Are Charitable People More Likely to Respond to Surveys, or Less?

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AAPOR 2026
Session Title: Who Participates and Why They Quit: Understanding Engagement, Refusals, and Break-Offs
Friday, May 15, 2026 at 4:15 PM

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Introduction

- Declining survey response rates and increasing survey costs → important to understand reasons people respond to surveys and reasons people don't
- Survey theory suggests that more altruistic individuals are more likely to respond to surveys
  - Leverage-Saliency Theory: Groves, Singer, and Corning (2000)
  - Social Exchange Theory: Dillman, Smyth, and Christian (2014)
- Hypothesis supported by various papers
  - Volunteering: Abraham et al. (2009)
  - Charitable Donations: Kennickell (2005)
  - Community Engagement: Couper, Singer, and Kulka (1998)

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Introduction

- However, could highly altruistic individuals be less likely to participate in surveys?
- **Continuum of Resistance Model**: While this model suggests "no," it faces various critiques regarding its simplicity (e.g., Lin and Schaeffer, 1995).
- **Leverage-Saliency Theory**: Participation can depend on competing motivators. For instance, while altruism encourages a response, distrust of a sponsor may simultaneously discourage it.

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Introduction

- My paper: Link U.S. tax data on charitable contributions to the American Community Survey (ACS), Household Pulse Survey (HPS), and Census Household Panel (CHP)
  - Large sample sizes of ACS and HPS→ Precise estimates of survey response for various levels of charitable donation rates
- Novel result: People who donate the higher percentage of their income to charity have **lower** response rates to the ACS and HPS than people who donate smaller amounts
- Potential explanation with CHP data: People who donate the most to charity have lower confidence in the U.S. Census Bureau and other Federal Statistical Agencies

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Data

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Survey Data

- American Community Survey (ACS):
  - Largest household survey in the United States, sampling 3.5 million addresses annually
  - Primary source of social, economic, and housing statistics for small geographies (counties, tracts)
  - Push for self-response followed by in-person follow-up

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Survey Data

- Household Pulse Survey (HPS)
  - Was an online survey that measured how emergent social and economic issues impacted households across the country
  - Started in 2020 in response to the COVID-19 Pandemic. Officially ended in 2024
  - Had only an online self-response mode. Survey invitations sent out via text and email

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Survey Data

- Census Household Panel (CHP)
  - An online panel from the U.S. Census Bureau
  - One of the predecessors to the Household Trends and Outlook Pulse Survey (along with the HPS)
  - Trust and confidence questions from recruitment survey asked the respondent “How much confidence do you have in …” a certain institution
  - About 18,500 households recruited in September-October 2023 and March-April 2024

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Tax Data on Charitable Donations

- From IRS 1040, Schedule A (Itemized Deductions)
- U.S. tax law: To reduce the amount of income that's eligible to be taxed, taxpayers choose a "standard deduction" or "itemized deduction"
- Choosing the itemizing deducting only beneficial if the taxpayer has large amounts of
  - Mortgage payments (primary reason for itemization)
  - Medical bills
  - State and local tax withholding
  - Charitable donations

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Tax Data on Charitable Donations

- IRS 1040 Data Matched to ACS, HPS, and CHP data at address level. About 90% of IRS 1040 records can be assigned a Census Bureau address linkage key (Bee et al. 2015)
- Key outcome variable is the **donation rate**: the percent of income a household donates to charity
- Households are classified as itemizers only if non-charitable deductions alone exceed the standard deduction
  - Minimizes selection issues biasing results

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Descriptive Statistics and Response Rates

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Income by Itemization

	Median Total Income, IRS Form 1040	Standard Error
Did Not Itemize	$76,520	$656
Itemize	$162,600	$3,443

Itemizers have much higher income

Source: 2021 and 2022 ACS, IRS 1040.

Percent Total Income Donated to Charity

Percentile	Estimate	S.E.
10	0.20	0.003
20	0.39	0.004
30	0.62	0.007
40	0.93	0.009
50	1.36	0.014
60	2.02	0.021
70	3.10	0.038
80	5.14	0.055
90	9.70	0.096
94	13.19	0.168
98	25.71	0.509

Most itemizers only donate a small percentage of their income

50th percentile: For half of itemizers, their charitable donation rate is 1.36% or lower.

Key group for paper: the 10% of itemizers that donate at least 9.7% of their income to charity

