THE GREAT RECESSION AND CHARITABLE GIVING

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ABSTRACT

We examine the impact of the Great Recession on charitable giving. We find sharp declines in overall donative behavior that is not accounted for by shocks to income or wealth. These results suggest that overall attitudes towards giving changed over this time period.

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1. Introduction

The impact of the Great Recession on every aspect of economic behavior is palpable. The effects on charitable giving are of particular interest because the need for private philanthropy is generally greatest during times of economic distress, just when the ability of donors to contribute is most limited. Indeed, total giving fell dramatically during that time period, as predicted by earlier studies exploring the relationship between aggregate giving and economic conditions (List, 2011; List and Peysakhovich, 2011).

While several studies have examined aggregate trends in giving around this time period (LeClair, 2014; Melkote, 2015; Reich and Wimer, 2012), there are shortcomings to the approaches these analyses take. Those using IRS data are limited to donors who itemize deductions on their tax returns, about 30 percent of households, most of them high income (Greenberg, 2016) – though itemizers account for most of the dollar value of giving. While informative, these studies can only describe broad patterns of giving during the Great Recession. They cannot, for example, disentangle whether the reduction in giving is driven by shocks to household income and wealth, or whether broader factors during that era explain the drop. For example, Fisman, Jakiela, and Kariv (2015) show that individuals exposed to the recession behave more selfishly in dictator games, even as they themselves may not have been directly affected.

In this paper, we examine patterns of giving before, during, and after the Great Recession using household-level panel data from the Panel Study of Income Dynamics. We look at both the likelihood of making donations and the amounts given, controlling for a variety of explanatory variables, including income and wealth and, in some specifications, household fixed effects. We find that giving fell on both the extensive and intensive margins during the Great Recession, that it had not recovered by 2012, that it is not explained by a fall in income or wealth, and that the reduction is evident even when controlling for time-invariant unobserved attributes, like tastes for altruism that do not shift over time. These findings provide evidence that other factors, like changing attitudes towards giving or increased uncertainty, explain much of the fall in giving during the Great Recession.

2. Data Summary and Econometric Specifications

We use seven biennial waves of the Panel Study of Income Dynamics (PSID), spanning 2001 through 2013. The data include demographic, income, and wealth information, as well as questions about charitable giving in the previous calendar year. After removing observations with missing values, the data comprise 54,115 observations on 13,109 individuals. We construct indicators for whether a household reported giving in the previous year and the total amount given (adjusted for inflation using the CPI).[1] In the 2001 wave of the PSID, reporting giving in the previous year, 61.2 percent of households reported making a donation. The mean gift conditional on making one is $2,597 (s.d. = $11,247) and the median is $924 (in 2013 dollars). The median percent of income given is 3.7%.

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[1] See Wilhelm (2006) for details on the construction of the data set.

Our empirical strategy is straightforward. We estimate a series of regressions with a measure of giving as the dependent variable, and vary the set of explanatory variables.[2] Our variables of interest are the year effects, with 2001 as the comparison year. These coefficients show the impact of all factors affecting households' giving each year, particularly the macroeconomic environment.

We begin by using ordinary least squares to look at the simple means of the likelihood of giving and the (log) amount given, conditional on making a gift. It is then straightforward to combine the estimates from these two regressions to find the impact on the average amount given, while allowing the effects on the extensive and intensive margins to differ. The next set of specifications adds a series of demographic controls,[3] state of residence, and a state-level housing price index (the All-Transactions Index) and its quadratic to account for the extraordinary fluctuations in the housing market that were present during this period. If the year effects are substantially different in this specification, it suggests that the basic descriptive statistics generated in the first approach actually reflect patterns correlated with those controls, such as those driven by changes in state-level macroeconomic conditions. The third set of specifications adds controls for household income, while the fourth adds controls for wealth (including home equity).[4] If the changes in giving reflect broader trends in giving rather than the impact of shocks to household income and wealth, the year effects from these regressions will be similar to those with fewer controls.

