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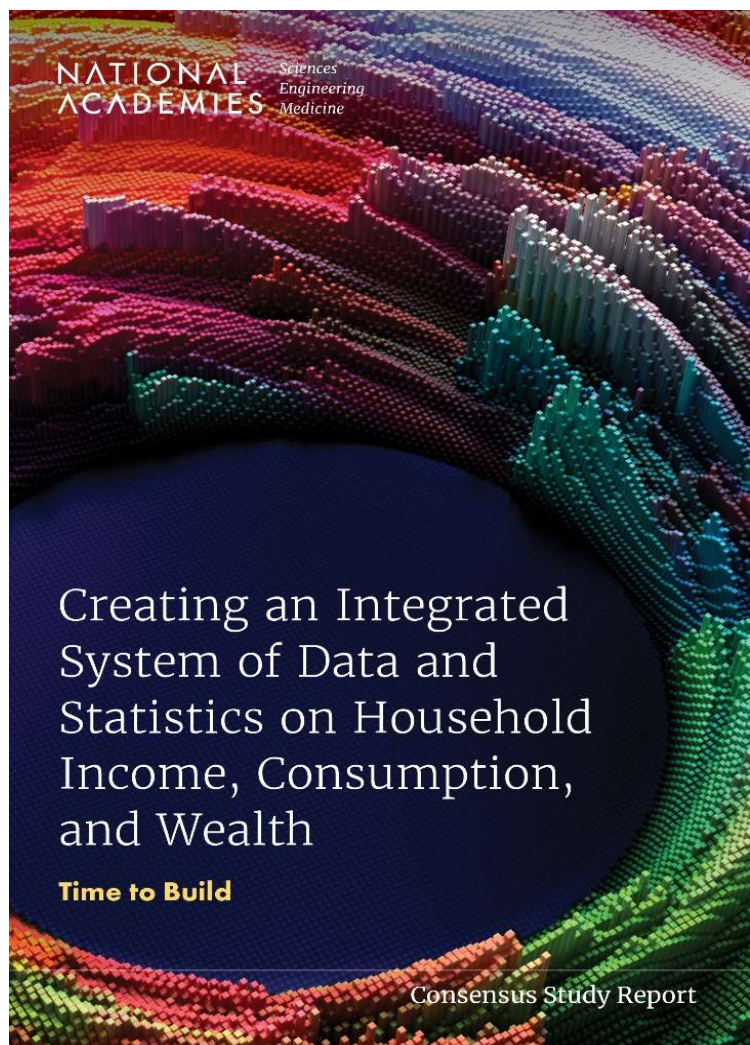
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Creating an Integrated System of Data and Statistics on Household Income, Consumption, and Wealth

Time to Build

CNSTAT Fall Seminar December 10, 2024





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Summary of the Report

Timothy (Tim) Smeeding (University of Wisconsin-Madison), NASEM Panel chair

Karen Dynan (Harvard University), Panel member

David Johnson (NASEM), Panel study director

Amy O'Hara (Georgetown University), Panel member

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Updates from the Agencies

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Thesia Garner (BLS)

Jonathan Rothbaum (US Census Bureau)

Pilot Projects

Bruce Meyer (University of Chicago) and Derek
Wu (University of Virginia)

David Splinter and Jacob Mortenson (Joint
Committee on Taxation)

John Sabelhaus (Brookings Institution), Panel
member

Reflections

Hilary Hoynes (University of California – Berkeley)

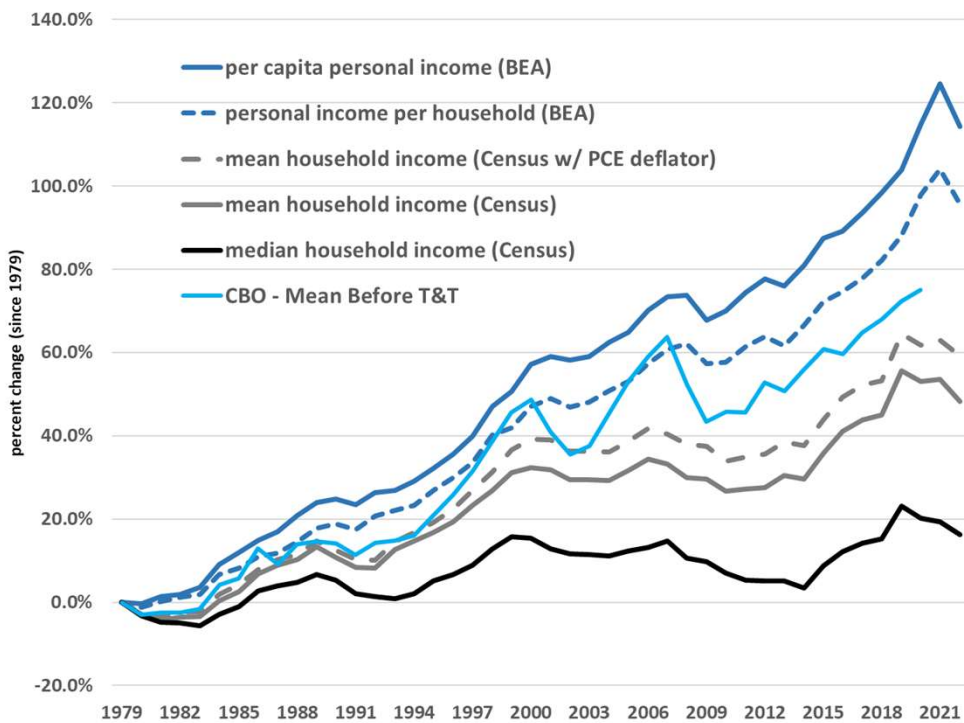
Richard Burkhauser (Cornell University)

The Issue: Integrated data and statistics on income (I), consumption (C) & wealth (W)