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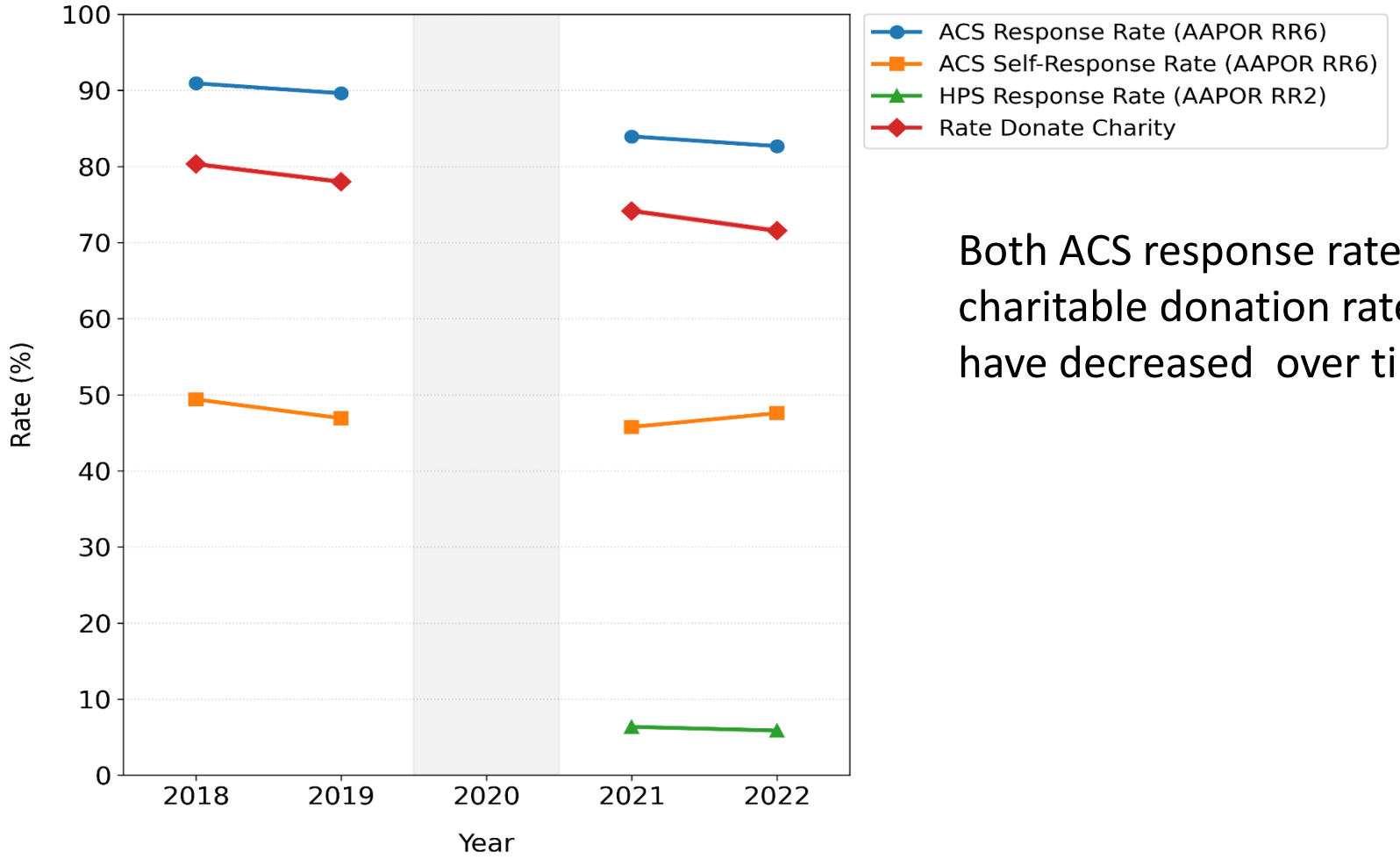
Source: 2018, 2019, 2021, and 2022 ACS, IRS 1040.

Survey Response Rates and Charitable Donation Rates



Both ACS response rates and charitable donation rates have decreased over time

Source: ACS, HPS, IRS 1040.

ACS Response Rates by Itemization and 1040 Match Status

	Response		Self-Response	
	Rate	S.E	Rate	S.E
Did not match to IRS 1040	74.89	0.06	32.28	0.05
Have IRS 1040, but no itemization	86.3	0.03	51.76	0.04
Itemize	88.69	0.10	56.3	0.13

Itemizers have higher response rates

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Source: 2021 and 2022 ACS, IRS 1040.

Main Results

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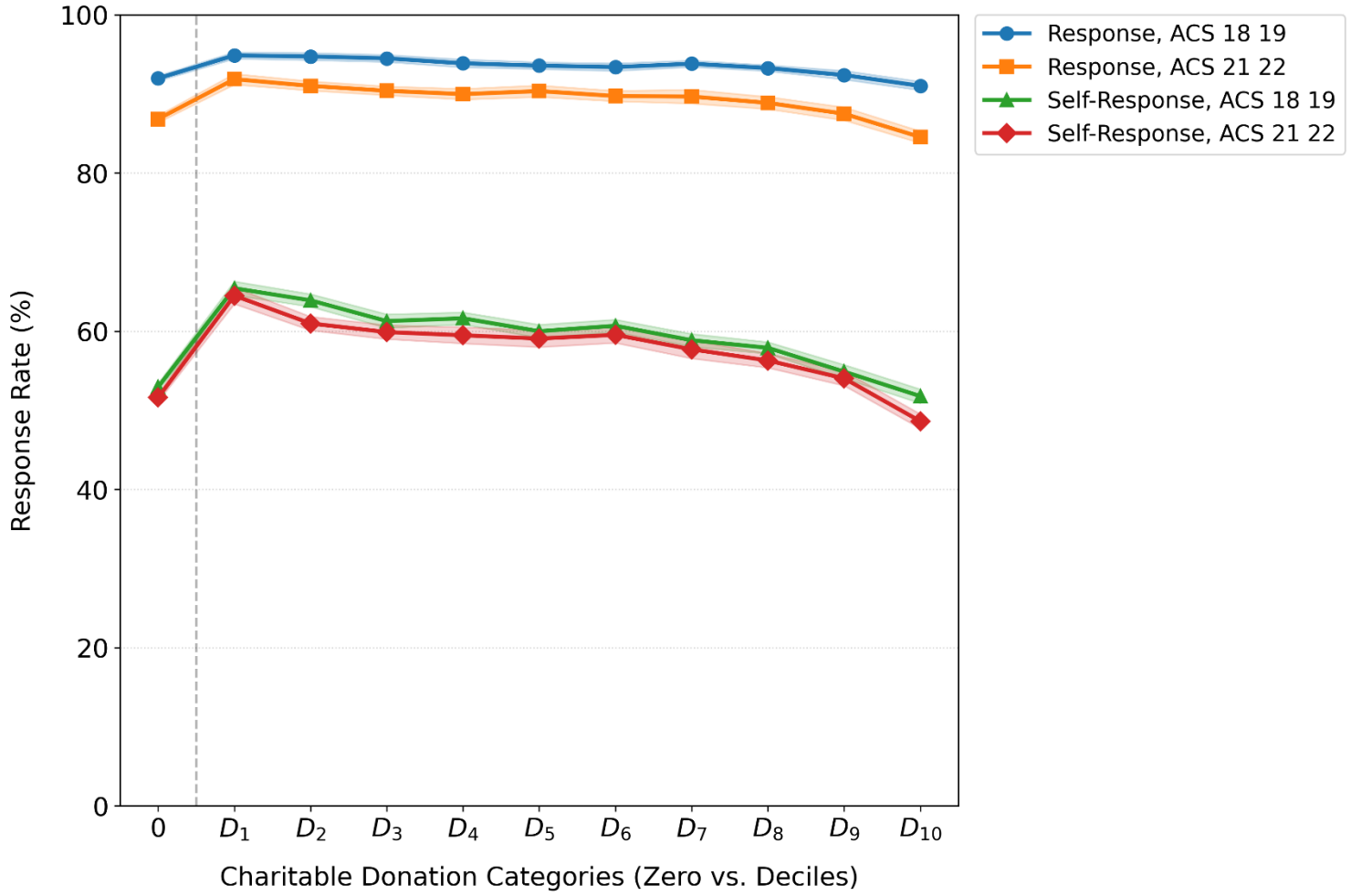
Survey Response Rates and Charitable Donation Rates



