

# A Comparison of Consumer Expenditure Surveys

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## I. Introduction

The Consumer Expenditure Survey (CE) is in the initial stages of a major redesign. The overall mission of the redesign is to improve data quality through a verifiable reduction in measurement error. As part of this effort, the CE studied the design features of household expenditure surveys conducted in other countries. This article presents an overview of the key design features of these surveys, particularly the unique design features that other surveys have successfully implemented for asking questions and collecting information about consumer expenditures.

The survey design elements were gathered from a number of sources including other countries' consumer expenditure survey program websites, methodology reports, and e-mail correspondence with representatives from the survey programs. For each survey program, the following characteristics were collected:

- a. Country and survey
- b. Achieved sample size and year: The number of completed surveys is provided along with the reference year. All sample sizes indicate the annual number of completed surveys reported except where otherwise specified.
- c. Data collection method: mode, instrument, and level of data collection
- d. Reference period
- e. Response rate and year, if different from that reported for the achieved sample size
- f. Notable design features: the use of global questions, interview structure, proxy reporting, recall period, split questionnaire design, new technology, and records and receipts

The surveys included in this article were selected based on the diversity of their characteristics and the accessibility of information about their design features. Many of the countries use the term "budget survey" which is considered interchangeable with "expenditure survey" in this article. The surveys summarized in this article are conducted by governmental statistical agencies in the following countries:

- |                   |                    |
|-------------------|--------------------|
| 1. United States  | 19. Italy          |
| 2. Australia      | 20. Latvia         |
| 3. Austria        | 21. Lithuania      |
| 4. Belgium        | 22. Luxembourg     |
| 5. Bulgaria       | 23. Malta          |
| 6. Canada         | 24. Netherlands    |
| 7. Croatia        | 25. Norway         |
| 8. Cyprus         | 26. Poland         |
| 9. Czech Republic | 27. Portugal       |
| 10. Denmark       | 28. Romania        |
| 11. Estonia       | 29. Singapore      |
| 12. Finland       | 30. Slovakia       |
| 13. France        | 31. Slovenia       |
| 14. Germany       | 32. South Korea    |
| 15. Greece        | 33. Spain          |
| 16. Hong Kong     | 34. Sweden         |
| 17. Hungary       | 35. United Kingdom |
| 18. Ireland       |                    |

A table detailing the characteristics of each survey can be found in Appendix A.

## **II. Summary of General Survey Characteristics**

### **Achieved Sample Size**

One of the most notable differences between the United States and the other countries examined was that the United States was the only country to use two independent samples to collect expenditure data. There was a large range in the achieved sample sizes countries used to get the required information for their stakeholders. The United States obtained the largest number of completed surveys aside from Germany. This was in part due to the United States' unique use of two independent samples to collect expenditure data. Using samples of approximately 60,000 addresses for the interview survey and 12,000 addresses for the diary survey, the CE obtained 35,843 completed interviews and 14,599 one-week diaries in 2010. Germany, with a gross sample size of 81,530, obtained 55,110 usable diaries in 2008, but Germany administered its survey every five years, used a quota sampling method and collected the data using four different components. In Denmark, Norway, Slovenia, and Sweden, data were aggregated across multiple years. Thus, Denmark had the smallest annual achieved sample size, 858, in 2010.

### **Data Collection Method**

All of the countries except South Korea used at least two instruments for collecting the expenditure data (for example, an interview/questionnaire and a separate diary); South Korea collected information using diaries only. Even though most surveys used these two collection methods, they varied in format. Some countries used individual diaries in addition to household diaries. In addition to data collected from interviews and diaries, some countries collected data directly from registries. Notable format differences are presented in Section III.

### **Reference Period**

For most of the countries, the reference period for an interview survey was either 1, 3, or 12 months. Almost all countries used a 14-day reporting period for a diary survey. The few exceptions included diary survey data collected over a period of 7 days, 1 month, or 2 months.

### **Response Rates**

Response rates among the surveys varied considerably from as low as 18 percent in Luxembourg to as high as 89 percent in Cyprus. The average response rate, across the 33 surveys for which information was available, was 60 percent and the median was 61 percent.

## **III. Notable Design Features**

### **Individual Diaries**

A number of countries' surveys collected expenditure information from each member of the household over a certain age, with that age varying across countries. Countries that used individual diaries included: Cyprus, France, Greece, Hong Kong, Ireland, Latvia, Malta, the Netherlands, Norway, Portugal, Slovenia, Spain and the United Kingdom. There were variations in how expenditure information was collected. Some countries involved the younger household members in data collection; the United Kingdom provided diaries to children aged 7 to 15, and Portugal gave diaries to children as young as 10 years-old, provided parental consent was given. However, the most common minimum age at which individuals were asked to participate was 15 years old (in Cyprus, the Netherlands, Norway and Portugal). Malta provided three diaries per households, and Latvia provided diaries for those who were temporarily absent from the household as well as youth.

