

# Real-Time Inequality

Thomas Blanchet   Emmanuel Saez   Gabriel Zucman

University of California, Berkeley

NBER Summer Institute  
July 19th, 2022

## Motivation: Lack of Timely Data on Inequality

**A lot of data on the current state of the US economy gets released from a variety of sources at a high frequency:**

- ▶ Estimates of GDP are released less than a month after each quarter.
- ▶ Detailed personal income, employment and earnings every month.
- ▶ Unemployment claims every week.

These indicators are heavily scrutinized by policymakers, the business community, the press, etc., and used to analyze the business cycle.

But they don't tell us — at least not explicitly — about the distribution.

## Motivation: Lack of Timely Data on Inequality

**In comparison, the available data on the distribution of income is lacking:**

- ▶ Distributions from tax statistics available with lag  $\geq 2$  years.
- ▶ Current Population Survey available monthly, but only for wage earnings, for a small subsample, doesn't capture the top.

**This limits the ability of policymakers to design effective policies:**

- ▶ **During Covid:** Did government redistribution undershoot? Overshoot?
- ▶ **Today:** Are real wages rising for low-income workers?

**Our goal:** Mobilize all public data to build real-time inequality statistics.

## Contribution: Monthly microdata matching macro totals

This project: **prototype real-time monthly distributional national accounts:**

- ▶ **Output:** Monthly synthetic microdata, which distributes all of national income and wealth to individuals, matching macro totals.
- ▶ Following a recession, this can be used to compute “distributional output gaps:” which groups of the population are below their pre-crisis income level or trend.
- ▶ Incorporate all taxes and government transfers → reveal how national income is distributed and redistributed month-to-month.

**Estimates available on [realtiminequality.org](http://realtiminequality.org) within a few hours of the publication of the national accounts:**

- ▶ Based solely on **public data**.
- ▶ Synthetic microfiles available as well.

# Our Website [realtimelinequality.org](http://realtimelinequality.org) Shows Who Benefited from Growth Last Quarter?

## Real income growth per adult in the last quarter (2022-Q1)

Growth rates, gains, and income levels are annualized.

Period:  Last Calendar Year  Last Quarter

Sort by: Group  Growth (%) Gain (\$) Income

Group	Growth (%)	Gain (\$)	Avg. Income
● Total	0.5% 	\$470	\$87k
● Bottom 50%	5.1% 	\$990	\$20k
● Middle 40%	1.6% 	\$1.5k	\$92k
● Top 10%	-1.4% 	\$-5.9k	\$410k
● Top 1%	-3.1% 	\$-53k	\$1.7M
● Top 0.1%	-3.6% 	\$-270k	\$7.5M
● Top 0.01%	-2.6% 	\$-860k	\$34M

# Methodology and Validation

# Methodology

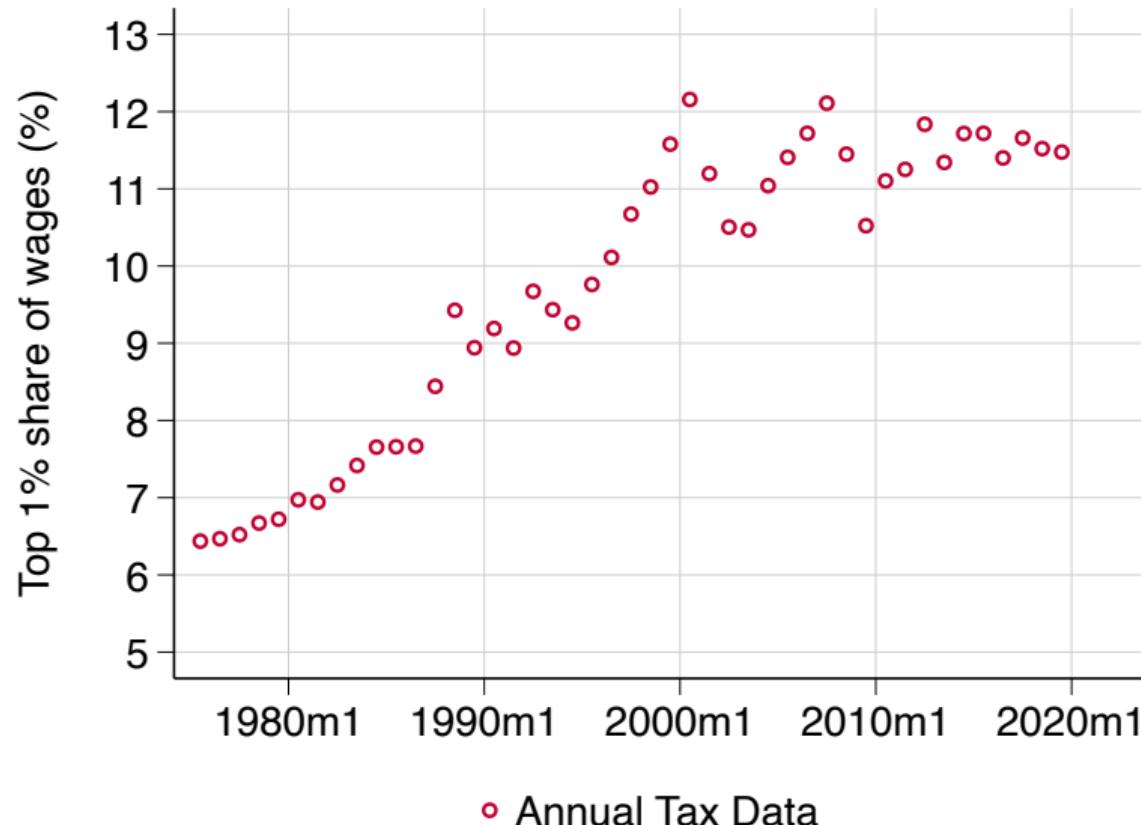
## We combine all the publicly available data:

- ▶ Annual distributional national accounts data (Piketty, Saez and Zucman, 2018) based on public-use tax microdata
- ▶ One-to-one statistical match with surveys (CPS, SCF)
- ▶ Adjust files to incorporate high-frequency information from:
  - ▶ Monthly and quarterly national accounts (NIPA)
  - ▶ Quarterly Census of Employment and Wages (QCEW)
  - ▶ Current Employment Statistics (CES) series
  - ▶ Monthly CPS, unemployment benefits, ...

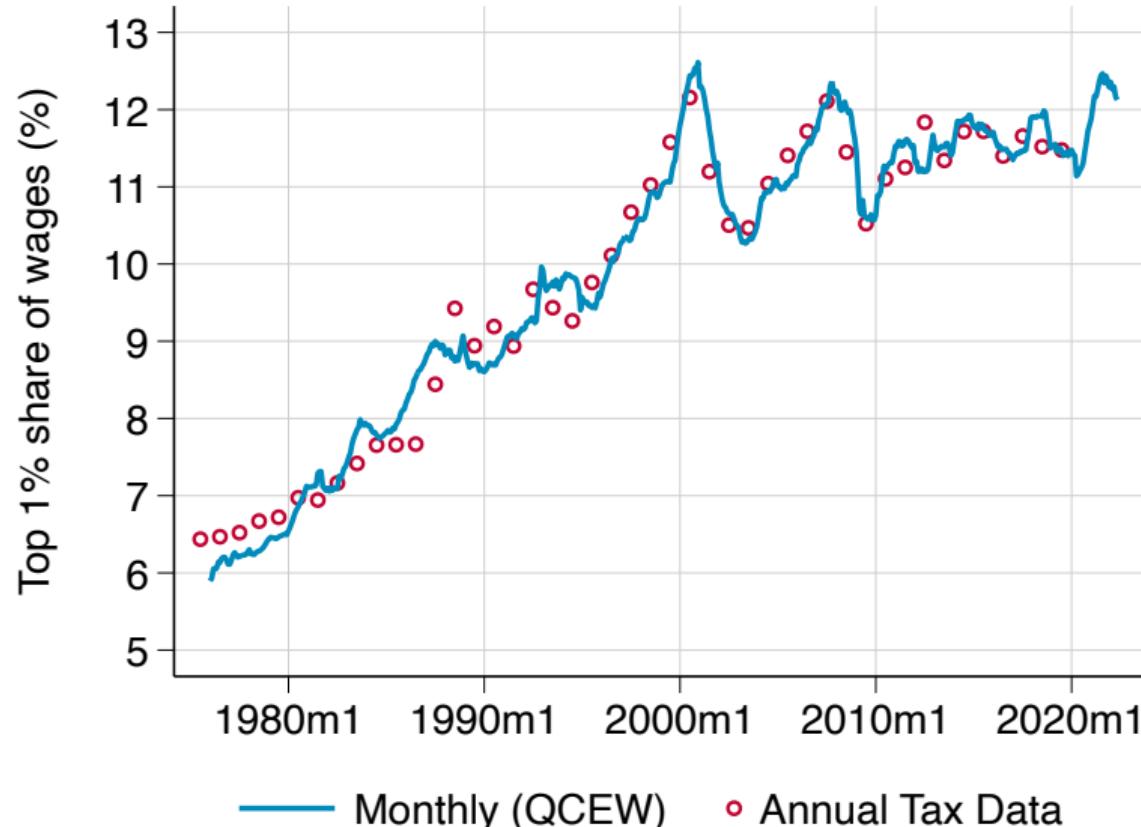
## The resulting datasets:

- ▶ Add up to each component of national income.
- ▶ Can be used to compute any inequality statistics in real time (income, wealth, wage, racial gaps, gender gaps, ...).

# Rise of Top 1% Wage Share in Tax Data

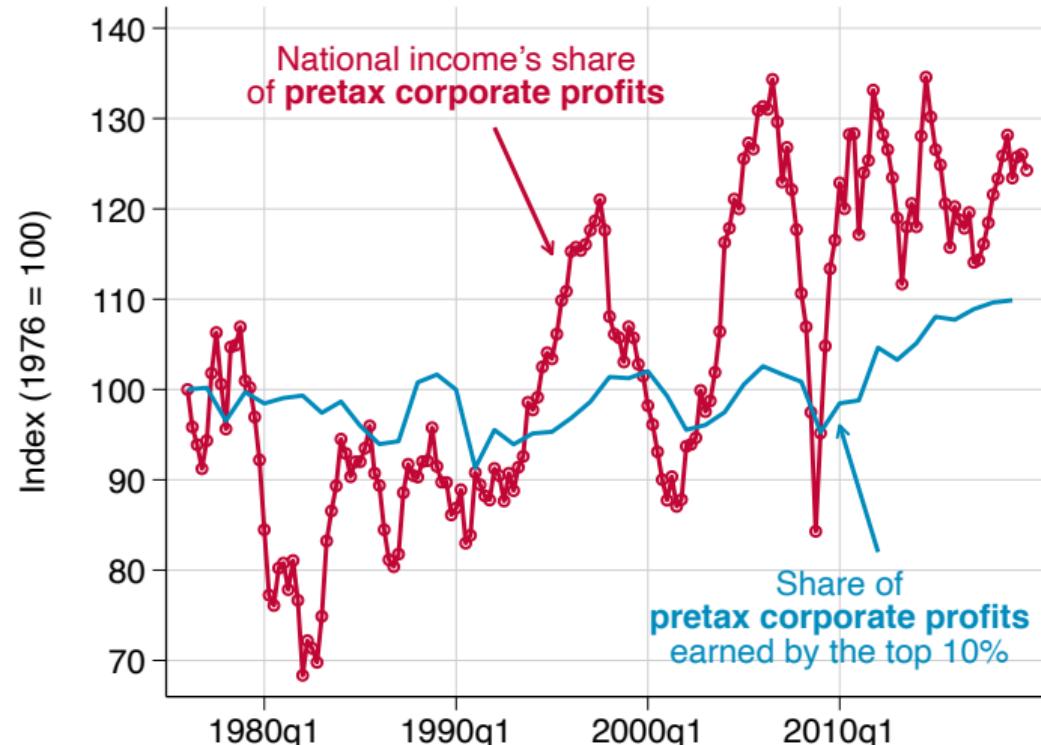


## QCEW Captures This Rise Remarkably Well



# Capital Incomes: We Simply Rescale to Macroeconomic Aggregates

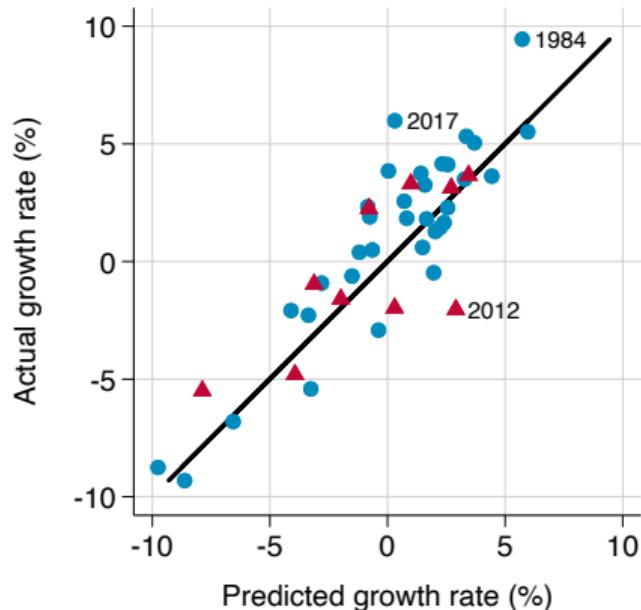
**This Works Because Aggregate Profits Are Volatile, Their Concentration is Not**



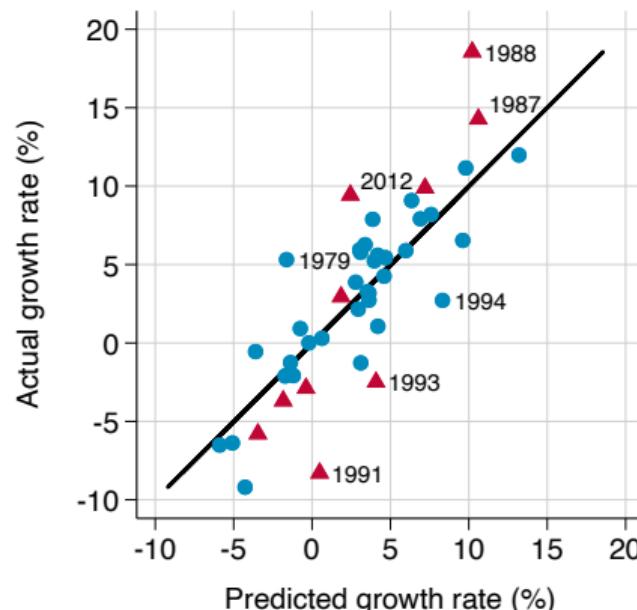
# We Validate Our Methodology by Applying It Retrospectively