Source: ACS and IRS 1040.

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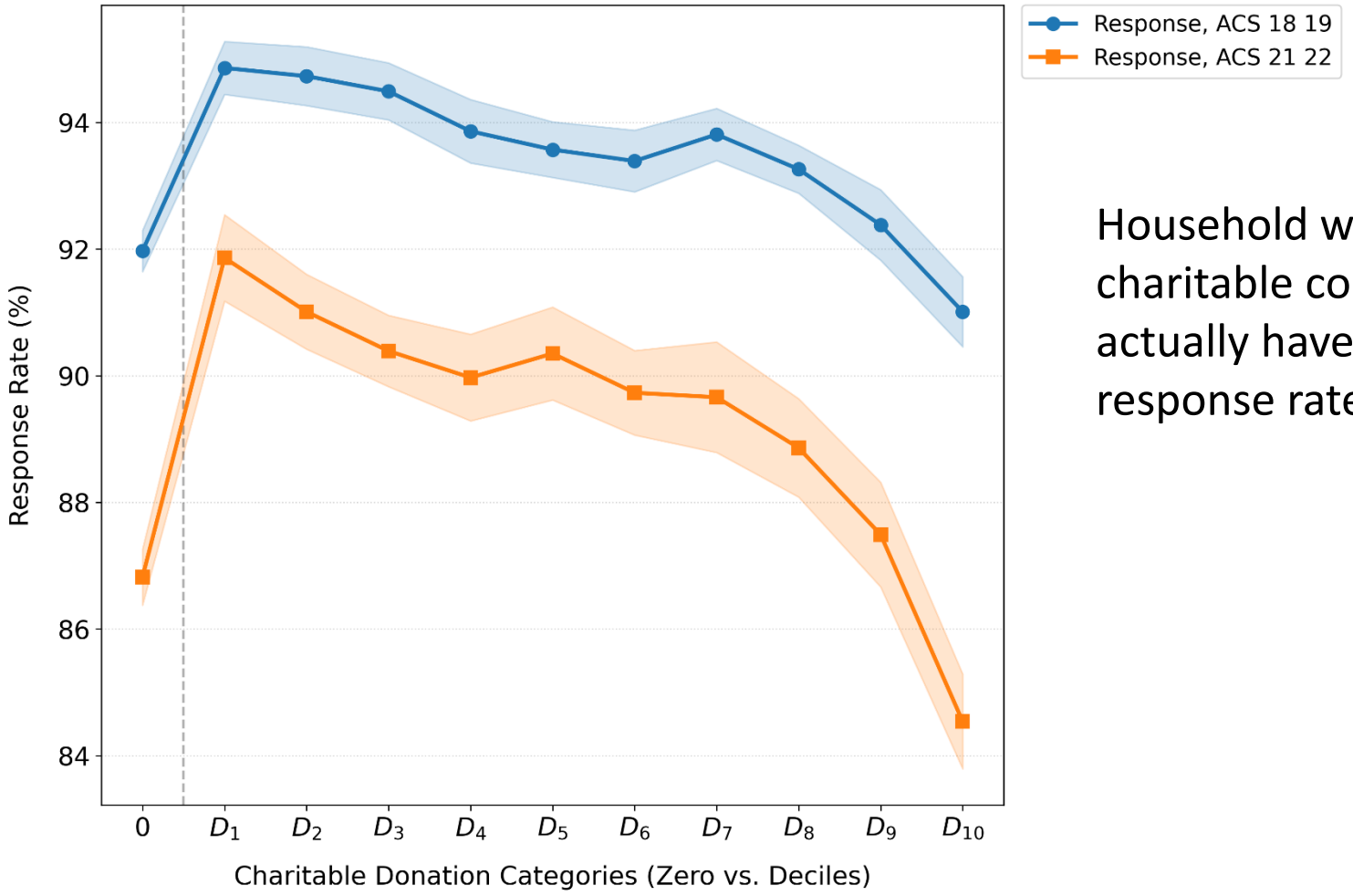
Survey Response Rates and Charitable Donation Rates



Household with highest charitable contributions actually have the lowest response rates!

Source: ACS and IRS 1040.

