Using Consumer Expenditure Surveys Data in the Classroom: Teacher (Graduate and Undergraduate) and Student Perspectives

Geoffrey Paulin, Bureau of Labor Statistics

The Consumer Expenditure Surveys (CE) are the most detailed source of expenditure data collected directly from households by the Federal government. In addition, information on income, assets and liabilities, and demographics are collected from a large, nationally representative sample of consumers. The result is a unique and rich source of data of interest to researchers, educators, advocates, policymakers, and others in a variety of fields. Moreover, these data, both tabular and at the household level (i.e., microdata), are publicly available for free download.

For these reasons, the data have been used in the classroom and in more advanced student research assignments (e.g., for use in a thesis or dissertation) to teach methods in empirically evaluating consumer interests or how they are or may be affected by different factors (policy changes, economic conditions, etc.).

This session will feature at least one presentation from the following: professors who are using, or have used, CE data in graduate courses; graduate students currently using the data; and professors who use the data to teach undergraduates. Subject to availability, the session may also include professors who first learned of the data in their graduate careers, and how this knowledge launched or subsequently informed their careers. (Note: The total number of speakers is not expected to exceed four). The presenters will each provide a brief description of their topics, after which the floor will open to an exchange of ideas with the audience regarding how its members can use CE data for their own classroom assignments—whether they are the professor or the student. Regardless, the presenters at this session will include a senior member of staff from the CE program, and others not affiliated with the CE program. This mix is chosen both to provide attendees with an opportunity to initiate or renew contact with CE program staff for current and future questions and comments, and also to demonstrate the accessibility and usefulness of the data to researchers who are learning about CE data, particularly students.

Using CE Data in Graduate Instruction: The Professors Speak

In this section, professors will describe current or past uses of CE data in instructing graduate students in topics related to the consumer interest. These may include assignments using CE data for analysis, using results from CE data or articles written analyzing CE data to describe concepts, comparing CE data to results of other surveys, or other uses of CE data in the classroom.

Using CE Data: A Graduate Student's Perspective

This section will describe the use of CE data in classroom assignments from the current or former student's perspective. This includes a description of their use in a classroom assignment involving the replication of published research using CE data and may include a description of the use of the data in writing a Ph.D. dissertation. Subject to availability of the speaker, this section may also include, in addition to or instead of the dissertation speaker, a presentation from a former graduate student who used the data at that time on the relationship of this experience and subsequent career development.

Using CE Data in Undergraduate Instruction

This presentation will describe how the CE data were used in instructing undergraduates in an introductory economics course to learn concepts related to consumer welfare. In addition to learning theory, students completed homework assignments using the CE data to measure particular concepts related to these theories. For example, one measure of consumer welfare involves the share of income allocated to food purchases: the smaller the share, the greater the welfare. CE tabular data are ideal for

¹ Senior Economist, Division of Consumer Expenditure Surveys, 2 Massachusetts Avenue NE #3985, Bureau of Labor Statistics, Washington, D. C., 20212, USA. Phone: 202-691-5132. Email: paulin.geoffrey@bls.gov.

demonstrating and evaluating this measure, as the necessary data are readily available, and the computations are straightforward.

About the Data

The CE consists of two components: the Interview Survey and the Diary Survey. The Interview Survey collects detailed expenditure information in four consecutive quarterly visits to households. Each eligible household contains at least one consumer unit (similar to a family), from which a respondent is selected. In each case, respondents are asked to recall expenditures made by their consumer unit for a variety of goods and services over the last three months. In contrast, the Diary Survey collects information from participants for two consecutive weeks. On each day of the collection period, respondents document expenditures for the consumer unit. In addition, detailed information on demographics (age, family type and size, etc.), income, and, in the Interview Survey, assets and liabilities are collected.

Information on average annual spending for several categories of goods and services are arranged by characteristics demographics and income group) on the CE website. In addition to expenditure levels (i.e., average dollars spent per household), tables describing allocation of budgets (i.e., shares of total expenditures for which food, housing, and other items account) and other factors of interest are available. For consumer educators, advisors, or similar practitioners, tables are tools that are easily accessible—both in terms of obtaining and explaining contents—for use with their clients. For example, a consumer advisor might use the tables to compare the client's expenditure patterns to the average reported for consumers with similar characteristics to help identify areas of concern for that client. In addition, these data are useful for those who are interested in performing high-level analysis of descriptive statistics. In fact, there are sets of tables that include standard errors in addition to mean expenditures for those who are interested in pursuing basic hypothesis testing.

For researchers interested in completing in-depth or multivariate analysis, microdata are also publicly available. Included in the files are detailed expenditures for each household, as well as demographic and income information both at the household and individual member level. These data are also useful for analysts who are interested in descriptive statistics for demographic groups or categories for which tables are not currently produced.

The data from both surveys are integrated and published in standard tables, which are available on the Internet. At present, microdata files from each survey component collected in 1996 through 2016 are also available for free download from the Internet. Prior years are available for purchase on flash drives.