

# Black-White Differences In Income Tax Liability

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ASSA Meetings

January 4, 2026

# The Same but Different

- Generally, the federal income tax does not refer to race/ethnicity
- Disparities can still arise because factors that affect tax liability are correlated with race/ethnicity (even after controlling for income).
  - Differences in HH composition → Differences in filing status and dependents
  - Differences in education, wealth → Differences in income composition
  - Moran and Whitford (1996) and Brown (2021)

## Three Issues:

- “Our hypothesis is that deviations from the ideal of a comprehensive income tax systematically favor whites over blacks” (H1, Moran and Whitford 1996)
- “We believe that even if income is held constant, the Internal Revenue Code systematically disfavors the financial interests of Blacks ... [which will] trigger different tax results.” (H2, Moran and Whitford (1996)
- How have previous tax reforms – and how would prospective tax reforms – affect the differences between the groups?

# Key Findings – Descriptive Data

- Black and white tax filing units differ systematically.
- On an overall basis, white units have higher income and so face higher average tax rates (on average)
- Even within income deciles, there are systematic differences – For example, white HH, relative to Black HH:
  - Are more likely to file as married filing jointly
  - Are less likely to file as head of household
  - Have fewer dependents
  - Have a smaller share of income in the form of wages
  - Have a larger share of income in the form of capital income (all, tax-preferred and tax-exempt)

# Key Findings – Testing MW Hypotheses

- H1: Untaxed forms of income accrue disproportionately to white households
  - On an overall basis and controlling for income
- H2: In the bottom half of the income distribution:
  - Black tax units face lower ATRs than white units
  - Due to differences in filing status and dependents
- H2: In the top half of the income distribution:
  - Black units face higher ATRs than white units
  - Due to higher share of income in the form of wages, which are fully taxed, and less in the form of capital income, which tax-preferred

# Key Findings – Tax Policy Changes

- TCJA was regressive, which favors white households. But controlling for income, the income tax provisions have little racial impact.
- ARP significantly reduced ATRs for Black HH compared to white HH in the bottom half of the income distribution, controlling for income (due to temporary CTC, EITC expansion)
- Prospective Reform
  - Base broadening to include more capital income reduces Black ATRs compared to white ATRs
  - Rate increases, holding the base constant, raise Black ATRs relative to white ATRs
  - The results occur because capital income (which is frequently preferred or exempt) is a smaller share of income for Black units compared to white units, holding income levels constant.
- 1970 law shows no differences in Black versus White ATR → racial differences in the tax system have changed over time.

# Outline

- Data and methodology
- Descriptive data
- Tests of the two Moran and Whitford Hypotheses
- Effects of Policy Reforms
- Replication of Strauss and Gouveia for 1970 law
- Decomposition of differences in group ATR (Lin and Slemrod)

# Overview of Methodology

- No dataset contains information on both race and taxes
  - Treasury, CBO, TPC impute race onto a dataset that contains tax information
  - We compute taxes using a dataset that contains race information and then calculate taxes
  - Basic logic – better to slightly mismeasure tax liability than to assign the wrong race
    - Studies show that assigning race is difficult.
- Several steps
  - Use household data from 1998-2022 waves of the SCF
  - Convert households into tax units (Gale et al. 2022)
  - Calculate AGI, deductions, credit eligibility
  - Compute income tax liabilities using NBER's TAXSIM
  - Construct Expanded Income (EI)



# Sample

- We pool nine waves of SCF from 1998 to 2022
  - Each wave surveys about 6,000 families
  - For each observation, the SCF generates 5 imputations (“implicates”) to account for missing data
  - The overall sample contains about 115,000 white tax units and 23,000 Black tax units
- We use SCF weights (divided by nine)
- We convert all dollar items to 2018 dollars (CPI-U)

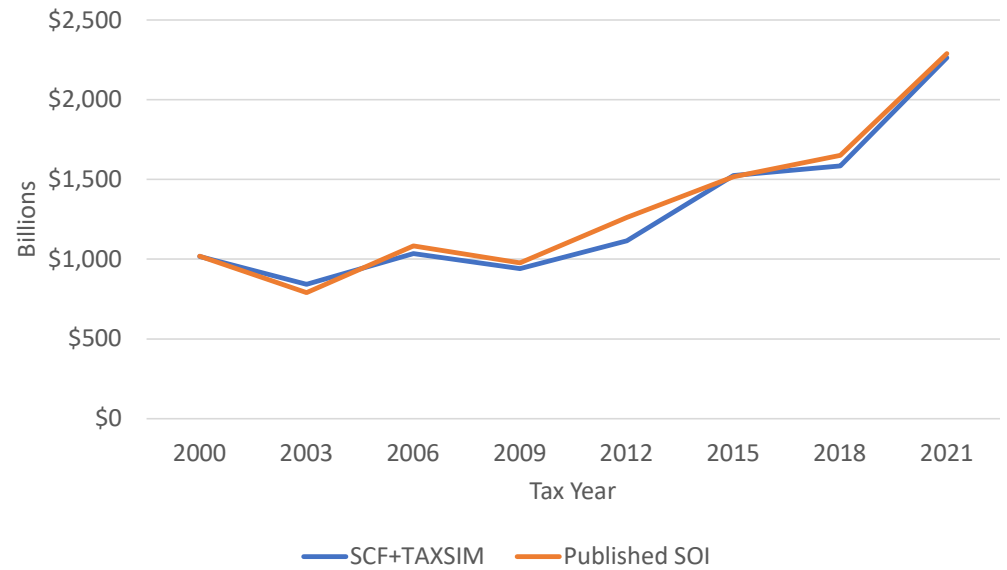
## Race Information in the SCF

- Asked consistently since 1998: Seven race categories and respondents can list more than one
- Asked only of the respondent
  - We define the couple (and their children) as the same race as the respondent
  - Only 1% of couples consist of a Black spouse and a white spouse (2010 Census)
- We focus only on respondents who list Black or white as their primary racial identification