Finally, we take advantage of the panel nature of the PSID and include head-of-household fixed effects in the four specifications listed above.[5] These account for all time-invariant attributes of the head including, most importantly, unobserved tastes for altruism. A decline in giving during and after the Great Recession, even accounting for income, wealth, and individual fixed effects, strongly suggests that broader changes in attitudes towards giving are at play.

3. Results

Figure 1 plots the year effects from OLS regressions of the probability of giving; the excluded category is giving in 2000 (recorded in the 2001 wave of the PSID). Across all four specifications, giving increases by one to two percentage points after the downturn of 2000-2001. Giving begins to decline by 2008, though the inclusion of income and wealth controls in panels C and D account for much of this impact. By 2010, though, the likelihood of giving has fallen sharply, by 8.8 percentage points in panel A to 4.5 percentage points in panel D. Despite a partial recovery of the economy by 2012, the probability of giving falls even further relative to 2000 levels. Without any controls, the reduction is 10.5 percentage points. When including income in Panel C, the effect is -7.3 percentage points, and adding wealth reduces the effect to -6.2 percentage points. As a first pass, this is strong evidence that forces broader than individual circumstances drove the decline in giving.

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[2] We cluster standard errors at the household level in all models.

[3] These include age and its quadratic, race, gender, retirement and disability status, number of children, self-reported health, marital status, education, and religious affiliation. These variables are reported for the head of household.

[4] For flexibility, we use a series of indicators for various levels of income and wealth. The results are not appreciably affected by using, for example, a linear and quadratic parameterization, nor by interacting income and wealth.

[5] The set of demographic controls is adjusted to include only time-varying variables; age is collinear with the head and year effects and is excluded. Including broader bins for age does not impact the results.

Turning to the intensive margin in Figure 2, we see similar results – the amount given, conditional on donating, falls dramatically during and after the Great Recession. Somewhat surprisingly, the time pattern of giving when there are no controls is very similar to that when including the full slate of controls. Note that this result represents both a treatment effect of the business cycle and a change in the composition of givers; while interesting, one must be cautious in interpretation.

In Figure 3, we combine our results from the extensive and intensive margins to compute the unconditional impact on giving. Given the steep decline on both margins, it is unsurprising that overall average giving falls dramatically.[6]

We next turn to estimates that include individual fixed effects in Figure 4. As noted above, fixed effects allow us to account for unobserved time-invariant attitudes towards altruism. Moreover, to some extent, the OLS estimates reflect the changing composition of the panel. Unsurprisingly, therefore, the change in giving is less dramatic than in specifications that did not include these controls. The likelihood of giving increases significantly relative to the 2000 comparison year until 2010, and falls lower still in 2012. The results in Panel D are particularly striking: even controlling for individual fixed effects, income, wealth, and other factors, the likelihood of giving was roughly four percentage points lower in 2012 than it was during the boom in the mid-2000s.

Turning to Figure 5 and the effects on the intensive margin, the results are quite different from those in Figure 2, without fixed effects. Rather than falling, the amount given conditional on making a gift remains stable over the business cycle. That is, those who remain as donors do not reduce their giving. This change likely reflects shifts in the composition of the conditional sample, and highlights the importance of care in interpreting results on the intensive margin. In Figure 6, we combine the estimates. The small decline in the probability of giving coupled with the increase by those who still give yields a significant drop in overall donations from the peak of the business cycle, but in most specifications, it does not drop significantly below the levels seen in the 2000 wave.

4. Conclusions

Our examination of patterns of charitable giving around the time of the Great Recession indicates that the propensity to give fell sharply and stayed well below previous levels, even when accounting for individual fixed effects. The amount given, conditional on giving, is sensitive to the inclusion of fixed effects; the estimates change sign when fixed effects are included, likely reflecting the change in the composition of the sample as the propensity to give fell. Overall giving falls relative to the levels seen in the mid-2000s, during the peak of the business cycle. Shocks to income and wealth do not account for this drop, suggesting that broader shifts in attitudes towards giving or increased uncertainty are at work. Given previous results on habit formation in charitable giving (Meer, 2013) and later-life impacts of macroeconomic shocks on behavior (Malmendier and Nagel, 2009), this finding suggests that the Great Recession might have serious long-term negative consequences for philanthropic behavior.