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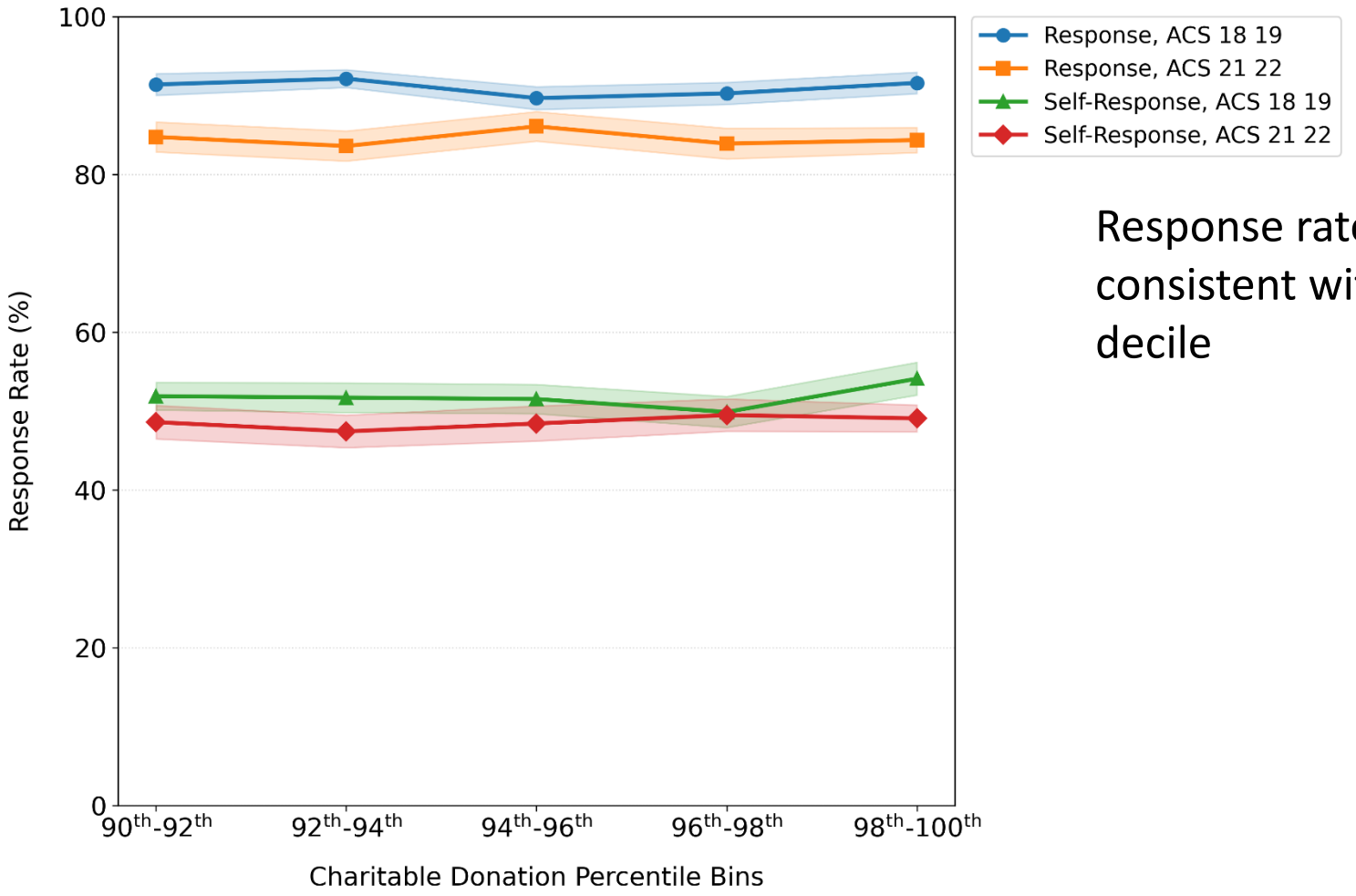
ACS Response Rates: Top Decile



Response rates relatively consistent within the top decile

Source: ACS and IRS 1040.

Why Would Top Donors Have Lower Response Rates?

- Unique effect with the ACS?
  - Get similar results in bias analysis with HPS
- Confounding effects?
  - Results still significant when conducting a regression that controls for state of residence and economic and demographic characteristics

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Why Would Top Donors Have Lower Response Rates?

- Potential explanation: Top donors have lower confidence in the U.S. Census Bureau
  - Analyze trust and confidence questions from the CHP
  - Analysis is correlational, like prior graphs
  - Assume that relative differences within the CHP sample mirror relative differences in the broader population
  - Goal: Assess whether donation groups with lower ACS and HPS response rates also show lower confidence in the Census Bureau

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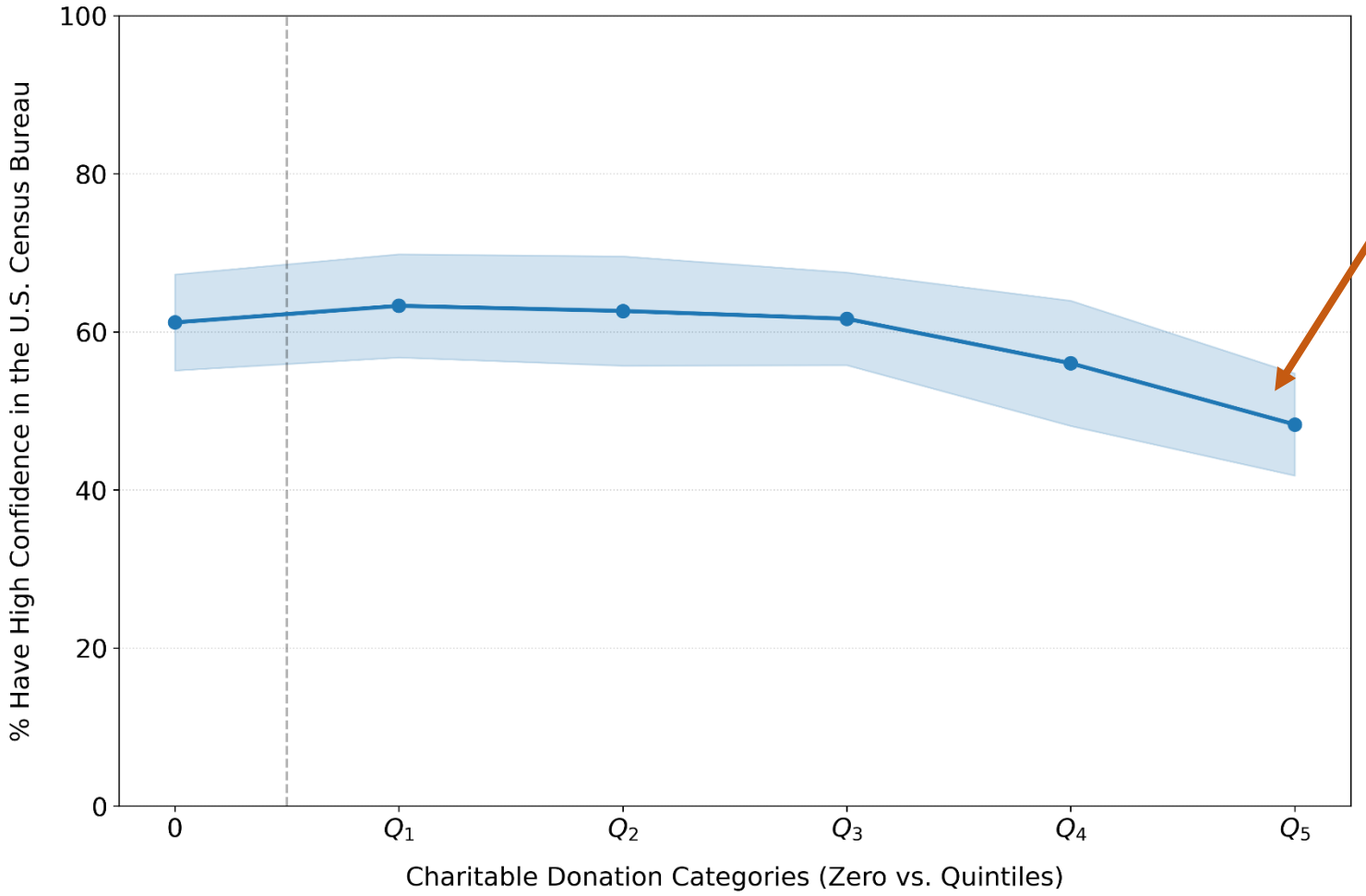
Percent that have High Confidence in the U.S. Census Bureau