### Estimated Aggregate AGI vs. SOI Totals



### Estimated Aggregate Tax Revenues vs. SOI Totals

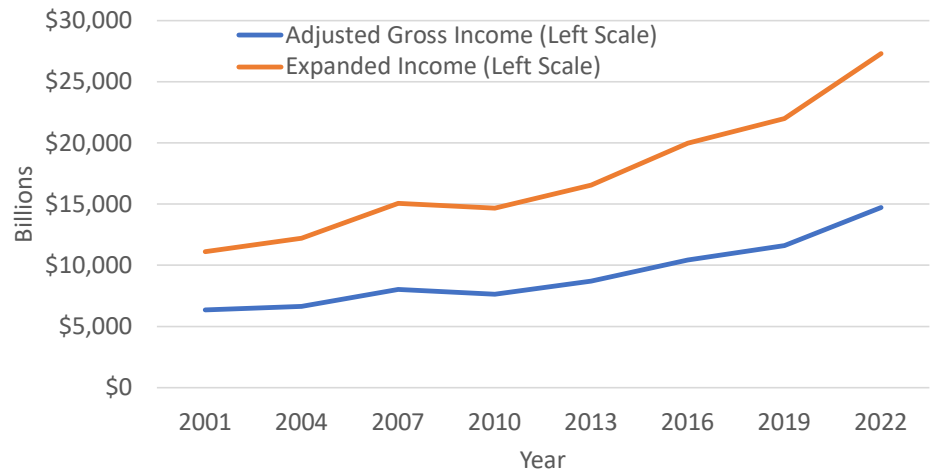


# Expanded Income

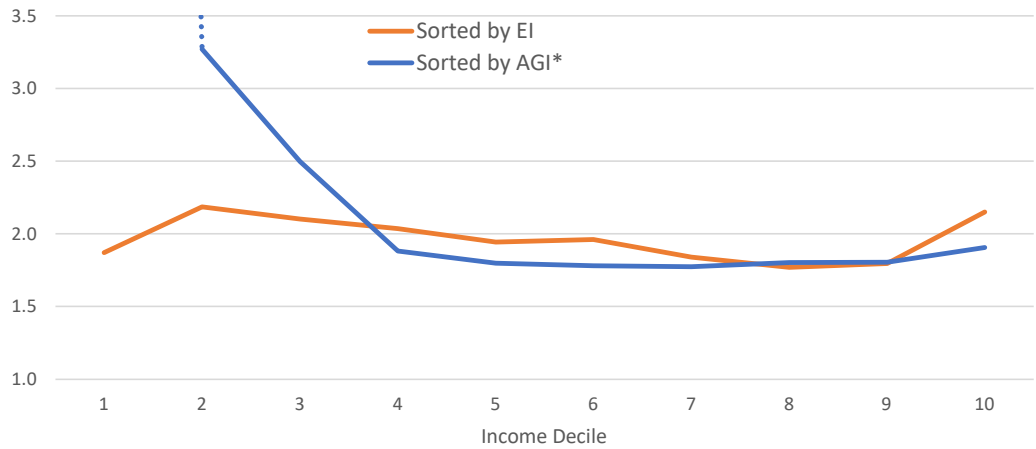
EI includes the following items not in AGI:

Current labor income	<ul style="list-style-type: none"><li>• Tax deductible ER and EE contributions to health benefits</li><li>• Employer-paid UI and payroll taxes</li></ul>
Retirement income	<ul style="list-style-type: none"><li>• ER and EE contributions to tax-preferred retirement plans</li><li>• Inside buildup on tax-preferred retirement plans</li></ul>
Capital income	<ul style="list-style-type: none"><li>• Tax-exempt interest</li><li>• Unrealized capital gains</li><li>• Untaxed closely-held business income</li><li>• Imputed rent on owner-occupied housing</li></ul>
Corporate tax burden	
Government transfers	<ul style="list-style-type: none"><li>• Nontaxable Social Security Income</li><li>• SSI, TANF, SNAP, and other transfers</li><li>• Medicare and Medicaid</li></ul>
Private transfers	<ul style="list-style-type: none"><li>• Net child support income</li><li>• Inheritance income</li></ul>