## Our Methodology Successfully Predicts Annual Growth Rates

*Bottom 50%*

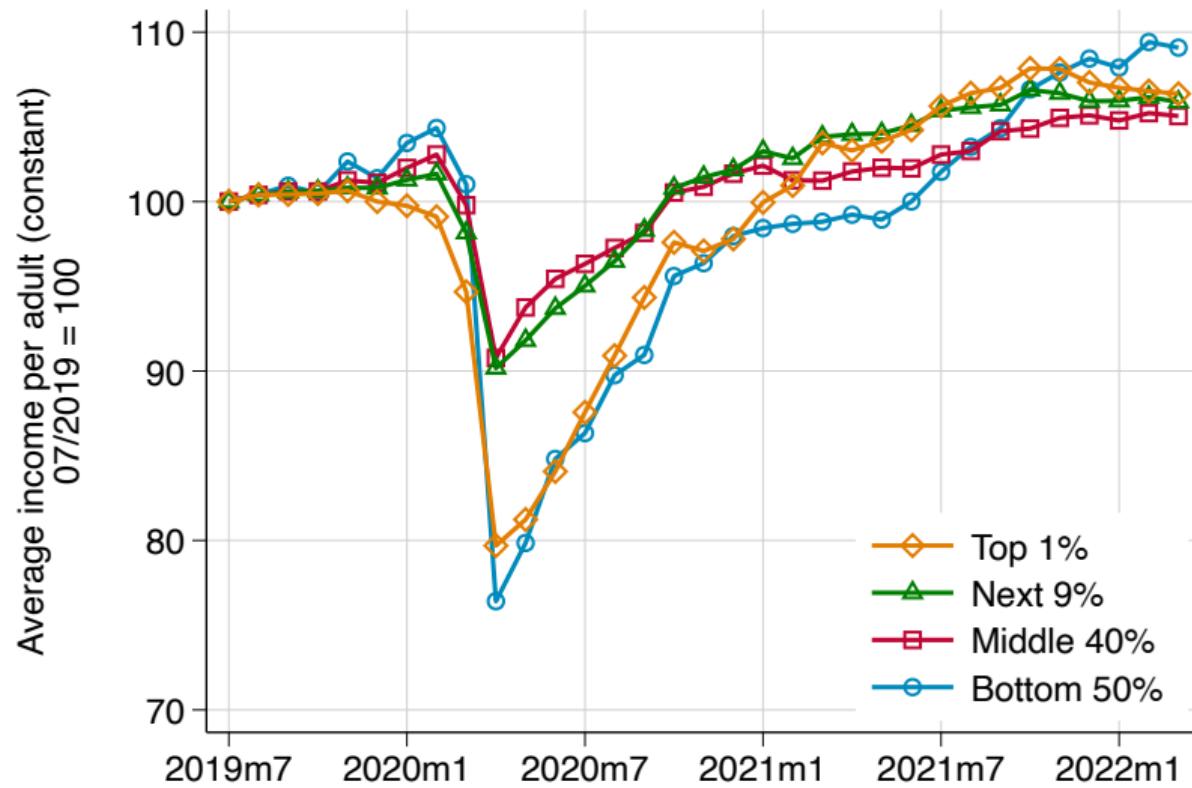


*Top 1%*

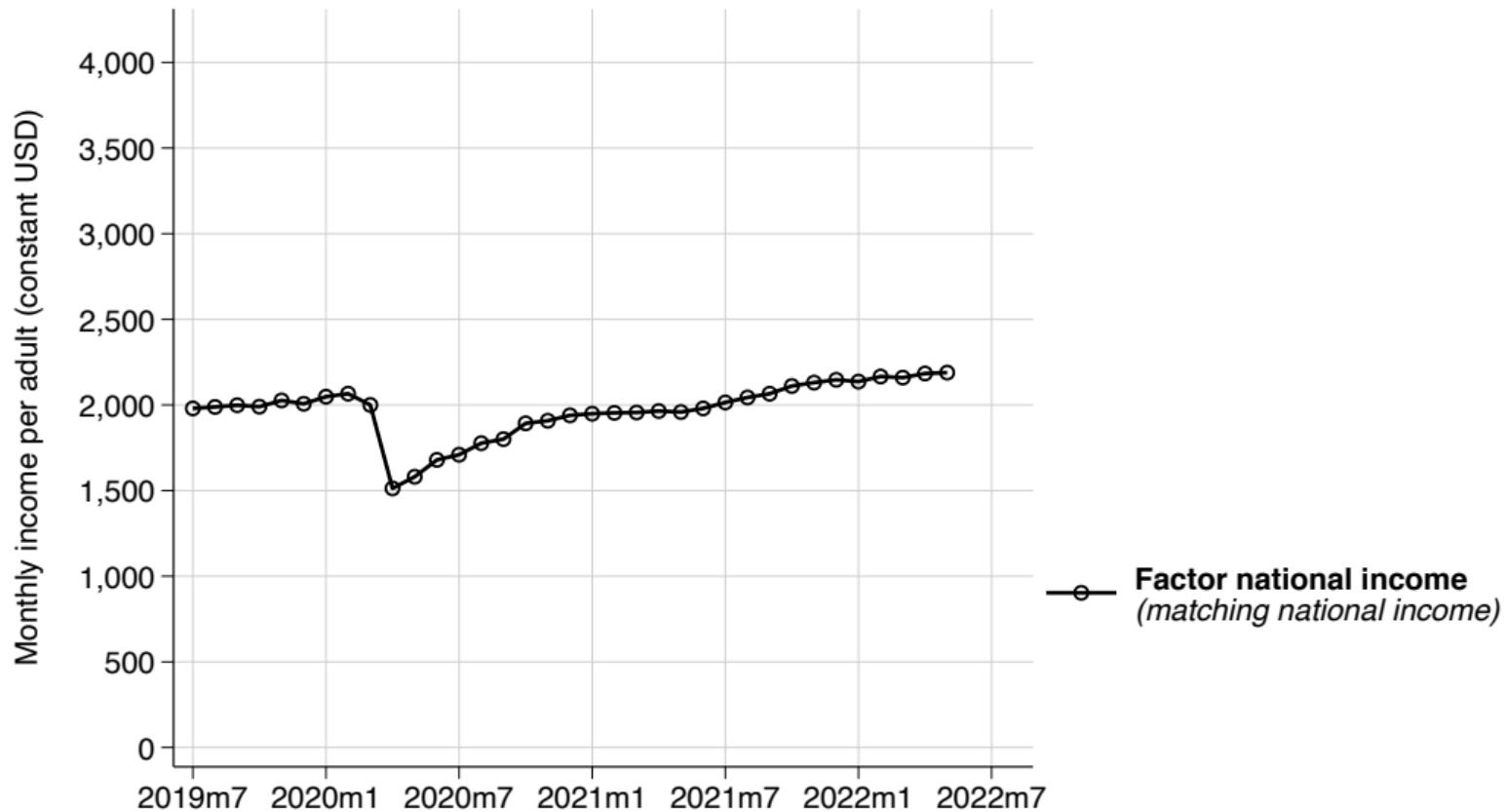


# The Distribution and Redistribution of National Income During Covid

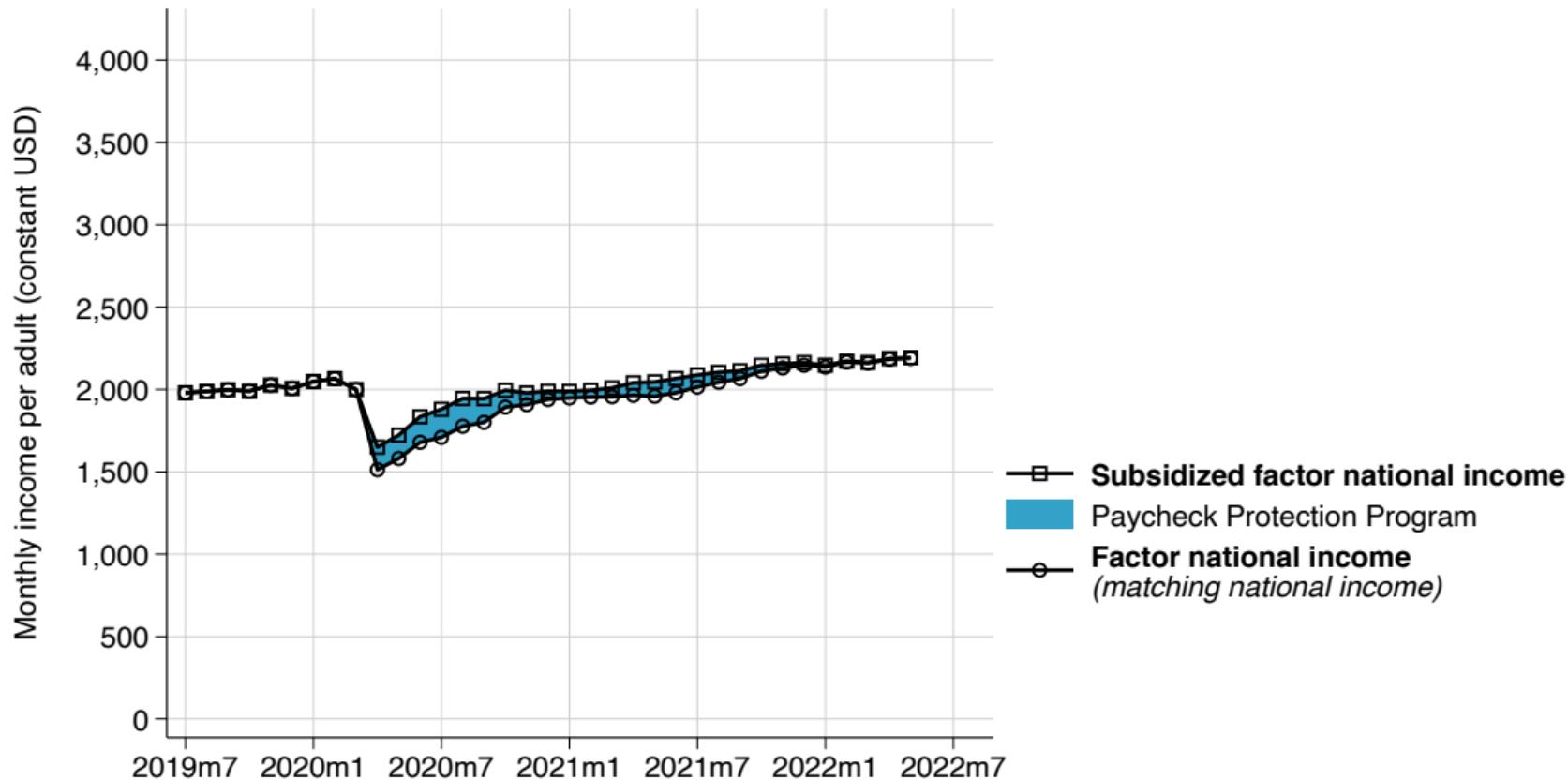
## COVID Crisis: All Groups Recover Within 20 Months