Top Donors Have Lower Confidence:
63.28% Quintile 1
vs.
48.27% Quintile 5

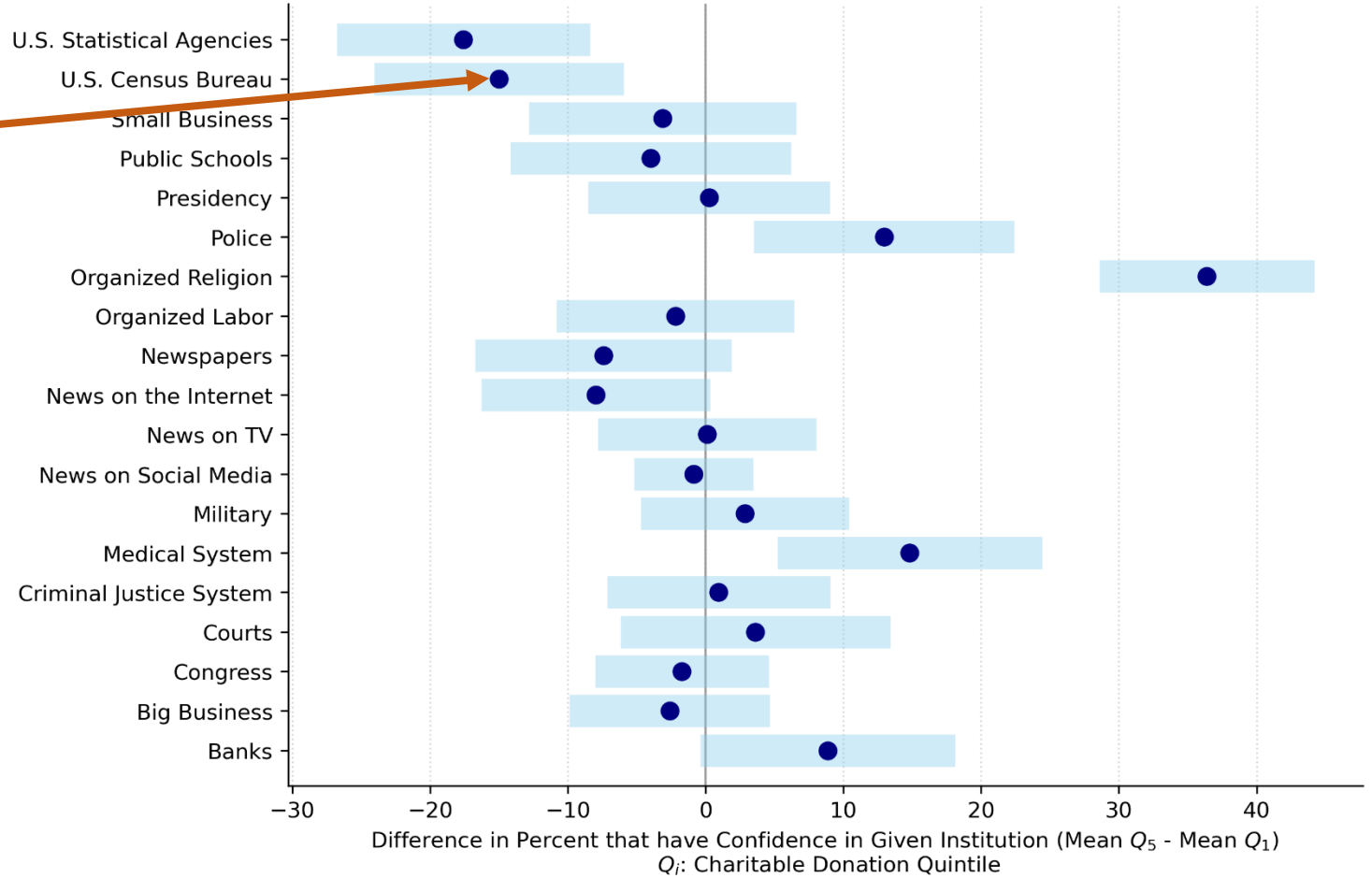
Decline of 15.01 p.p.