AGI and Expanded Income (EI) Over Time

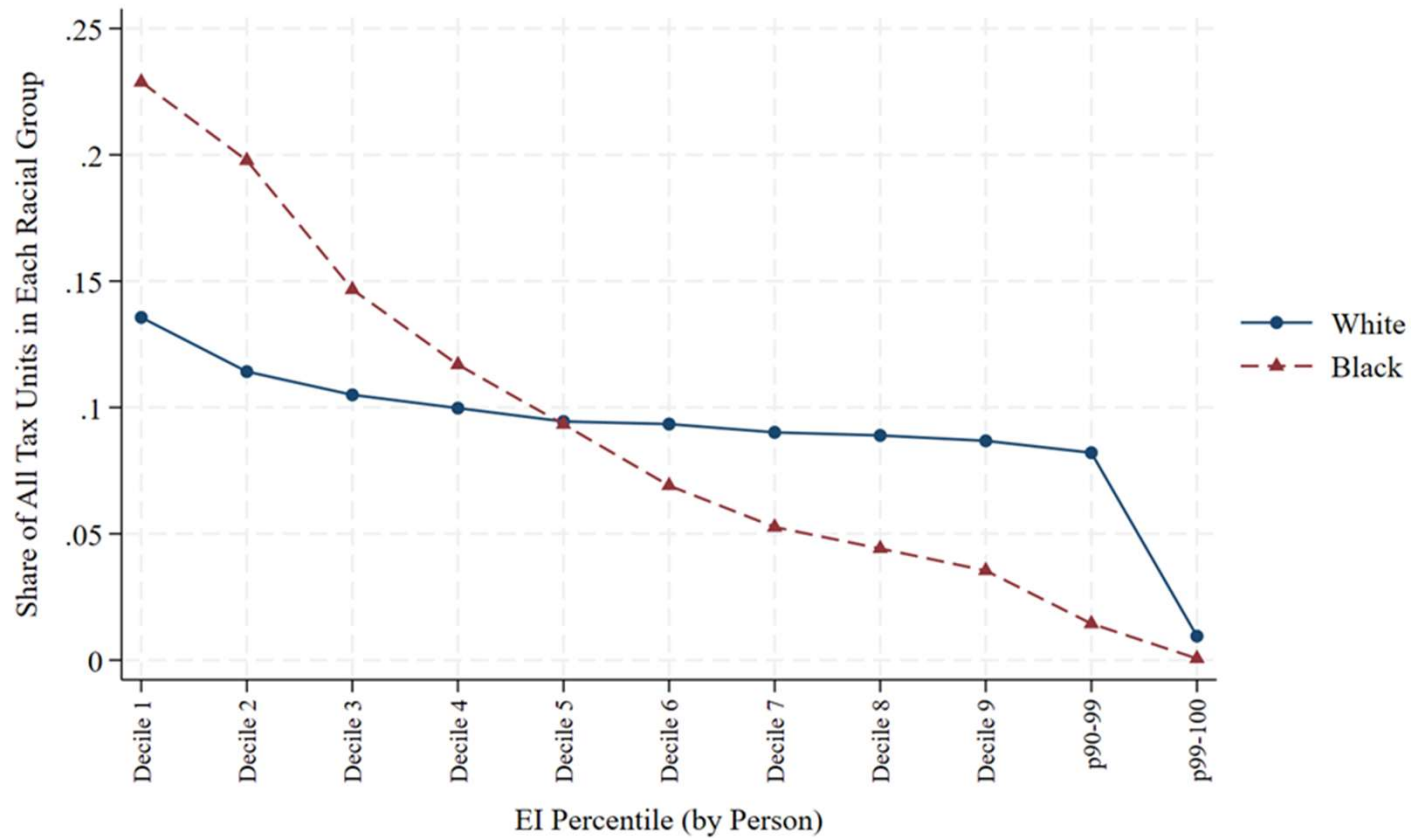


Ratio of EI to AGI across the AGI and EI Distributions

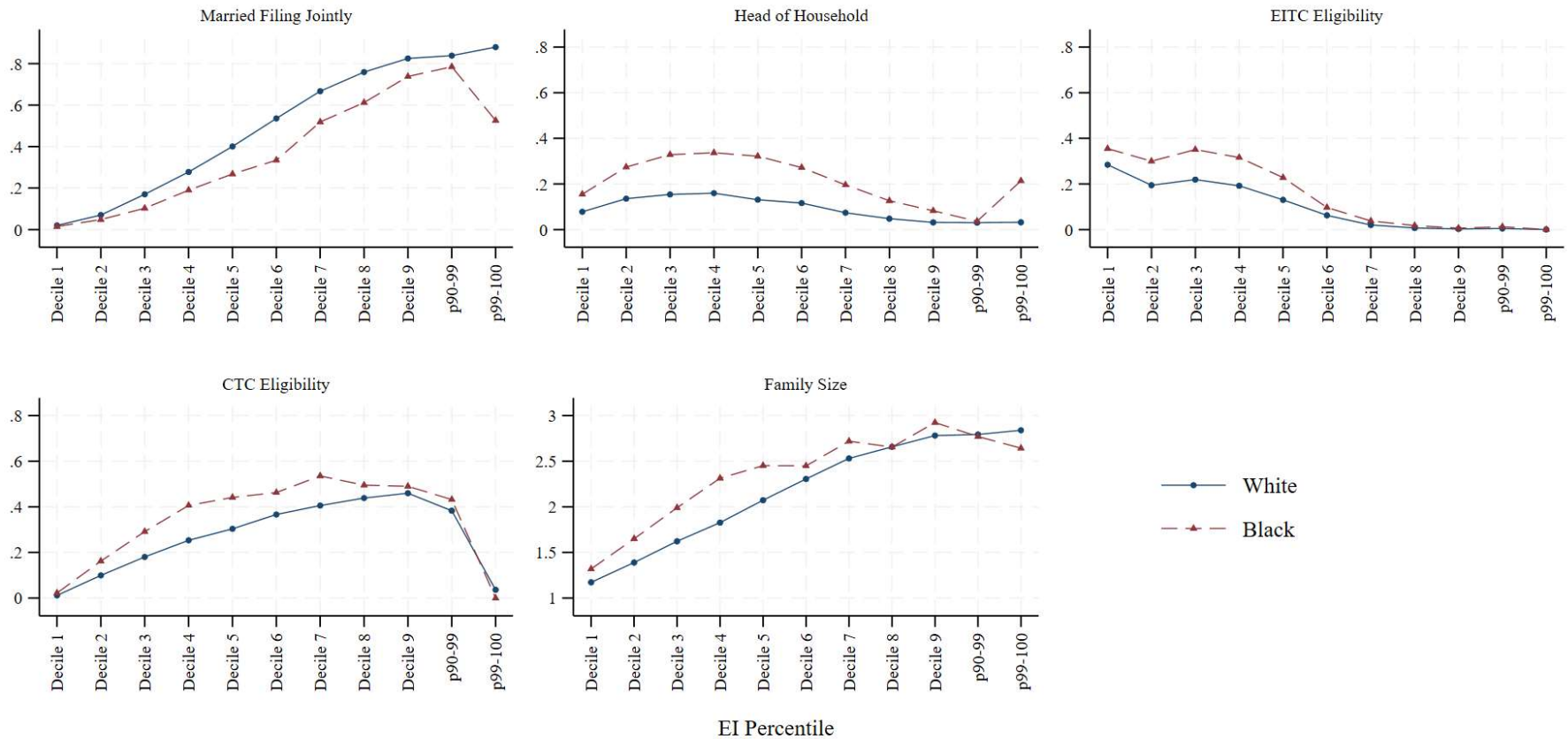


\*AGI Decile 1 is omitted for scale. Value: 22.9

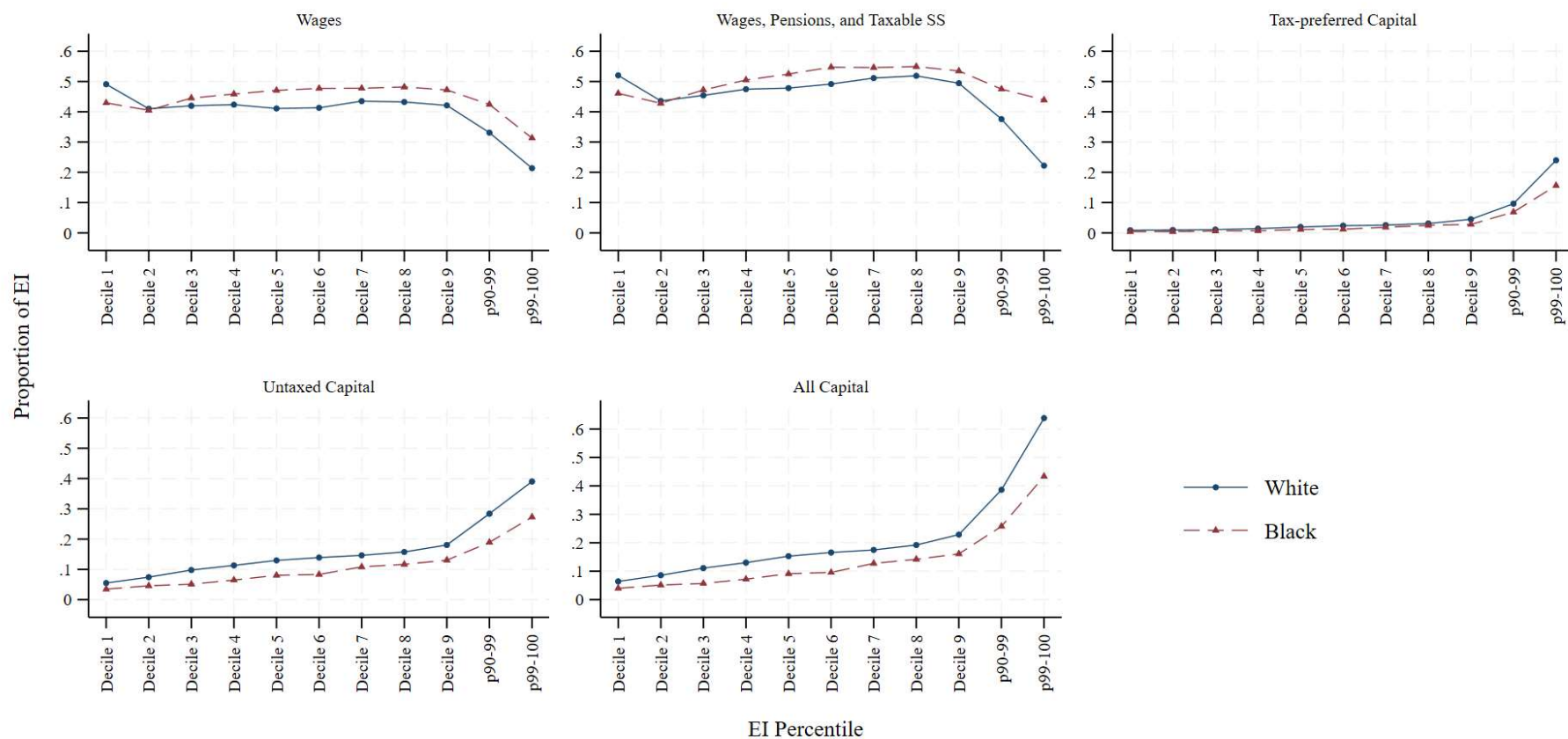
# Distribution of Tax Units by EI Percentile