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[6] Recall that the usual approximation in a log-linear regression does not hold for such large coefficients in absolute value; for example, an effect of -0.50 log points is a 39.3% reduction.

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Figure 1: Effects on Probability of Giving
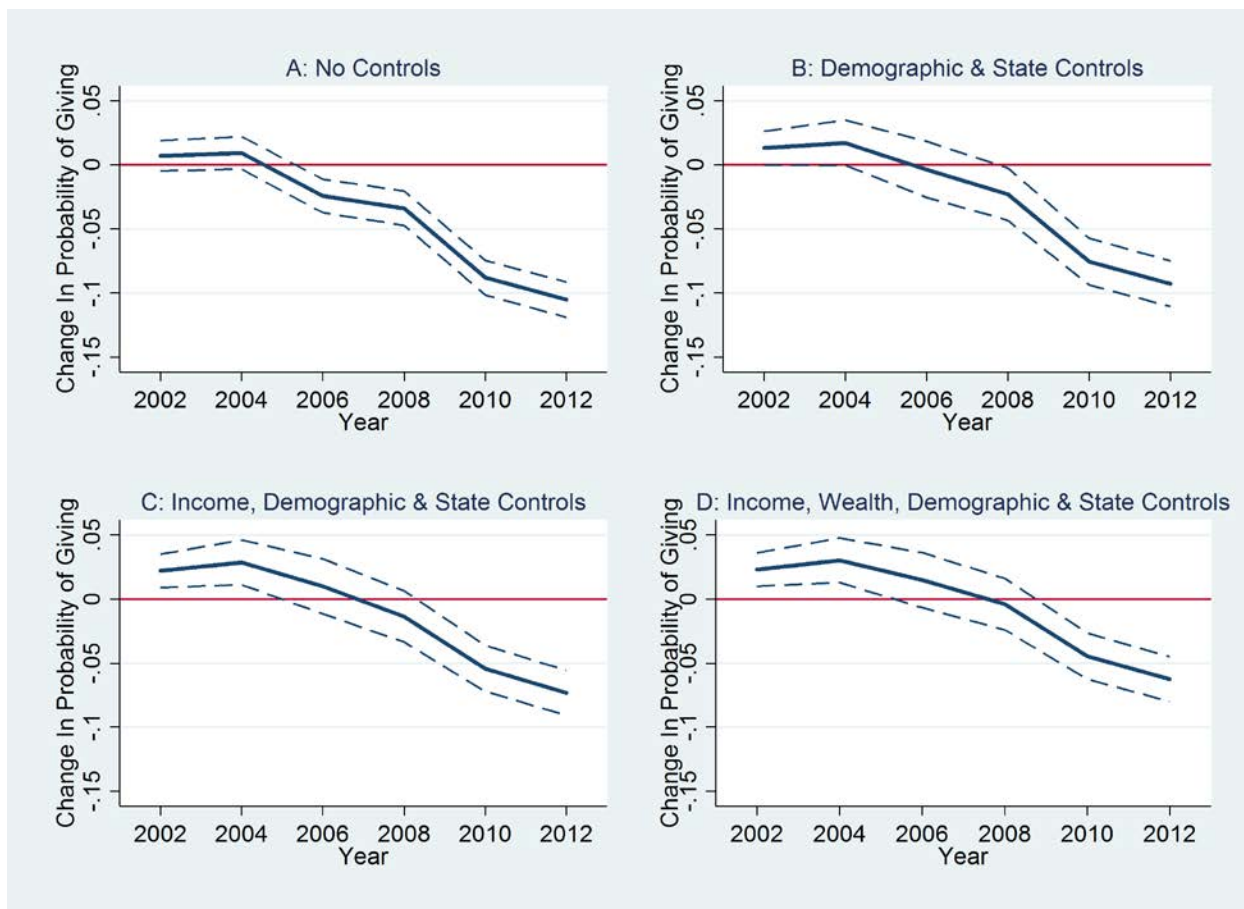OLS Estimates