Differences existed in the amount of diary information that a household needed to provide to be considered a cooperating household. Spain did not require that all household members fill out the one-week personal diaries, but did require that the main two-week household diary collecting common household purchases be completed. Information from the Spanish survey indicated that about 75 percent of cooperating households filled out all diaries, with imputation used for the remaining household members. Ireland required that all individual diaries be returned in order to classify a household as completing the survey. In Ireland, only 1.2 percent of the households that provided interview information in 2010 did not complete a single diary, leading them to be re-classified as refusals. France also required completion of all diaries in order for a case to be classified as a complete.

### **Use of Administrative Records**

A number of European countries maintained population registries which were used to assist in data collection. Scandinavian countries made use of administrative sources in their household budget surveys, with income and education data taken from the registries in Norway and Finland, and income, property tax, and taxable benefits information taken in Sweden. The Netherlands took income and housing cost data from administrative records, when available. The Netherlands also used demographic data from their population registry to carry out non-response adjustments. Canada and Denmark also collected information on household members' incomes from administrative data files.

### **Incentives**

Several of the countries examined provided incentives – whether monetary or non-monetary – in return for a household's participation in their budget surveys. There was no standard practice regarding the type or amount of incentive provided. These countries included: Austria, Belgium, Bulgaria, Denmark, Estonia, Germany, Hong Kong, Ireland, Luxembourg, Malta, the Netherlands, Slovakia, South Korea, Spain, and the United Kingdom. Most incentives were structured at the household level, with the exception of Ireland and the United Kingdom, where incentives were given to each member who completed an individual diary. Ireland did not withhold incentives if field interviewers verified that a returned diary with no expenditures recorded reflected that persons' actual lack of spending. Belgium, while not making use of individual diaries, did tailor incentive amounts to the size of the household (giving up to 124€ for households with six or more members). In Spain the 2006 survey redesign involved introduction of a 30€ voucher starting in January of that year (analysis indicated this did not bias the income composition of the respondent sample), while Lithuania ceased providing incentives (worth approximately \$6) after 2008. South Korea offered households the option to choose between three different types of surveys, each with a different incentive. A \$10 incentive was provided for a paper diary, \$40 for an e-diary (a web version of the diary), and \$50 for an e-diary that was connected to their credit accounts or bank records. Among non-monetary incentives offered, Estonia allowed respondents to request feedback on their households' aggregate expenditure categories, a feature requested by 20 percent of responding households. Denmark provided households with a gift and entry into a lottery.

### **Technology**

Belgium, South Korea, and the Netherlands, redesigned their surveys to include website data collection. Belgium's Household Budget Survey (HBS) initially planned to provide tablets with an installed Blaise application for interviewers to collect household data. However, the amount of technical support staff available to respond to problems with the tablets was judged to be insufficient, leading them to postpone the introduction of tablets until the 2014 survey. The Belgian HBS did move forward with a website component in their 2012 redesign, allowing respondents the option to record expenditure information online or by paper. It indicated that approximately 15 percent of households decided to use the website for recording expenditures. South Korea provided households the option to complete an e-diary and encouraged them to keep the e-diary by offering a higher incentive than if they

completed a paper diary. A third option which offered an even higher incentive was to use an e-diary that was connected to their credit accounts and bank records.

The Netherlands' expenditure survey, *Budgetonderzoek* (BO), moved entirely to online data collection in an effort to save costs. In adopting a website for data collection, the survey was able to take advantage of the Netherlands' high rate of Internet penetration (with 94 percent of the population reporting access, and 80 percent having a broad-band connection). The website contained instructional videos assisting respondents with the multiple online questionnaires and the downloadable diary. Aspects of monitoring were built into the survey. Respondents could enter their email address or telephone number in the questionnaire, allowing them to be contacted by survey staff. The website also contained coding tools and automated checks for common mistakes. Although response rates to the pilot test of the website survey were reportedly low, of those willing to respond, 78 percent expressed an inclination to participate in a second round. In terms of measurement error, pilot tests indicated improved reporting for small purchases with no effect on the reporting of larger purchases.

In the new design, one household member reported for the household; there was some indication of under-reporting of expenditures for other household members (e.g., a reduction in the reporting of entertainment expenses was noted for households with older children). The BO plans to research the use of individual website accounts to allow for greater privacy in expenditure reporting, as well as the use of Smart Phones to take photos of receipts. Although response rates to the BO remained low, the redesigned survey resulted in noticeable cost savings.

The Singapore Household Expenditure Survey did not utilize a web diary but interviewers used personal digital assistants (PDAs) in place of hardcopy survey forms to directly record expenditure information. Additionally, Germany's Sample Survey of Income and Expenditure (EVS) collected housing and socio-demographic information online in some parts of the country.

