Consumer Expenditure Survey CNSTAT Panel Briefing

BLS Consumer Expenditure Survey Program Staff

February 8, 2011

Consumer Expenditure Survey
CNSTAT Briefing

<u>CE Overview 10:30 – 2:00</u>

- Official Charge to the Committee
- Background & Measurement Objectives
- CPI uses
- Survey design & Data Collection
- Sampling & Estimation
- Information Dissemination & Data Users

Consumer Expenditure Survey
CNSTAT Briefing

CE Redesign 2:00 – 5:00

- Measurement Error & Gemini
- Data Comparisons
- New Designs & Data Collection Technology
- Other Data Sources

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Consumer Expenditure Survey
CNSTAT Briefing

Speakers

- Michael Horrigan, Associate Commissioner, Office of Prices and Living Conditions
- Jay Ryan, Chief, Division of Consumer Expenditure Survey (DCES)
- Adam Safir, Chief, DCES, Branch of Research and Program Development
- Steve Henderson, Chief, DCES, Branch of Information and Analysis
- David Swanson, Chief, Branch of Consumer Expenditures (Division of Price Statistical Methods)
- Robert Cage, Chief, CPI, Section of Index Cost Weights
- Thesia Garner, Research Economist, Division of Price and Index Number Research

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CE Program Managers

[CE is one of four programs in the Office of Prices and Living Conditions, Managed by Associate Commissioner, Michael Horrigan]

Consumer Expenditure Surveys Program

- Jay Ryan, DCES Division Chief
  - Carolyn Pickering, Production Branch Chief
    - Meaghan Smith, Phase 2 Section Chief
    - Troy Olson, Phase 3 Section Chief
  - Adam Safir, Research Branch Chief
  - Steven Henderson, Information Branch Chief
    - John Rogers, Publications Section Chief
    - Nick Zwileneff, Processing Section Chief

- LaVern James, CEIS Division Chief
  - Manoj Talwar, Expenditures Branch Chief
  - Chro Muhammad, Publications Branch Chief

- David Swanson, SMD CE Branch Chief

Primary Interactions

Census Bureau

- Maria Reed, Census Field Branch Chief
- Richard Schwartz, Census DSD Section Chief

CPI

- Rob Cage, CPI Cost Weights Branch Chief

Survey Methods and Research

- John Eltinge, OSMR Associate Commissioner
- Vacant, PINR Division Chief

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Background

History of Consumer Expenditure Survey

1888-1891: 1st BLS expenditure survey

Done sporadically until early 1940s, then about every ten years

History of Consumer Expenditure Survey

1980: Continuing Consumer Expenditure Survey began

- Recognized need for a constant source of data on the economic condition of American consumers
- Allowed CPI to revise weights more often (initially a 3 year cycle then the current 2 year cycle with the sample expansion in 2000)
- Design based largely on 1972-73 survey

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Quick facts

Years as a continuous survey	31
Program budget in FY10	$43 million
CE staff at BLS	60 economists, statisticians, survey methodologists, systems analysts
Response rates	About 75% for both surveys
Interview addresses in sample	60,000 annually About 35,000 good interviews
Diary addresses in sample	13,000 annually About 14,000 good weekly diaries
Interview surveys by telephone	About 33%

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Goals of the CE

- To meet the need for timely and detailed information about the spending patterns of different types of households.

- To provide the basis for revising the expenditure weights for the Consumer Price Index (CPI) every two years.

Data Collection

- The U.S. Census Bureau collects CE data for the BLS using two different surveys with separate samples:
  - Interview Survey (quarterly, five interviews)
  - Diary Survey (two weekly diaries)

- Respondents in both surveys are asked to describe “all” of their spending. Business expenses and reimbursements are excluded.

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Scope / Coverage

- The CE is a nationwide survey designed to represent the U.S. civilian noninstitutionalized population.

- CE data is collected from consumer units (CUs) - people living at one address who share living expenses. In most cases, CUs are the same as households.