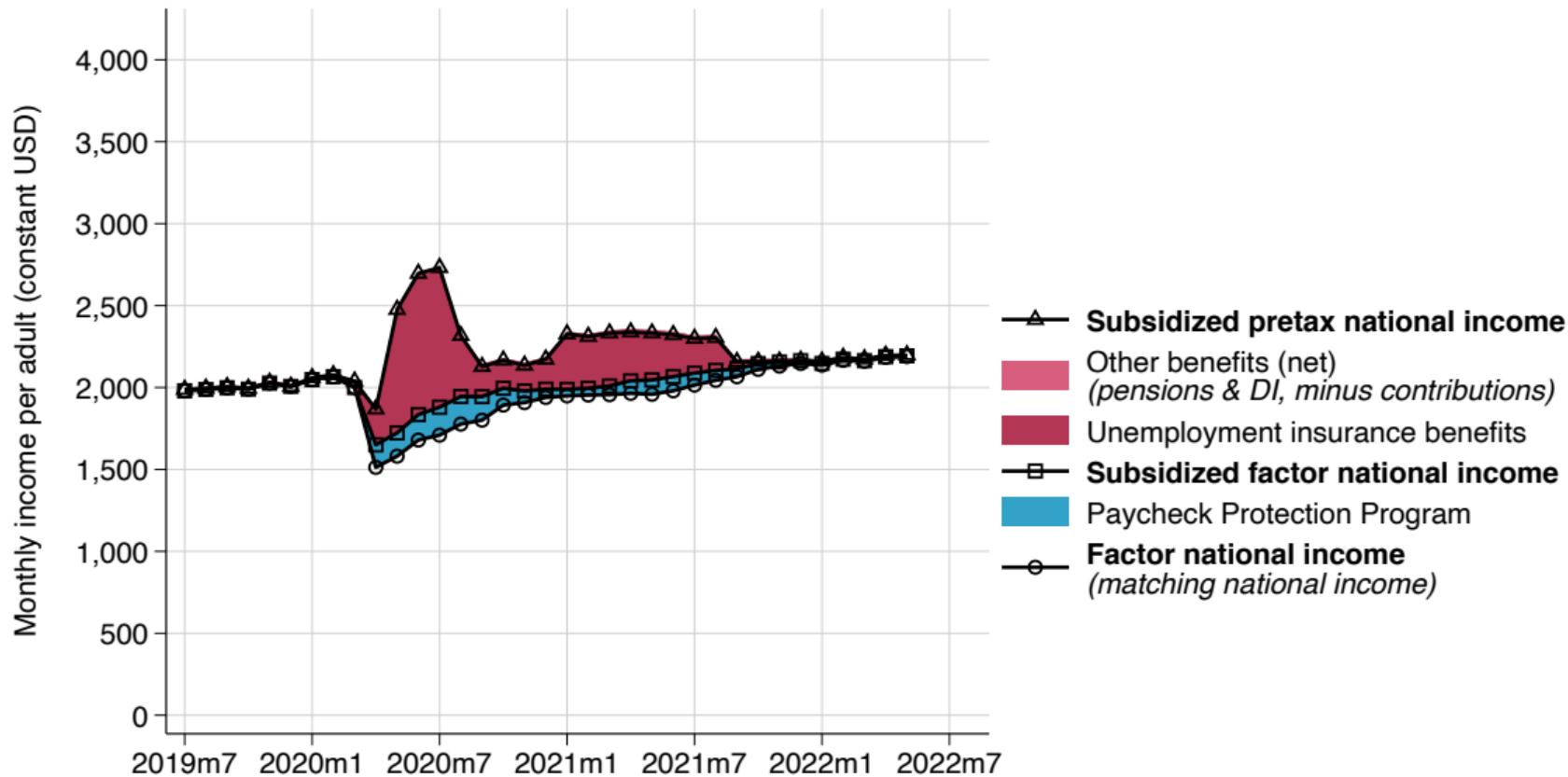
# Bottom 50% Incomes: The Role of Government Transfers