# Demographic Characteristics by EI Percentile



# Income Composition by EI Percentile



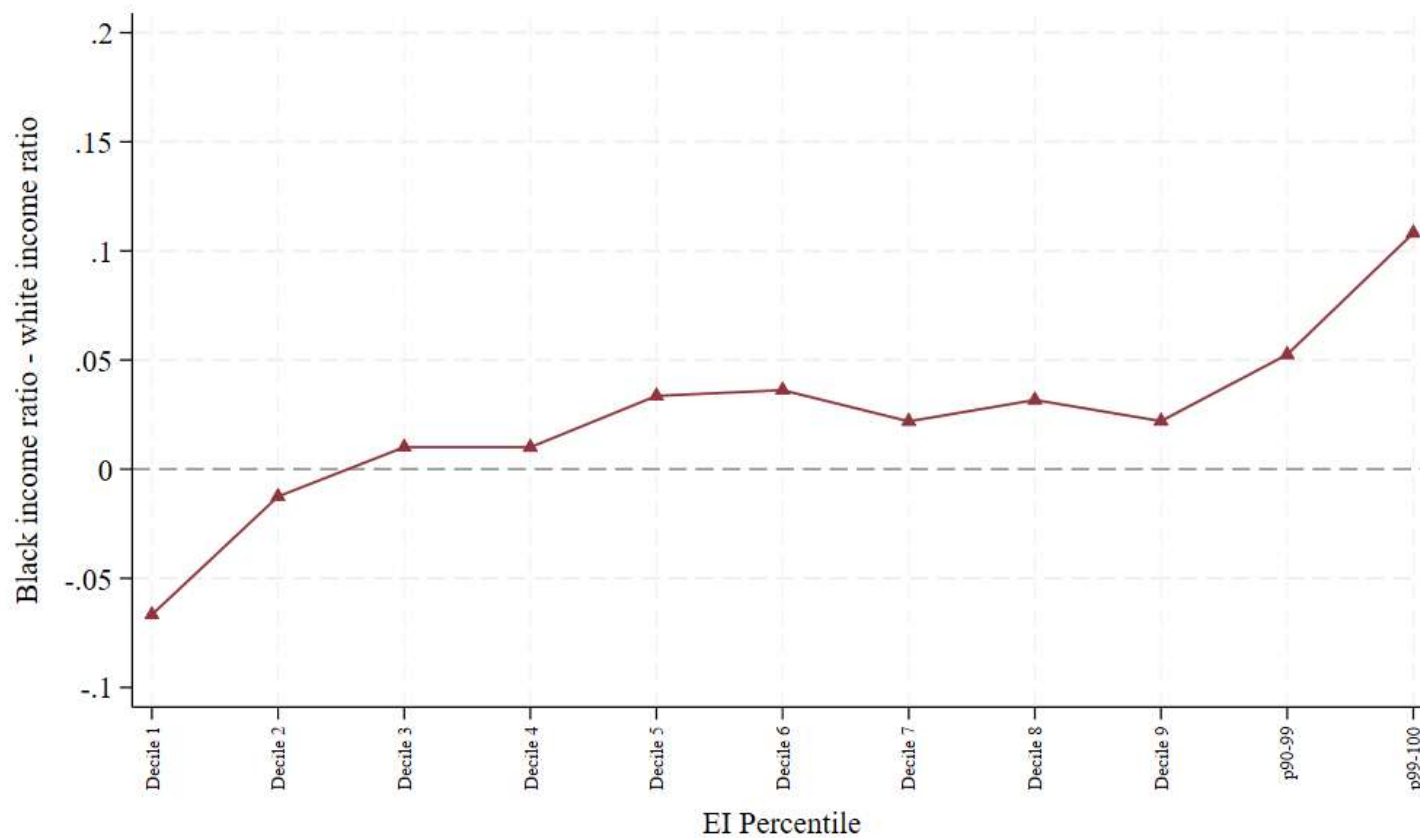


## Testing Hypothesis I:

Do Deviations from a Comprehensive Income Tax Systematically Favor White Units Over Black Units?

- We define
  - Comprehensive Income Tax Base = EI
  - Deviations from Base =  $EI/AGI$  (higher number = more tax preferences)
  - Very similar results hold if deviations =  $EI/TI$