### **Other Survey Features**

Some countries involved different data collection requirements for different parts of their sample. The German EVS had households provide income and expenditure information for a three month period. Every fifth household in the sample recorded expenditures on food, beverages, and tobacco for a one-month period in a 'detailed log book.' In Canada's Survey of Household Spending (SHS), only a subsample of households were asked to report their expenditures in the diary due to budget constraints.

Expenditure surveys often allowed households to provide receipts as part of the data collection process. The Canadian SHS offered respondents the option to provide receipts in order to reduce burden. Sweden allowed households to send in receipts instead of reporting information in the diary, which it credited as having reduced the rate of item non-response. Estonia's HBS also gave responding households leeway in how to report expenditure information. In 2011, in the 80 percent of households for which information was available, 57 percent of households provided a mix of receipts and diary entries, 27 percent provided only receipts, and 16 percent only filled in the diary. Allowing submission of receipts does risk the problem of collecting receipts that contain ambiguous or limited product information. The Estonian HBS found that 3-to-5 percent of receipts did not provide sufficient information about the product to allow proper classification, necessitating imputation. The Irish HBS sought to address this problem by requesting households to annotate receipts with sufficient detail to categorize purchases. For purchased items, respondents were asked to write in, if not already noted, the weight or volume of the food purchase, and note whether the item was bought online.

Countries have been modernizing their survey designs, seeking ways to minimize the burden surveys place on respondents. In Estonia, the 2010 redesign was motivated by a response rate which fell from 65 percent in 2000 to less than 50 percent in 2007. In order to address non-response, burden was limited by consolidating the HBS to only

one household questionnaire and one diary, cutting the diary reporting period in half to two weeks, and removing income questions which were being collected in another survey. In 2010, Estonia's HBS also added some retrospective questions about larger purchases to the household questionnaire. Unfortunately, following the revisions, the response rate remained low, with 42 percent completing both the interview and diary in 2011, up only 4 percent from the prior year. The French Family Budget Survey (BDF) is a mandatory survey carried out every five years. As in Estonia, efforts were made to reduce the amount of data collected from respondents in the redesigned 2010-11 BDF survey. The number of interviews was reduced from three to two (each lasting approximately one hour), and the diary reporting period was cut in half to one week. Subsequent to the redesign, response rates to the BDF returned to their 2000 levels (above 75 percent) after falling below 70 percent in 2005. Spain's Household Budget Survey (EPF) was unique in that, unlike many European budget surveys, it involved a second wave of data collection. The redesign of the EPF occurred in 2006, doubling the amount of reporting required for the diary to two weeks, while reducing the number of questions asked in the interview. The EPF observed steady response rates following these changes with a response rate of 71 percent in 2010, though analysis revealed underreporting in expenditure reports during the second week of data collection.

#### **IV. Conclusion**

Information on design characteristics of other consumer expenditure survey programs is valuable in allowing the United States CE program to evaluate best practices in terms of general survey characteristics as well as notable design features, and determine whether they hold promise for improving the redesign of the CE. The CE shares similar data collection methods and reference periods with many of the other surveys, but stands out as being the only survey program to use independent samples for each instrument.

In terms of notable design features, the only feature currently shared by the CE and the other surveys is encouraging respondents to keep records or receipts to aid recall. However, the CE is considering many other design elements that are already employed by other survey programs, including incentives, individual diaries, and a web diary. In evaluating and determining which elements to investigate for use in the CE redesign, it would be helpful to follow-up with representatives from specific survey programs that have those elements in their surveys.

Based on the information gathered, the following is a summary of recommended action for investigating potential design elements for the CE.

1. Sample Size – Evaluate the need for two separate samples.
2. Data Collection Method – Consider supplementing respondent-collected data with administrative data or data on expenditures collected by other surveys to reduce respondent burden. Although this has the potential to reduce the amount of data collected directly from respondents, some issues to consider with this approach would be the ability to gain both respondent consent and access to information held by other data providers, and the need for the other data to be in a compatible format.
3. Individual Diaries – Many countries use individual diaries (i.e., Cyprus, France, Greece, Hong Kong, Ireland, Latvia, Malta, the Netherlands, Norway, Portugal, Slovenia, Spain and the United Kingdom). Consider speaking with representatives from those survey programs to learn more about their use of individual diaries. In particular, follow up with other countries about their definitions for what constitutes a “complete” household interview. For example, does receiving 50% of completed individual diaries result in a “complete” household interview, or is some other threshold used?
4. Incentives – The CE is exploring the use of incentives, and should speak with representatives from the following survey programs to learn more about their use of incentives: Austria, Belgium, Bulgaria, Denmark, Estonia, Germany, Hong Kong, Ireland, Luxembourg, Malta, the Netherlands, Slovakia, South Korea, Spain, and the United Kingdom. Of special interest is Estonia's offer to provide a summary of a family's aggregate expenditures to participating households as a non-monetary incentive. This is an idea that has been suggested for CE and perhaps worth following-up on with

Estonian representatives. In addition, South Korea's use of a higher incentive for e-diaries connected to respondent bank and credit card accounts is a very interesting idea and something to investigate.