Source: 2023-2024 CHP; IRS 1040 tax year 2022 data

Confidence Estimates, All Institutions

(Mean Q_5 – Mean Q_1)

-15.01 difference from prior slide

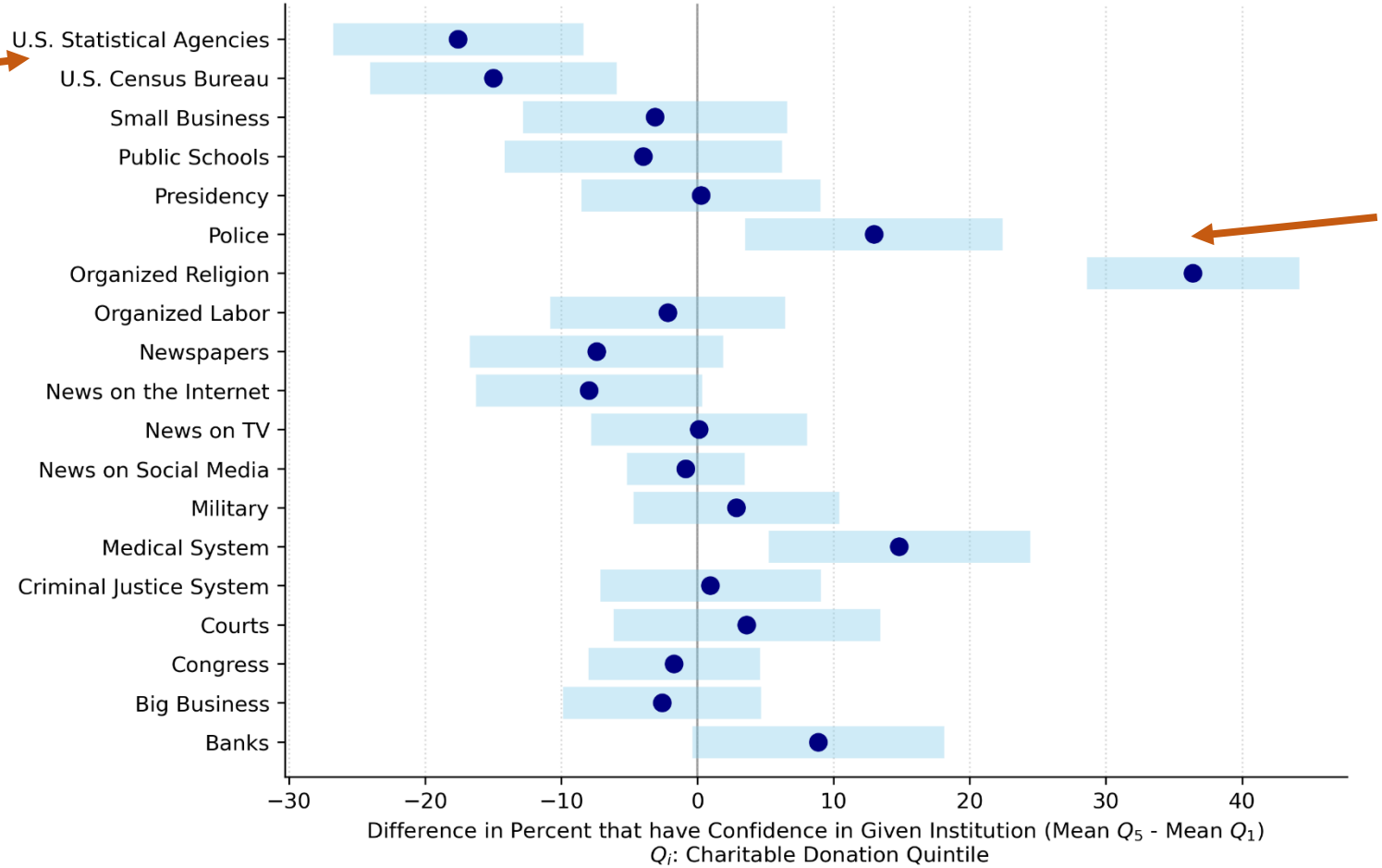


Source: 2023-2024 CHP; IRS 1040 tax year 2022 data

Confidence Estimates, All Institutions

(Mean Q_5 – Mean Q_1)

Top Donors Have Lower Confidence in Statistical Agencies Generally



Top Donors Have Higher Confidence in Police, Organized Religion, and the Medical System

Source: 2023-2024 CHP; IRS 1040 tax year 2022 data

Conclusion

- Novel finding: People who donate the most to charity have *lower* survey response rates
- Results potentially explained by highest donors having lower confidence in U.S. Census Bureau
- Takeaways for survey methodology
  - Further evidence how social capital is not a one-dimensional concept
  - Further support for theories of response like leverage-saliency theory that can capture competing effects on decision to respond
  - For some individuals, trust in a survey sponsor may be a stronger driver of survey participation than general altruistic tendencies

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Appendix

Regression Analysis

- Conduct analysis where ACS response of self-response is the dependent variable and charitable contributions are the key explanatory variable
- Control Variables
  - State of residence
  - Log of total income from IRS 1040
  - Indicators of having other types of deductions claimed on schedule (e.g. medical claims)
  - Demographic variables on age, race, and Hispanic origin characteristics of household members. These data come from other administrative data
- For each dependent variable, conduct two regressions
  1. Extensive margin: Sample is all itemizers. Key explanatory variable is whether donate at all to charity
  2. Intensive margin: Sample is people who donate to charity. Key explanatory variable is the charity donation decile the household falls into

