

Mega-Trends: Implications for BEA Data

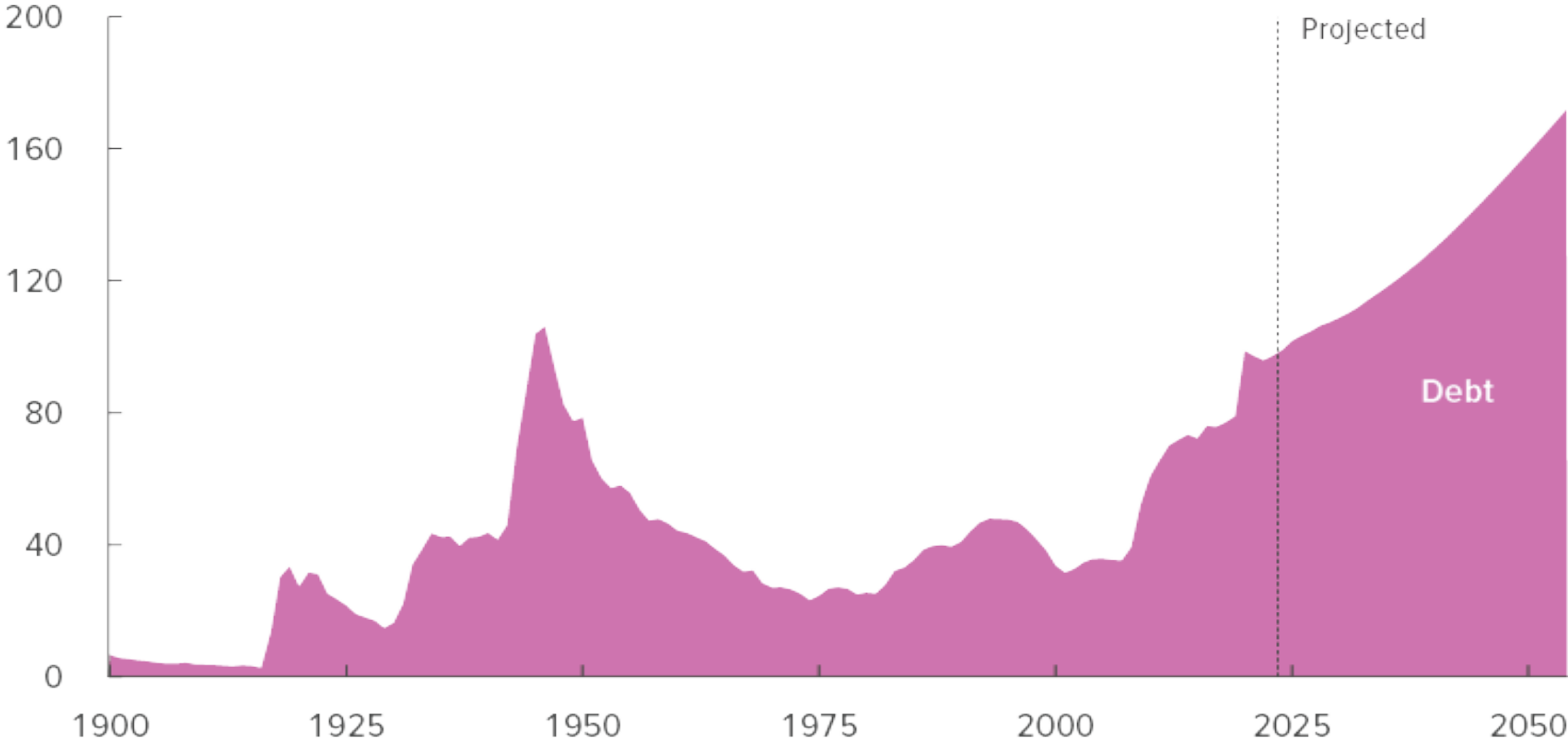
Steve Landefeld, Consultant to BEA

*BEA Advisory Committee Meeting, November 2024 (Slides 9 and 10 corrected
11/5/2024)*



