Income, Wealth, and Charitable Giving

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March 9, 2019

Extended Abstract

A key relationship underlying discussions of the role of philanthropy in society broadly and the tax treatment of charitable giving specifically is the relationship between income and giving. Yet this relationship is often subject to conjecture with little basis in fact or, worse, based on inappropriate methodology. For example, a recent essay in The Atlantic (Stern 2013) argued that wealthy donors were less generous than the poor. The basis for this argument was a report analyzing the IRS Statistics of Income (Lindsay 2017), which measure income rather than wealth, and only measure charitable giving for those who itemize their deductions. The selection bias inherent in this method is clear: lower-income taxpayers who itemize their deductions are far more likely to have made charitable donations. More broadly, the extent of pro-social behavior (or lack thereof) among the rich seems to be of significant interest both in the mass media and among researchers (Andreoni et al. 2017).

The recent Tax Cut and Jobs Act, which did not significantly alter marginal tax rates but did dramatically increase the standard deduction, has brought renewed interest to the question of how tax policy affects charitable giving and which households are most likely to benefit from these preferences. The number of itemizing tax-filing units may fall by over 60% (Joint Committee on Taxation 2018), and other estimates indicate that changes to the tax code could reduce giving by $10 billion (Indiana University Lilly Family School of Philanthropy 2017).

In this paper, we more closely examine the relationship between income, wealth, and charitable giving, and provide updated estimates of the tax price elasticity of giving. Using eight biennial waves of the Panel Study of Income Dynamics, spanning 2001 through 2015,

we can include individual fixed effects to control for unobserved altruism and permanent income. We can also estimate these relationships for all households, including non-itemizers, as well as controlling for wealth, which is not observed in administrative tax data.

After examining both the extensive and intensive margin of giving, we will examine the tax price elasticity of giving, building on previous work by Auten, Sieg, and Clotfelter (2002) and Bakija and Heim (2011). We will discuss implications of our findings for charitable giving after the Tax Cut and Jobs Act, as well as estimates of the marginal propensity to donate out of income and wealth.

Preliminary Results

The most recent estimate of the relationship between income and giving in the United States is James and Sharpe (2007), who use a cross-section of the Consumer Expenditure Survey covering 1998-2001. They find evidence for the common conjecture that low-income households give a higher percentage of their income to charity, but also find that this relationship is driven by outliers. Further, many of these outlier households are wealthy relative to their income and tend to be elderly.

By using panel data that include detailed information on wealth, we can better account for factors that might lead to spurious correlation between income and giving. Further, we can more closely examine the types of households that are low-income yet high-percentage givers. For example, the median percent of income given conditional on making a donation, among those in the bottom decile of reported income, is 4.4%, but the mean giving rate for that group is 70%. Among those in the bottom decile, 12.7% gave more than 10% of their income, a rate triple that of any other group, and about 28% of those large givers were in the bottom decile. But 30% of those individuals were above the median household wealth in that same year. Perhaps unsurprisingly, 17% are above the age of 65, as compared to 12% in the rest of the sample. Conditional on being under 65, many appear to have transitorily low income: on average, they are somewhat above the median of the income distribution in other years of the sample.

We provide some preliminary estimates of these relationships, estimating the relationship separately for the extensive and intensive margins. To illustrate the difference that accounting for individual fixed effects makes, Figure 1 shows the unconditional mean of the likelihood of giving by income and wealth decile.[1] The average giving rate for the bottom

[1] We include a bin for negative wealth and those who report zero wealth; positive wealth is divided into 10 bins. The 44 observations with negative reported income are dropped from the sample.

decile is about 20%, as compared to nearly 90% for the top decile. Similarly, the relationship between giving and wealth is strongly positive, excluding the outlier for the negative wealth bin is primarily due to relatively young, highly-educated individuals with large amounts of debt.

By comparison, Figure 2 reports coefficients from a linear probability model that includes individual fixed effects, year fixed effects, and time-varying factors such as marital status, religion, self-reported health, state of residence, and a housing price index.[2] This gradient is much flatter, but still positive: even conditioning on unobserved time-invariant characteristics, changes in wealth, and time effects, those in those top income decile are 10 percentage points more likely to give than those in the bottom decile. An effect of roughly similar magnitude is seen for wealth, holding income fixed.

Figure 3 shows the impact on relationship between the log of the amount given (conditional on making a gift). Figure 4 combines the estimates on the extensive and intensive margins and reports marginal effects on the mean of log giving. These graphs also show the strong positive correlation between income, wealth, and giving.