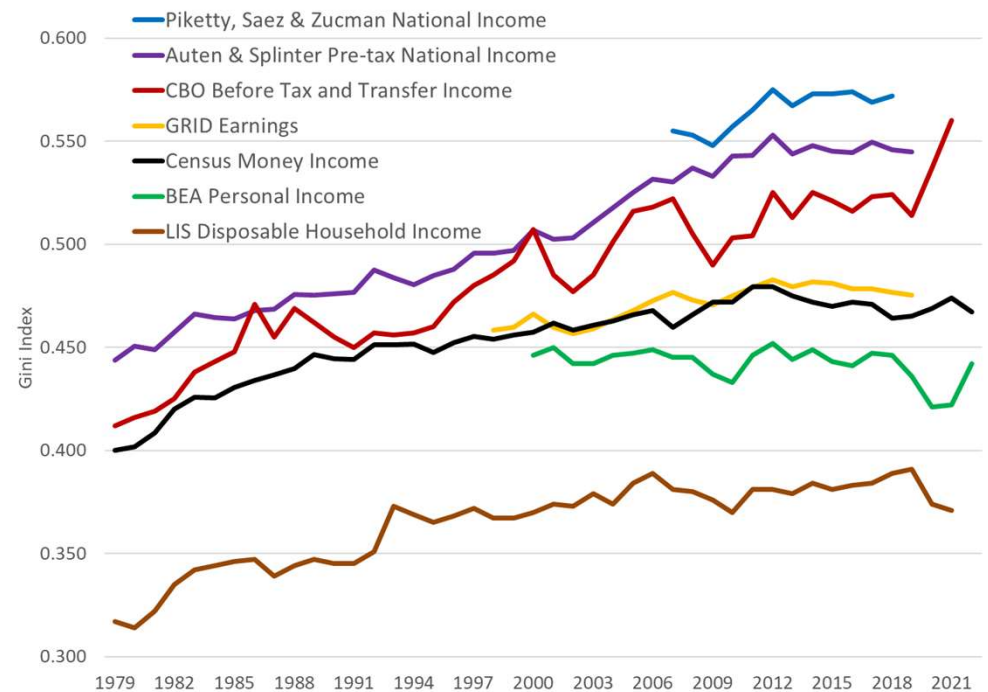
- For decades household and individual economic wellbeing has been measured annually for income (I) only—*and different measures of income give different estimates of means, medians, trends and levels of inequality and poverty*
- There is a need for I, C, W and changes in W (ΔW) to all be well measured from the same high-quality dataset or data construction in a transparent way
- There is a need for high-quality, consistent “official” annual statistics on I, C, W and their joint distributions, as well as access to the full range of data for research purposes
- Other motivation and importance: well being in retirement; intergenerational mobility and in-vivos transfers; wealth and financial precarity
- But this is not possible with current data sources – we need to build better ones

Current estimates are confusing and inconsistent

How much has income increased?



How much has income inequality increased?



Report contents

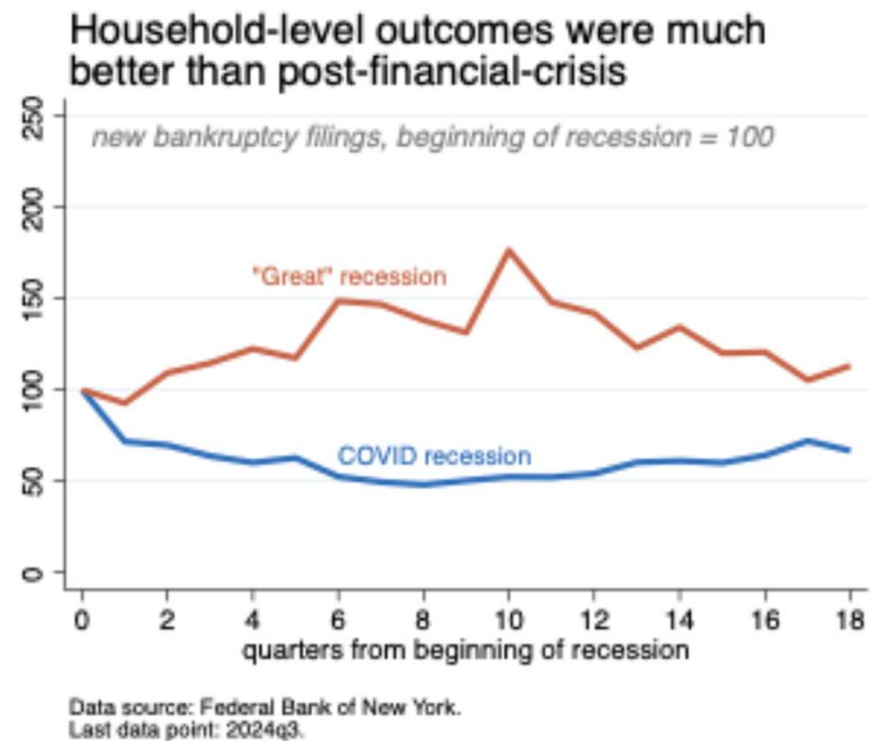
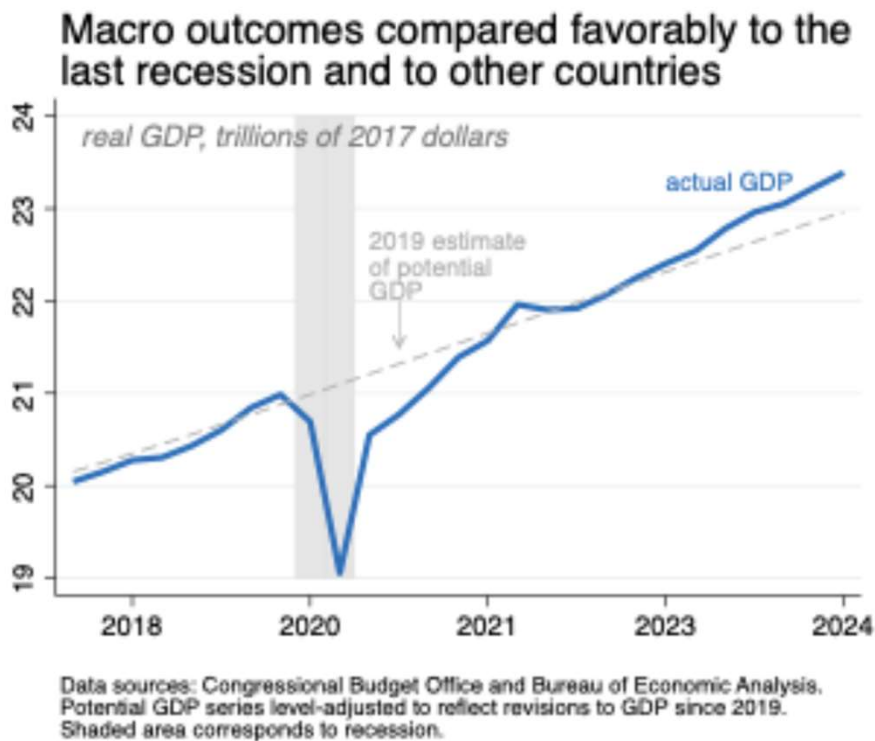
Summary

- 1 Introduction and Overview
- 2 Definitions and Conceptual Issues
- 3 Statistics for Policy and Public Understanding
- 4 Data Requirements and Criteria
- 5 Data Solutions, Methods and Options
- 6 Governance, Legal and Privacy Issues

