Expenditure Patterns of Low and High Income Groups by State: California, Florida, New Jersey, New York, and Texas

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State Estimates

- First test estimates produced for three states (CA, FL, and NJ) using 2013 data.
- Two additional states (NY and TX) were added in 2019.
How do they work?

- 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.
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 people per CU with the weight.
   2.4 people per CU

3. Multiply and compare to Census value.
   8.5 * 2.4 = 20.4 million people

Approximately equal to the 20.6 million 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.
Using the weights

- By taking national data and applying a state’s weight we can create data estimates that are representative of CUs within that state.

- Here we’ve taken all 5 state weights and applied them to data from 2017 - 2018 and aggregated into 10 expenditure categories:
  - Food, Housing, Apparel and services, Transportation, Healthcare, Entertainment, Education, Cash contributions, Personal insurance, All other expenses.

- We then further evaluated the data by examining the differences between income quintiles, focusing mainly on the lowest 20% and highest 20% of incomes.
Trends across States

- In all 5 states the lowest income group allocates a greater proportion of expenditures to necessary items (food and housing) than the highest income groups.

- The highest income groups spend more on personal insurance and pensions than the lower income groups.
  - California’s top quintile has the highest share at 17%, where New York, New Jersey, and Texas all have 15% at the low end.
  - Comparatively California’s lowest quintile only allocates 3% of expenditures on personal insurance, with New York having the lowest at only 1%. 
The Necessity Gap

- Across all 5 states and nationally there is a gap in necessity (food + housing) expenditures between income quintiles
  - New York’s lowest group has the largest share at 65% of all expenditures, while low-income Texans have the lowest at 56%
  - New York’s top quintile has a necessity expenditure share of 44%, while Texas has 42%
- Nationally this gap is 15%, New York and California have the highest gaps at 20% and 17%
- Texas has a 14% gap, while New Jersey and Florida both have the lowest at only 13%
State vs National Trends

- Almost all the patterns displayed by the states also appear at the national level.

- Nationally, necessities make up 57% of expenditures for the lowest income group, close to most states besides California and New York at 61% and 65% respectively.

- Conversely, the personal insurance spending share for the highest group is 16% nationally, nearly the same as all 5 states.
Conclusion

- The state weights can be used to produce estimates of average annual expenditures and shares for selected states. Those examined here are close, but not identical to, national estimates.
- The weights can be used to better aggregate and account for geographical patterns in spending where possible.
- Our example shows clear patterns by income level that appear across state data as well as at the national level.
Interested?

- [https://www.bls.gov/cex/csxresearchtables.htm#stateweights](https://www.bls.gov/cex/csxresearchtables.htm#stateweights)
  - Documentation
    - How the weights are created
    - How to utilize State Weights with PUMD
  - State weight files
  - Sample code
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