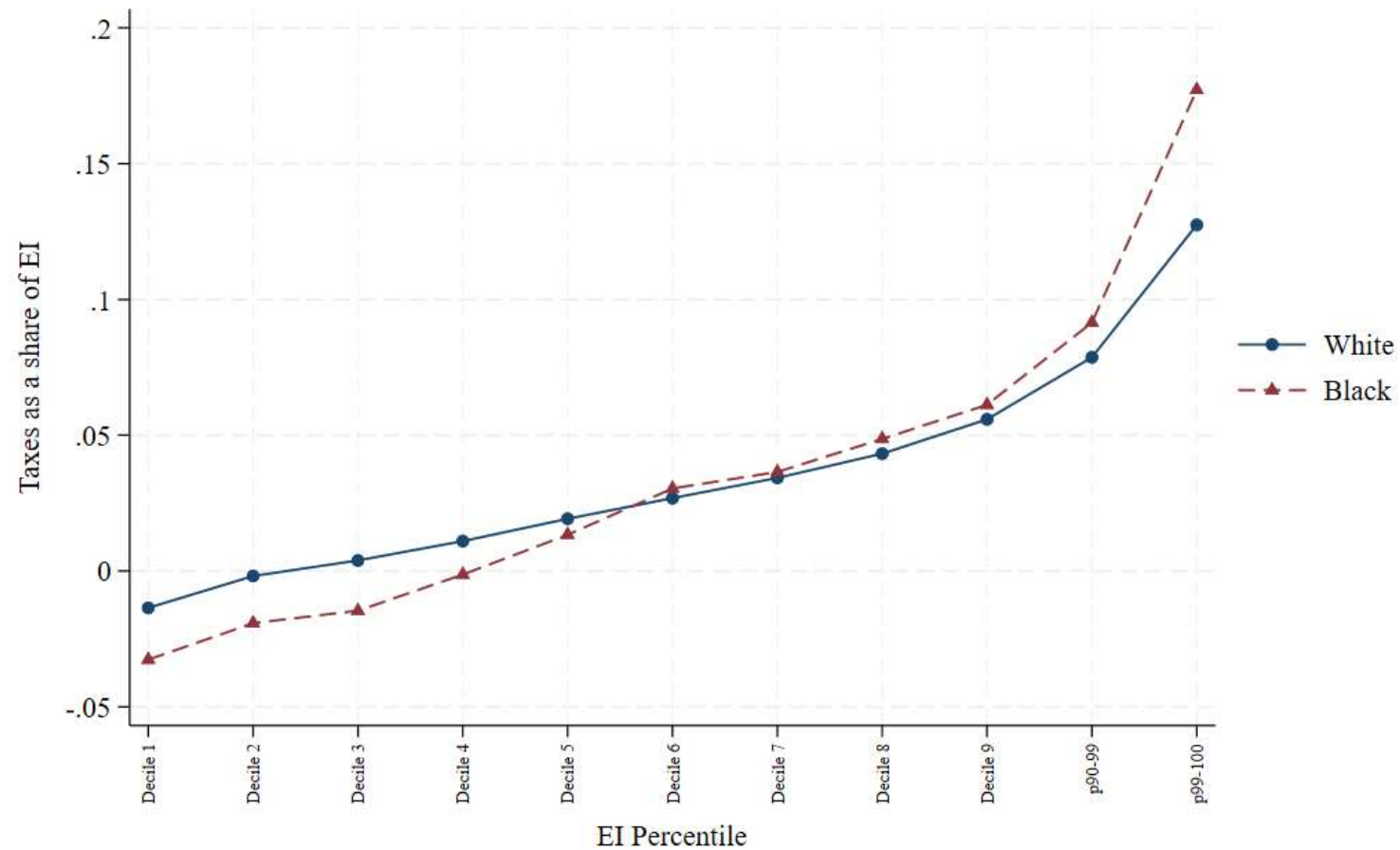
# Ratio of Average White EI to Average Black EI by AGI Decile



## Testing Hypothesis II:

Holding Income Constant, Does the  
Income Tax Disfavor the Financial Interests of  
Black Filers?