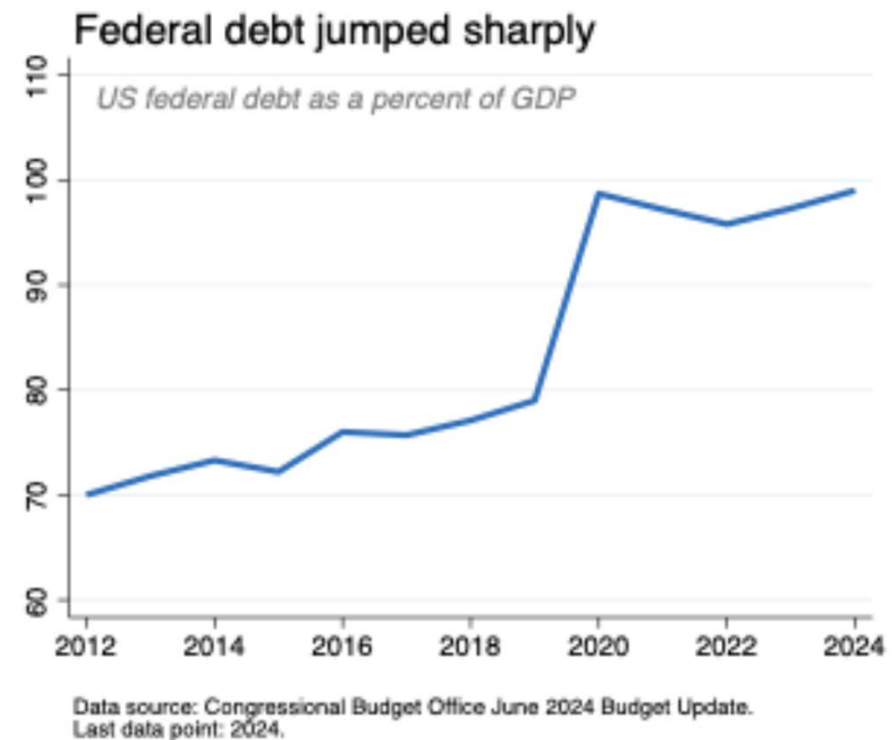
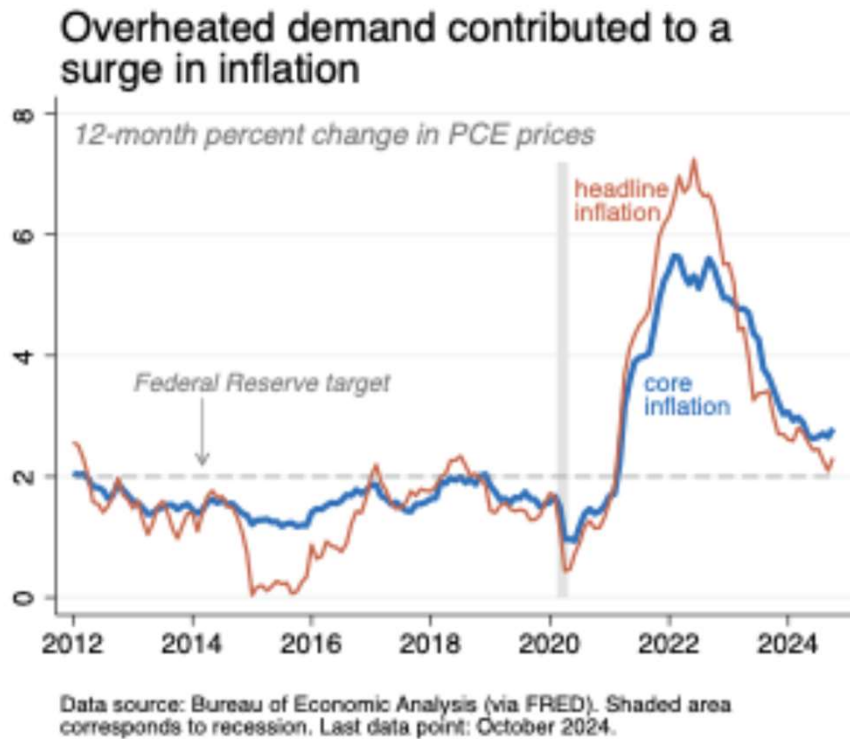
The Need: Fundamental research questions that could be informed by an integrated ICW system

- Trends and levels of **inequality, poverty, and economic mobility**
- Assessing **financial well-being, hardship, and exposure to risk**—at the business cycle frequency and over the longer-run
- **Implications of shifts** in demographics, household structure, and the economic environment for the dynamics of the economy
- **Assessing the role of accumulated wealth** is an important source of income and consumption insurance and an increasingly important source of intergenerational transfers
- Better understanding of consumer behavior in response to income and wealth transfers or shocks—**propensities to consume, borrow, save, take on risk**
 - heterogeneity by income/wealth/access to financial opportunities/other characteristics
 - heterogeneity by type of resource shocks (permanent/transitory)

Policy application 1: Evaluating the vigorous US economic policy response to the pandemic



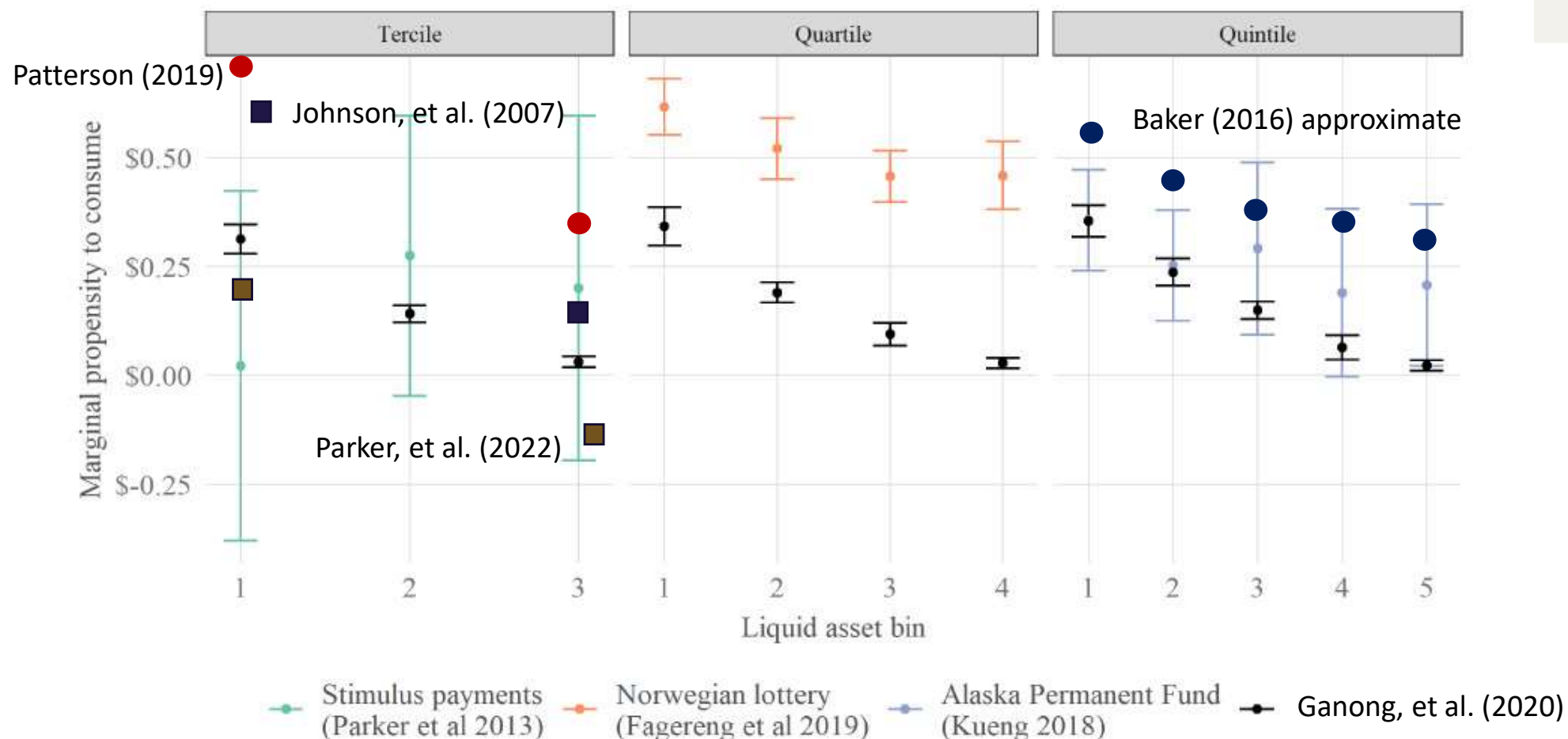
But the benefits of the pandemic policy response came with costs