- Why **10–20 Year Outlook?** Uncertainty on outlook and lags in statistical response.
- It can take time to:
 - Recognize structural changes in the economy
 - Distinguishing between new trends from temporary changes
 - Analyze the impact of these changes on measurement
 - Develop new methods and build professional consensus
 - Design and test new or expanded surveys or other data sources, and
 - Obtain funding for these surveys and estimates
 - Field the new surveys or data purchases necessary to implement the changes in measurement

Debts and Deficit: Debt as a Percent of GDP



- Measurement Implications:
 - Continued focus on net saving and impact on growth using regularly updated and extended BLS-BEA growth model estimates.
 - Better measures of labor inputs, capital services, and technology.
 - Growing Deficits and Debt: Need for up-to-date information on fiscal programs and their impact.

Component	1987–2007	2007–2022	Difference
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Average Annual Real Growth

Real GDP	3.10%	1.80%	-1.30%
Labor Input	1.60%	1.10%	-0.50%
Capital Services	4.00%	2.40%	-1.60%
Multifactor Productivity	1.00%	0.50%	-0.50%

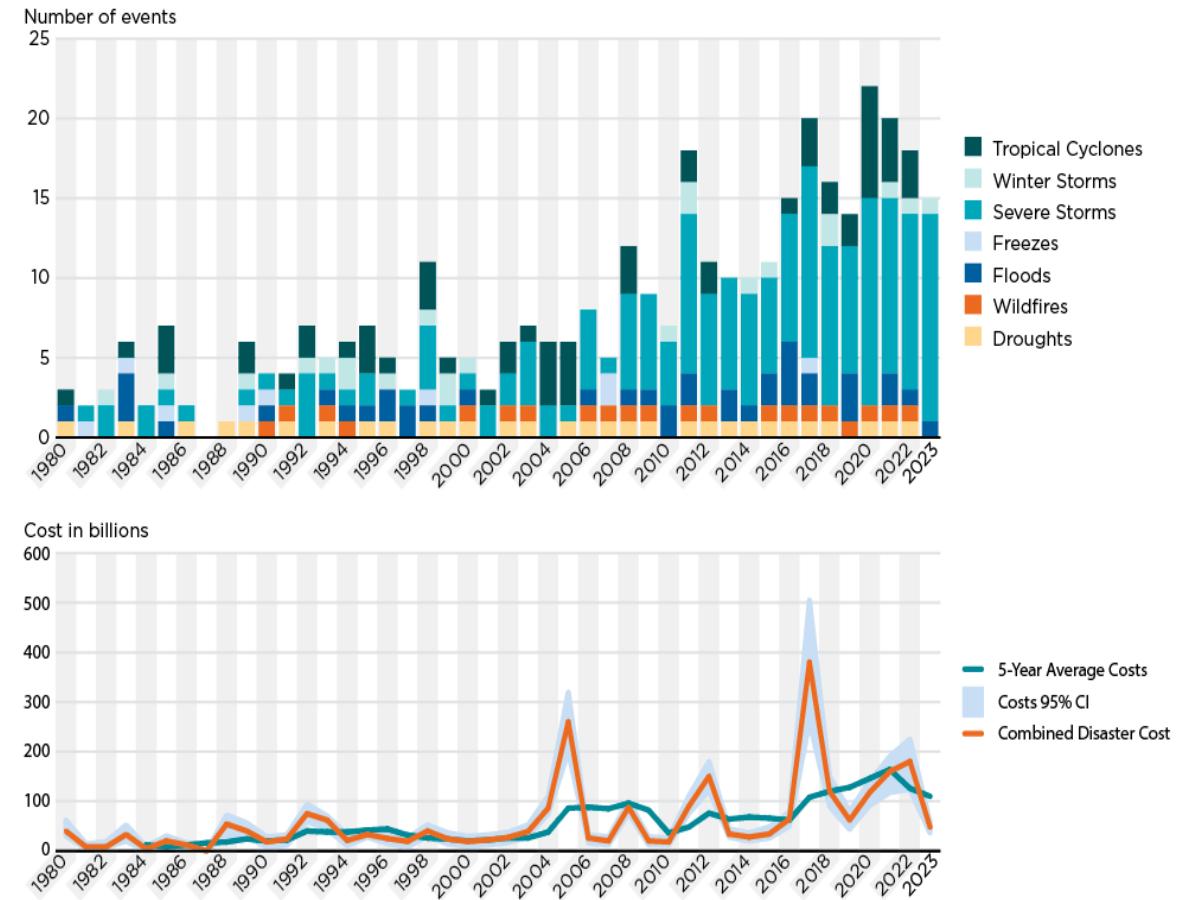
Contributions to Growth (Percentage Points)