Figure 5 looks at the relationship between the percent of income given, income, and wealth, reporting marginal effects from estimates that combine the effects on the extensive and intensive margins. We replicate the high levels seen for low-income households in previous literature – the percent given by households outside of the bottom decile is nearly 50 percentage points lower than those in the bottom decile, and the estimates are very noisy. We then winsorize the percent donated to a maximum value of 10%, so as to reduce the influence of outliers without truncating the sample. Figure 6 shows these results, which indicate a much flatter relationship, while low-income households.

We are in the process of estimating marginal tax rates for individuals in the PSID using the National Bureau of Economic Research's TAXSIM module. We will then estimate tax price elasticities, exploiting changes in state tax codes and following the empirical approach in Bakija and Heim (2011), and provide back-of-the-envelope estimates for the change in charitable giving expected from the Tax Cut and Jobs Act.

Taken together, our descriptive results and the estimates of the effects of tax policy on charitable giving should be of substantial interest to policymakers and journalists.

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[2] List and Peysakhovich (2011) and Meer, Miller, and Wulfsberg (2018) show that macroeconomic conditions play a significant role in giving trends.

Figure 1: Unconditional Probability of Giving

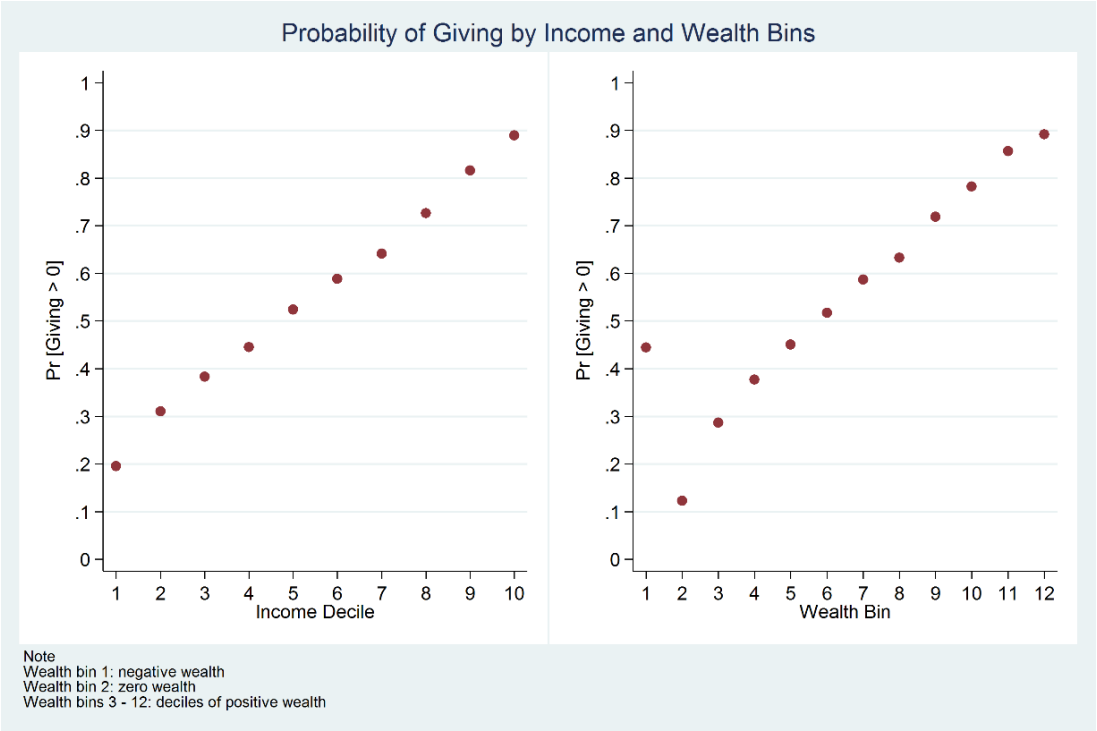