5. Web Diary and Technology – Review screen shots of the web diary used by Belgium, South Korea, and the Netherlands to extract any useful design elements. Consider speaking with representatives from those countries to obtain recommendations and learn about problems encountered. Obtain more detailed information from the Netherlands about other benefits of using a web diary, such as instructional videos, monitoring aspects, coding tools and automated checks for common mistakes. The Netherlands mentioned their planned research into the use of Smart Phones to take photos of receipts, which is also of special interest to CE.
6. Multi-mode – South Korea offers households different mode options for reporting expenditure data. Consider speaking with them about their experience with the mode options as CE has contemplated all of the options at some point (i.e., paper diary, web diary, and a collection method that connects with respondent's credit and bank accounts).
7. Records – CE has conducted a number of research projects related to record use. Consider speaking with Canada, Estonia, and Ireland about their experience with allowing respondents to submit their records/receipts in production.

## Appendix A. Table of Countries' Expenditure Survey Characteristics

Country and Survey	Notable Design Features	Achieved Sample Size (year)	Response Rate (%)	Data Collection Method	Reference Period
<b>United States</b> Consumer Expenditure Survey (CE)	Respondents are encouraged to keep records/receipts to aid recall.	Interview: 35,843 (2010)	Interview: 73.4	Household Interview (CAPI)	3 months
	Interview: An accordion file is sometimes given to respondents to store/organize receipts.	Diary: 14,599 (2010)	Diary: 71.5	Household Diary (Paper)	14 days
	Diary: A pocket is included on the inside of the back cover for respondents to store receipts.  <a href="http://bls.gov/cex/">http://bls.gov/cex/</a>				
<b>Australia</b> Household Expenditure Survey (HES)	The HES sample of 6,957 households is a subsample of the Survey of Income and Housing (SIH) sample of 11,361 households.  <a href="http://www.abs.gov.au/ausstats/abs@.nsf/mf/6530.0/">http://www.abs.gov.au/ausstats/abs@.nsf/mf/6530.0/</a>	6,957 (2009-10)	75	Household Interview (CAPI)	Not reported
				Individual Diary (Paper)	14 days
<b>Austria</b> Household Budget Survey (HBS)	The Austrian HBS is a rotating panel survey, providing a detailed description of the expenditures of private households by demographic and socio-economic characteristics.  A two-week detailed household diary is provided. Separate in-person interviews are conducted with the same household to collect housing and demographic information for each household member. Response is compensated with a 50€ voucher.  <a href="http://www.statistik.at/web_en/statistics/social_statistics/consuption_expenditures">http://www.statistik.at/web_en/statistics/social_statistics/consuption_expenditures</a>	6,534 (2009-10)	38.1	Household Interview (CAPI)	1 month, and 12 months
				Household Diary (Paper)	14 days

Country and Survey	Notable Design Features	Achieved Sample Size (year)	Response Rate (%)	Data Collection Method	Reference Period
<b>Belgium</b> Household Budget Survey	<p>Involves an in-person household questionnaire filled out with the interviewer, with individual questions to record demographic and income information. A household diary is used to record starting and ending assets, income and daily expenses over a one-month period. Receipts are not collected and there is no panel component.</p> <p>Post-completion incentives range from 74€ to 124€ depending on household size.</p> <p>(Starting in 2012, the survey is conducted biennially but with a larger sample size. Households complete a shorter survey, and respondents can record expenditures via paper or web).</p> <p><a href="http://statbel.fgov.be/fr/statistiques/collecte_donnees/enquetes/budget_des_menages">http://statbel.fgov.be/fr/statistiques/collecte_donnees/enquetes/budget_des_menages</a></p>	3,578 (2010)	77.6	Household Interview (Paper)	4 months
				Household Diary (Paper)	1 month
<b>Bulgaria</b> Household Budget Survey (HBS)	<p>The Bulgarian HBS involves a four-wave rotating panel design, with households interviewed one month per quarter. Interviewer visits occur twice per month, providing two diaries.</p> <p>Respondents record (by proxy) prior two months of expenses for non-food items and income. Incentives offered (in 2001). Survey allows substitution of households to bolster response.</p> <p><a href="http://www.nsi.bg/otrasal-metodologiaen.php?otr=44">http://www.nsi.bg/otrasal-metodologiaen.php?otr=44</a></p>	2,870 (2005)	65.1	Household Interview (Paper)	Not reported
				Household Diary	15 days