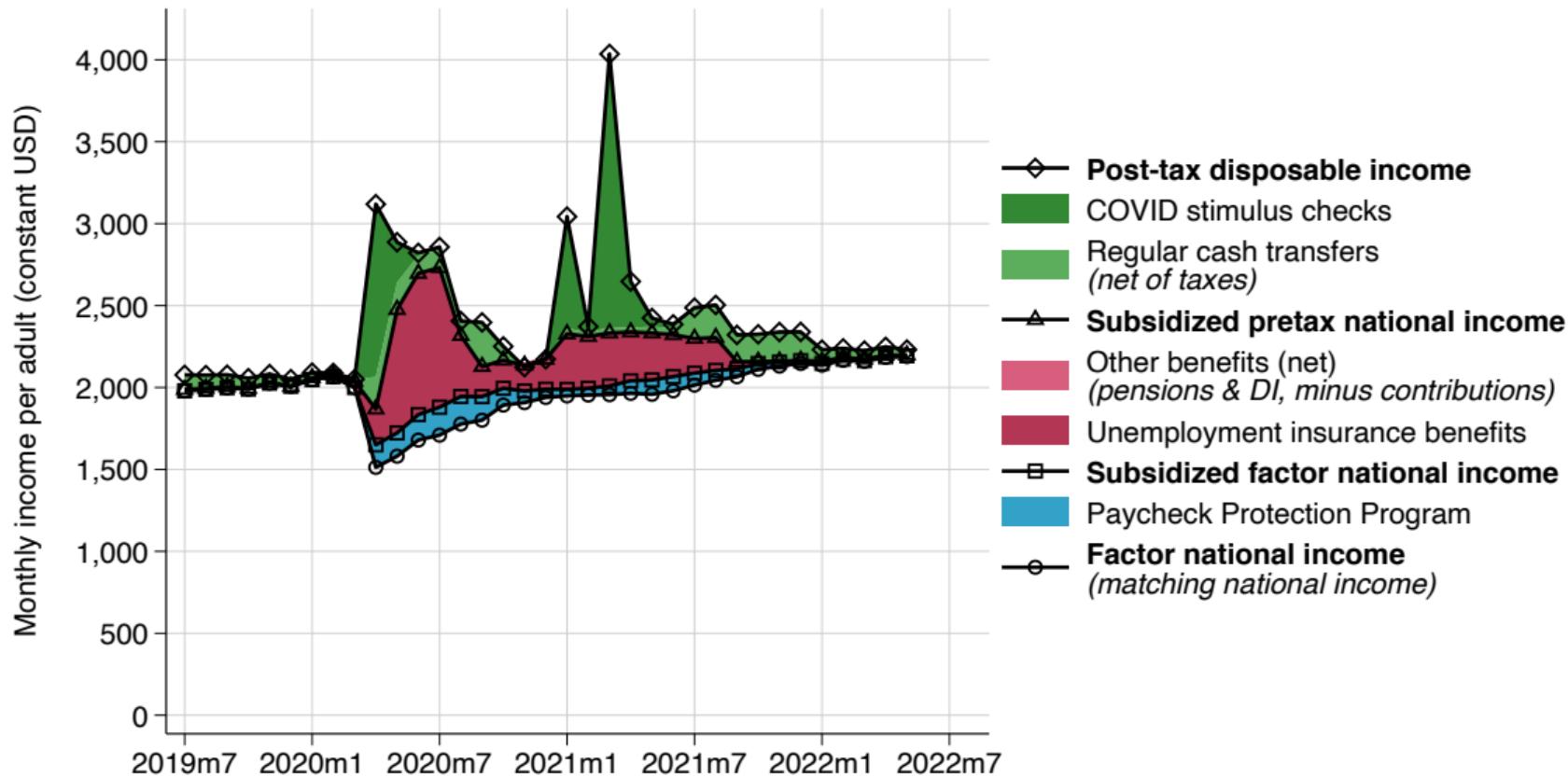
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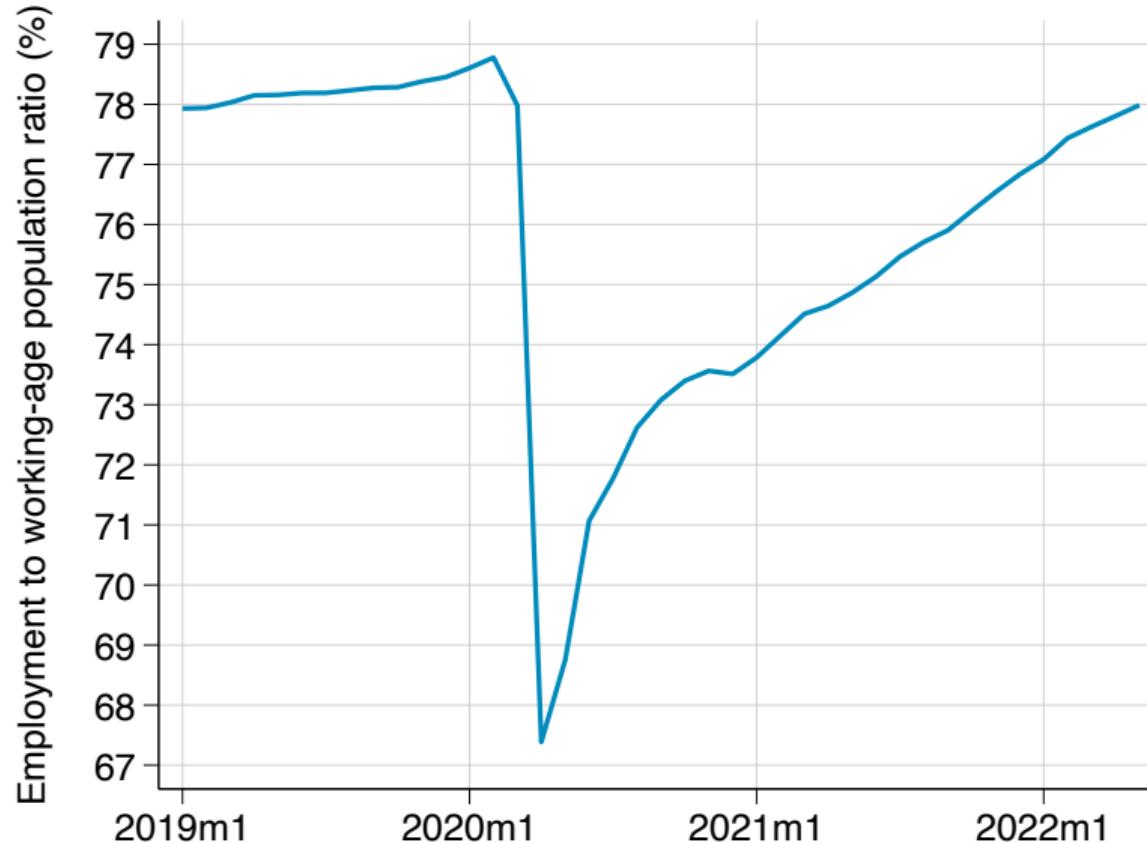


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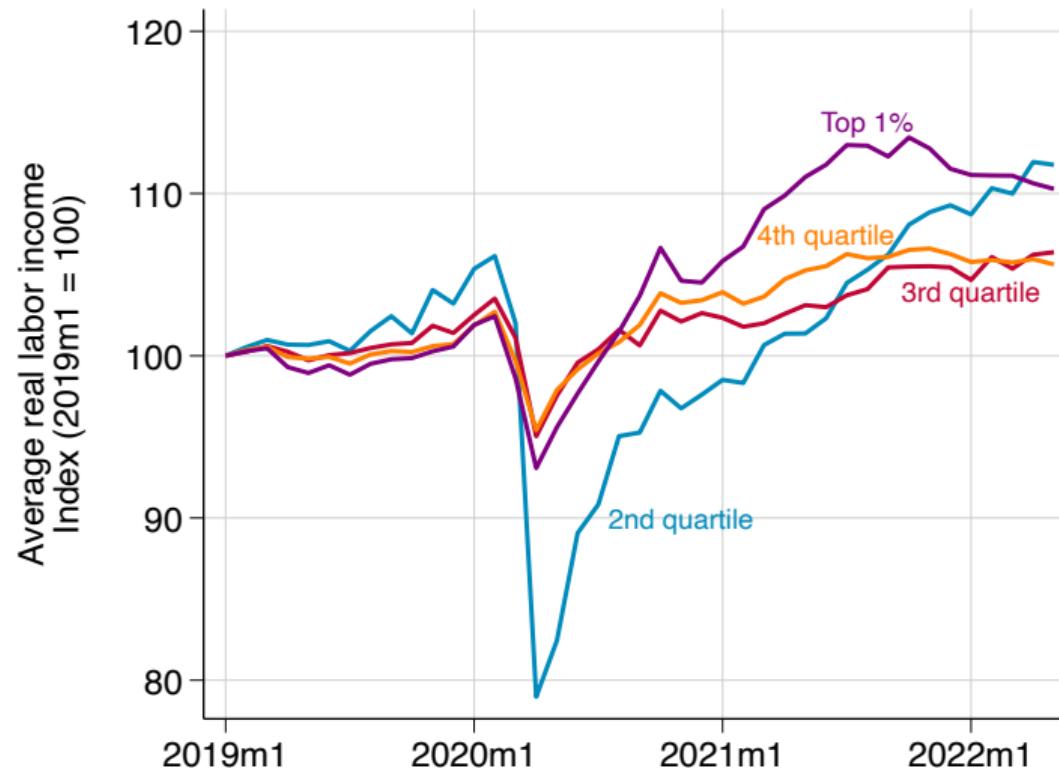
# The Post-Covid Recovery: Is Real Labor Income Growing? For Whom?