Real GDP	3.1	1.8	-1.3
Labor Input	1.05	0.66	-0.4
Capital Services	1.36	0.94	-0.42
Multifactor Productivity	0.66	0.18	-0.49

Source: BLS-BEA Integrated GDP Productivity Accounts

○ Measurement Implications:

- Need for Integrated Natural Resource and Environmental Accounts.
- Partnerships with other agencies (NOAA, BLS, Census, NCHS, NIH) needed that have the expertise to better measure econ/enviro effects (economists, epidemiologists, physicians, statistician, and engineers).
- Big project and sustained effort is key.



- Measurement Implications:

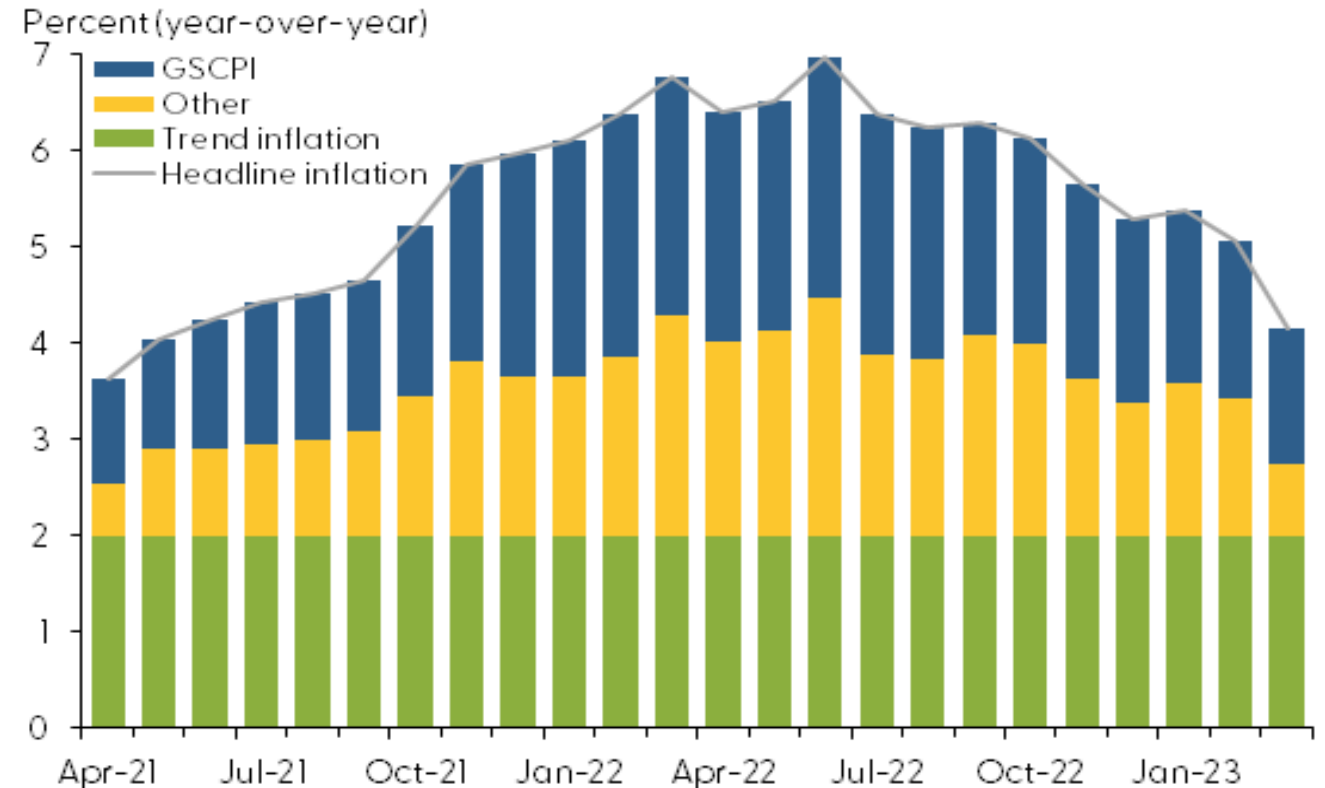
- Need for more relevant measures of the gains from trade through extended Global-Value-Added measures of trade, extended input output accounts, and extended coverage of services.

