

Personal Consumption Expenditures by State: Source Data, Methodology, and Preliminary Results

Christian Awuku-Budu, Ledia Guci, Christopher Lucas, and Carol Robbins

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Motivation for State-level PCE Statistics

- Uses of geographic PCE statistics
 - Fiscal policy, regional macro and I-O analysis
 - Geographic marketing information
 - Consumption as a measure of economic well-being
- Existing approaches to PCE-by-state measures
 - Retail sales
 - State tax receipts
 - Household survey data
 - Scale national totals to population or income

Contribution

- **Comprehensiveness**
 - Nominal expenditures for 16 major PCE categories
 - Both goods and services
 - Prepared at more detailed level and aggregated to major categories

- **Consistency**
 - Annual time series 1997-2007, extrapolating to 2011
 - NIPA definitions and concepts
 - Retain key data sources for NIPA estimates
 - With other BEA regional statistics

- A method to evaluate the statistics and to adjust for out-of-state spending in receipts-based data

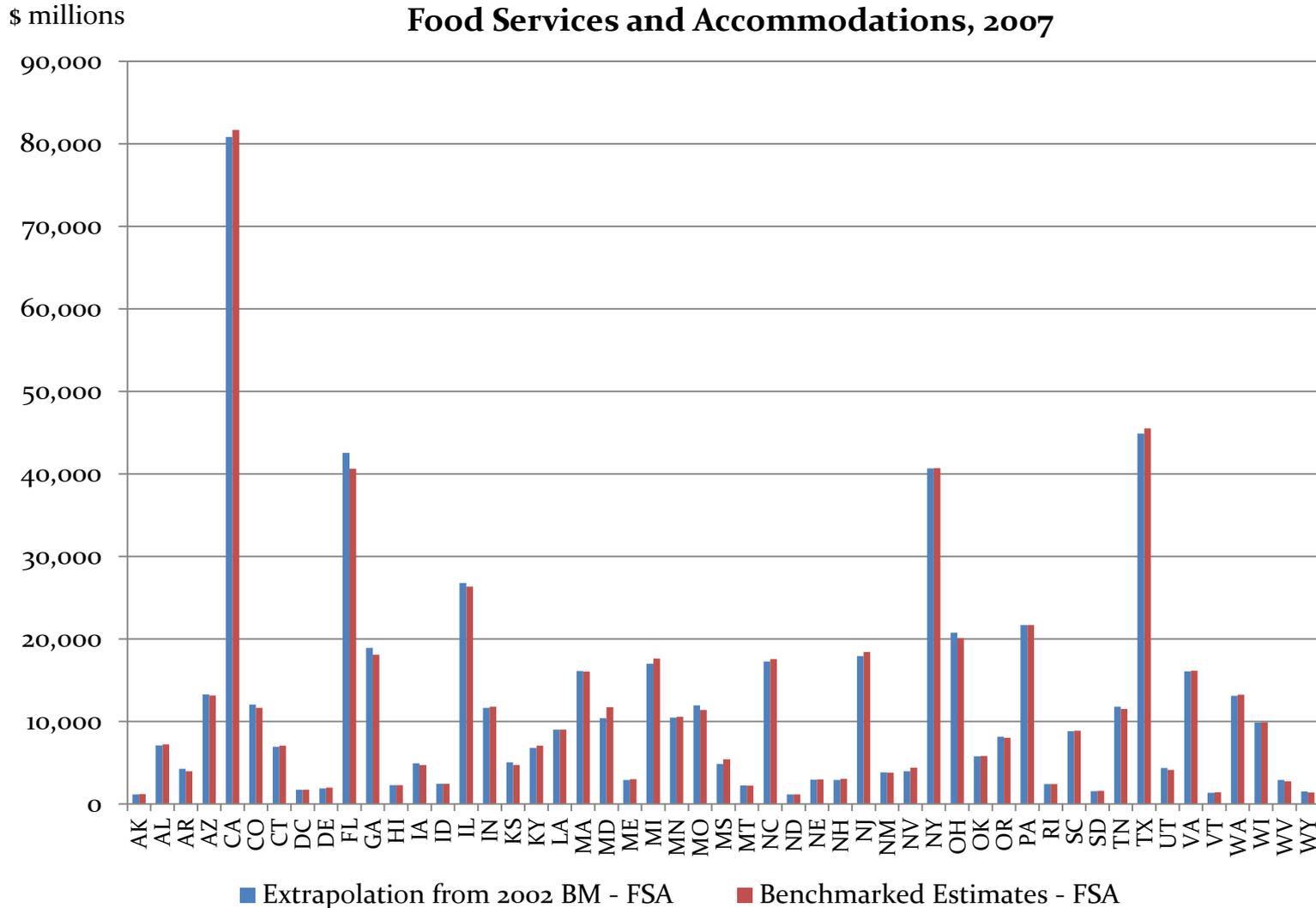
Personal Consumption Expenditures

- Accounting framework aligns state personal income and expenditures
- PCE includes
 - Out-of-pocket household spending
 - Spending on behalf of households
 - Imputations
 - Owner-occupied housing
 - Financial services without explicit payment
 - Net expenditures of non-profit institutions serving households

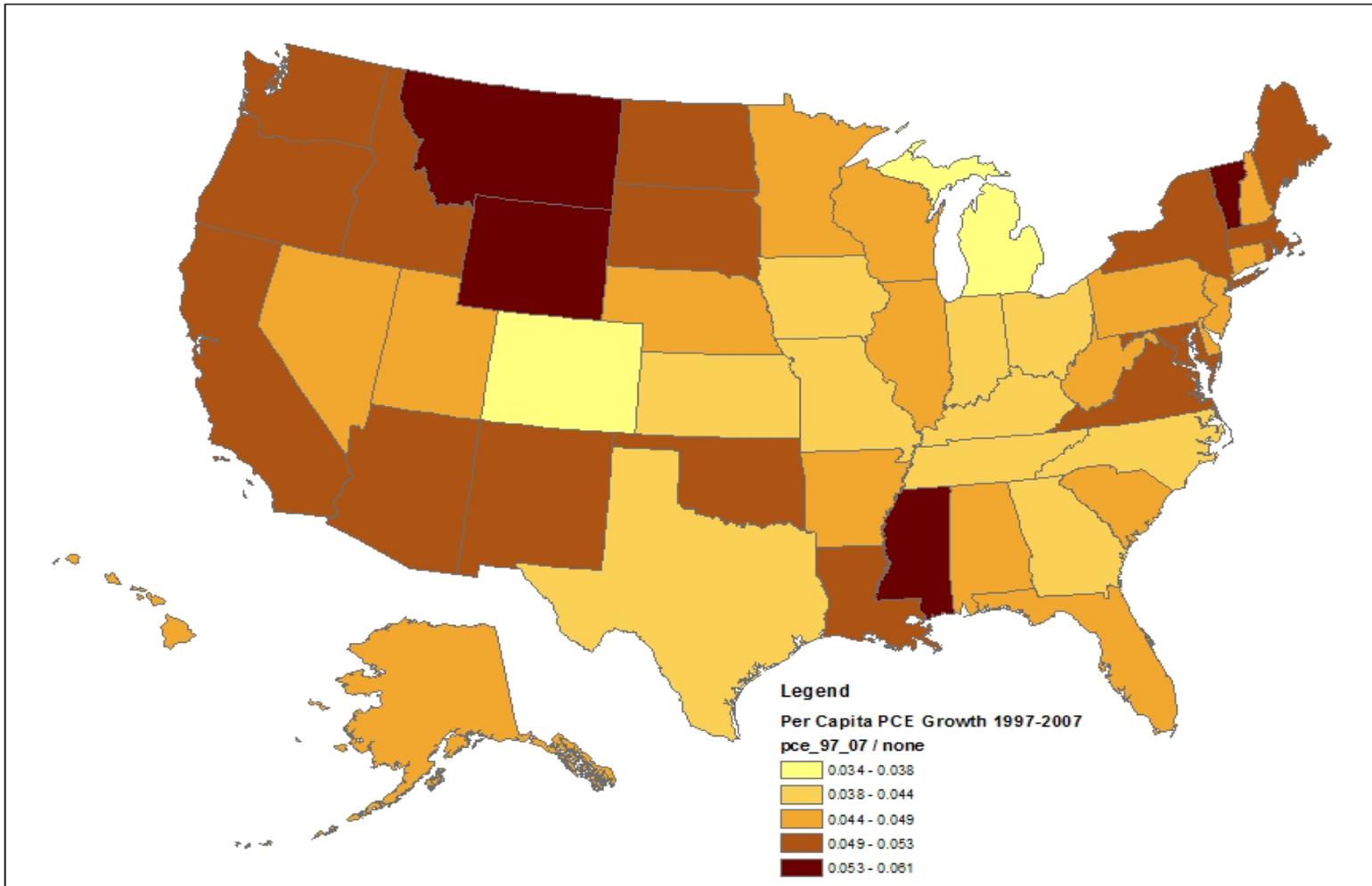
State-level Data Sources for PCE

- Receipts-based
 - Economic Census
 - Retail sales, Service sector receipts, Census of Governments
 - BLS Quarterly Census of Employment and Wages
- Price times Quantity
 - Decennial Census data
 - American Community Survey
 - Administrative records and regulatory data
- When all else fails
 - BEA state personal income