# Employment Rate Is Back to Pre-COVID Levels

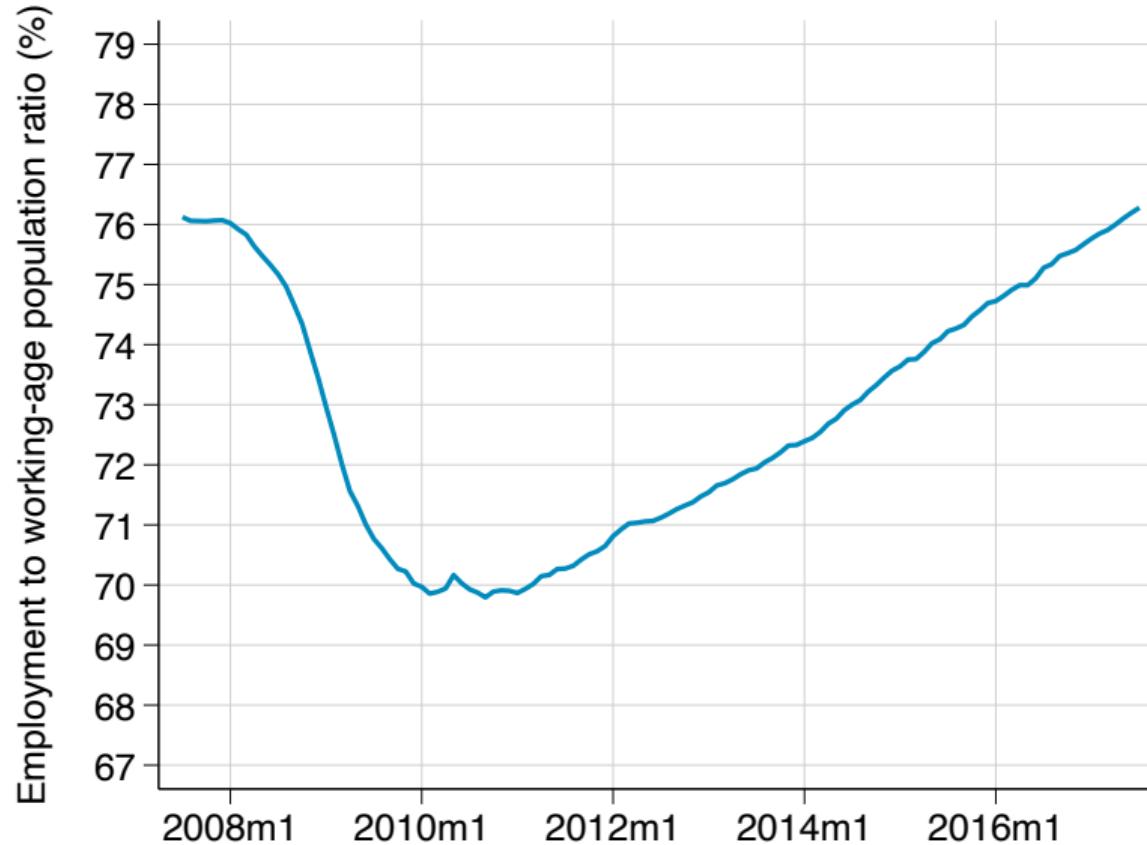


# The Tight Labor Market Benefits Low-Wage Workers

## Real Labor Income Per Working-Age (20–64) Adult

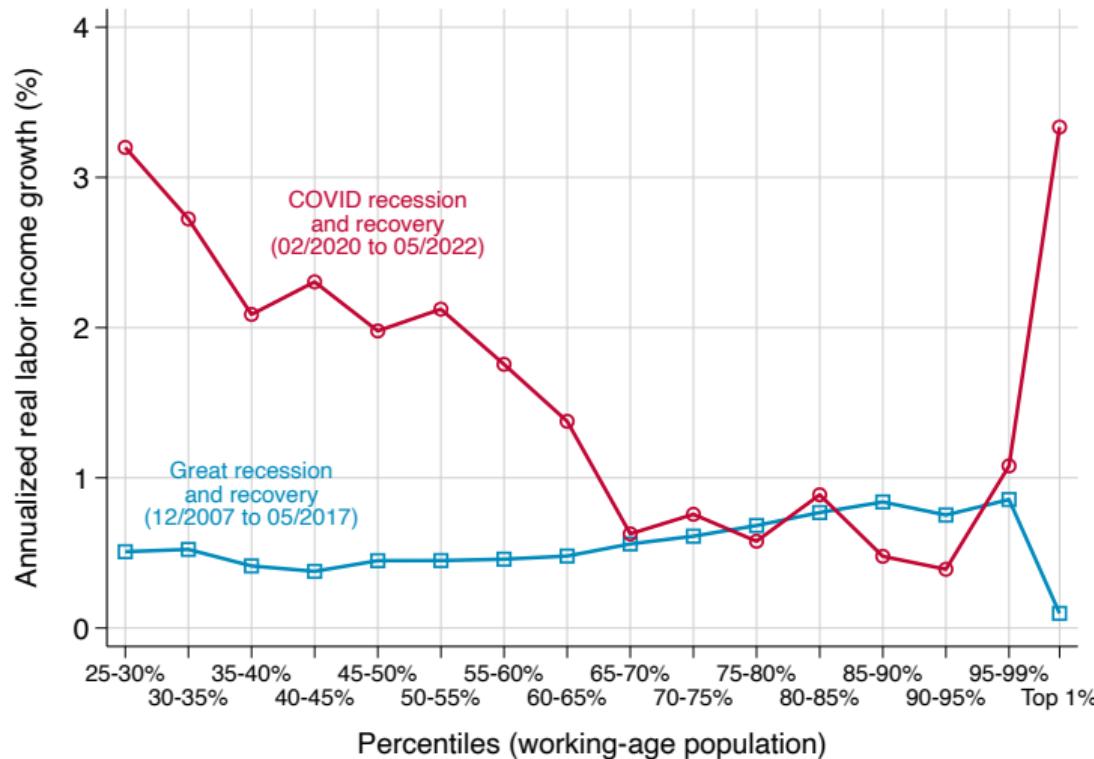


## After the Great Recession, Employment Took 10 Years to Recover



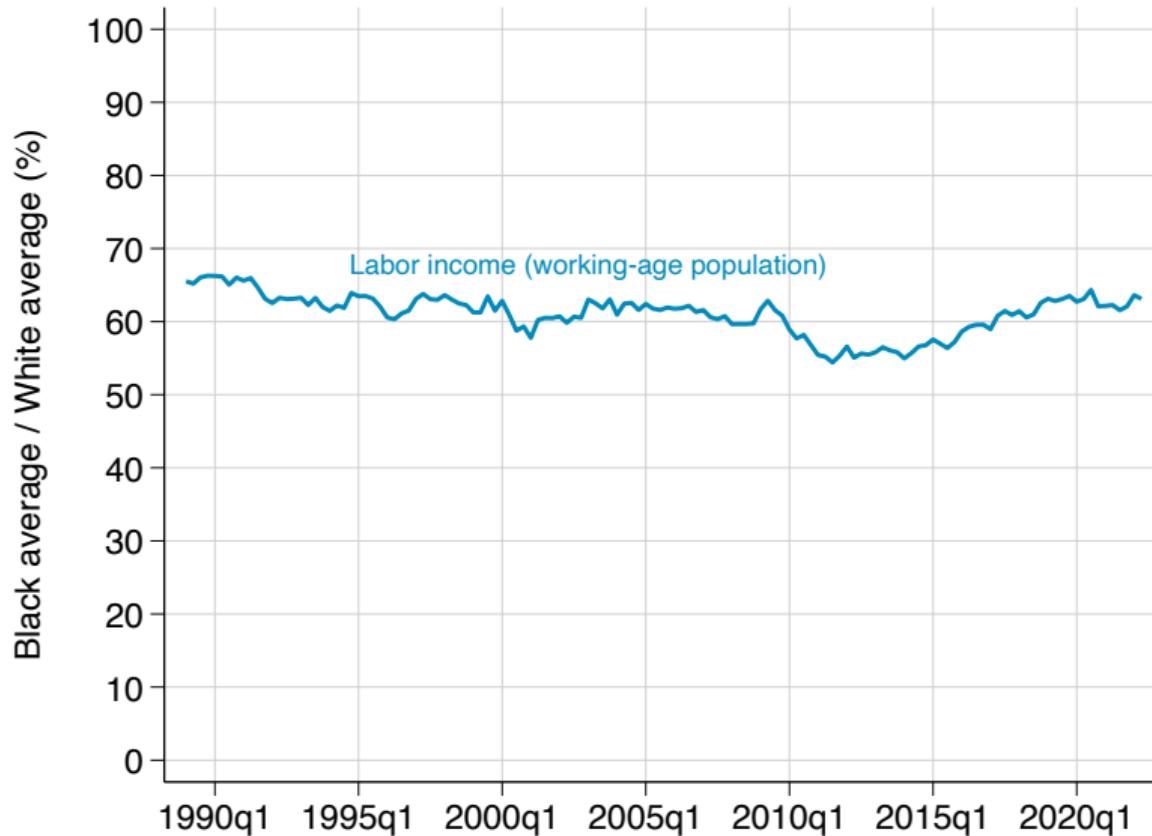
# Dramatic Contrast Between the COVID Recovery and Great Recession

