Consumer Expenditure Surveys: New Geographic Data

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State Estimates

- First test estimates produced for three states using 2013 data.
- Two additional states were added in 2019 using the 2017 data.
Suppose the population of New Jersey was 20.

Each consumer unit in New Jersey is re-weighted to represent the population of New Jersey instead of the national population.

- National Weight: 100
  NJ Weight: 10

- National Weight: 120
  NJ Weight: 8

- National Weight: 80
  NJ Weight: 2
How well do they work?

- Use of other sources which already have state weights for comparison. (ACS)
- Does the state weight produce a difference from other sources that is equal to or better than the national weight?
CE-ACS Comparison using New Jersey Weights from Each Survey, 2016

CE-ACS Comparison using National Weights from each Survey, 2016

How well do they work?

Compare population targets to US Census.

1. Add up the weights for Florida from PUMD. 
   ~8.5 Million Consumer Units (CU)

2. Compute average number of persons per CU with the weight. 
   2.4 persons per CU

3. Multiply and compare to census value. 
   8.5 * 2.4 = 20.4 million persons

Approximately equal to the 20.66 reported Florida population.
Who uses them?

- Academics
  - Researchers have been asking for greater geographic detail for a long time. This is an effort to provide it where we can.

- Government
  - The New Jersey weights were utilized by the New Jersey State Government.

- You!
  - Curious individuals can now answer questions about state level expenditures.
Do you have an example?

- Use case to do a static examination of the housing market in New Jersey.
- New Jersey has the highest population density of any state.
Housing Expenditures and Components by Selected Geographies

- Rented Dwellings
- Owned Dwellings
- Utilities
- Household Equipment
- Household Operations

Geographies:
- National
- New Jersey
- Washington, D.C.
Proportion of Housing Expenditures and Components by Selected Geographies

National

New Jersey

Washington, D.C.

- Rented Dwellings
- Owned Dwellings
- Utilities
- Household Equipment
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Proportion of Housing Expenditures and Components by Selected Geographies
Other Uses?

- Creating state-level market baskets
- Has the potential to calculate cost weights for future consumer price indexes.
- Can be used to evaluate more local state-level decisions
California, 2017

- Food: 15%
- Housing: 37%
- Apparel and services: 2%
- Transportation: 13%
- Healthcare: 15%
- Education: 6%
- Entertainment: 3%
- Cash contributions: 4%
- Personal insurance and pensions: 2%
- All other expenditures: 3%
## Shares of Total Expenditure, by Major CPI Item Categories

### 2017 data, Texas

<table>
<thead>
<tr>
<th>Category</th>
<th>Texas Shares</th>
<th>National Shares</th>
<th>Absolute Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and Beverages</td>
<td>0.15</td>
<td>0.13</td>
<td>0.02</td>
</tr>
<tr>
<td>Housing</td>
<td>0.33</td>
<td>0.33</td>
<td>0.00</td>
</tr>
<tr>
<td>Apparel</td>
<td>0.02</td>
<td>0.03</td>
<td>0.01</td>
</tr>
<tr>
<td>Transportation</td>
<td>0.20</td>
<td>0.16</td>
<td>0.04</td>
</tr>
<tr>
<td>Medical Care</td>
<td>0.07</td>
<td>0.08</td>
<td>0.01</td>
</tr>
<tr>
<td>Recreation</td>
<td>0.04</td>
<td>0.05</td>
<td>0.01</td>
</tr>
<tr>
<td>Education</td>
<td>0.03</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>Other Goods and Services</td>
<td>0.16</td>
<td>0.20</td>
<td>0.04</td>
</tr>
</tbody>
</table>
What’s next?

- Every state is being evaluated for its potential to generate a weight.
- The following concerns are evaluated,
  - Sample size
  - Confidentiality
  - Long term retention in the survey
Contact Information

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