Country and Survey	Notable Design Features	Achieved Sample Size (year)	Response Rate (%)	Data Collection Method	Reference Period
<b>Canada</b> Survey of Household Spending (SHS)	<p>To reduce burden, respondents are given the option to provide their receipts. Due to budget constraints, only a sub-sample of households are asked to report their expenditures in the diary.</p> <p>Respondents are categorized into three groups: those who provided receipts only, those who only provided transcribed expenditures and those who combined the two modes of reporting.</p> <p>Last payment approach and recall periods of one, three, or twelve months for less frequent expenditures are used.</p> <p><a href="http://www.statcan.gc.ca/imdb-bmdi/3508-eng.htm">http://www.statcan.gc.ca/imdb-bmdi/3508-eng.htm</a></p>	13,075 (2010)	<p>Interview: 67</p> <p>Diary: 46</p>	Household Interview (CAPI)	1 month, 3 months, and 12 months
				Household Diary (Paper)	14 days
<b>Croatia</b> Household Budget Survey	<p>Croatia's survey does not involve a panel component. Interviewers collect information on income, earnings and most household expenses through in-person interviews.</p> <p><a href="http://www.dzs.hr/default_e.htm">http://www.dzs.hr/default_e.htm</a></p>	3,461 (2010)	61	Household Interview	Not reported
				Household Diary	14 days
<b>Cyprus</b> Household Budget Survey	<p>Conducted every five years. Interviews are conducted using laptops. Diaries are completed by all household members at least 15 years old. No incentives are provided.</p> <p><a href="http://www.moi.gov.cy/moi/pio/pio.nsf/6645bc8e70e73e2cc2257076004d01c1/dd8a213e2dc1ff0ac22574f3003bbeef?OpenDocument">http://www.moi.gov.cy/moi/pio/pio.nsf/6645bc8e70e73e2cc2257076004d01c1/dd8a213e2dc1ff0ac22574f3003bbeef?OpenDocument</a></p>	2,990 (2005)	88.9	Interview (CAPI)	1, 2, 3 and 12 months
				Individual Diary	14 days

Country and Survey	Notable Design Features	Achieved Sample Size (year)	Response Rate (%)	Data Collection Method	Reference Period
<b>Czech Republic</b> Family Budget Statistics	Czech Republic uses a quota sampling method. Households keep detailed food and expenditure information for two months, and only report total expenditures in the remaining months of the year. Income and expenditure is reported using a monthly reporting period.  <a href="http://www.czso.cz/eng/edicniplan.nsf/aktual/ep-3">http://www.czso.cz/eng/edicniplan.nsf/aktual/ep-3</a>	3,000 (2011)	Unknown	Household interview	Not reported
				Household Diary	2 months
<b>Denmark</b> Household Budget Survey	Interviews are conducted using a laptop. Analysis of diary data has indicated higher reporting in the first week than in the second. Participating households receive a gift and entry into a lottery for participation.  <a href="http://www.dst.dk/en/Statistik/dokumentation/Declarations/household-budget-survey.aspx">http://www.dst.dk/en/Statistik/dokumentation/Declarations/household-budget-survey.aspx</a>	858 (2010)	38	Household Interview (CAPI)	1 year
		Data for a three-year period are aggregated into one sample of approximately 2,500 households.		Household Diary (Paper)	14 days
<b>Estonia</b> Household Budget Survey	A 2010 HBS redesign limited data collection to one household questionnaire and one diary, for which the reference period was cut in half to 2 weeks. Respondents are given the option of placing expenditure receipts in an envelope or recording those expenditures in the diary. Data for uncodable expenditure receipts is imputed. Participating households receive a pen for participation, as well as a feedback letter with aggregate expenditure data, if requested.  <a href="http://www.stat.ee/51932">http://www.stat.ee/51932</a>	2,816 (2010)	Interview and Diary: 42 (2011)	Household Interview (CAPI)	1 month, 12 months
				Household Diary (Paper)	14 days

Country and Survey	Notable Design Features	Achieved Sample Size (year)	Response Rate (%)	Data Collection Method	Reference Period
<b>Finland</b> Household Budget Survey	Data is collected via interview (for durable goods, housing and liabilities), diary (with receipts collected), and administrative sources (for income and education)  <a href="http://www.stat.fi/meta/til/ktutk_en.html">http://www.stat.fi/meta/til/ktutk_en.html</a>	4,007 (2005)	52.6	Household Interview (CATI)	3 months, 12 months
				Household Diary (Paper)	14 days
<b>France</b> Family Budget (BDF)	France's BDF involves two interviews lasting approximately one-hour each, collecting information for broad expenditure groupings (housing, services, insurance, taxes and gifts). The same households are given individual diaries for household members age 14 and older to record expenditures or attach receipts.  <a href="http://www.insee.fr/fr/methodes/default.asp?page=sources/sou-eng-bdf-2006.htm">http://www.insee.fr/fr/methodes/default.asp?page=sources/sou-eng-bdf-2006.htm</a>	~11,000 (Mainland and overseas, 2010-11)	Interview and diary: 75 (mainland) and 82 (overseas)	Household Interview (CAPI)	1 to 12 months depending on question
				Household Diary (Paper)	7 days
				Individual Diary (Paper)	7 days
<b>Germany</b> Sample Survey of Income and Expenditure (EVS)	The EVS is administered every five years, using a quota sampling method. Four components are used: income and expenditures are recorded in a diary for three months, general information (housing and socio-demographics) is collected online in some areas, money and asset information is collected through a questionnaire, and food and beverage expenditures are recorded in a "detailed log book" by a subsample for one month. Households are given a stipend for participation.  <a href="https://www.destatis.de/EN/Meta/abisz/Einkommens_Verbrauchsstichprobe_e.html">https://www.destatis.de/EN/Meta/abisz/Einkommens_Verbrauchsstichprobe_e.html</a>	55,110 (2008)	Unknown	Questionnaire (online in some areas)	Not reported
				Household Diary (Paper)	3 months