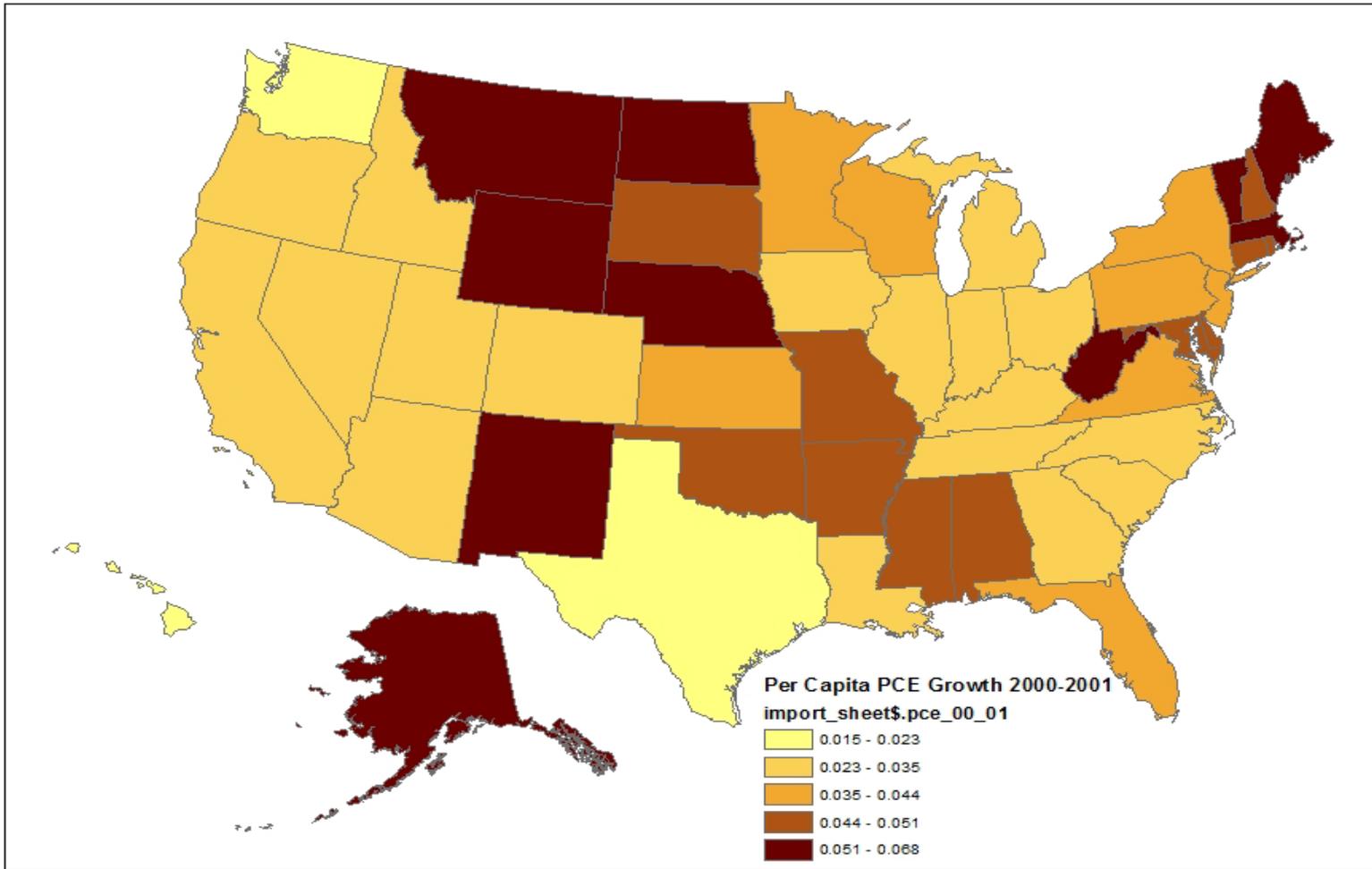
Integrating QCEW with Economic Census Data



