

Consumer Expenditure Survey CNSTAT Panel Briefing

Measurement Error & Gemini Project Overview

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February 8, 2011

Outline

- Measurement Error
 - Evidence
 - Possible Sources
 - Internal Research
- Gemini Project Overview
 - Motivation for Redesign
 - Major Tasks
 - Activities Completed & Upcoming
 - Research

Measurement Error: Evidence

From 1984 until the present, the ratios of aggregate expenditure estimates from the CE compared with Personal Consumption Expenditures (PCE) data from the National Accounts show a declining trend for a number of spending categories

Measurement Error: Evidence, cntd.

- The 2008 CE Program Review Report cites item nonresponse and measurement error as areas of concern
- Subgroup comparisons show differences in expenditure reporting by mode of interview and use of recall aids

Measurement Error: Possible Sources

- Complexity: detailed information
- Conditioning: 22 sections, 5 waves
- Proxy reporting: household respondent
- Recall effects: 3-month reference period
- Survey length: 60 minute average
- Telephone administration: 33%

Measurement Error: Internal Research

Complexity

- What Does 'Usual' Usually Mean? (Edgar, 2009)

Conditioning

- Learning to Say No: Conditioned Underreporting in an Expenditure Survey (Shields & To, 2005)

Proxy reporting

- The Quality of Proxy Reports on the Consumer Expenditure Survey (Kojetin & Jerstad, 1997)

Internal Research, cntd.

Recall effects

- Analysis of Recall Effect on Reporting of Expenditures for CE (Steinberg et al., 2006)

Survey length

- Forthcoming results from Measurement Issues and Order Effects studies

Telephone administration

- Mode Effects in a Survey of Consumer Expenditures (Safir & Goldenberg, 2008)

Gemini Project

Mission

- Improve data quality through a verifiable reduction in measurement error, with a particular focus on under-reporting.

Objective

- Develop a detailed research plan for implementing a redesign of the CE surveys, including piloting, evaluation, and transition.

Gemini Project: Redesign Motivation

Technological advances

- Transformation of respondent behavior
- Emergence of new data collection options

Need for more flexibility

- Allow for faster implementation of questionnaire changes
- Allow for mixed-mode interviewing

Redesign Motivation, cntd.

Evidence of measurement error

- Possibly due to complexity, conditioning, proxy reporting, recall error, survey length, mode effects

Same basic design for past 30 years

- Different environment today

Gemini Project: Major Tasks by Year

Year	Tasks
2009-10	(1) Research database (2) Data requirements and priorities (3) Data quality definition
2010-11	(4) Hold research events, produce reports
2010-13	(5) Conduct ongoing supporting research
2012	(6) Assess user impact of design alternatives (7) Recommend survey redesign (8) Propose transition roadmap
2013+	Piloting, Evaluation, Transition

Gemini Project: Activities To Date

Date	Report
Oct 2009	Data Quality Definition Report (public)
Mar 2010	Research Tracking System Report (internal)
Jun 2010	CPI Requirements Paper (public)
Aug 2010	Conference Team Report (internal)
Aug 2010	Data User Needs Report (internal)

Activities to Date, contd.

Date	Event
Jan 2010	Survey Redesign Panel
Mar 2010	Data Capture Technology Forum
May 2010	Panel on Respondent Record Use
Jun 2010	Data User Needs Forum
Dec 2010	Methods Workshop

Gemini Project: Upcoming Activities

Date	Event
Mar 2011	CE Data Priorities Summary
May 2011	Household Survey Data Producers Workshop
May 2011	AAPOR Presentations: Burden, Global Questions, Data Capture & Financial Software
Sep 2011	CE Redesign Options Workshop
Mar 2012	CNSTAT Panel Recommendations (pre-pub rpt)

Gemini Project: Ongoing Research

Data capture and financial software

- Alternative designs
- Technology

Diary double placement

- Cost
- Reporting quality

Measurement issues study

- Recall period, interview frequency
- Split questionnaire

Online diary prototype

- Alternative designs
- Technology

Order effects test

- Interview length
- Reporting quality

Gemini Project: Research, cntd.

Split questionnaire

- Interview length
- Statistical issues

Records study

- Availability
- Utility

Balancing edit (proposed)

- Feasibility
- Effectiveness

Bounding (proposed)

- Cost
- Reporting quality

Individual diaries (proposed)

- Proxy reporting
- Response rates

Gemini Project Website

<http://www.bls.gov/cex/geminimaterials.htm>:

- Gemini overview
- Gemini events
- Gemini presentations
- CE survey methods research
- CE methods and survey forms
- Other redesign related events and studies