- **Mega Trend?**

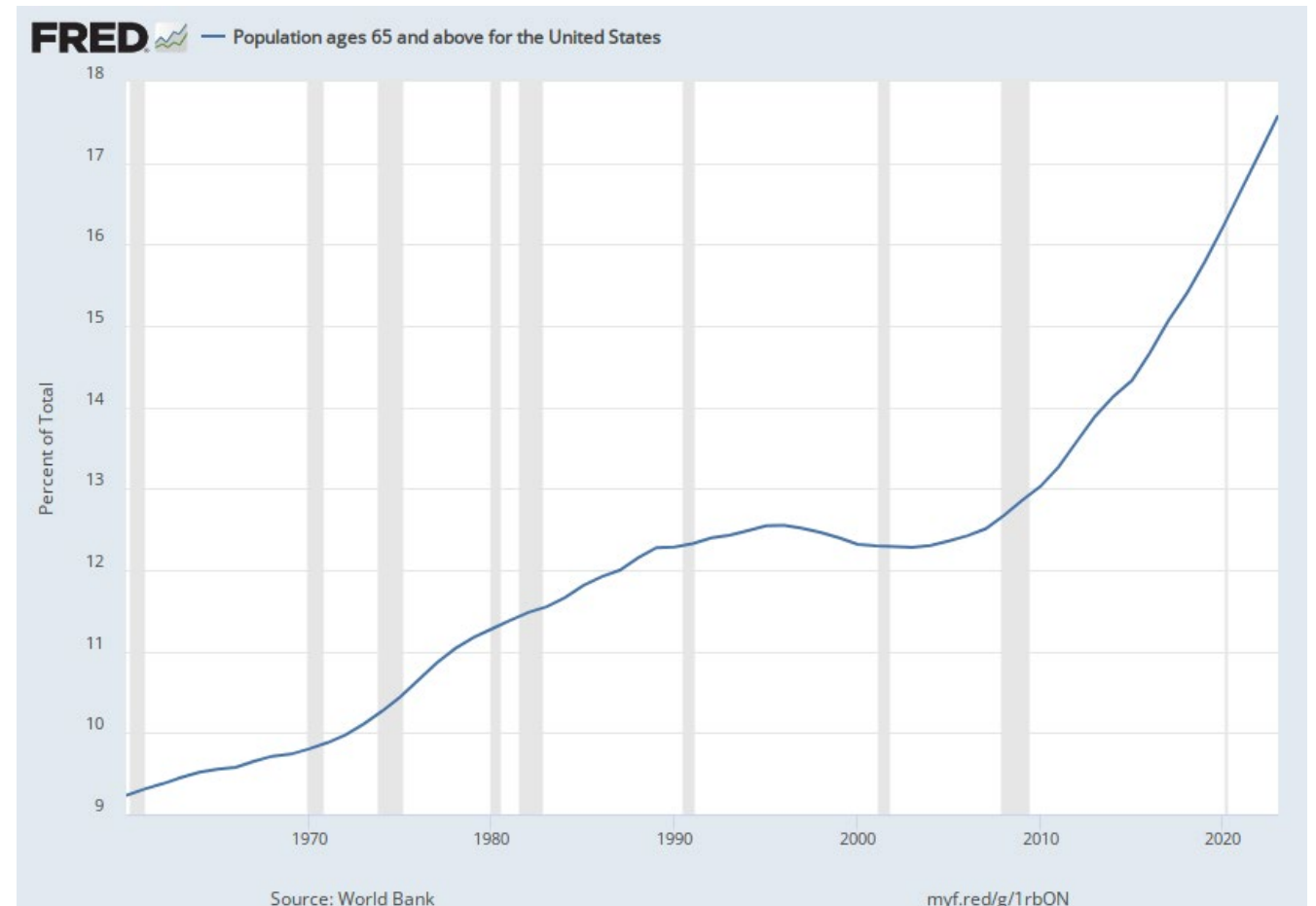
- Studies of the impact of the most recent rounds of U.S. tariff increases (followed by retaliatory tariffs by trading partners) have:
- Raised prices
- Reduced GDP and employment
- Had a negative net impact on the U.S. economy