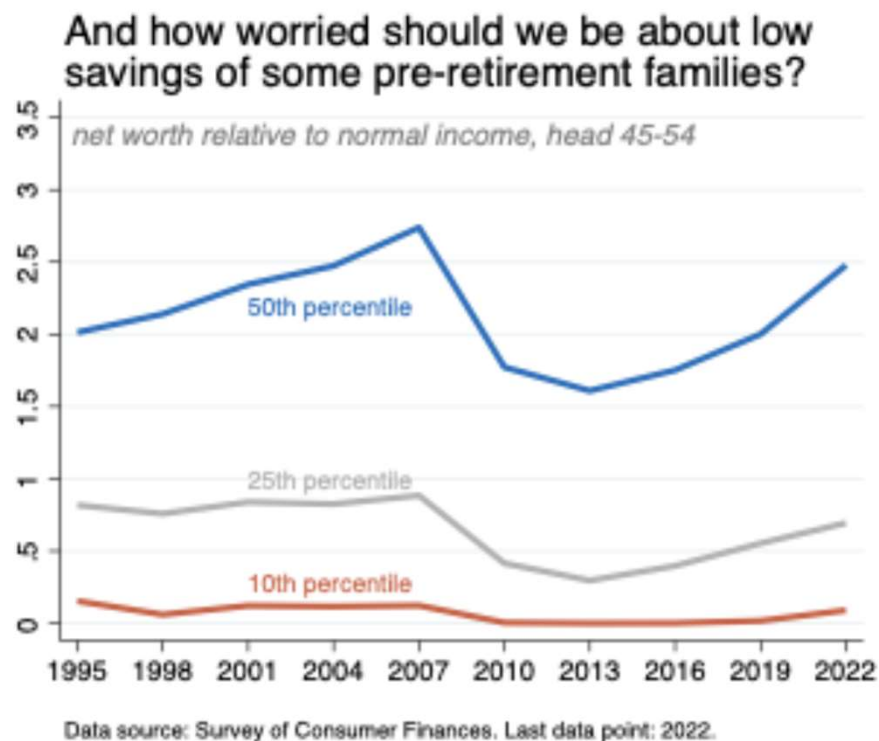
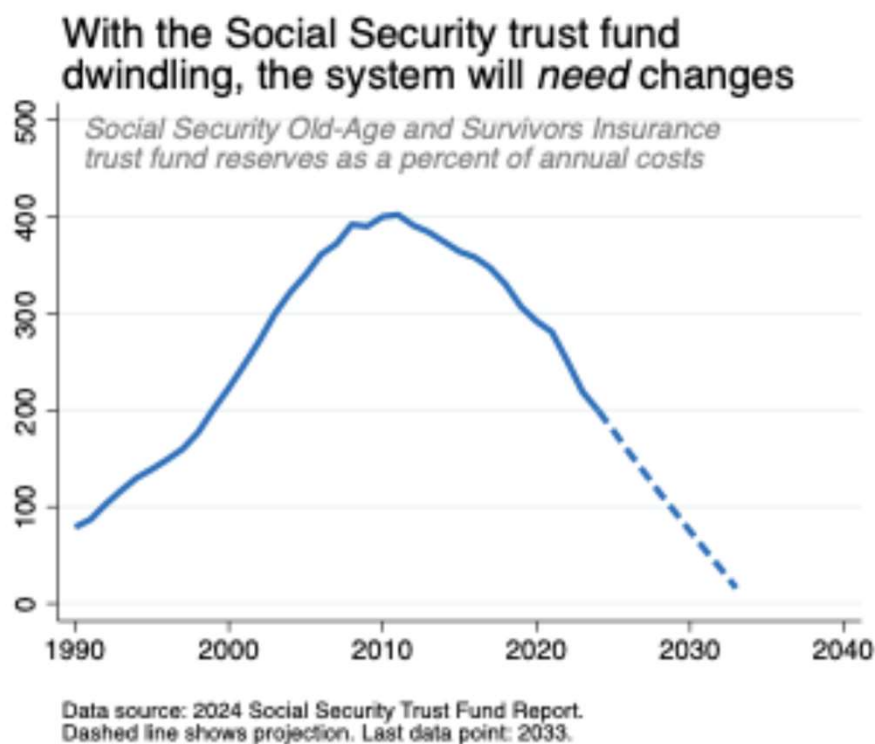
Research based on better ICW data could help mitigate macro fluctuations and reduce their costs

- Better ICW data could **help reveal “cracks”** before they turn into big problems—e.g., how many borrowers taking on unsustainable levels of debt in the early 2000s?
- Better ICW data could **help with targeting**—e.g., who really needed another “COVID check” in March 2021?
- Better ICW data could shed more light on **the likely response to countercyclical interventions**—e.g., a better grasp of likely MPCs could help us understand whether demand stimulus is not enough (as was probably the case in the early 2010s) or too much (as was probably the case in the early 2020s)?

Consistent ICW on same dataset can improve estimates of MPC by income/asset quantile



Policy application 2: Informing changes to Social Security and broader retirement savings policies



Research based on better ICW data would provide vital background on retirement security issues

- Better ICW data could provide a **truly comprehensive picture of household resources** (including pension wealth, family structure, and financial connections across generations)—which is needed to understand who is at risk of hardship at older ages
- Better ICW data could resolve debates over trends in inequality, which **bear on what people view as “fair”** when it comes to cutting benefits or raising taxes
- Better ICW data could help **the many outstanding questions about how retirement policy affects incentives** for people to accumulate their own retirement savings

Important for ICW measures to be consistent with budget identity and national accounts

- Conclusion 2-1: Conceptual definitions of household income, consumption, and wealth **are most useful when they are constructed to satisfy the budget identity, $\text{Consumption} = \text{Income} - \text{Saving}$** ... A fundamental principle in specifying an integrated data system is that decisions about what to count as income have direct implications for what to count as consumption and wealth.
- Conclusion 2-3: **Multiple definitions** of household income, consumption, and wealth are needed **to examine different policy and research**...
- Conclusion 2-4: Definitions **embedded in systems of national accounts** provide a well-established starting point for the variety of ICW concepts envisioned for the dataset recommended in this report.