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Sampling

- The CE is a designed to represent all urban and rural areas in the U.S.
- Sample selection begins with the definition and selection of geographic areas called primary sampling units (PSUs; currently 91 PSUs in sample).
- Sample addresses are drawn from the 2000 Census.

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Stakeholders

- CPI
- Bureau of Economic Analysis (BEA)
- IRS
- Defense
- Census
- Other Federal Agencies
- State governments
- Businesses
- Researchers
- General Public

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Stakeholder Input

- CPI:
  - CE/CPI Group
  - CE production data review by CPI staff
  - Regular CPI input on questionnaire content
- User surveys & Data Users’ Forum
- Microdata users’ workshop
- Census Manufacturing and Construction
- BEA meetings
- Conferences and presentations

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Validation Studies

- CE/PCE (Personal Consumption Expenditures) comparisons published regularly
- Medical Expenditures Panel Survey (MEPS)
- Current Population Survey (CPS): income comparisons
- Residential Energy Consumption Survey (RECS)

http://www.bls.gov/cex/cecomparison.htm

Interview & Diary Improvements

- CAPI Interview (2003)
- CAPI Diary demographics and income (2004)
- Contact History Instrument (2005, 2006)
- User Friendly diary (2005)
- Diary auto-coding system (2005)
- Biennial Interview questionnaire revisions (...2005, 2007, 2009, 2011, 2013)
- Timely and relevant questionnaire revisions
  - Medicare prescription drug program (2006)
  - Tax stimulus: amount and how used (2008, 2009)

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Interview & Diary Improvements

Statistical methods improvements

- Income imputation (2004)
- New methodology for selection of Diary or Interview data for best publication estimates (2007, 2009)
- Research underway for income tax imputation

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Measurement Objectives

CE Concepts

Consumption vs. Expenditures

- Consumption is inherently very difficult to measure, although this is what many economists really want
- Consumption expenditures is a proxy to measure consumption and construct price indexes
- Gifts received are a part of consumption, but not expenditures; gifts given are a part of expenditures, but not consumption

CE Concepts

Consumption Expenditures:

Expenditures are the acquisition costs, as measured by actual financial obligation at the time of the acquisition, in dollar terms, for any payment method, for goods and services acquired by the consumer unit from outside the consumer unit, which are intended to increase the well-being of the consumer unit.

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CE Concepts

“actual financial obligation”

- No goods or services acquired via barter
- No value of home production

“at the time of acquisition”

- No flow of services approach
- Items purchased with credit cards are counted at the time the charge is made, not when the card is paid off

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CE Concepts

“for any payment method”

Payment methods are changing. With the increasing use of gift cards and automatic on-line payments, the CE needs to ensure we capture expenditures made in many ways. This is an area where the program engages in environmental scanning, to ensure we understand consumer behavior and effectively communicate the survey needs to our data collectors and respondents.

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CE Concepts

“acquired by the consumer unit from outside the consumer unit”

Exchanges which occur within the CU are not counted, e.g.

- Paying your daughter to mow the lawn
- Buying a car from your brother who lives with you

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CE Concepts

100% business expenses are excluded.

For expenditures partially for business, determine % business:

- Properties
- Utilities
- Transportation
- Trips

Meeting CPI Requirements

Identify the correct subsamples :

- CPI_U: urban wage earners and clerical workers, professional, managerial, and technical workers, self-employed, short-term workers, the unemployed, retirees, and others not in the labor force (87%)
- CPI_W: hourly wage earners or clerical workers (32%)
- Other groups for special studies: e.g. elderly

Meeting CPI Requirements

- Cost weights for major groups of expenditures, for individual items within groups, and special aggregations (e.g. services)
- Relative shares requirement -- no partial interviews are allowed
- Identify month of expenditure (reference year boundary, C_CPI_U)

Measurement Objectives

Demographic and other non-expenditure data:

- Workforce and earnings data to meet CPI classification requirements
- Other demographic data for analytic value: age, race, education
- Housing characteristics
- Income, assets, and liabilities are of particular interest to a wide variety of users

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