○ Measurement Implications:

- Extended GVC and I-O accounts provide an important alternative perspective and will be increasingly important for trade policy, macroeconomic projections of output and inflations, productivity, and long-term growth.



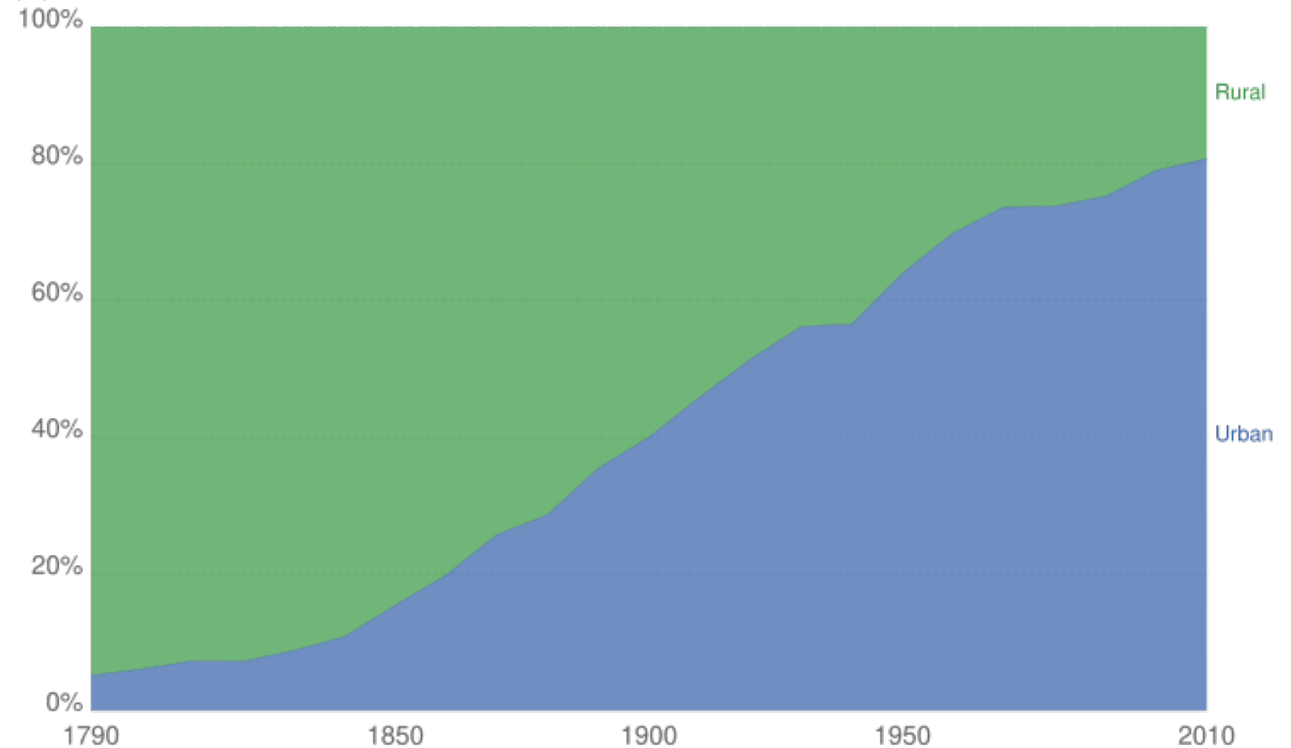
- Measurement Implications:
 - **Aging.** Better measures of health care output and productivity (Hedonic and extended price and output indexes for stay at home vs. assisted living/rehab facilities; social value of new drugs, etc).