## Annual Real Growth In Labor Income by Percentile

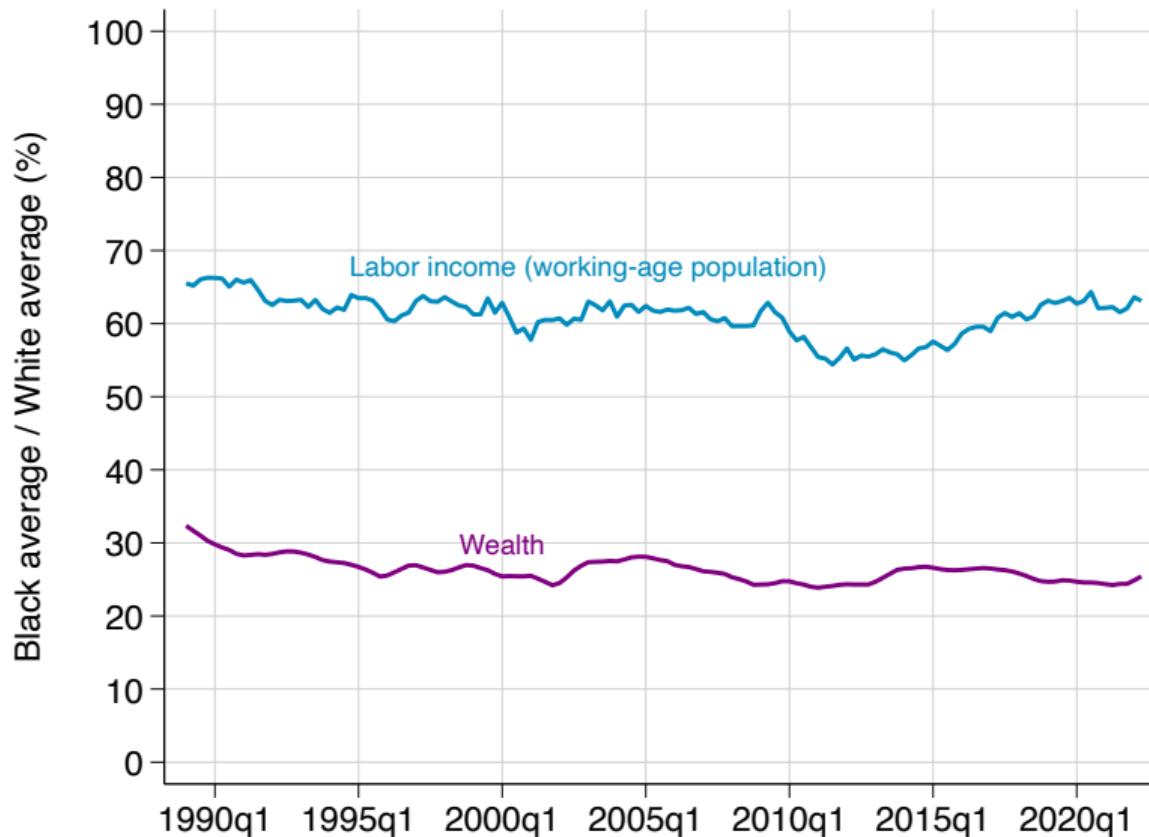


# Crisis and Recovery by Race and Gender

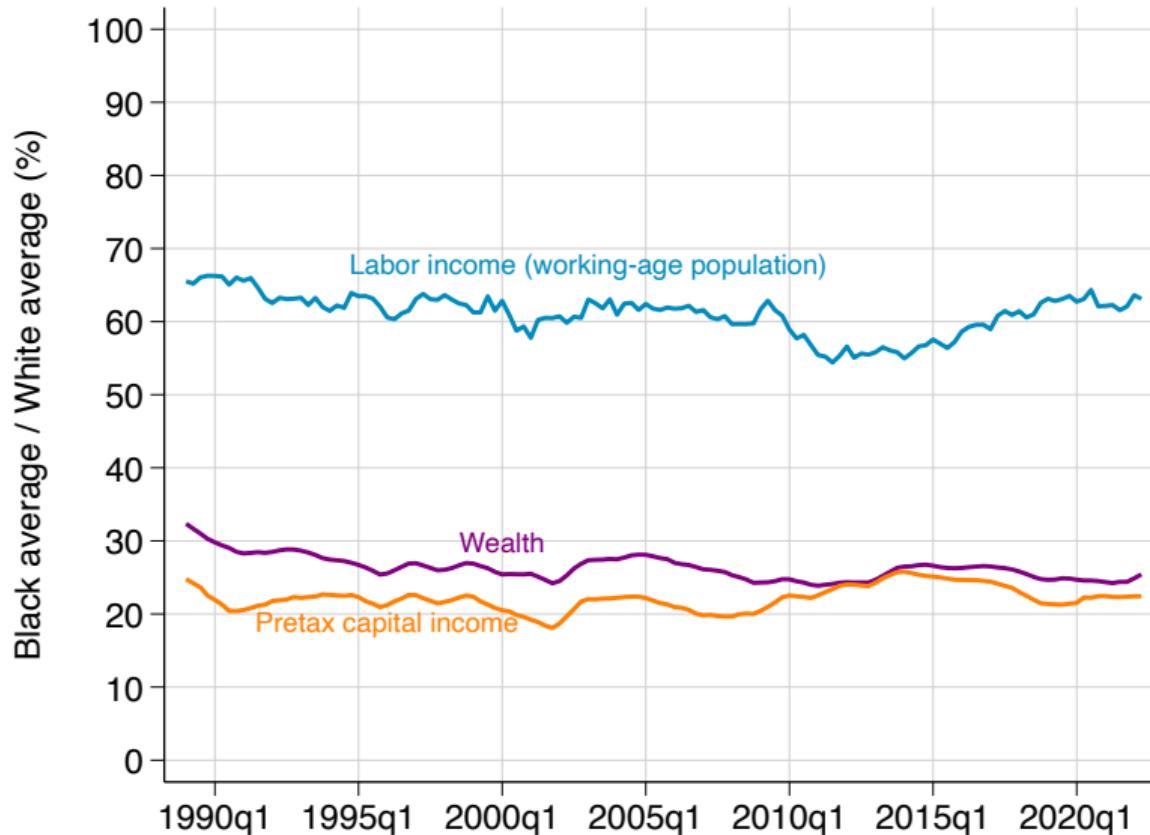
# A Comprehensive Estimate of Black/White Economic Disparities



