

Appendix A

About the Consumer Expenditure Survey

History

The Consumer Expenditure Survey (CEX) is an ongoing study of the day-to-day spending of American households. In taking the survey, government interviewers collect spending data on products and services as well as the amount and sources of household income, changes in savings and debt, and demographic and economic characteristics of household members. The Bureau of the Census collects data for the CEX under contract with the Bureau of Labor Statistics, which is responsible for analysis and release of the survey data.

Since the late 19th century, the federal government has conducted expenditure surveys about every ten years. Although the results have been used for a variety of purposes, their primary application is to track consumer prices. In 1980, the CEX became a continuous survey with annual release of data (with a lag time of about two years between data collection and release). The survey is used to update prices for the market basket of products and services used in calculating the Consumer Price Index.

Description of the Consumer Expenditure Survey

The CEX comprises two surveys: an interview survey and a diary survey. In the interview portion of the survey, respondents are asked each quarter for five consecutive quarters to report their expenditures for the previous three months. The purchase of big-ticket items, such as houses, cars, and major appliances, and recurring expenses such as insurance premiums, utility payments, and rent are recorded by the interview survey. The interview component covers about 95 percent of all expenditures.

Expenditures on small, frequently purchased items are recorded during a two-week period by the diary survey. These detailed records include expenses for food and beverages purchased in grocery stores and at restaurants, as well as other items such as tobacco, housekeeping supplies, nonprescription drugs, and personal care products and services. The diary survey is intended to capture expenditures respondents are likely to forget or recall incorrectly over longer periods of time.

The average spending figures shown in this book are the integrated data from both components of the survey. Integrated data provide a more complete accounting of consumer expenditures than either component of the survey is designed to do alone.

Data collection and processing

Two separate, nationally representative samples are used for the interview and diary surveys. For the interview survey, about 7,500 consumer units are interviewed on a rotating panel basis each quarter for five consecutive quarters. Another 7,500 consumer units keep

weekly diaries of spending for two consecutive weeks. Data collection is carried out in 105 areas of the country.

The Bureau of Labor Statistics reviews, audits, and cleans the data, then weights them to reflect the number and characteristics of all U.S. consumer units. Like any sample survey, the CEX is subject to two major types of error. Nonsampling error occurs when respondents misinterpret questions or interviewers are inconsistent in the way they ask questions or record answers. Respondents may forget items, recall expenses incorrectly, or deliberately give wrong answers. A respondent may remember how much he or she spent at the grocery store but forget the items picked up at a local convenience store. Most surveys of alcohol consumption or spending on alcohol suffer from this type of underreporting, for example. Nonsampling error can also be caused by mistakes during the various stages of data processing and refinement.

Sampling error occurs when a sample does not accurately represent the population it is supposed to represent. This kind of error is present in every sample-based survey and is minimized by using a proper sampling procedure. Standard error tables documenting the extent of sampling error in the CEX are available from the Bureau of Labor Statistics at <http://www.bls.gov/cex/csxtnderror.htm>.

Although the CEX is the best source of information about the spending behavior of American households, it should be treated with caution because of the above problems. Comparisons with consumption data from other sources show that CEX data tend to underestimate expenditures except for rent, fuel, telephone service, furniture, transportation, and personal care services. Despite these problems, the data reveal important spending patterns by demographic segment that can be used to better understand consumer behavior.

The definition of consumer unit

The CEX uses consumer units as its sampling unit instead of household, which is the sampling unit used by the Census Bureau. The term “household” is used interchangeably with the term “consumer unit” in this book for convenience, although they are not exactly the same. Some households contain more than one consumer unit.

The Bureau of Labor Statistics defines consumer unit as either (1) members of a household who are related by blood, marriage, adoption, or other legal arrangements; (2) a person living alone or sharing a household with others or living as a roomer in a private home or lodging house or in permanent living quarters in a hotel or motel, but who is financially independent; or (3) two or more persons living together who pool their income to make joint expenditure decisions. The Bureau of Labor Statistics defines financial independence in terms of “the three major expense categories: housing, food, and other living expenses. To be considered financially independent, at least two of the three major expense categories have to be provided by the respondent.”

The Census Bureau uses household as its sampling unit in the decennial census and in the monthly Current Population Survey. The Census Bureau's household "consists of all persons who occupy a housing unit. A house, an apartment or other groups of rooms, or a single room is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters; that is, when the occupants do not live and eat with any other persons in the structure and there is direct access from the outside or through a common hall." The definition goes on to specify that "a household includes the related family members and all the unrelated persons, if any, such as lodgers, foster children, wards, or employees who share the housing unit. A person living alone in a housing unit or a group of unrelated persons sharing a housing unit as partners is also counted as a household. The count of households excludes group quarters."

Because there can be more than one consumer unit in a household, consumer units outnumber households by several million. Most of the excess consumer units are headed by young adults, under age 25.

For more information

If you want to learn more about the CEX, contact the specialists at the Bureau of Labor Statistics at (202) 691-6900, or visit the Consumer Expenditure Survey home page at <http://www.bls.gov/cex/>. The web site includes news releases, technical documentation, and current and historical summary CEX data. The average spending data for most of the individual products and services profiled in *Best Customers* are available from the BLS only by special request.