- Measurement Implications: Urbanization and Changes in Purpose and Use:
 - Price indexes that capture near-market characteristics of new construction.
 - New price measures that capture mixed-use residential units (Remote work).
 - Across the board update of BEA data and methods (service lives, depreciation, and capital stocks).

Urban and rural populations in the United States

Figure illustrates the size of the rural and urban populations in the United States over time. The US Census Bureau's population threshold of an urban place changes over time. The rural population is defined as any population outside urban areas. See the source tab for further information.



Source: US Census Bureau (2010)

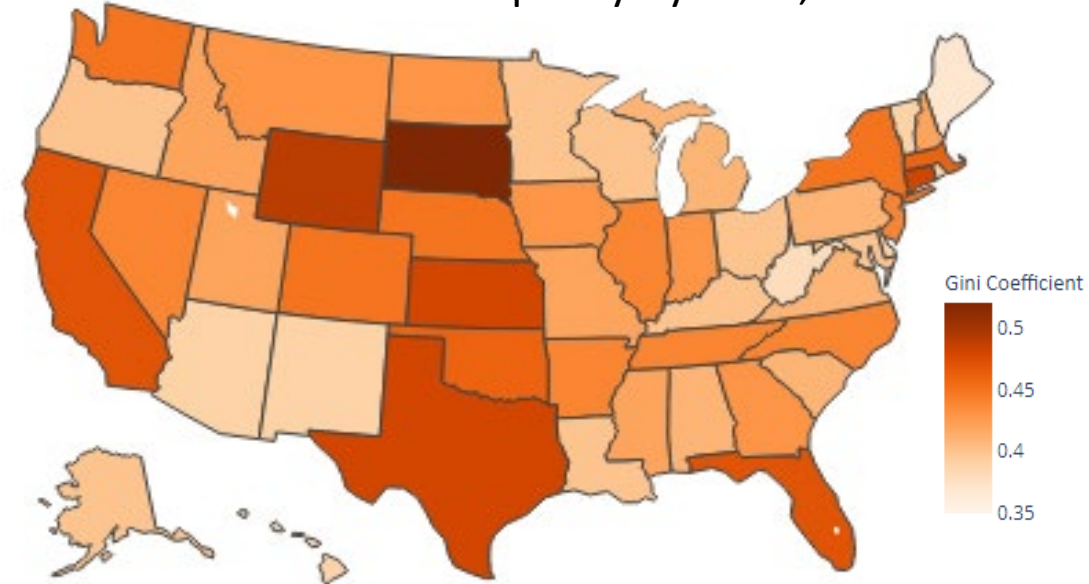
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- **Inequality.** BEA's prototype measures of the distribution of personal income and disposable personal income for 2022 show that:
 - The top 20% of households' share of personal income is 52 percent
48% of disposable personal income
 - The bottom 20% of households' share of personal income is 5 percent
6% of disposable personal income

- Implications for BEA:

- Extend existing work on the distribution of income.
- Given controversy over distribution of income data key that data are consistent with other BEA data with respect to accuracy, timeliness, periodicity, accessibility, transparency, and reproducibility.
- Explore integration of wealth with FRB into BEA distributional accounts.