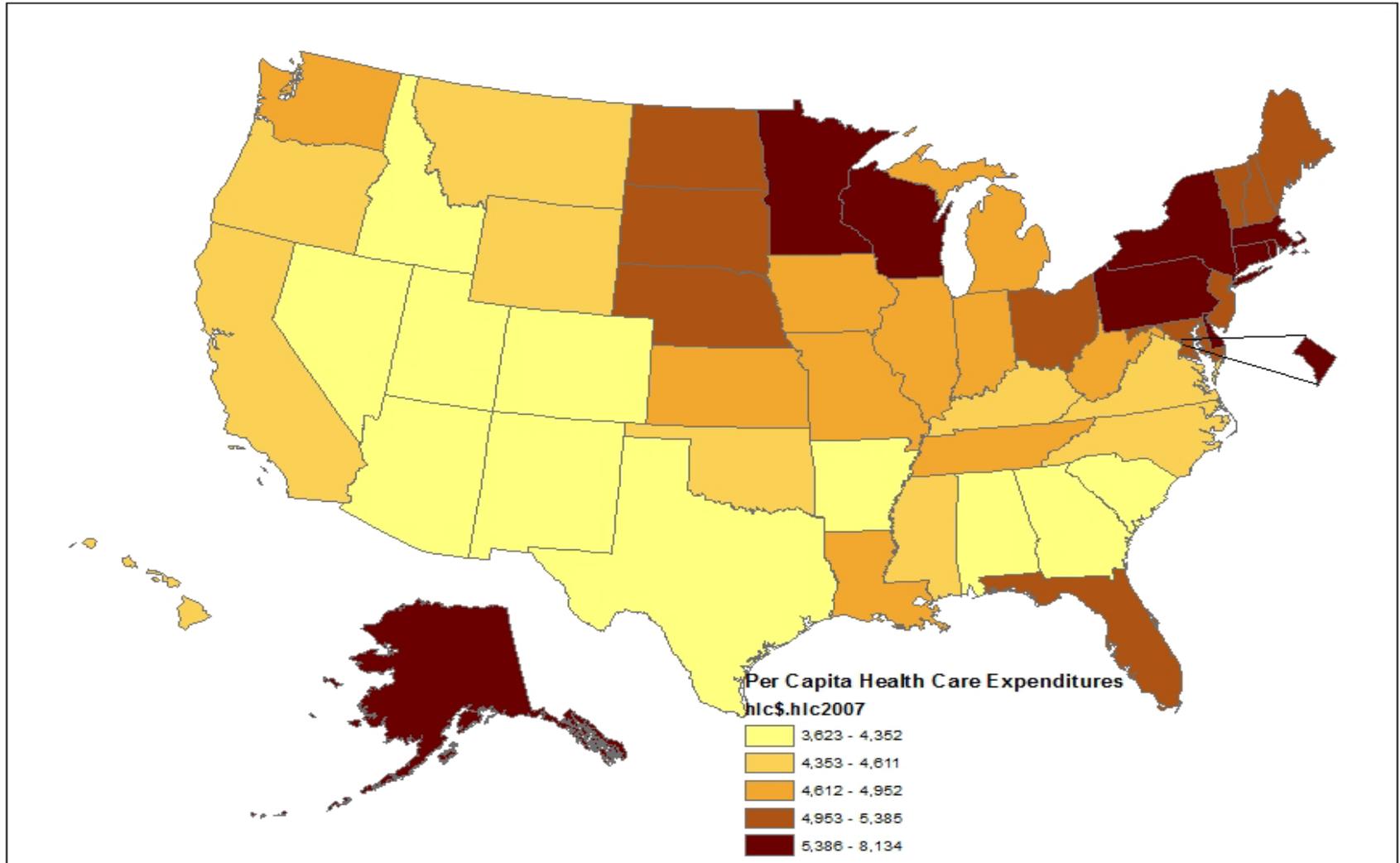
Average PCE Growth, 1997-2007



PCE Growth in the 2000-2001 Recession



Health Care Services, 2007



Evaluation Procedure

- For each category of spending
 - Calculate three analytical ratios
 - Examine the outliers
 - Top and bottom 10%
 - 20% most extreme absolute values
 - Look for economic reasons for outliers
 - Disposable personal income
 - Relative prices
 - Demographics and regional preferences
 - Out-of-state spending