Country and Survey	Notable Design Features	Achieved Sample Size (year)	Response Rate (%)	Data Collection Method	Reference Period
<b>Greece</b> Family Budget Survey (HBS)	Daily visits by the interviewer are used to prompt reporting to the diary (as of 1999).  <a href="http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p_param=A0801">http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p_param=A0801</a>	6,555 (target, 2009)	60.3 (2005)	Household Questionnaire	1 to 12 months depending on question
				Adult Individual Diary (Paper)	14 days (questions reference last 12 months)
				Individual Diary (Paper)	14 days
<b>Hong Kong</b> Household Expenditure Survey (HES)	The HES is conducted once every five years, for a one-year period which is broken down into 26 cycles (each comprising two weeks). Households supplying required information were given an honorarium of \$150HKD.  Consists of 3 parts: <ol style="list-style-type: none"> <li>1. Household Schedule – collects housing conditions and household characteristics</li> <li>2. Expenditure Diary – individuals aged 12 and over each kept the diary</li> <li>3. Questionnaire on Infrequently Purchased Items</li> </ol> A Supplemental Questionnaire is specially designed for non-respondents for analysis of non-response bias  <a href="http://www.censtatd.gov.hk/major_projects/2009_10_household_expenditure_survey/">http://www.censtatd.gov.hk/major_projects/2009_10_household_expenditure_survey/</a>	5,957 (2009-10)	77	Household Schedule (Paper)	Not reported
				Individual Diary (Paper)	14 days
				Questionnaire on Infrequently Purchased Items (Paper)	3 months
<b>Hungary</b> Household Budget Survey (HBS)	Income and expenditures are recorded by diary for two 15-day periods. A retrospective interview is conducted at the end of the year.  <a href="http://www.ksh.hu/income_and_living_conditions">http://www.ksh.hu/income_and_living_conditions</a>	9,058 (2005)	50.3	Household Interview (CAPI)	12 months
				Household Diary (Paper)	1 month

Country and Survey	Notable Design Features	Achieved Sample Size (year)	Response Rate (%)	Data Collection Method	Reference Period
Ireland Household Budget Survey (HBS)	Ireland's HBS uses substitute households to obtain a quota of cooperating households. Each person age 16 and older is interviewed. Household members age 16 and older are given individual diaries to record expenses for two one-week periods. Respondents are asked to annotate information provided on receipts to ensure it is comprehensive. Respondents receive a 40€ gift for completing the questionnaires and diary.  <a href="http://www.cso.ie/en/releasesandpublications/housingandhouseholds/">http://www.cso.ie/en/releasesandpublications/housingandhouseholds/</a>	5,891 (2010)	40	Household Interview (CAPI)	1 to 12 months depending on question
				Household Diary (Paper)	14 days
				Individual Diary (Paper)	14 days
Italy Household Budget Survey	Households complete two one-week diaries. Household interviews for the 'Family expenditure summary' involve collection of demographic and large-scale purchases.  <a href="http://www.istat.it/it/archivio/66174">http://www.istat.it/it/archivio/66174</a>	24,107 (2005)	75.2	Household Interview	1 month, 3 months, 12 months
				Household Diary (Paper)	14 days
Latvia Household Budget Survey (HBS)	Interviewers conduct two interviews, a preliminary interview (averaging 32 minutes) to collect demographic information and explain the diary and a Final interview (averaging 35 minutes) to obtain income information. A 'Pocket Individual Diary' is provided for those temporarily absent from the household and for youth.  <a href="http://www.csb.gov.lv/en/notikumi/household-consumption-expenditure-2010-32044.html">http://www.csb.gov.lv/en/notikumi/household-consumption-expenditure-2010-32044.html</a>	3,798 (2010)	43.1	Household Interview (Paper)	1 month, 12 months
				Household Diary (Paper)	14 days
				Individual Diary (Paper)	14 days