Figure 2: Effects on Log Amount Given Conditional on Making a Gift
OLS Estimates

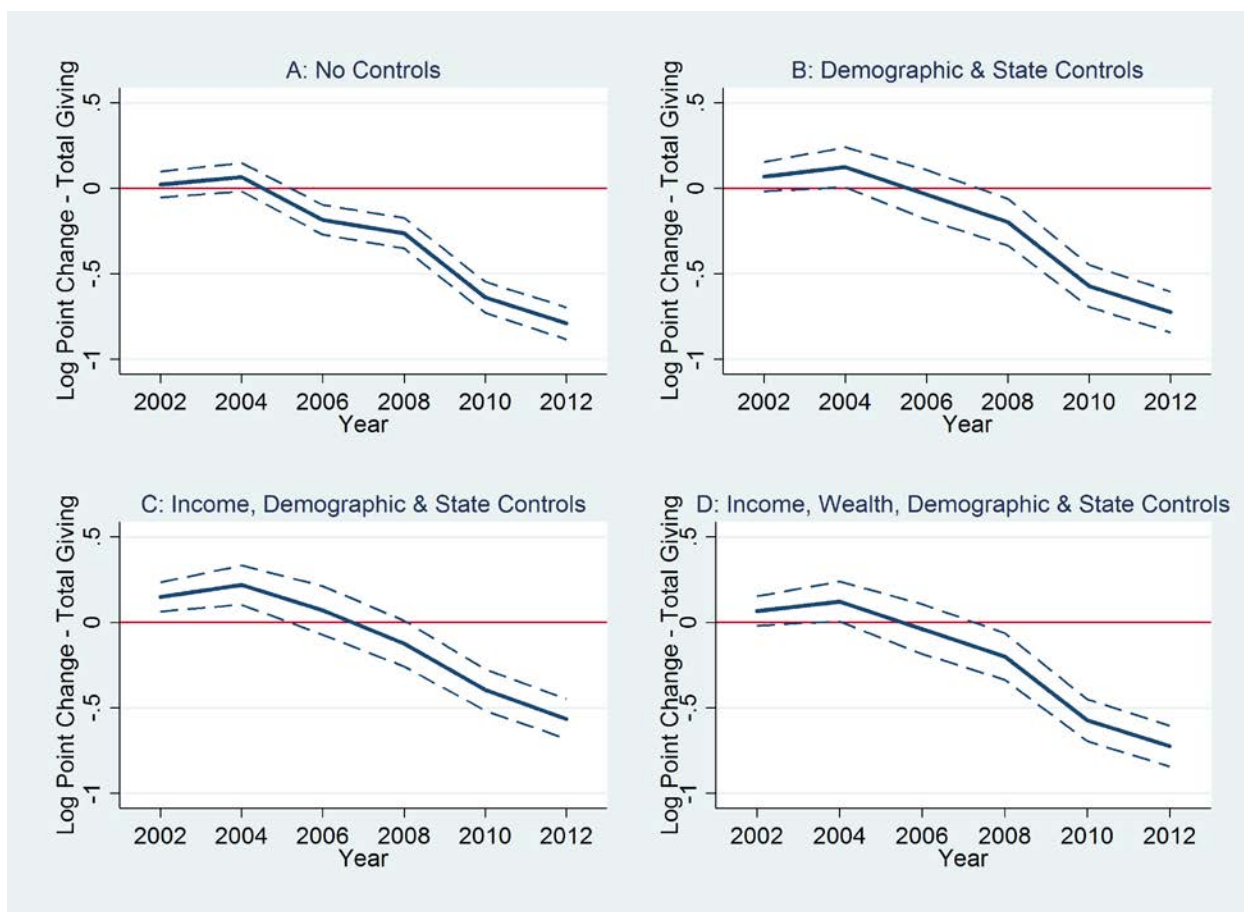Figure 3: Effects on Total Log Amount Given
OLS Estimates