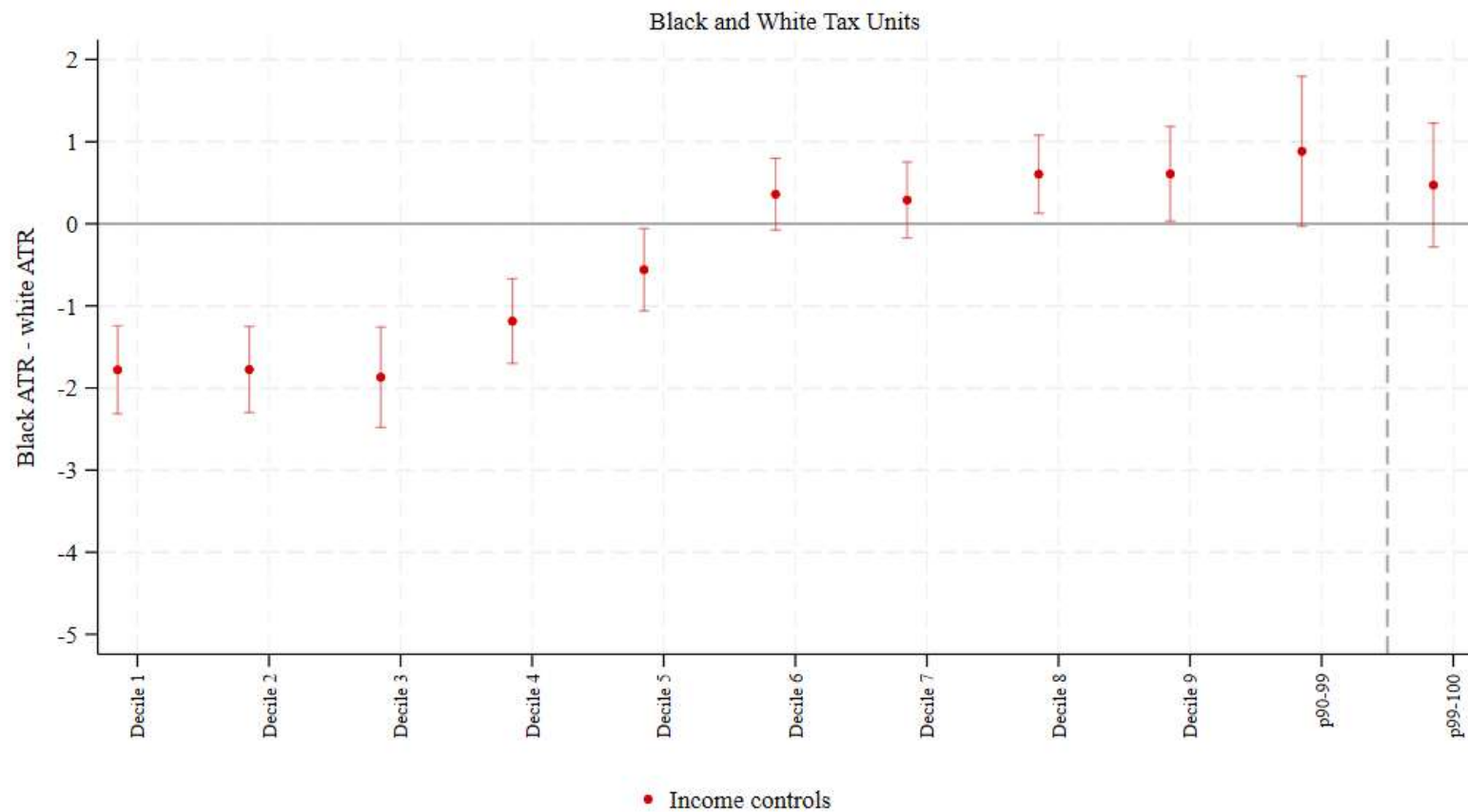
# Aggregate Income Taxes / Aggregate EI



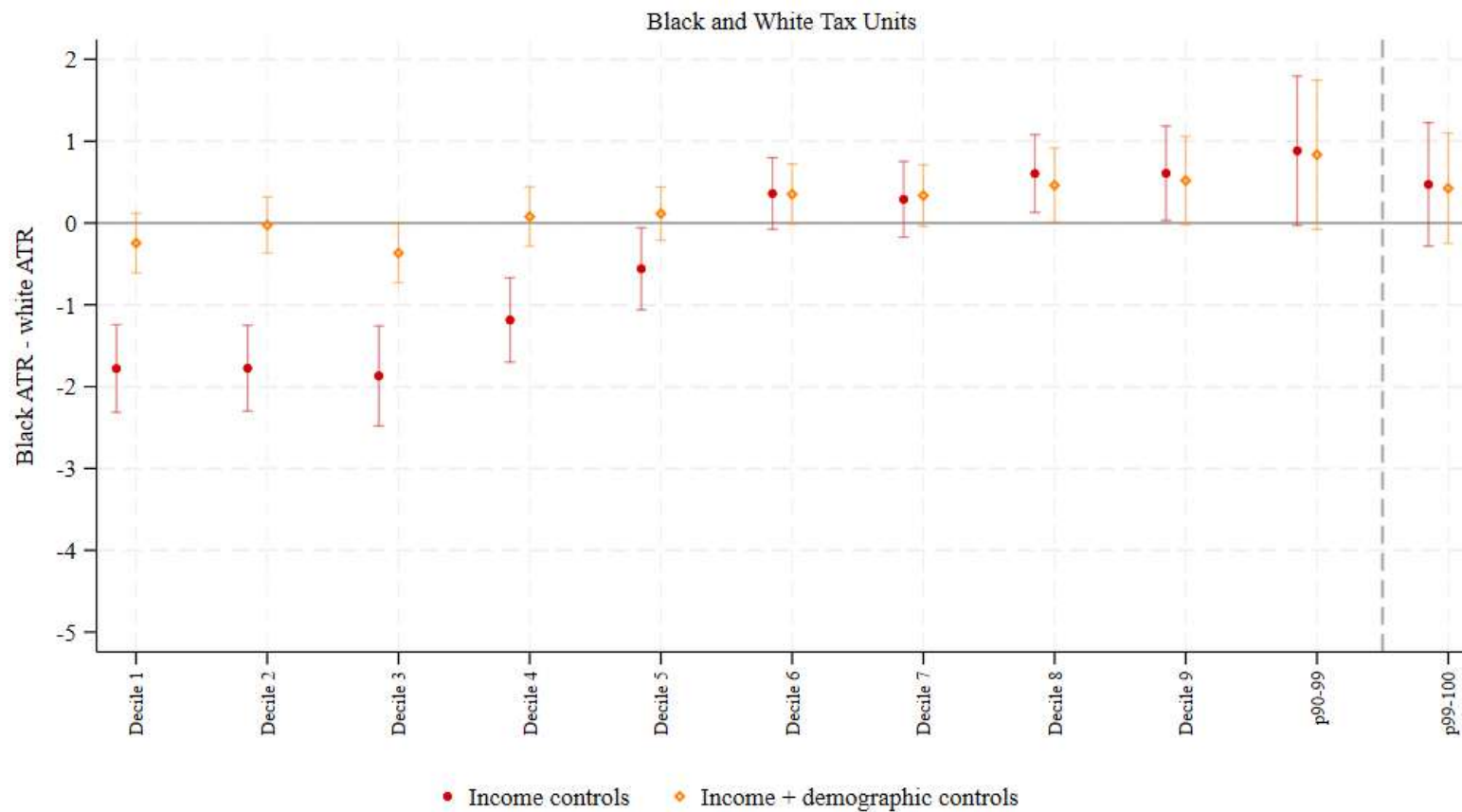
# Three Regressions

- Dependent Variable = Tax filing unit's tax liability
- RHS1 = EI and race (all regressions include constant and survey year dummies)
- RHS2 = Adds filing status proxies and number of dependents
- RHS3 = Adds (to RHS2) the share of EI in wages, the share of EI in capital income
- Regressions run separately by EI decile to allow for heterogeneous responses and as a simple way to capture non-linearities in the income tax
- The graphs show the coefficient on the race variable (1 if Black tax unit)

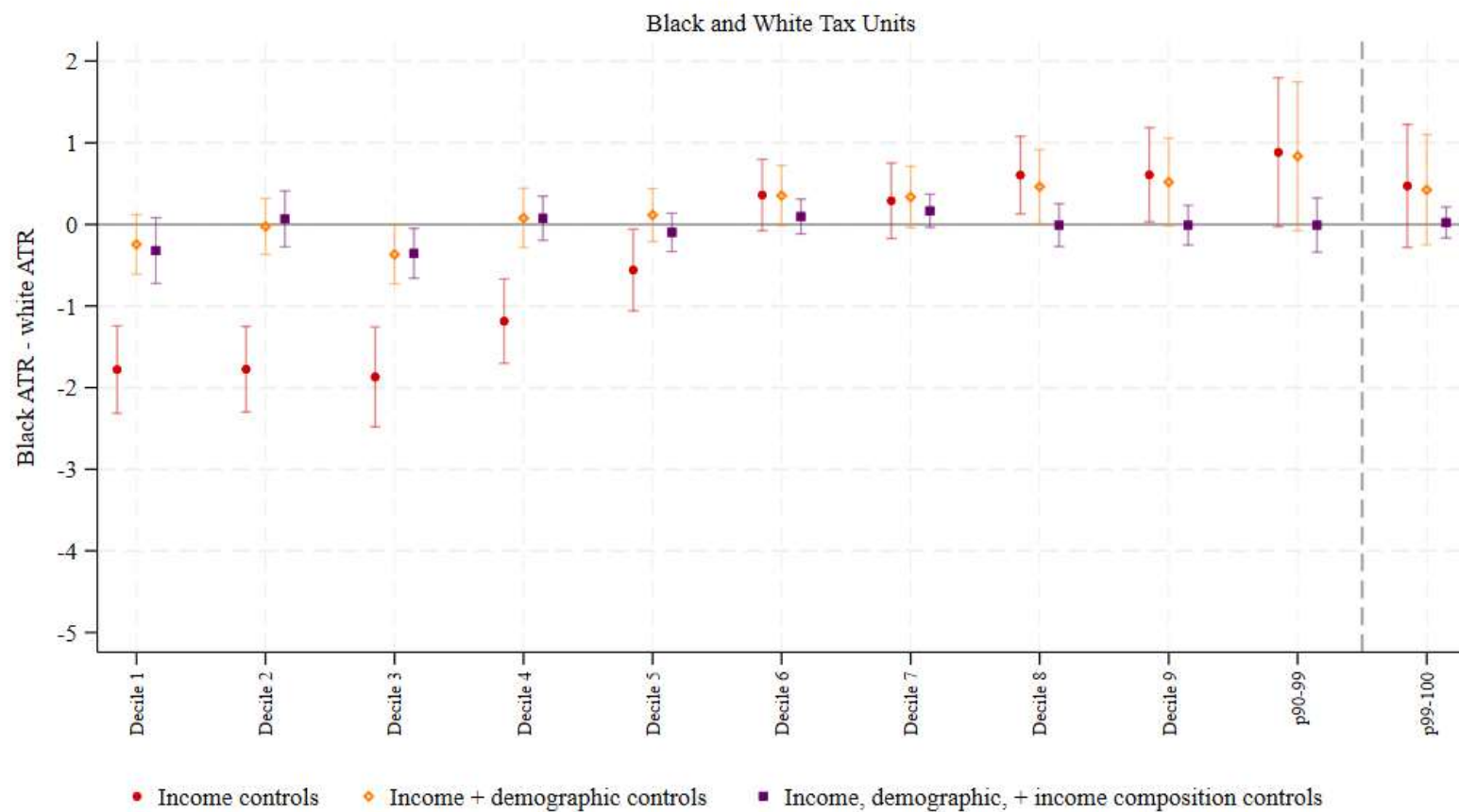
# Regressing Tax Burden on Race by EI Decile