<b>Lithuania</b> Household Budget Survey	In 2008, half of sampled households completed the diary in the first half of the month with the rest completing it in the second half. Households were given a monetary gift of 15.4 LTL (approximately \$6) for participation. In 2012 the HBS questionnaire was simplified and households are no longer remunerated for participating.  <a href="http://www.stat.gov.lt/en/news/view/?id=7418">http://www.stat.gov.lt/en/news/view/?id=7418</a>	6,103 (2008)	55.3	Household Interview (Paper)	1 month, 2 months, 12 months
				Household Diary (Paper)	14 days
<b>Luxembourg</b> Family Budget Survey (BDM)	At the first interviewer visit, the interviewer collects socio-demographic and housing information and provides the diary. Respondents are asked to prepare receipts to assist their reporting at the follow-up visit, where information about income is collected. Participating households are reimbursed 85€. Non-contact is a significant proportion (47 percent) of the high non-response rate, for which solutions are being considered.  <a href="http://www.statistiques.public.lu/fr/methodologie/methodes/conditions-sociales/Cond-vie/budget-menages/index.html">http://www.statistiques.public.lu/fr/methodologie/methodes/conditions-sociales/Cond-vie/budget-menages/index.html</a>	3,846 (2008-10)	18	Household Interview	3, 6 and 12 months
				Household Diary (Paper)	15 days
<b>Malta</b> Household Budgetary Survey	Interviewers carry out several visits to recruited households to encourage recording of expenditures. A questionnaire collects income and major expenditure information, typically with a 12-month reference period. Households are also given a total of three diaries to complete for the 2-week period. Responding households receive a monetary stipend for participating.  <a href="http://www.nso.gov.mt/site/page.aspx?pageid=204">http://www.nso.gov.mt/site/page.aspx?pageid=204</a>	3,732 (2008)	57.1	Household Interview (Paper)	1 month, 3 months, 12 months
				Household Diary (Paper)	14 days
				Individual Diary (Paper)	14 days

<b>Netherlands</b> Household Budget Survey (BO)	In 2012, the design of the BO was modernized to collect data by website. One household member reports data for the household for four weeks (with expenses below 20€ recorded for one of those weeks), then collection occurs again 3 months later (when infrequent purchase data is also collected). Response is encouraged through helpdesk support and a 30€ incentive. To compensate for low response rates, administrative data is used for non-response adjustment.  <a href="http://www.cbs.nl/en-GB/menu/themas/inkomen-bestedingen/nieuws/default.htm">http://www.cbs.nl/en-GB/menu/themas/inkomen-bestedingen/nieuws/default.htm</a>	6,000 (2005-10)	25	Household Questionnaire (website)	Not reported
				Household Diary (website)	4 weeks (1 week for small purchases)
<b>Norway</b> The Survey of Consumer Expenditure	Two face-to-face interviews take place before and after diary placement. Individual diaries are provided to household members over 15 years old. Since 1998, Norway has used tax registries to collect information on household income and education.  <a href="http://www.ssb.no/forbruk_en/">http://www.ssb.no/forbruk_en/</a>	3,420* (2007-09)  *represents aggregated sample of households over a 3-year period	50	Household Interview (CAPI)	Not reported
				Household Diary (Paper)	14 days
				Individual Diary (Paper)	14 days
<b>Poland</b> Household Budget Survey	Interviewers visit at least four times per month. Visits are to ensure households correctly record expenditures in the diary and to conduct end-of-month interview collecting housing and regular purchase information. Households are also contacted quarterly to collect rarer expenditures. Survey allows substitution of households to bolster response (response rate represents the initial households contacted prior to substitution).  <a href="http://www.stat.gov.pl/gus/5840_3467_ENG_HTML.htm">http://www.stat.gov.pl/gus/5840_3467_ENG_HTML.htm</a>	37,375 (2011)	43.7	Household Interview	Not reported
				Individual Diary (Paper)	1 month

<b>Portugal</b> Household Budget Survey (IDEF)	Interviewers make four to six visits to recruit and collect data. Diaries are provided to individuals aged 15 and older (or 10 and older with parental consent), and a household diary is given to the person most knowledgeable about household purchases.  <a href="http://www.ine.pt/xportal/xmain?xpid=INE&amp;xpgid=ine_publicacoes&amp;PUBLICACOESpub_boui=26973702&amp;PUBLICACOESmodo=2&amp;lang=en">http://www.ine.pt/xportal/xmain?xpid=INE&amp;xpgid=ine_publicacoes&amp;PUBLICACOESpub_boui=26973702&amp;PUBLICACOESmodo=2&amp;lang=en</a>	10,403 (2005-06)	65	Household Interview (CAPI and Paper)	1 month, 3 months, 12 months
				Household Diary	14 days
				Individual Diary (Paper)	14 days
<b>Romania</b> Family Budgets Survey (ABF)	Interviewers make at least three visits during the month of expenditure data collection. In cases where households cannot complete the diary, interviewers collect the information in person or through receipts. Questionnaires collect data for all household members.  <a href="http://statistici.insse.ro/shop/index.jsp?page=tempo3&amp;lang=en&amp;ind=BUF115I">http://statistici.insse.ro/shop/index.jsp?page=tempo3&amp;lang=en&amp;ind=BUF115I</a>	37,440 (target, 2011)	81.6	Household Questionnaire (Paper)	1 month
				Household Diary (Paper)	1 month
<b>Singapore</b> Household Expenditure Survey (HES)	PDAs are used in place of hardcopy survey forms to capture remaining information required.  Reference period varies based on question (1 month, 3 months, and 12 months).  <a href="http://www.singstat.gov.sg/stats/themes/people/house.html">http://www.singstat.gov.sg/stats/themes/people/house.html</a>	7,545 (2007-08)	84.0	Household Interview (CAPI)	1 month, 3 months, and 12 months
				Household Diary (Paper)	14 days
				Individual Diary (Paper)	14 days



