Considering the Structure of the Consumer Expenditure: Designing Computer Assisted Interviewing

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BUREAU OF LABOR STATISTICS
• CONSUMER EXPENDITURE SURVEY
• METHODS WORKSHOP

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Research Setting

- There is a long history of keeping track of consumer expenditure
- In the current day the challenges are enormous
- Impact of internet access, proliferation of other expenditure modes (A)
- Proliferation of goods and service types, especially for rich families (B)
- Think of A x B
- Add in fluid household structure!
‘OLDEN DAYS’

Sweden, 1290 - 2008
DESIGN THEMES

- Extensive use of interactive GUI
- Use to screen inconsistencies from adding up
- Apply a more ‘conversational mode

A Bit More on Design Themes

- Soft checks on consistency
- Hard checks on consistency from ‘adding up’ such as 52 weeks per year
- GUI works over the phone – tool to help interviewer navigate a less structured ‘conversation’
- Can have tabs for interviewer to work back and revisit topics
- An example is our Employment Event History Calendar (EEHC) revised in 2009 and use 2009 and now in 2011.
DOES ‘IT’ WORK??
Alignment of Unemployment Spells and Receipt of UI

Difference Between 1st Month Received Unemp. Comp. and 1st Month Unemployed
Where 1st Month Unemp. January - June 2008
By Proxy Status
(N=151)
USE OF GLOBAL CATEGORIES

- Traditionally used in PSID
- Expanded 1997-2009 to cover most spending domains
- Spread throughout application – not one long block
- Commonly use unfolding brackets
Table 1. Ratio of average consumption expenditures in PSID to Consumer Expenditures Survey

<table>
<thead>
<tr>
<th>Category</th>
<th>1999</th>
<th>2001</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>0.96</td>
<td>1.02</td>
<td>1.01</td>
</tr>
<tr>
<td>Food</td>
<td>1.03</td>
<td>1.08</td>
<td>1.1</td>
</tr>
<tr>
<td>Housing</td>
<td>0.94</td>
<td>1</td>
<td>0.97</td>
</tr>
<tr>
<td>Transportation</td>
<td>0.86</td>
<td>0.95</td>
<td>0.94</td>
</tr>
<tr>
<td>Education</td>
<td>1.16</td>
<td>1.31</td>
<td>1.13</td>
</tr>
<tr>
<td>Childcare</td>
<td>1.21</td>
<td>1.25</td>
<td>1.26</td>
</tr>
<tr>
<td>Health care</td>
<td>1.04</td>
<td>1.1</td>
<td>1.14</td>
</tr>
</tbody>
</table>

Source: Li, Schoeni, Danziger, Charles (2010), table 3
An Expenditure Periodicity Taxonomy (C)

<table>
<thead>
<tr>
<th>Regularity</th>
<th>Frequency</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somewhat regular</td>
<td>High (weekly)</td>
<td>Food, gasoline</td>
</tr>
<tr>
<td>Regular</td>
<td>Medium (monthly)</td>
<td>Rent, utilities, prescription drugs (for some people)</td>
</tr>
<tr>
<td>Regular</td>
<td>Low (annual/semiannual)</td>
<td>Property taxes, auto license</td>
</tr>
<tr>
<td>Irregular</td>
<td>Varies across households</td>
<td>Clothing, health care copays</td>
</tr>
<tr>
<td>Big ticket items</td>
<td>Usually less than once/year</td>
<td>Automobiles, home improvements</td>
</tr>
</tbody>
</table>

DIVERSE MODES IN THE ABOVE TABLE (D)

• Store
• Check
• ETF regular
• ETF sporadic
• Credit/Debit Cards
• Vending machines
• Internet (GPI?)
DIVERSE PURCHASERS (E)

- Respondent
- Spouse
- Kids PSID CDS has allowances paid to kids
- Stealth credit card purchases? 8+ in 2007 from original CDS I sample

A x B x C x D x E
### Interactive Reconciliation
ALP- CEX
Rohwedder and Hurd, 2010

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>45 or Older</th>
<th>65 or Older</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALP</td>
<td>$41,723</td>
<td>$43,814</td>
<td>$40,585</td>
</tr>
<tr>
<td>CEX</td>
<td>$43,596</td>
<td>$44,147</td>
<td>$35,706</td>
</tr>
</tbody>
</table>
Strategies and structure

• First obtain force status of the family members age 15 and older as of the survey data and the prior calendar year. Then a summary measure of labor income from the prior calendar year period.

• Add ins (eg. Inheritance, mortgage refi??) to define an ‘annual cash flow available for consumption’ or ACFC.
Strategies and structure

• Go through a set of rather global expenditure categories, using recall periodicities to match the expenditure category.

• Then a reconciliation phase in which the components are added to a total.

• Then a single consumption domain (or two) for added detail. Here the starting point could be the categories set out in Appendix B of CPI Requirements of CE.
Strategies and structure

• Mode (s) of Purchase. For the specific domain. Maybe tabs by mode?

• Gifts of goods, ‘help from others’ in ACFC

• Who purchased? (some aspects of the Japanese expenditure studies?)