Research does not use consistent measures of Income, Consumption and Wealth

TABLE 2-1A Established Definitions of Income

Source	Dispos- able personal income (BEA)	After tax & transfer national income (PSZ)	OECD (SNA)	Can- berra dispos- able HH income	Money income (Census Bureau)	After tax & trans- fer (CBO)	AGI	SCF family income (FRB)	CE after- tax income (BLS)
Employment income	+	+	+	+	+	+	+	+	+
Employer contribution to Social Security	<i>a</i>		<i>a</i>						
Employee contribution to Social Security	<i>a</i>		<i>a</i>		+		+	+	+
Employer-provided pensions	+	+	+				+		
							(some)		
Employer-provided health insurance	+	+	+			+			
Employer-provided other benefits	+	+	+						
Business income (including self-employment)	+	+	+	+	+	+	+	+	+
Investment income ^b	+	+	+	+	+	+	+	+	+

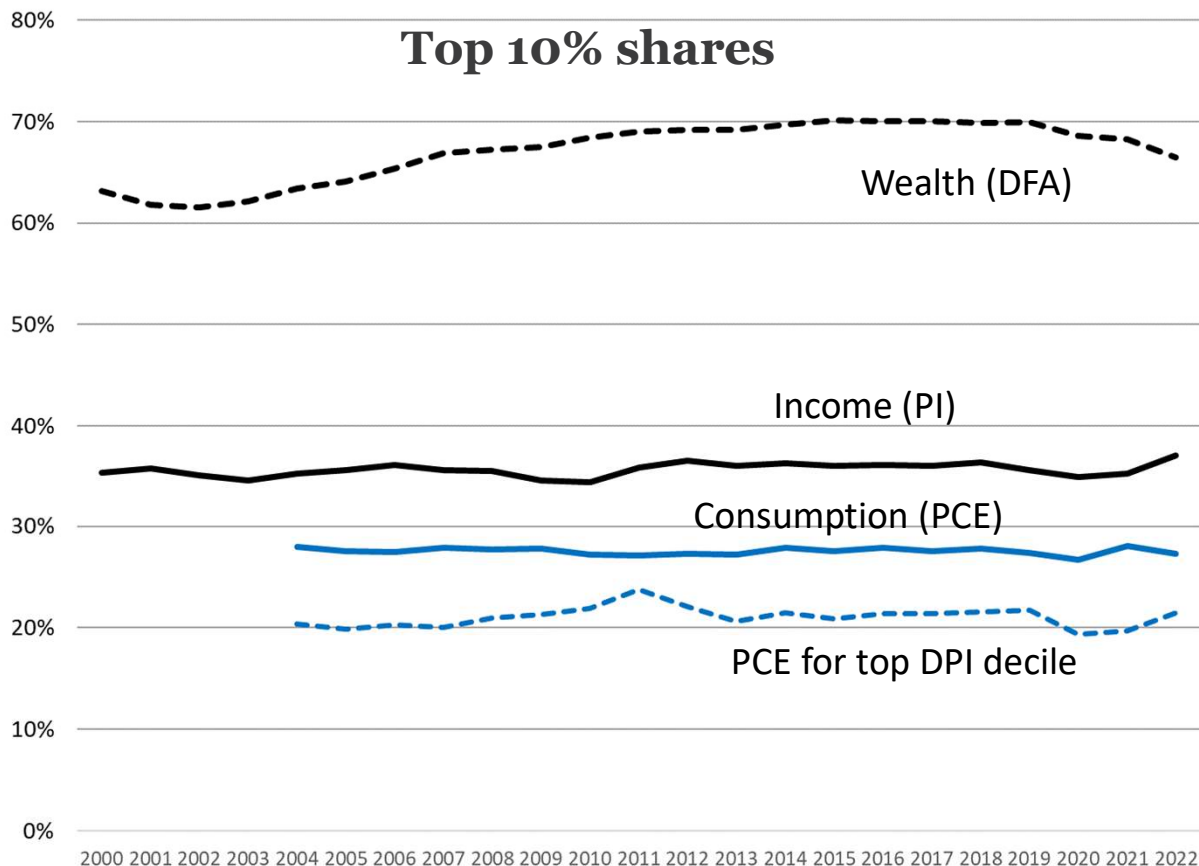
TABLE 2-1B Established Definitions of Consumption

	Personal consumption expenditures	CE expenditures (published)	BLS/CE consumption (proposed)	Fisher et al. consumption	Meyer/Sullivan consumption	OECD consumption expenditures
Durable goods						
Motor vehicles and parts						+
<i>New motor vehicles</i>	+	+				+
<i>Net purchases of used motor vehicles</i>	+	+				+
<i>Motor vehicle parts and accessories</i>	+	+	+	+	+	+

The Recommendations: Improved statistics and a report from federal statistical agencies

- Recommendation 3-1: ...**statistical agencies should build on their current initiatives** to publish improved statistics of household income, consumption, and wealth.
 - **BEA** should make its distributional household personal income (PI) estimates more useful by adding estimates for: (1) disposable (after-tax) PI that excludes nonprofit institutions serving households; and (2) disposable PI (excluding NPISH)...
 - The **Census Bureau's** household income estimates should include pre- and post-tax-and-transfer series...
 - The **BLS**...should expand and accelerate its program to publish annual estimates of household consumption...
- Recommendation 3-2: Relevant statistical agencies should **collaboratively publish a major report every three years** that compares levels and trends among the household income, consumption, expenditure, and wealth statistical series...
- Conclusion 3-1: The initiatives by [the federal agencies] are laudable. These initiatives deserve support to become established series as soon as practicable.