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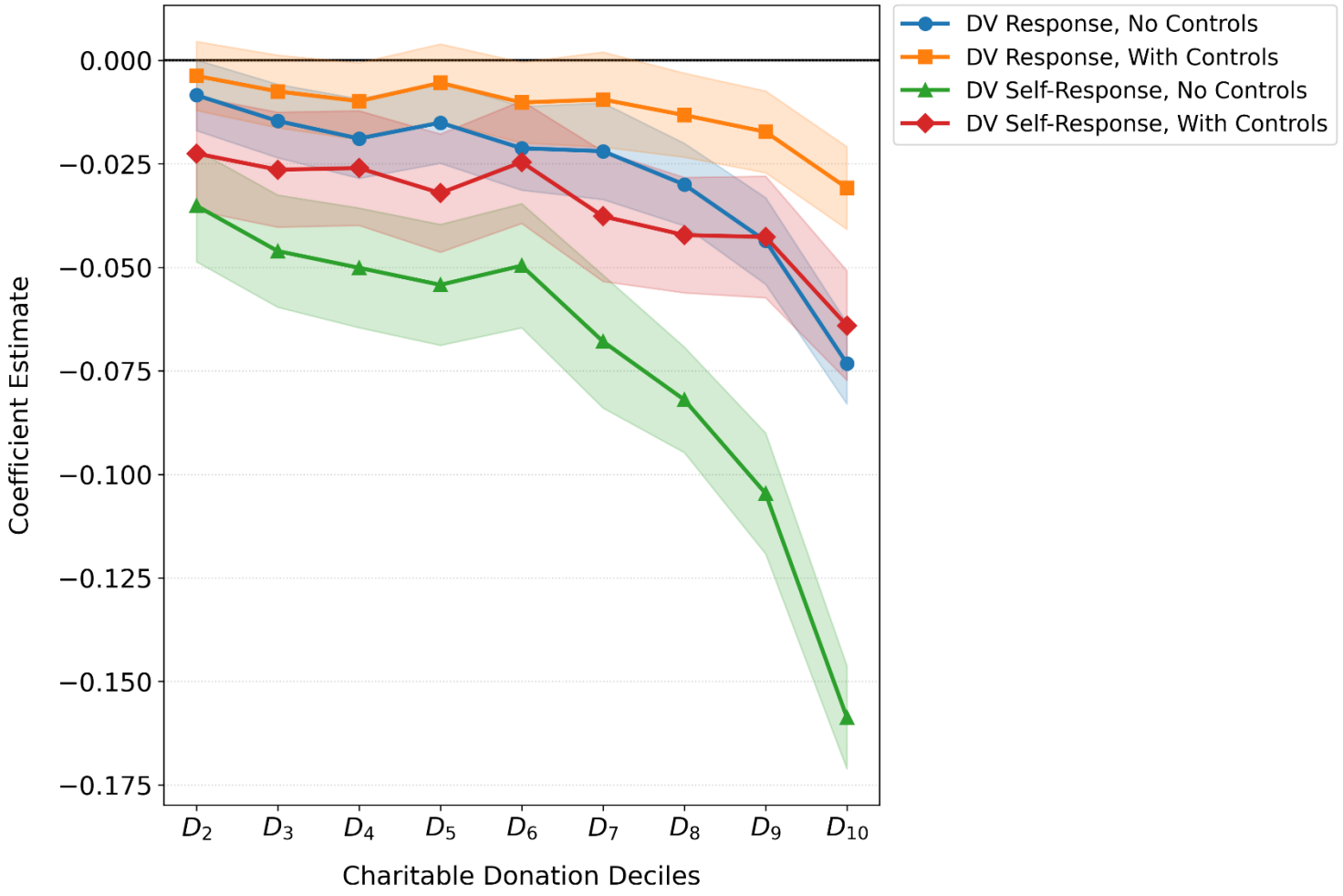
Regression Results: Intensive Margin



Source: 2021 and 2022 ACS, IRS 1040, SSA Numident, Census Best Race and Ethnicity Composite File

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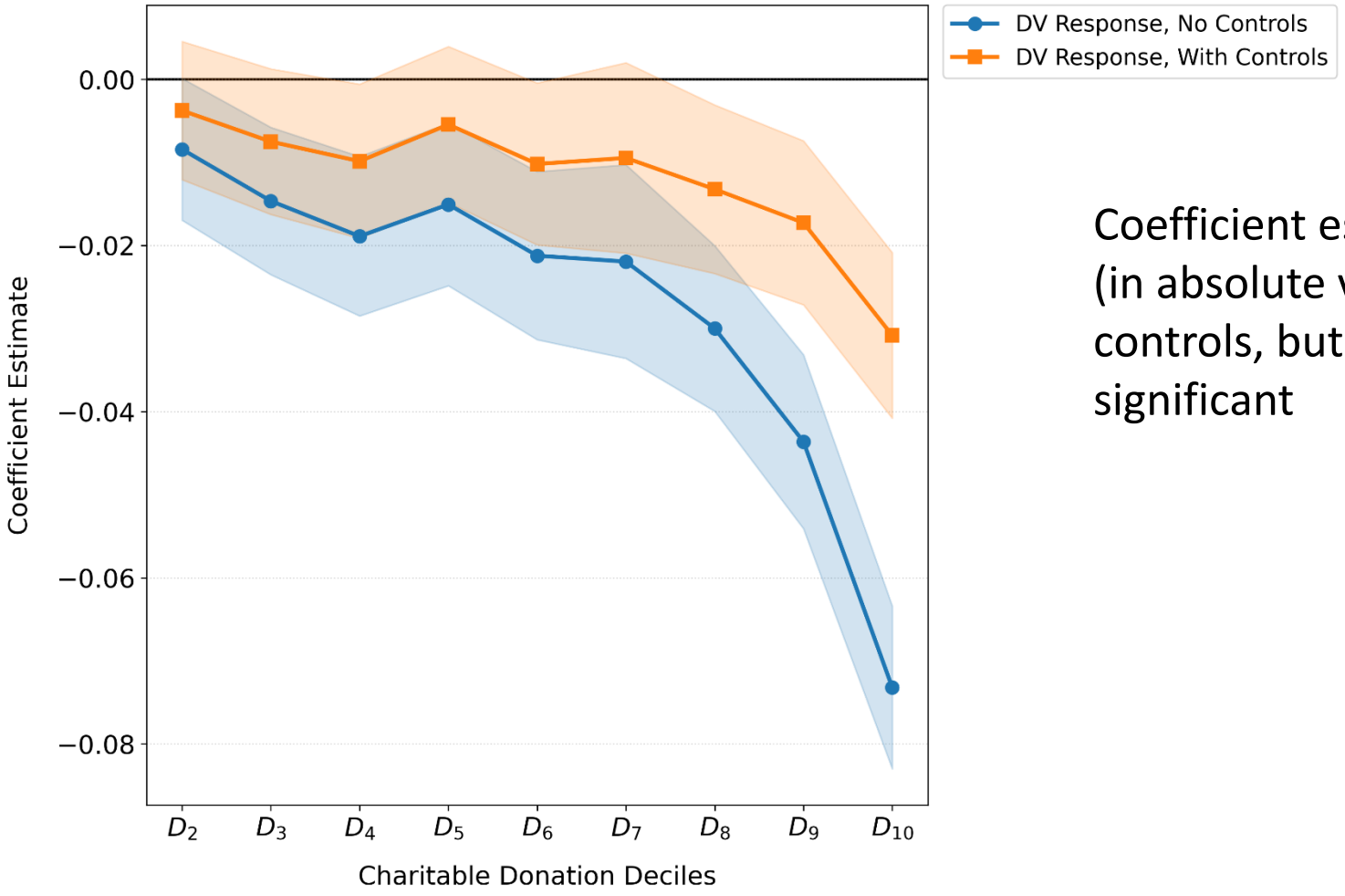
Regression Results: Intensive Margin