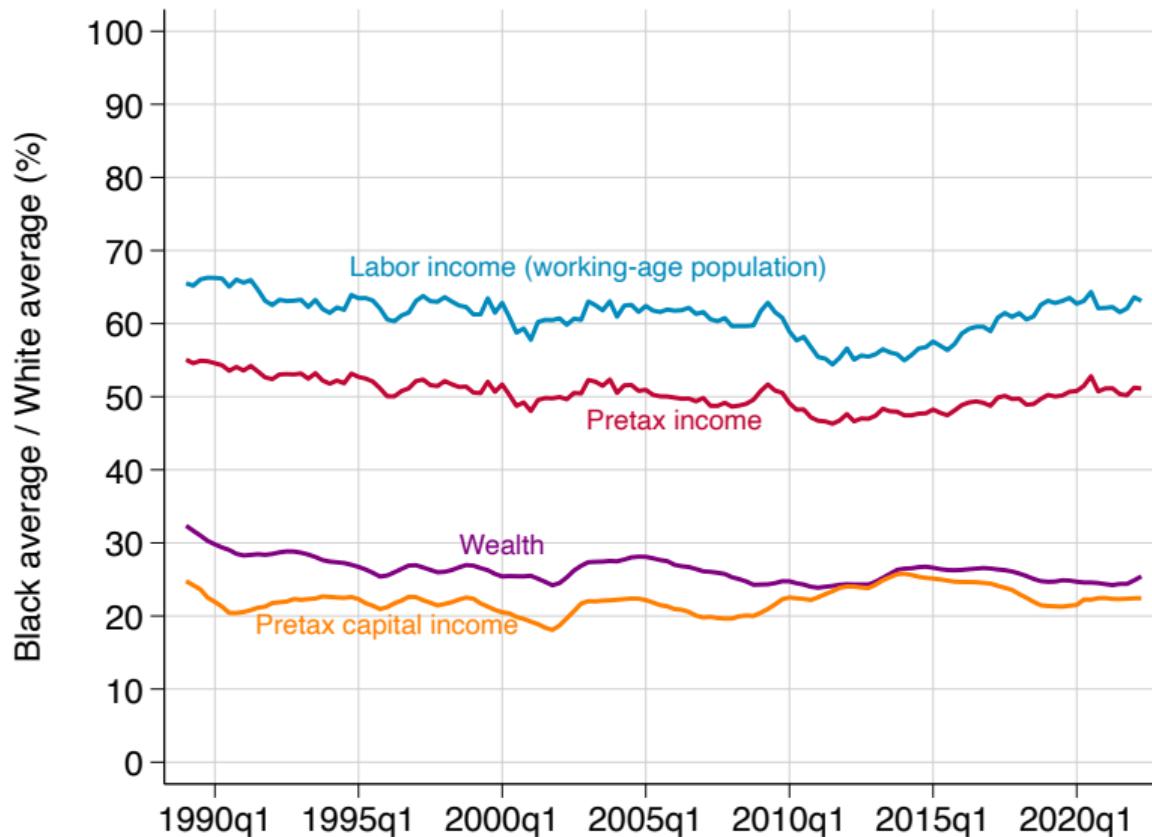
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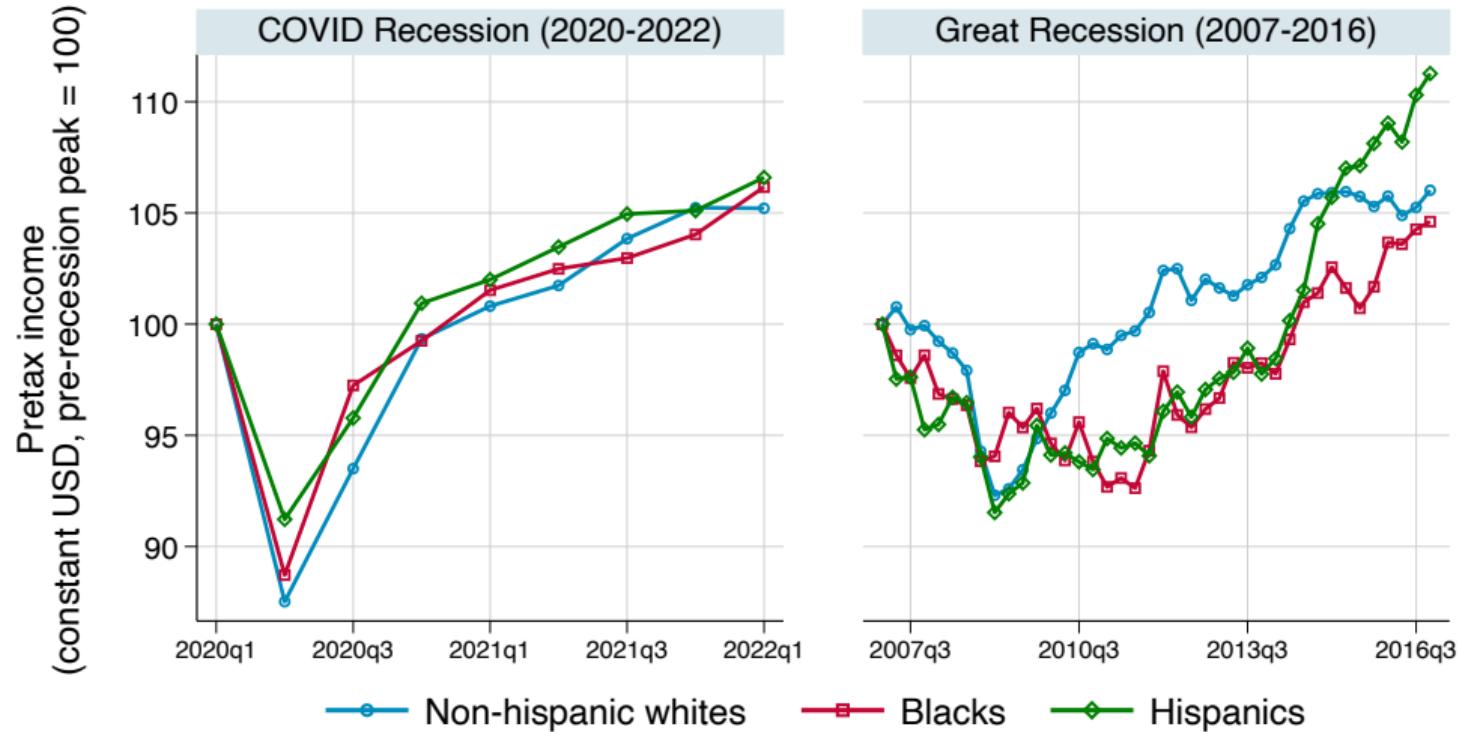
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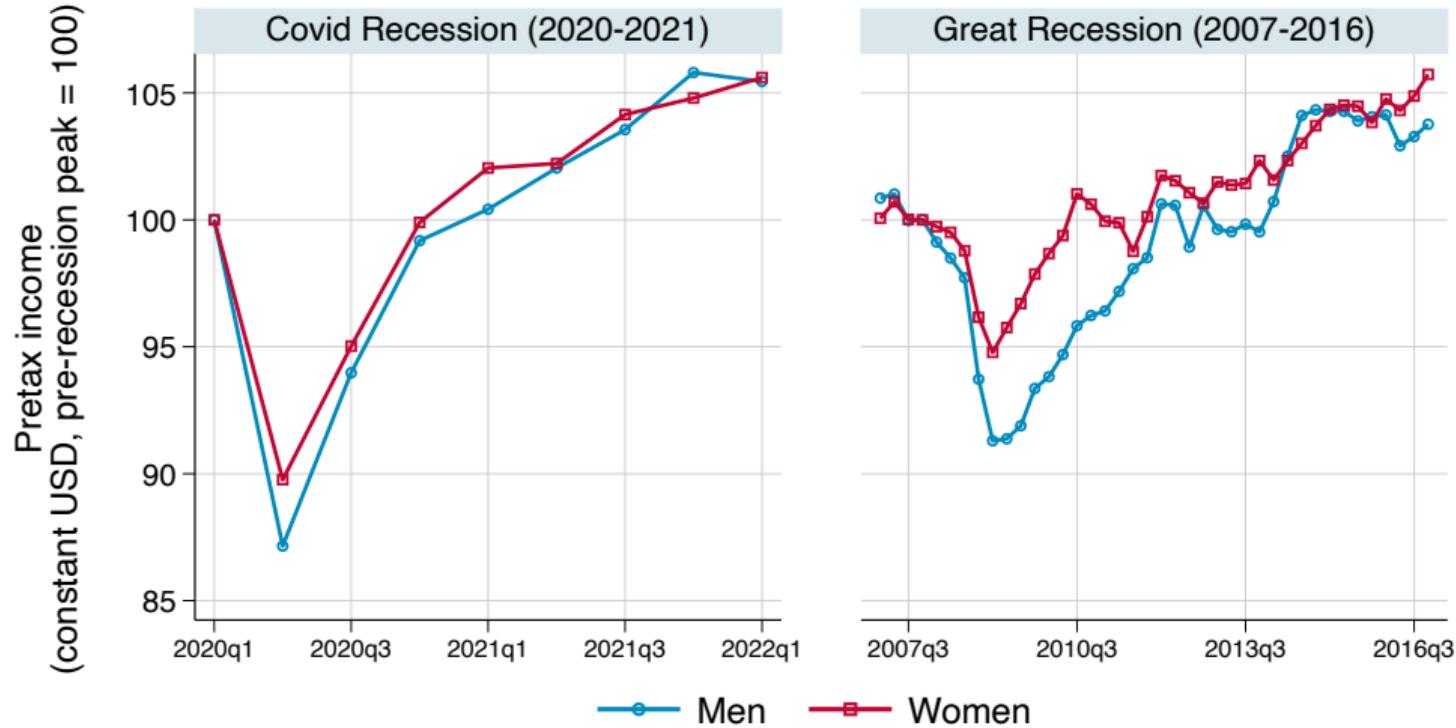
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# Recessions and Recovery by Race and Ethnicity



# A Covid “Shecession”? Recessions and Recovery by Gender



## Conclusion

- ▶ It's possible to track inequality in near real-time.
- ▶ Estimates based solely on public data.
- ▶ Prototype to be improved and run by government agencies down the road.
- ▶ Stark contrast between the recoveries from the last two recessions.
  
- ▶ [realtimeinequality.org](http://realtimeinequality.org)
- ▶ Updated daily for wealth, quarterly for income.

# Supplementary Slides

## Backtests (Share)

