Paper estimates consumer spending by state

In a recent working paper, Bureau of Economic Analysis (BEA) economists Christian Awuku-Budu, Ledia Guci, Christopher Lucas, and Carol Robbins presented experimental estimates of nominal consumer spending by state. Personal consumption expenditures were calculated for eight categories of goods, seven categories of services, and net expenditures of nonprofit institutions serving households for 50 states and the District of Columbia for 1997–2007.

State-level statistics on consumer spending can provide a window into the geographic distribution of household spending and thus be useful to a wide range of data users, from marketing professionals to regional science academics to state policy analysts.

The BEA working paper contributes to the existing literature on this general topic by offering a time series of nominal state-level statistics on spending by and on behalf of U.S. households that is consistent with the framework of BEA’s national income and product accounts (NIPAs).

Such data would also fill a well-known gap in the federal statistical system. Currently, users of regional statistical data in need of state and local data on consumer spending face limited choices. They can use state-level disposable personal income to allocate national expenditures; they can use state-level sales data provided by the Economic Census every 5 years; they can infer consumption from retail sales tax receipts for certain states; or they can draw inferences from similar categories of regional spending from the Bureau of Labor Statistics’ Consumer Expenditure Survey.

For data users interested in statistics consistent with BEA regional income data and national household spending data, none of these options is fully satisfactory.

The experimental state-level estimates offer several other advantages as well. First, they offer expenditure category detail instead of solely an aggregate measure. Second, a series of accompanying statistical tables allows users to evaluate the statistics relative to disposable income and population. Third, the authors use household expenditure data to overcome the fact that state-level retail trade statistics from the Economic Census include the spending of out-of-state residents.

The preliminary results for 1997–2007 show that regional variations in spending by category are related to geography, income, and demographics. High per capita spending on cars and gasoline in sparsely populated rural states is evident, as is high expenditures on housing in many coastal states. The data also show which states have high per capita spending on health care as well as states in which this spending is increasing as a share of total state consumer spending growth.

These estimates represent a first step toward the larger, long-term goal of developing inflation-adjusted consumer spending statistics by state, a direct measure of economic well-being that accounts for the impact of income, wealth, and prices.

In the near-term, an important next step is to complete the extrapolation of the experimental statistics through 2011, which will begin to show the impact of the Great Recession on consumer spending at the state level.

For “housing and utilities,” the largest single category in the estimates, the Bureau plans to exploit available microdata from the American Community Survey. Given that owner-occupied rent makes up such a large share of household spending, a high priority going forward is to continue to investigate whether the estimates for this spending might be further improved.

Finally, although consumer spending statistics are categorized based on the state of residence of consumers, one possible extension of the work is to show estimates of expenditures for goods and many services based on the location of businesses.

These supplemental statistics might prove useful for evaluating the locations of consumer spending by state, including out-of-state spending.