Coefficient estimate decrease (in absolute value) with controls, but are still significant

Source: 2021 and 2022 ACS, IRS 1040, SSA Numident, Census Best Race and Ethnicity Composite File

Bias Analysis

- Definition of nonresponse bias: $\bar{Y}^R - \bar{Y}$
- Use this to analysis both ACS and HPS at same time, given the two surveys have very different baseline response rates
- $\bar{Y}$ (Benchmark): Comes for set of sampled ACS cases in occupied housing units. Includes both respondents and nonrespondents
- $\bar{Y}^R$: Mean from ACS respondents or HPS respondents
- Means analyzed is the percent of people that fall into each of the key charitable donation categories. Population is people who itemize on their taxes

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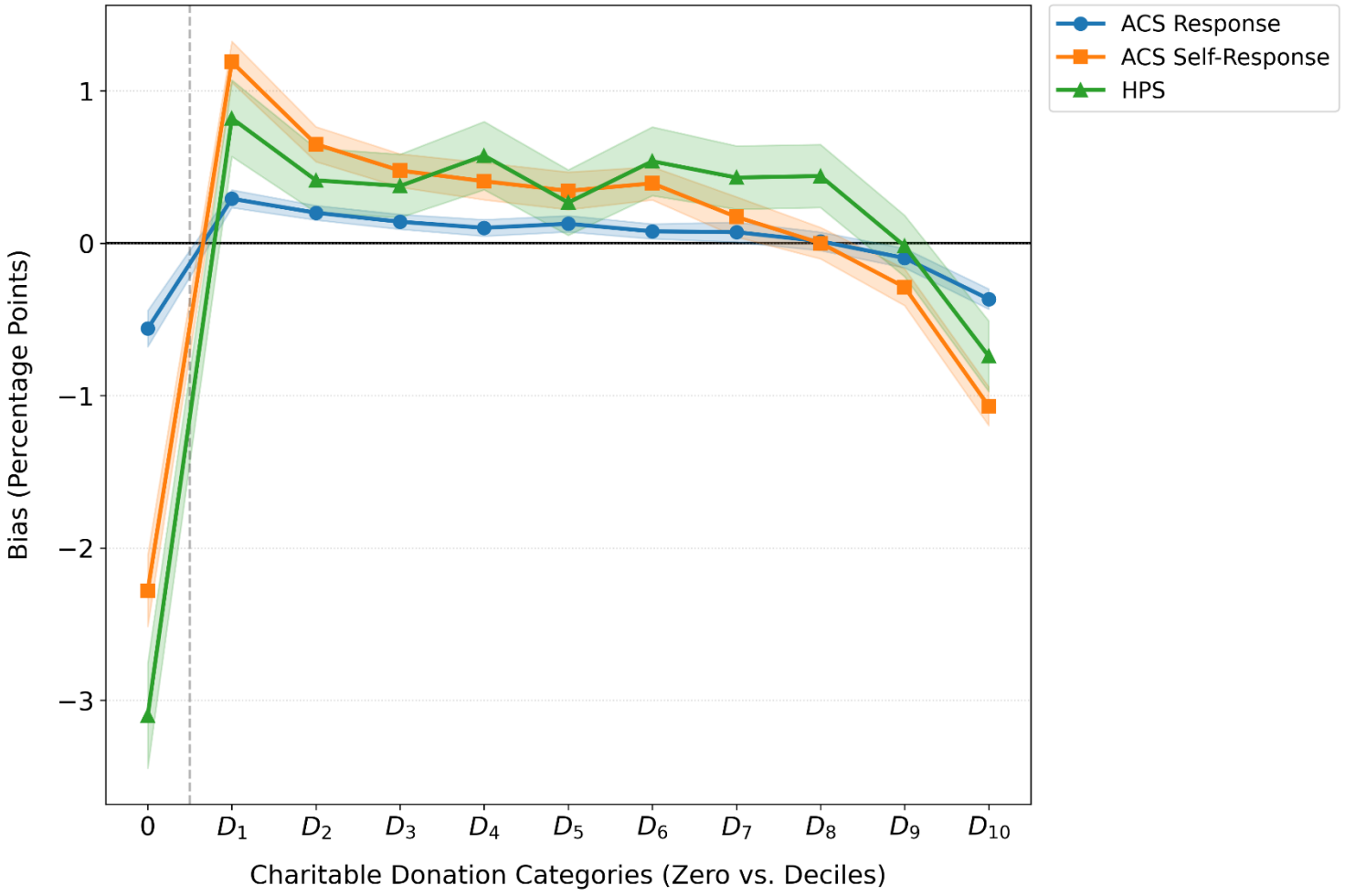
Bias Analysis



Source: 2021 and 2022 ACS, 2021 and 2022 HPS

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