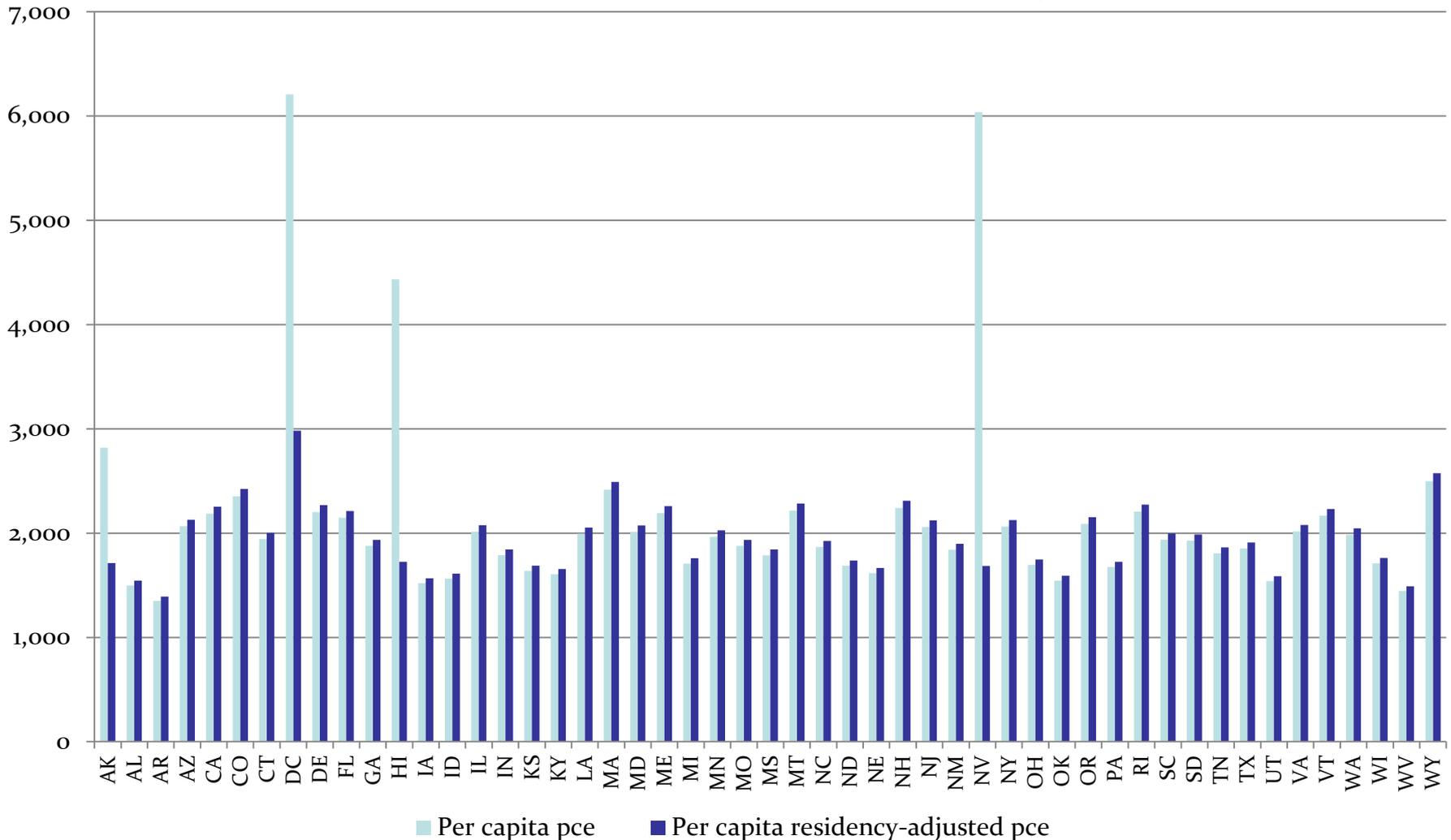
Out-of-state Spending

- Adjust extreme outliers when
 - Evidence for economic reason exists
 - A good category match is available in the consumer-expenditure-based data

- Replace Census-based share with survey-based share
 - Scaled to national accounts totals
 - Maintain state time series trend of Census data

Unadjusted and Residency-adjusted Expenditures

Food Services and Accommodations, 2007



Next Steps

- Solicit feedback on methodology and potential uses
 - Working paper
 - Survey of Current Business article

- Extend experimental estimates to 2011
 - Show impact of Great Recession by category

- Longer term work
 - Improve housing and financial services estimates
 - Consider potential for greater detail for key sectors

- Questions?
 - Contact: Carol Robbins, carol.robbs@bea.gov