Nationwide Inequality by State, 2022



- **Risk of another financial crisis.**

Better measures of risk including:

- Ultimate beneficial owner data for Foreign Direct investment
- “Who Owes What to Who” data for portfolio investment

- **Heightened geopolitical tensions.**

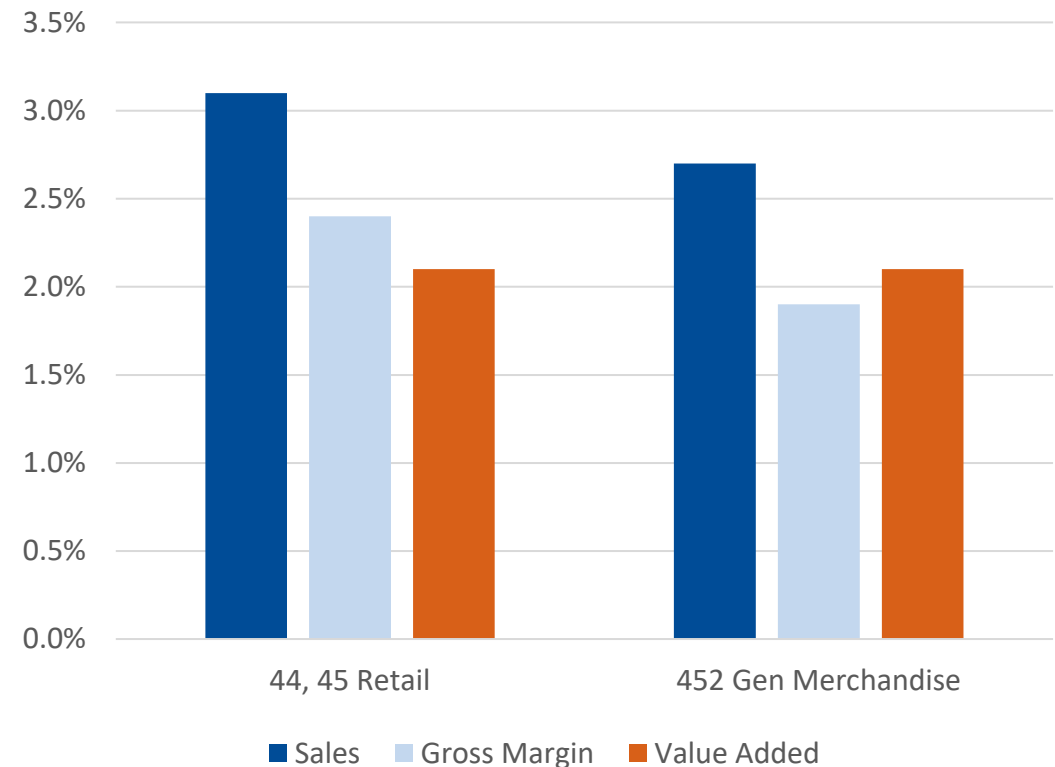
- Need for better data on the impact on global supply chains (e.g. Ukrainian wheat and Russian oil).

- Structural change, emerging technology, and changing markets carry **implications for BEA:**
 - Retail and a number of other industries may need revamping of basic concepts, methods, and source data
 - New or modified measures of nominal output, prices, real output, and productivity measures
 - At some point, update of NAICs may be required (Aarggh!)

Need for Continuous Updates

- In 1987, Robert Solow observed, *“You can see the computer age everywhere but in the productivity statistics”*
- Today it is the transformation in retail trade that is everywhere, but in the productivity statistics.
- Between 1997 and 2018, the average value-added growth rate for all industries was 2.1%; retail trade was roughly average.

Average Annual Change in Labor Productivity, 1997-2018, by Output Measure



○ **BEA's programs and research agenda will require continuous updates through 2044.** These updates will

involve many of the same processes used in the past and should be addressed in BEA's annual plans and checklists 10 to 20 years out and beyond. These generic goals include:

- New and better source data
- Research on innovative methods for nominal, price, and real estimates.

○ Also, in today's 24/7 data-driven economy there is growing demand for more timely (real time) data:

- More detailed data
- More relevant presentation of data

- Finally, the long-term fiscal outlook suggest that BEA continue its efforts to be as **innovative and effective** as possible through:
 - More use of micro data
 - More use of new technologies, including AI
 - More efficient human capital policies including recruitment, management, (including remote work)
 - Collaborative cross- agency and multidisciplinary work on issues such as environmental, resource, and health accounting
 - Regular updates across all the accounts

Most importantly, addressing all the forward-looking measurement challenges facing BEA will require the Bureau’s capable and talented employees to maintain a program **of proactive research.**