.6	30.1	13.3	72.8	27.2	17.1	28.4	54.4
Bosnia and Herzegovina	43.3	56.7	46.5	30.7	22.8	53.9	46.1	23.6	27.8	48.6
Bulgaria	36.7	63.3	27.9	36.3	35.8	68.5	31.5	26.9	27.2	45.9
Croatia	43.9	56.1	31.5	34.9	33.6	62.1	37.9	9.5	15.6	75.0
Czech Republic	39.3	60.7	41.0	38.1	20.9	76.9	23.1	2.4	19.2	78.4
Estonia	28.8	71.2	32.2	26.7	41.1	59.0	41.0	9.3	33.4	57.2
France	47.8	52.2	27.4	40.5	32.1	71.2	28.8	2.5	9.3	88.2
Georgia	30.8	69.2	35.5	34.3	30.2	50.0	50.0	70.3	16.3	13.4
Germany	43.5	56.5	29.6	43.4	27.1	71.9	28.1	3.6	8.5	87.9
United Kingdom	43.7	56.3	30.6	31.2	38.2	77.3	22.7	9.0	16.0	75.0
Hungary	40.4	59.6	27.0	33.9	39.1	70.5	29.5	20.5	33.6	45.9
Italy	33.9	66.1	33.3	42.7	24.0	40.0	60.0	2.4	10.7	86.9
Kazakhstan	31.9	68.1	49.2	37.2	13.6	56.0	44.0	48.0	29.9	22.1
Kyrgyz Republic	40.9	59.1	51.7	34.5	13.8	40.1	59.9	72.3	21.1	6.6
Latvia	40.6	59.4	33.6	30.5	35.9	73.6	26.4	19.7	31.7	48.6
Lithuania	32.8	67.2	27.2	34.3	38.5	62.2	37.8	14.2	31.3	54.5
FYR Macedonia	44.5	55.5	43.5	36.3	20.2	62.8	37.2	19.3	25.1	55.6
Moldova	35.8	64.2	30.2	36.7	33.1	40.1	59.9	55.2	22.3	22.5
Mongolia	44.7	55.3	61.1	27.4	11.5	48.6	51.4	61.4	18.1	20.5
Poland	47.5	52.5	36.6	33.4	30.0	46.8	53.2	17.8	29.0	53.3
Romania	42.9	57.1	32.4	33.0	34.6	57.9	42.1	45.8	27.8	26.4
Russia	30.4	69.6	41.2	31.9	26.9	72.9	27.1	11.4	28.2	60.4
Serbia	43.9	56.1	31.6	38.6	29.8	55.9	44.1	15.6	24.0	60.5
Slovak Republic	38.4	61.6	48.2	41.3	10.5	66.4	33.6	5.3	22.4	72.2
Slovenia	44.2	55.8	39.2	37.8	23.0	58.5	41.5	1.9	7.9	90.2
Sweden	53.8	46.2	23.8	42.7	33.6	90.2	9.8	3.6	10.1	86.3
Tajikistan	40.5	59.5	55.6	34.3	10.0	15.9	84.1	74.6	14.3	11.1
Turkey	34.3	65.7	54.5	33.0	12.5	76.6	23.4	33.6	31.8	34.6
Ukraine	30.0	70.0	40.3	31.2	28.5	65.2	34.8	39.3	24.5	36.2
Uzbekistan	39.7	60.3	55.3	34.1	10.7	41.3	58.7	73.4	19.4	7.2
Kosovo	42.6	57.4	64.9	25.3	9.8	44.1	55.9	88.0	9.0	3.0
Montenegro	44.9	55.1	52.4	30.7	16.9	56.4	43.6	6.9	17.8	75.4

Adaptation of sampling design to prevailing country circumstances

Russia - Given the geographical size of the country and unavailability of fieldforce in the most remote parts of the country, a number of areas were excluded from the fieldwork coverage. The resulting sample covered all seven major geo-administrative regions of Russian Federation and all major cities. The number of rural and urban PSUs in the sample was proportional to the urban/rural split of the country.

Sweden - Face-to-face recruitment for in-home interviews is very rare in Sweden. Given the availability of the general population register with telephone numbers for the majority of residents, it was decided to recruit respondents over the telephone and conduct interviews face-to-face at home.

Turkey - Similar to Russia, due to the vast geographical size of the country and lack of availability of the fieldforce, the fieldwork coverage was limited to the 12 largest regions which cover around 50% of the country's population.

Mongolia - Parts of the country are difficult to access, and a substantial proportion of the population is nomadic. According to our estimates, around 16% of the country's population was excluded from the fieldwork because of this.

Italy - Due to lack of availability of fieldforce, eight PSUs were replaced with similar areas as measured by the population size and geographical region.

Great Britain - The original response rate estimate of 50% unadjusted was much higher than what was obtained during the fieldwork. Additional PSUs were selected and additional addresses were issued in those PSUs to compensate for the lower response rate and achieve the target sample of 1,500 households.

Weights

In all countries, except for France, Poland and Sweden, there is a significant majority of females and relatively older people in the sample. This is likely to have resulted from the fact that household members who were away from home on a permanent basis, either for work or studies, were excluded from the sample.

In order to correct this problem, a weighting scheme was introduced. In the first step, the weighting scheme identifies target populations in each country, disaggregated by age and gender. In the second step, weights are assigned in order for the sample to reproduce the gender and age breakdown within the country's population. Indirect weights were computed. They are equal to the number of persons in the country's population in each age x gender category, divided by the sample size for the considered age x gender category. These weights do not account for sampling design or non-response.

Using 'democratic' weights, all countries are weighted by their population. With 'federal' weights, all countries are weighted equally.