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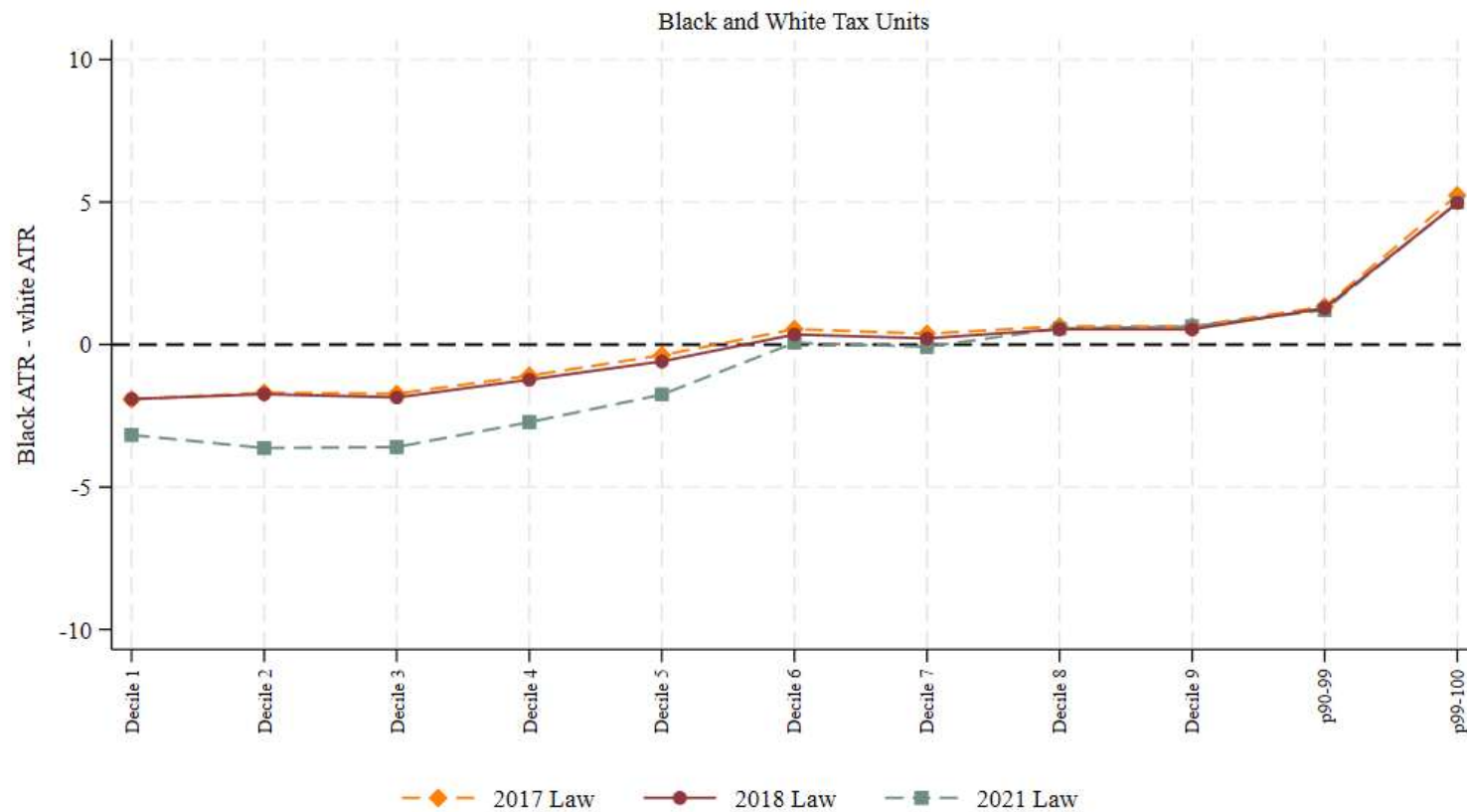


