A Macro Perspective on the Consumer Expenditure Survey Redesign

Clinton McCully

Redesigning the Consumer Expenditures Surveys Meeting #3
October 26, 2011
Personal consumption expenditures

RCE Noncomparable

Underreporting

CE not comparable

Consumer Expenditures
PCE: Taking Out the Noncomparable

Personal Consumption Expenditures by Sources of Funds 2009

- Comparable
  - Direct household expenditures: 70%
  - In-kind social benefits: 10%
  - Imputations ex NPISH & employer contributions: 10%
  - Employer contributions for private insurance: 6%
  - Life insurance & pension fund expenses: 3%
  - NPISH final consumption expenditures: 1%

www.bea.gov
Direct Household Expenditures & CE

Direct household expenditures (larger circle)

Underreporting Not measured in CE

Consumer Expenditures (CE) (smaller circle)

CE not comparable
What should a CE redesign do?

- From National Economic Accounts point of view
  - Redesign should narrow the differences between PCE & CE

- Two aspects
  - Valuation differences
    - Almost entirely underreporting on CE
  - Definitional/conceptual/coverage differences
Sources of Underreporting

- Recall effects
- “Diary fatigue”
- Deliberate underreporting
  - “Sin” Commodities
    - Alcohol
    - Tobacco
    - Gambling
    - Penalty fees (?)
- Incomplete questions/prompts/examples
- Refusals (?)
Redesign Proposals to Address Underreporting

- Emphasis on the use of records over recall/diary
  - Use of electronic records wherever possible
- Use of incentives to promote participation
- Flexibility
  - Diary/interview as options if respondents do not want to provide records
- Phase-in/testing to see effects
Effect of Redesign Proposals on Underreporting

- Proposals address most of listed sources of underreporting
- Don’t address possible effect of refusals
- Size of effect on underreporting remains to be seen—any way to measure effects?
- Effect of incentives
  - Will probably help response rates, but have more of an effect on low end than on high end.
  - Don’t have any effect until you’ve “gotten in the door”
Recommended Use of Records

- Receipts, bank statements, credit card statements are among these records
  - Pay stubs would be an additional record which would be very useful
    - Information on deductions for health and life insurance, contributions to flexible spending accounts (child care and medical), pension contributions
  - Flexible spending account reimbursement records would also be helpful
Underreporting Over Time

- Gap for comparable PCE & CE categories has grown over time
- Growth in gap has varied considerably by commodity
- Largest differences are for those with the largest differences in per unit consumption between lowest and highest income quintiles
- Lower differences for those with lower ratios
Underreporting Over Time

Aggregate % Change, 1992 to 2009

Food at home
- CE 71.5%
- PCE 84.4%

Clothing and footwear
- CE 24.1%
- PCE 51.4%

Jewelry
- CE 7.0%
- PCE 81.2%
Source of Differential Growth?

- Differences in PCE vs. CE growth by commodity
  - Something other than an increase in respondent underreporting may be at work
- Increases in rates of refusal
  - If disproportionately accounted for by higher income and consumption households, would be consistent with observed pattern of differences
  - Income & consumption of refusals not known (only a few geographic & demographic variables are known)
  - Any way to glean income and/or consumption info on refusals?
PCE Benchmarking?

- What if CE were benchmarked to PCE?
  - Would this improve the accuracy of the CE estimates?
  - PCE can be adjusted to remove noncomparable items
  - If PCE at (broad?) commodity level used to benchmark CE values, commodity aggregates would be accurate
    - Implicit assumption is that degree of underreporting same for each consumer unit
  - Would significantly affect CPI weighting
    - Shelter weight would be reduced from 32% to 20%
    - Weights for most other commodities raised
Direct Household Expenditures and CE

- Direct household consumption expenditures (DHCE)
  - Direct *purchases of goods and services* by households
    - Economic definition of consumption
- Direct household outlays (DHO)
  - Adds interest paid by households & household transfer payments to DHCE
- DHO comparable to most CE components
Adjustments for Noncomparable CE Components

- Exclude the following from CE which are not part of DHO:
  - Pension/IRA contributions:
    - Part of savings (what is \textit{not} spent)
  - Social Security contributions
    - Not purchases of goods/services
    - Subtracted from personal income, akin to taxes
  - Incorporate offsetting entries for alimony & child support outlays
    - Transfers are receipts of other households
  - In consolidated expenditures, have no effect
  - Used motor vehicles: Account for person-to-person purchases with offsetting sales & eliminate in consolidation; account for sales to dealers (subtraction)
Inclusions of DHO Not Captured in CE

- Brokerage charges on transactions in financial assets
- Fees for investment advice & management
- Penalty fees on bank and credit card accounts
- Tuition/room/board/fees financed through loans
- Employer contributions for health & life insurance
  - Possible inclusion if broaden CE concept beyond out-of-pocket expenditures
- *In CE, separately account for*
  - Consumption expenditures
  - Transfers—both intra- and intersectoral
  - Interest paid—payment for use of money, not purchases of goods & services