Possible new Report: Current estimates on ICW inequality use blended data

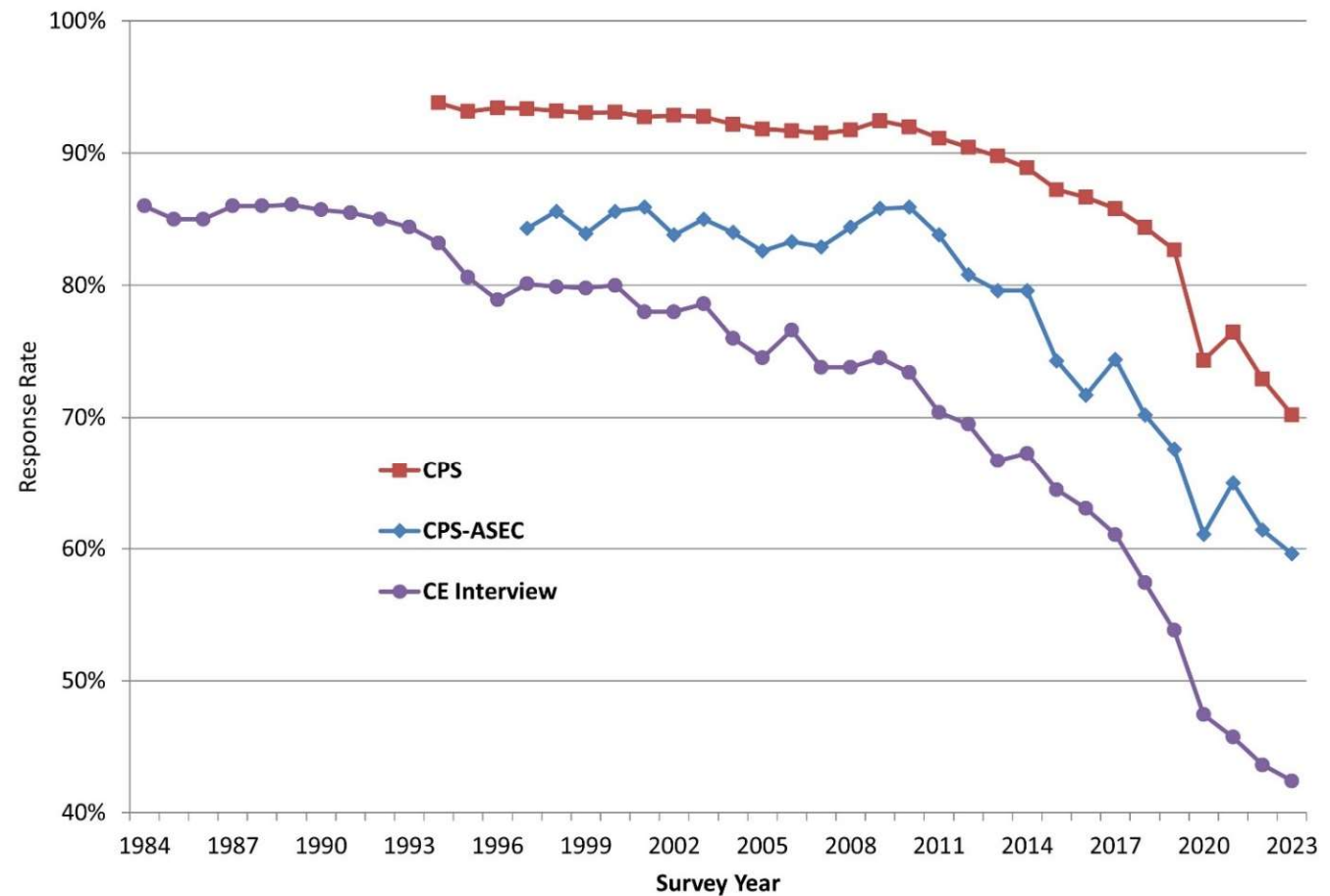


- Federal Reserve Board estimates quarterly distributional financial accounts (DFA) for wealth (SCF uses tax data)
- BEA estimates annual distributions of personal income (PI) and disposable personal income (DPI) (uses SOI tabulations)
- BLS estimates annual distributions of Personal Consumption Expenditures (PCE)
- Joint distribution of DPI and PCE (from BEA and BLS)

Need new and improved statistics on disparities by sociodemographic groups and geographic areas

- Conclusion 3-6: To summarize levels and trends in household economic wellbeing, agencies that publish improved estimates of household income, consumption, expenditures, and wealth need to display them with categories that illuminate the entire distribution....**collaborate on publishing a comparable set of inequality measures along with distributional breakdowns by sociodemographic groups.**
- Recommendation 3-3: To provide **additional geographic detail** for new and improved estimates of household income, consumption, and wealth, relevant statistical agencies should move toward implementation...

The ICW infrastructure cannot only rely on survey data with falling response rates



The data need to be assessed for quality

- Conclusion 4-1: Current federal household survey datasets that include income, consumption, and wealth data suffer from multiple data quality issues, including unit and item nonresponse, coverage error, and reporting error (mostly underreporting). **Use of administrative records can provide additional data to address these errors.**
- Recommendation 4-1: The relevant statistical agencies **should ensure that the integrated household-level data on ICW are representative of the national population;**
- Recommendation 4-3: Statistical agencies that produce estimates for households about income, consumption and wealth **should regularly consult with expert groups and agency advisory committees** and evaluate their datasets to assess whether the datasets and the estimates derived from them meet quality criteria—**namely relevance, accuracy, timeliness and punctuality, accessibility and clarity, and comparability and coherence.**