<b>Slovakia</b> Household Budget Survey (HBS)	Households are interviewed with retrospective data covering the prior 12 months collected. One household member records expenditures for two months, providing aggregated expenditure information the first month and detailed information the second month. Responding households are paid 43.15€ for completing the HBS.  <a href="http://portal.statistics.sk/showdoc.do?docid=3025">http://portal.statistics.sk/showdoc.do?docid=3025</a>	4,718 (2008)	74.6	Household Interview	12 months
				Household Diary (Paper)	2 months
<b>Slovenia</b> Household Budget Survey (APG)	Slovenia's APG combines data collected during a three-year period to produce estimates for the middle year (e.g., 2010 estimates result from 2009-11 data collection).  <a href="http://www.stat.si/eng/novica_prikazi.aspx?id=4867">http://www.stat.si/eng/novica_prikazi.aspx?id=4867</a>	3,725* (2004)  *represents aggregated sample of households over a 3-year (2003-05) period	70.7	Household Interview	Not reported
				Individual Diary (Paper)	14 days
<b>South Korea</b> Household Income and Expenditure Survey (HIES)	An Interviewer visits a household during each month for diary distribution, diary collection, and weekly guidance. Households participate for three years before being rotated out.  Monthly cash incentives are provided: <ul style="list-style-type: none"> <li>• \$10.00 for regular paper diary</li> <li>• \$40.00 for e-diary</li> <li>• \$50.00 for B-case who have their e-diary connected to their credit accounts or bank records</li> </ul> <a href="http://www.kostat.go.kr/portal/english/surveyOutlines/4/1/index.static">http://www.kostat.go.kr/portal/english/surveyOutlines/4/1/index.static</a>	11,200 (target, 2006)	80	Household Diary (Paper) 60 percent	1 month
				Household E-Diary (Web)	1 month
				Household B-Case (Web) Diary connected to credit/bank record	1 month

<b>Spain</b> Household Budget Survey (EPF)	Spain's EPF underwent a redesign in 2006. Changes included increasing diary collection from one to two weeks, reducing the number of questions in the interview, and reducing the sample size by 25 percent. Households remain in the sample two consecutive years. One person fills out the household diary for two weeks, while other household members age 14 and older complete individual diaries for one week. Analysis of household diary data has indicated under-reporting in the second week. Participating households are reimbursed with a 30€ voucher. The EPF involves a re-interview process for a subsample of households to ensure good data quality.	16,299 (2010)	70.8	Household Interview (Paper)	1 month, 3 months, 12 months
				Household Diary (Paper)	14 days
				Individual Diary (Paper)	7 days
				<a href="http://www.ine.es/jaxi/menu.do?type=pcaxis&amp;path=/t25/p458&amp;file=inebase">http://www.ine.es/jaxi/menu.do?type=pcaxis&amp;path=/t25/p458&amp;file=inebase</a>	
<b>Sweden</b> Household Budget Survey (HBS)	HBS data is collected via in-person visit, telephone, diaries and the use of administrative records. Households can choose to send in receipts instead of noting spending in the diary. Property tax, income and taxable benefits are collected from administrative sources.	4,000 (target, 2009)	51	Household Interview (CATI)	12 months
				Individual Diary (Paper)	14 days
				<a href="http://www.scb.se/Pages/Product_22952.aspx">http://www.scb.se/Pages/Product_22952.aspx</a>	
<b>United Kingdom</b> Living Costs and Food Survey (LCF)	The LCF allows household interviews to be carried out by proxy (representing 21 percent of responding households in 2009).  Each individual aged 16 or over who keeps a diary (and whose income information is collected) is paid £10, as a token of appreciation. Respondents aged 7-15 who keep a Children's diary are given a £5 payment.	5,320 (2009)	50.4 (Great Britain)	Household Interview (CAPI)	3 months, 12 months
				Individual and Children's' Diary (Paper)	14 days
				<a href="http://www.esds.ac.uk/findingData/snDescription.asp?sn=6945">http://www.esds.ac.uk/findingData/snDescription.asp?sn=6945</a>	