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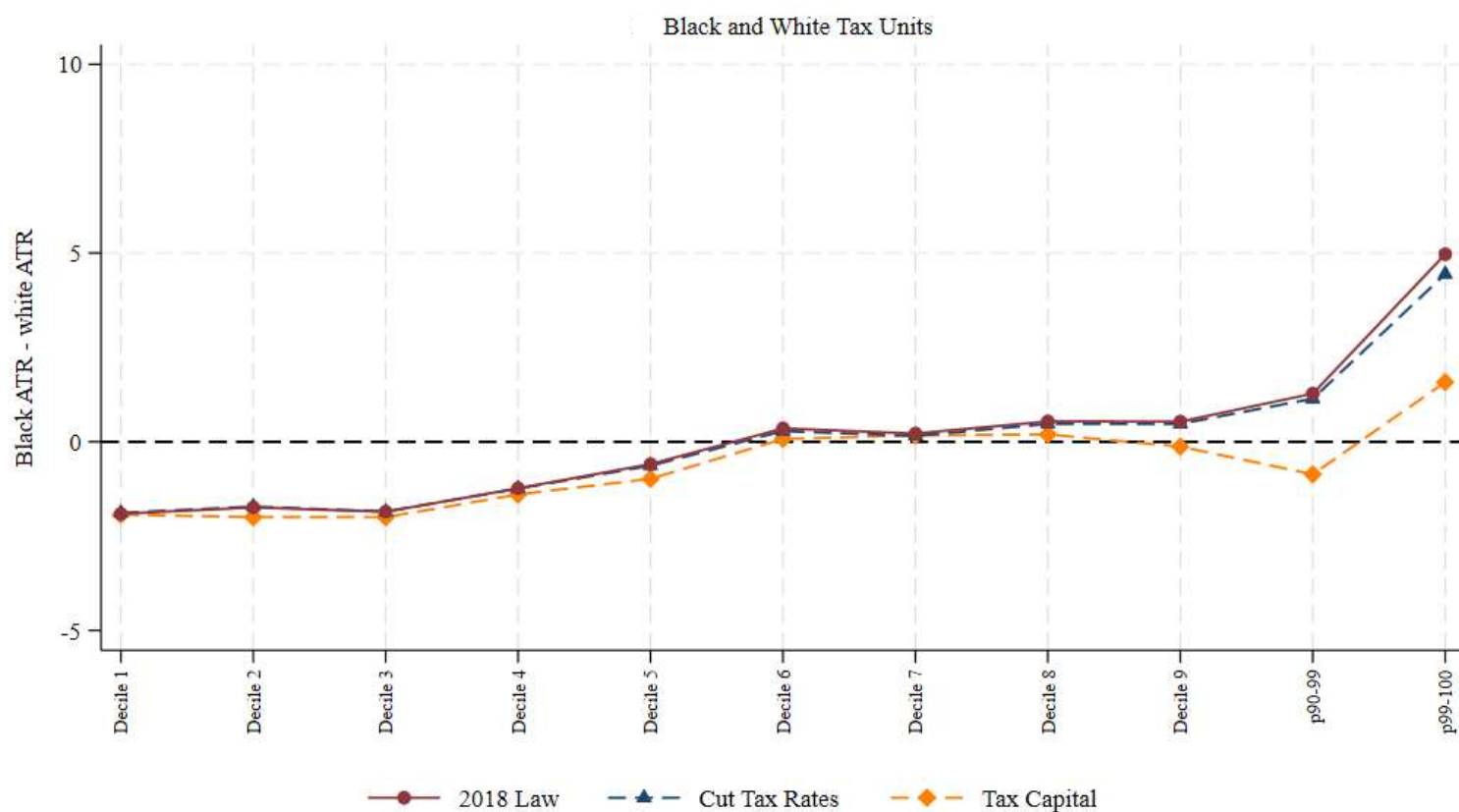




# Effects of the TCJA and ARP (Income Tax Changes Only)

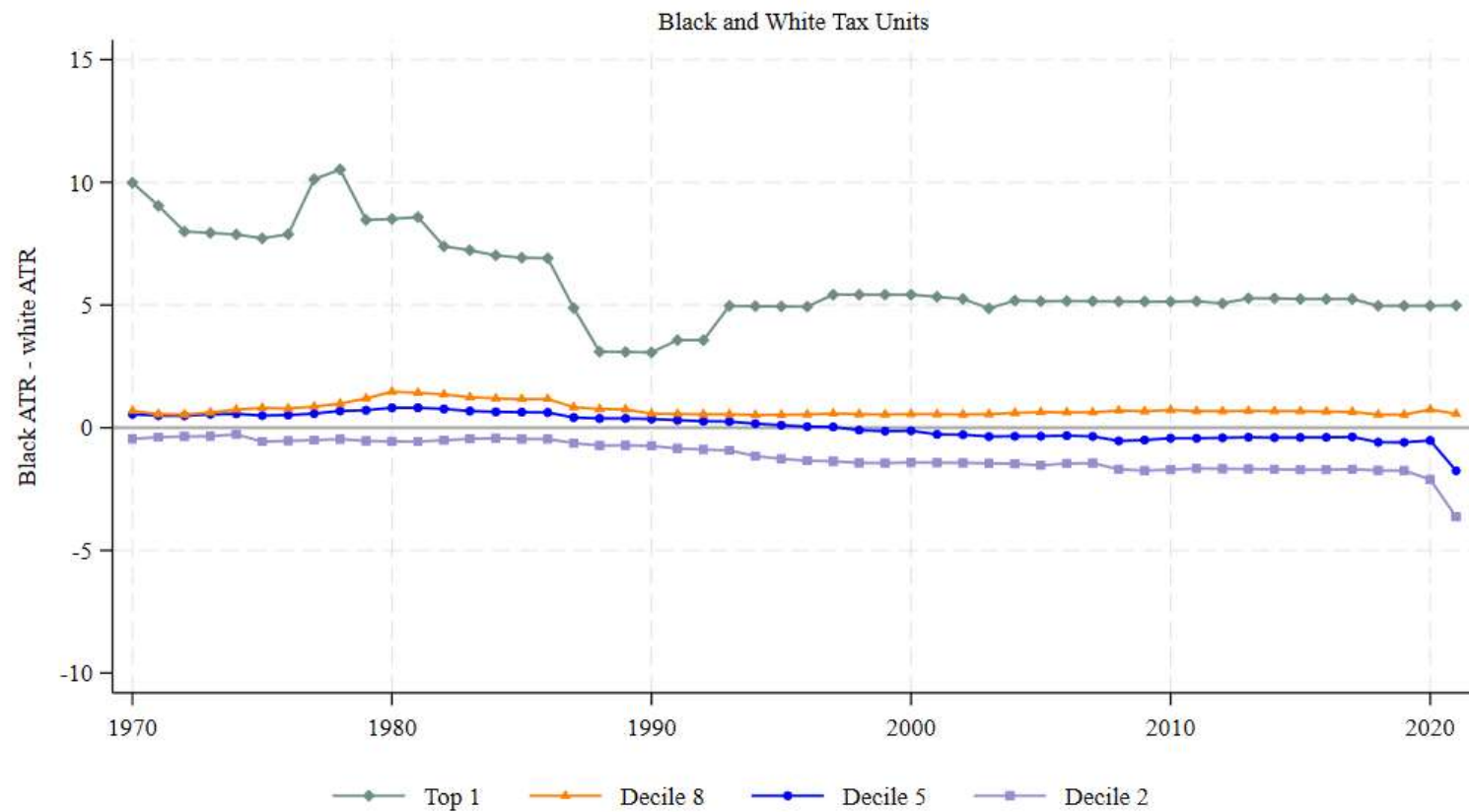


# Effects of Broadening the Base by Including More Capital Income



# ATRs Under 1970 Law

## Replicating Strauss and Gouveia (2023)



# Conclusion

- Tax rules can create different outcomes across races even if the code language is race-blind
- Substantial role for policy.
- Racial equity is one more reason to broaden the base by including more capital income
- More work is needed to understand the full dimensions of these issues
  - Other races/ethnicities
  - Other policies – federal and state, spending and regulatory

# The Same but Different: How the Income Tax Treats Black, Hispanic, and White Households

<https://www.brookings.edu/articles/the-same-but-different/>