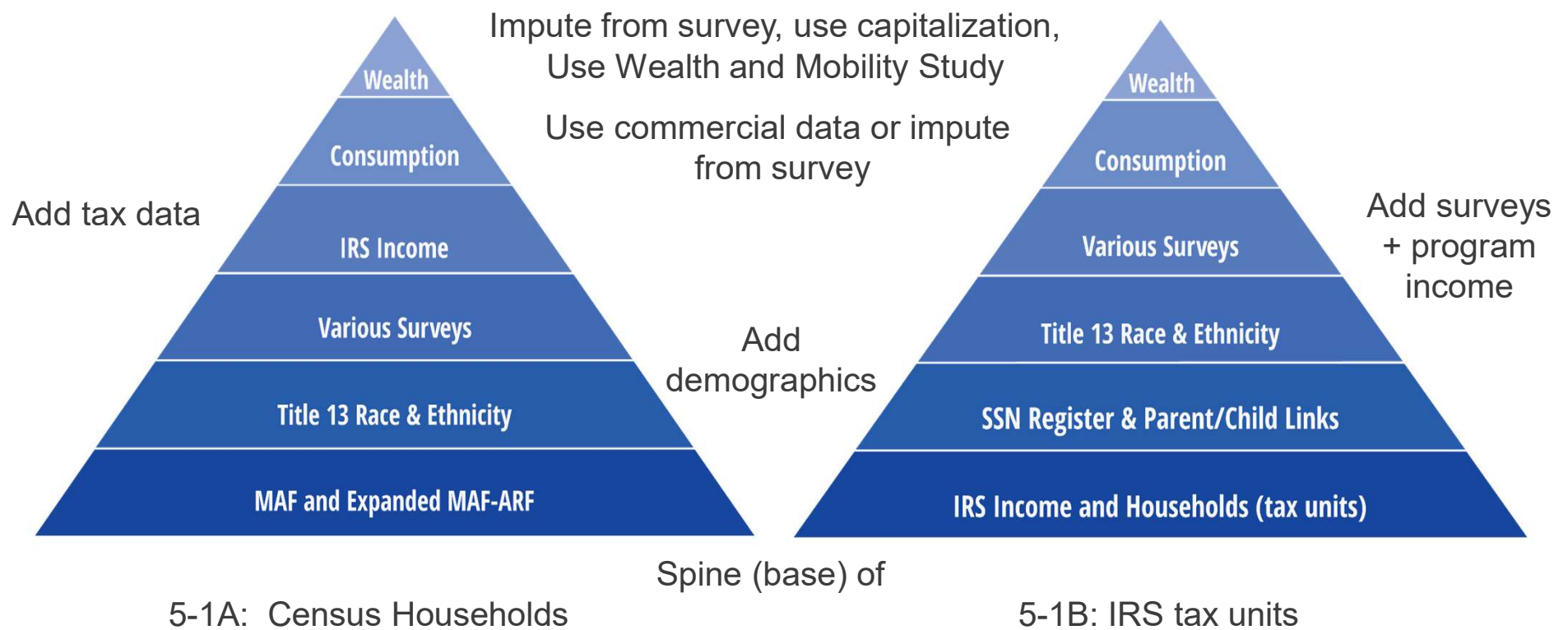
The Ideal Dataset

- The ideal data infrastructure for statistics and research on household ICW is a micro dataset with records for households with some data on the individuals living in the household. Such a dataset would allow users to precisely estimate the joint distribution of ICW for individuals aggregated to households and other units of analysis with as much geographic, race/ethnicity, and demographic detail as possible at various breakdown points in the distribution, including the very top (e.g., top 1% and top 0.1%). The ideal dataset is easily accessible, regularly updated, and comparable both over time and with other countries.
- The ideal dataset captures the desired units of observation, coverage, characteristics, consistency, frequency, timeliness, updateability, and flexibility. However, such a dataset does not exist in the United States.

Need a wide variety of blended data sources (linked survey and administrative data)

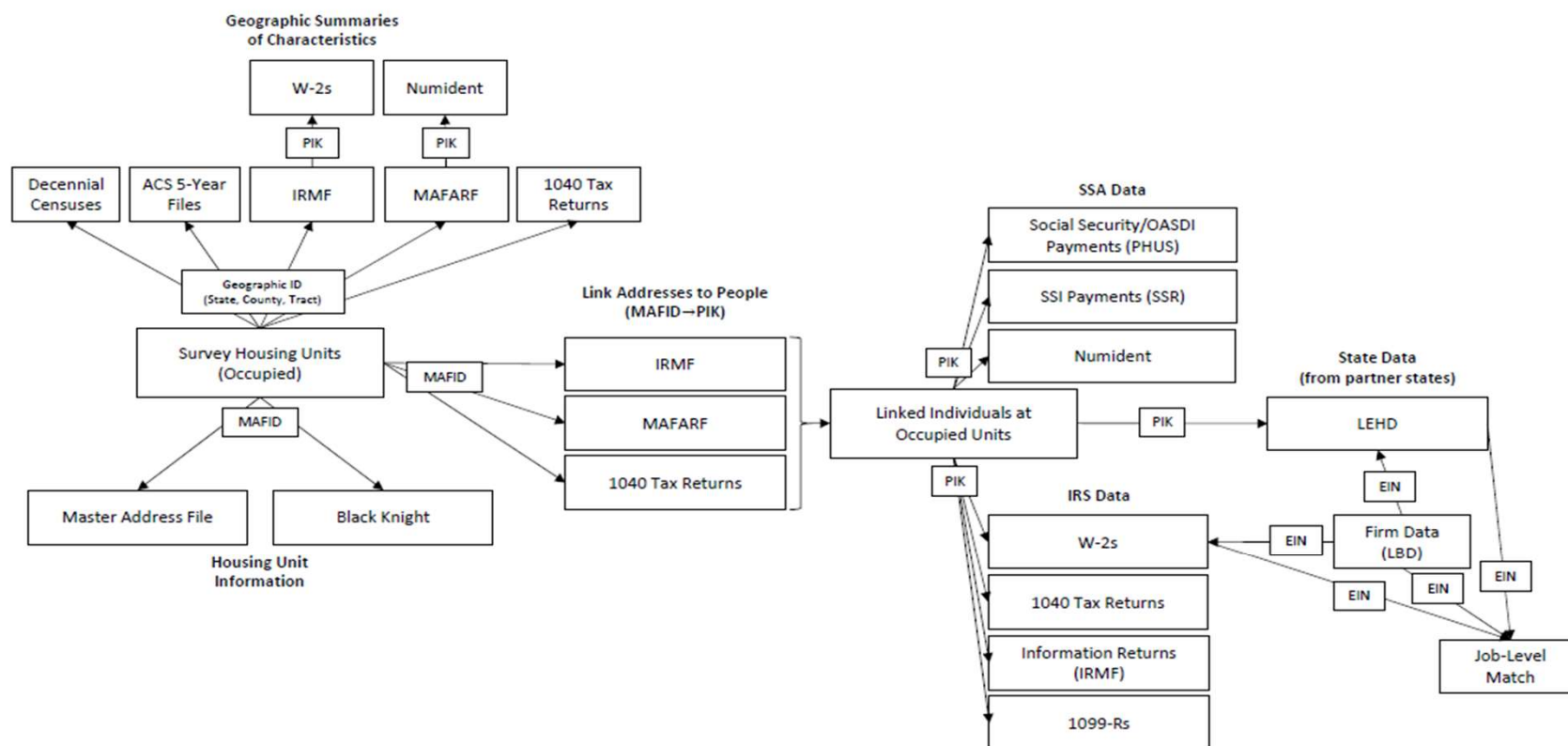
- Recommendation 5-1: The Chief Statistician and the National Secure Data Service should work together to create a **coordinating entity to solve administrative, legal, and technical challenges to integrate data from multiple federal entities**...as well as private businesses that collect microdata on individual and household income, consumption, and wealth.
- Recommendation 5-2: ...the coordinating entity should **expand on current efforts and coordinate new pilot studies to blend multiple datasets** that have the key components of income, consumption, and wealth;
- Recommendation 5-4: ...the coordinating entity...should explore the **fusion of relevant publicly accessible datasets**
- Recommendation 5-5: ...the relevant statistical agencies, should assess the costs and benefits of constructing a new panel dataset based on a survey, **and via consent, links to administrative data and commercial data.**

Blended data begins with a spine



Census National Experimental Wellbeing Statistics blends multiple data sources to measure income

Figure 4: Linkage Diagram for Address File



Source: Bee, A., Mitchell, J., Mittag, N., Rothbaum, J., Sanders, C., Schmidt, L., & Unrath, M. (2023). *National experimental wellbeing statistics* (SEHSD Working Paper No. 2023-02). U.S. Census Bureau

Possible Pilot Projects

- Expanding NEWS to include government in-kind transfer programs, health benefits, income taxes, and capital gains
 - NEWS has new estimates for after-tax and transfer income and the supplemental poverty measure.
- Building on efforts to measure spending in commercial data to improve consumer expenditure data in the CE
 - Can use CID methods to link CE data and administrative data to create joint distributions
- Evaluating both data constructions in Figure 5-1 to compare the estimates of income and population characteristics, particularly in the tails of the distributions.
 - Possibilities of using tax data to examine Figure 5-1B
- A comparison of the consumption (or spending) estimates using the budget identity or actual estimates
 - Evaluate the budget identity and SCF to create measures of income, wealth and savings to use with the budget identity to estimate consumption (ala Rec 5-4).