Figure 4: Effects on Probability of Giving
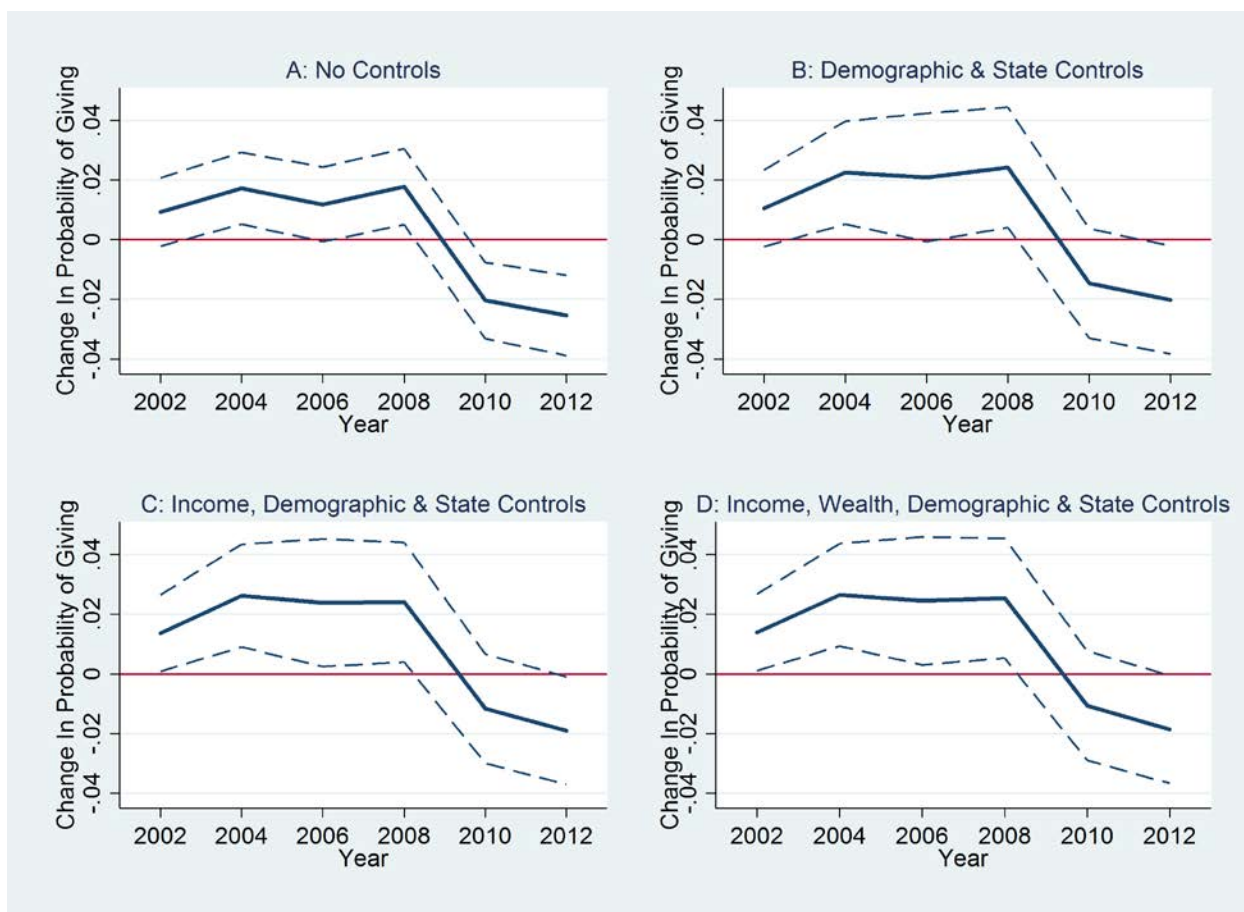Individual Fixed Effects Estimates

Figure 5: Effects on Log Amount Given Conditional on Making a Gift
Individual Fixed Effects Estimates

Figure 6: Effects on Total Log Amount Given
Individual Fixed Effects Estimates