Figure 2: Marginal Effects on Probability of Giving

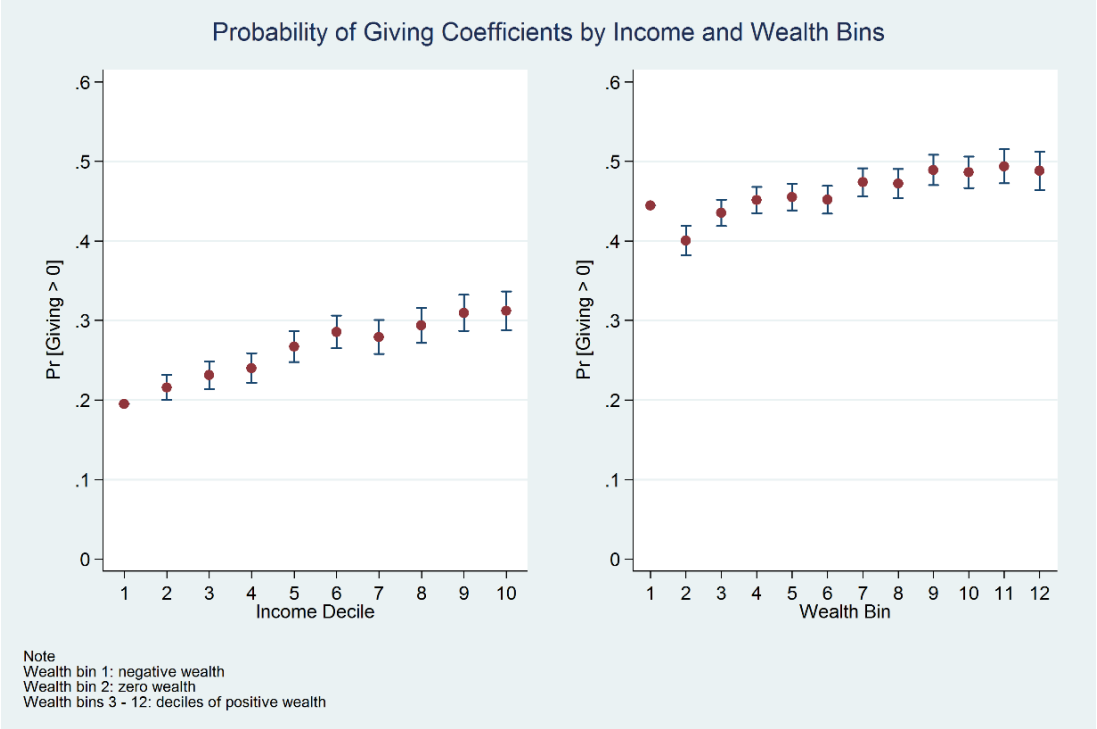


Figure 3: Marginal Effects on Amount Given Conditional on Giving

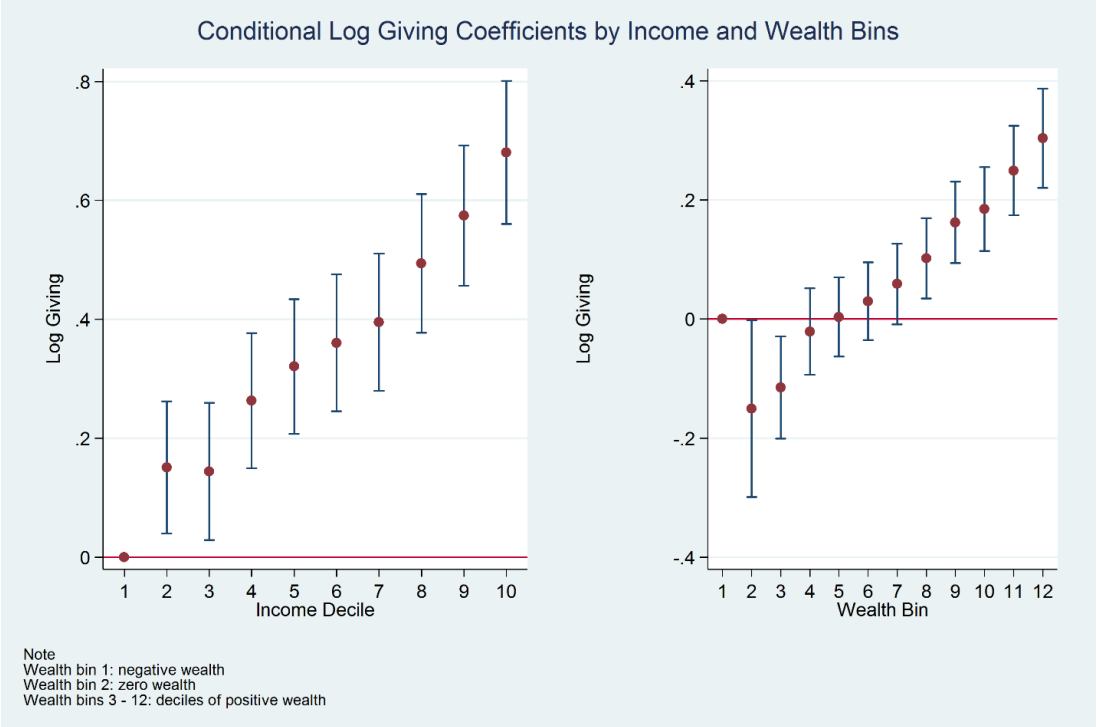


Figure 4: Marginal Effects on Amount Given

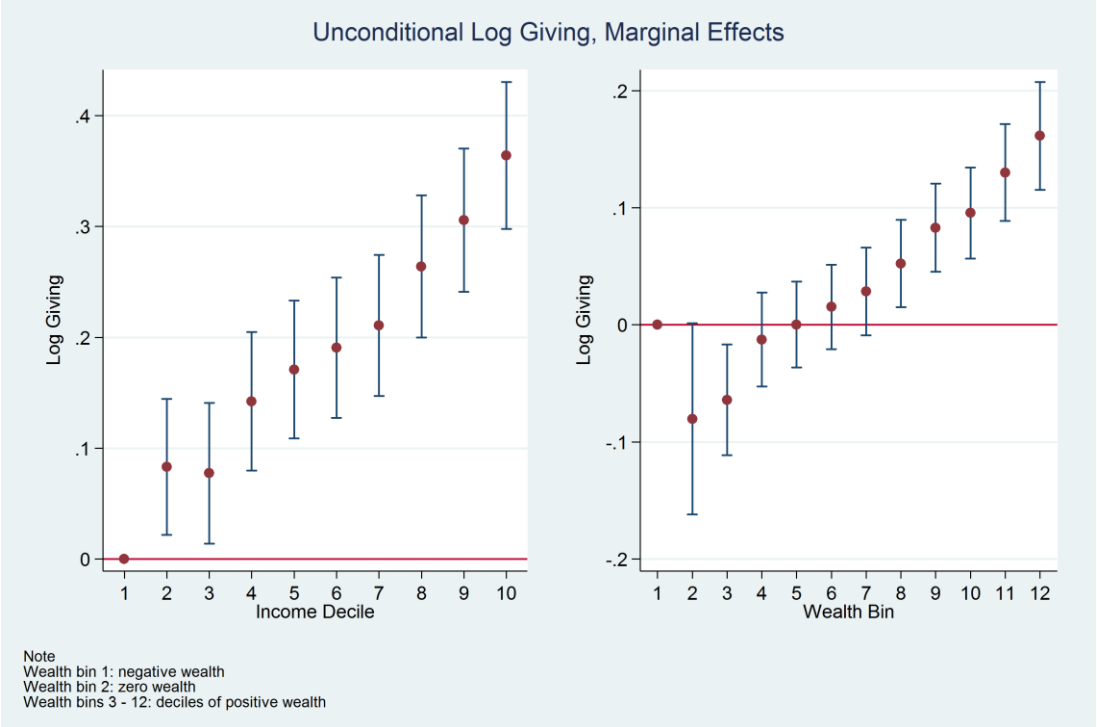


Figure 5: Marginal Effects on Percent of Income Given

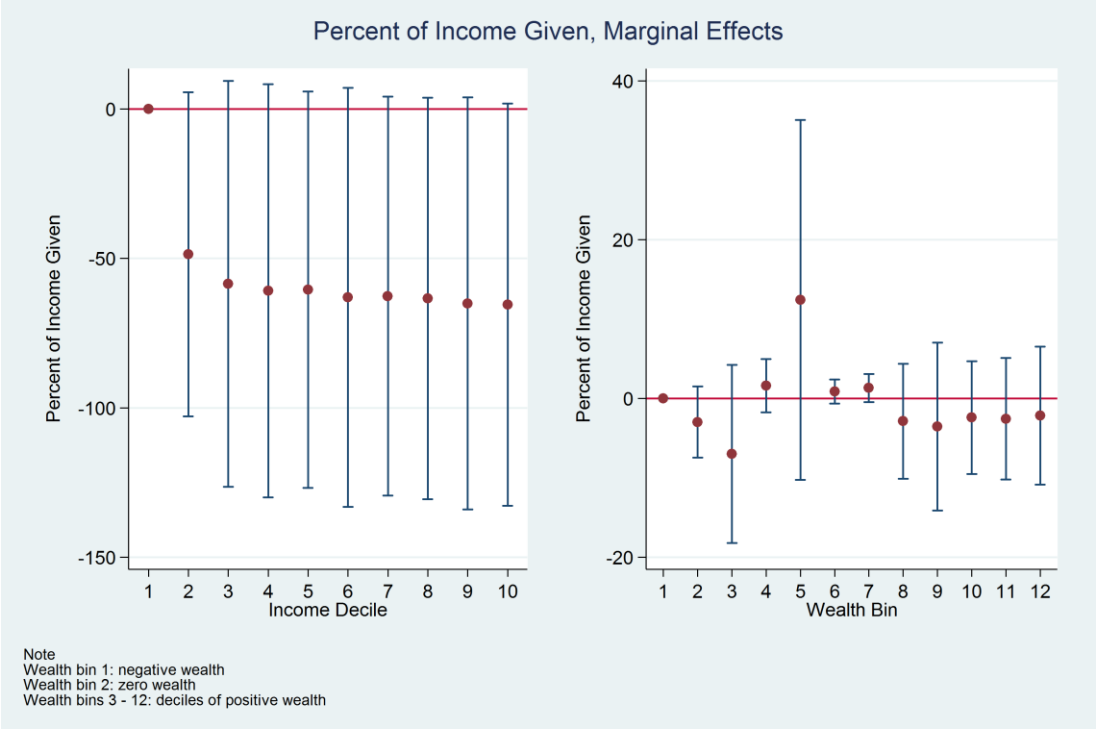
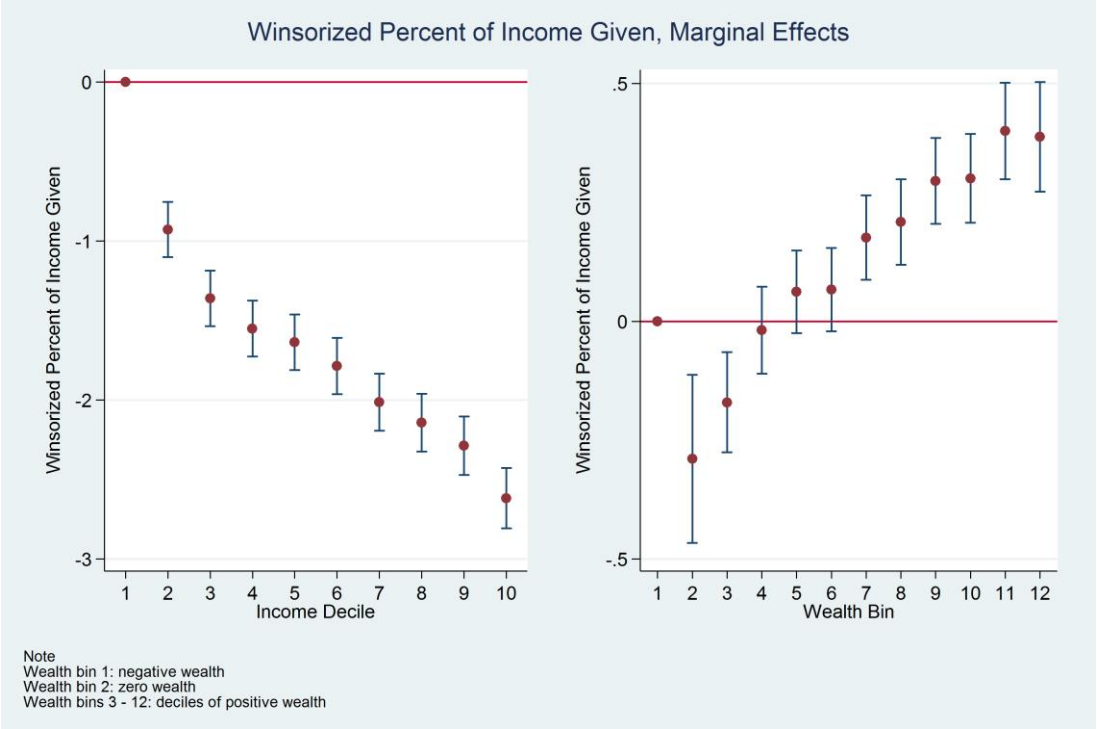


Figure 6: Marginal Effects on Percent of Income Given (Winsorized)



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