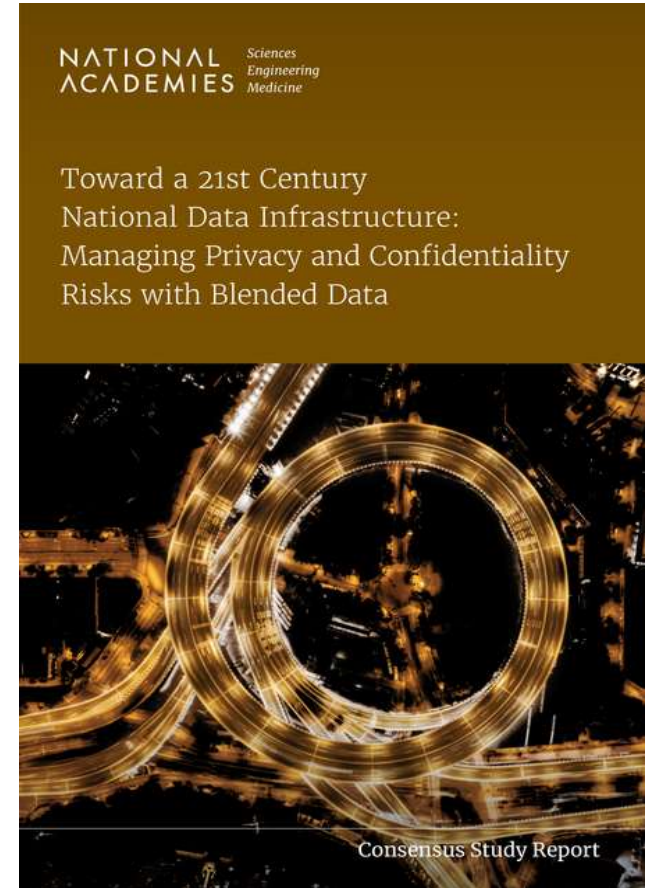
Need to ensure privacy while maintaining accessibility and usefulness

- Recommendation 6-1: ...the coordinating entity, in collaboration with relevant statistical agencies, **should jointly develop a risk-utility framework** and a combination of traditional disclosure limitation strategies and privacy enhancing technologies...
- Recommendation 6-2: The coordinating entity...should **propose options for a National Secure Data Service pilot** to be created through which **approved researchers would be allowed to access** linked microdata...

Builds upon recent 21st Century reports stressing the importance of blended data



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21st Century report conclusions

Conclusion 2-1 from 1st 21st Century Report

- The United States needs a new 21st century data infrastructure that **blends data from multiple sources to improve the quality, timeliness, granularity, and usefulness of national statistics...**

Conclusion 9-3 from Multi-source report.

- **Use of multiple data sources is expected to play a major role in the future production of statistical information in the United States, ...**

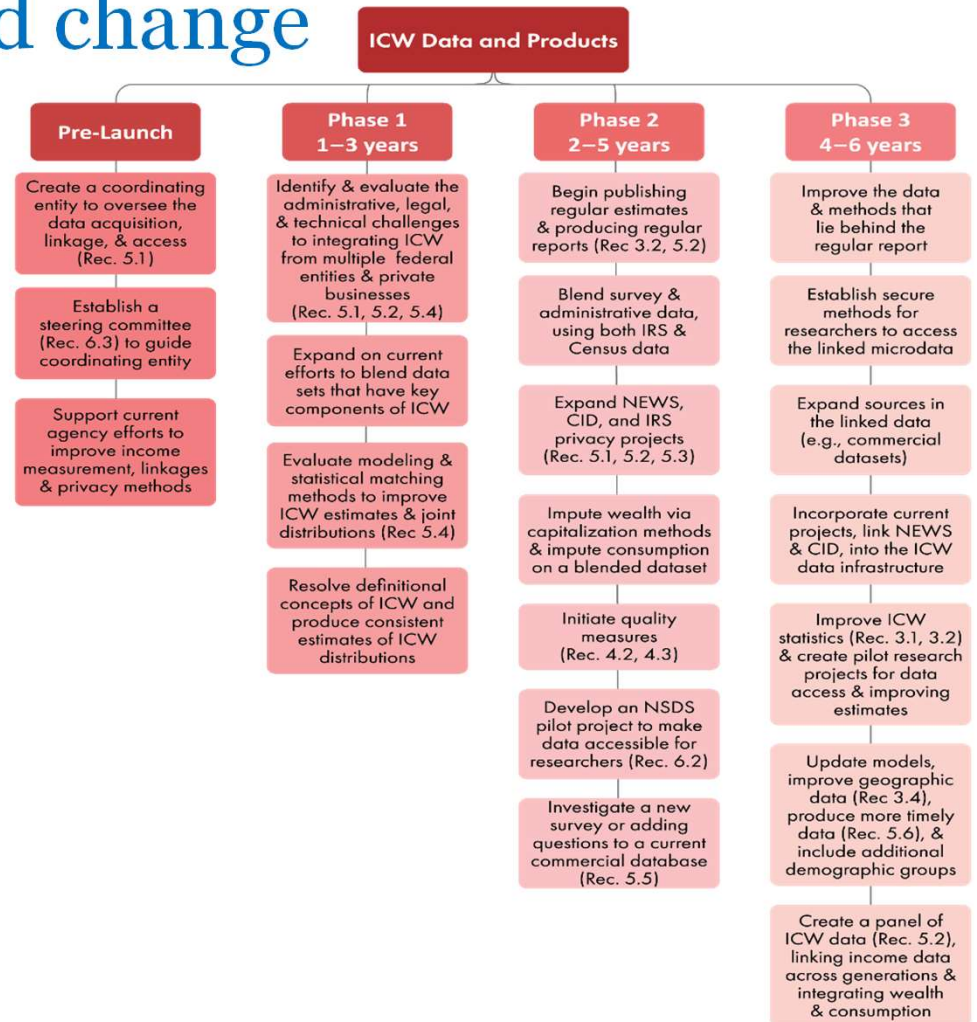
Conclusion 3-2 from Privacy report

- **Tiered access for data users and agencies is a key component of a dynamic disclosure risk/usefulness framework, to reflect differences in acceptable risks given policy priorities.**

The Roadmap: How to make progress and a steering committee to lead change

Conclusion 6-2: The success in using multi-source data and data integration in other countries that operate with a single centralized statistical agency can provide guidance to improve the collaboration within and integration of the current U.S. statistical system.

Recommendation 6-3: The OMB Chief Statistician, in collaboration with the Interagency Council on Statistical Policy, should **establish an ICW technical steering committee...**



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