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Do Women Give More?

FINDINGS FROM THREE UNIQUE DATA SETS ON CHARITABLE GIVING



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Abstract

This study seeks to explore gender differences in the incidence and amount of charitable giving. We analyze data from three unique data sets: the Philanthropy Panel Study, the Bank of America/U.S. Trust Studies of High Net Worth Philanthropy, and the Million Dollar List to investigate the intra-household factors of income and education on charitable giving overall, and to religious and secular causes. We confirm prior studies finding that single women have a higher likelihood of giving and give a higher average dollar amount than single men, but find no gender differences among high net worth single men and women. Being married increases the likelihood and amount of charitable giving for both men and women. Within married couples, differences in the husbands' or wives; earned and unearned income influences the likelihood and amount of giving along with where charitable giving is directed. This study uses new waves of data to examine previous, sometimes conflicting findings about gender differences in philanthropy in order to provide a more nuanced view of how women and men give.

I. Introduction

For policymakers, nonprofit leaders, and practitioners, the changing nature of household arrangements in America creates challenges and opportunities for the study of gender and charitable giving. The classic nuclear family of the 1960s—a breadwinner father and stay-at-home mother raising children—may have been easier for researchers to study. In particular, microeconomic theory has historically treated the household as a single decision maker with a unitary household budget. Since the 1980s, however, the unitary household model has increasingly been challenged, both theoretically and empirically (Rode, 2011). Today, household arrangements are increasingly complex and varied, and researchers understand that individual preferences may affect how households operate. In particular, American households have seen the rise of dual-earning couples, divorce and cohabitation, single women at all income levels, and couples where women out-earn their husbands (Wang & Parker, 2014). In addition, adults are marrying later in life or not marrying at all; from 1960 to 2015, the percentage of American adults who had never been married more than doubled from 9 to 20 percent (Krogstad, 2014). Further, Americans are having fewer children; today, families average 1.9 children compared to 3.7 children in 1960 (Krogstad, 2014). In this changing landscape, the role of women in the household and in philanthropy is of increasing importance.

In recent decades, numerous studies have been conducted to investigate whether and how gender matters in charitable giving. Do men and women participate in charitable giving differently? And if so, why do such differences exist? A comprehensive review of the research literature reveals that the answers to these questions are complex and depend on the data sets used, methodology employed, and demographic factors included in individual studies (Women’s Philanthropy Institute [WPI], 2015). Moreover, given the complexity of the gender-giving relationship, it is challenging to ascertain the impact of other demographic factors such as income, education, and age, which also influence charitable behavior.

The purpose of this study is to provide a more complete picture of gender and charitable giving by examining specific demographic variables among singles and married couples and by conducting analysis using three unique data sets. By analyzing both single-headed and married couple households, we are better able to understand the implications of the changing nature of American households on charitable decision making. We first examine men and women in single-headed households. We confirm the prior research findings that single women are both more likely to give to charity and give higher amounts than single men. In a new finding that emerges from examining a sample of high net worth donors, we find that single men and single women within this sample are much more similar in their giving behavior than the general donor population.

Next, we examine married couple households, which tend to give to philanthropy at higher levels than single people (Mesch, Rooney, Steinberg, & Denton, 2006; Wiepking & Bekkers, 2012), by looking at their self-reported decision-making patterns. As women’s earning potential has grown, women have become more equal economic partners and participate more in household economic decisions; among married couples, women have been found to be part of as many as 90 percent of household giving decisions, either as sole or joint decision makers (Center on Philanthropy at Indiana University [COP], 2011). Finally, we examine the intra-household factors of income, education, and employment, which have been found to affect charitable giving by individuals, but have not yet been studied within married couples. Our analysis reveals that household economic structures and the complexity of financial arrangements in the household

matter when making charitable decisions. We find that husbands' incomes have a disproportionate effect on household giving behaviors, but that education matters far less than previously thought. Again, we show that differences are more apparent in the general population than among high net worth households. For both donors and fundraising practitioners, this new information reveals a more robust picture of household giving and the need to understand donor couples as having multiple and diverse economic arrangements.

II. The Current Landscape of Gender and Giving Research

Prior research has demonstrated that women are more likely than men to engage in prosocial behaviors, which is often attributed to women's higher motivations to help others, including empathic concern (Einolf, 2011). Among charitable giving specifically, studies from both the U.S. and U.K. have found that women are more likely to make a charitable donation than men, a finding that appears in both experimental and survey research (e.g., Eckel & Grossman, 1998; Mesch, 2010; Mesch, Brown, Moore, & Hayat, 2011; Micklewright & Schnepf, 2009; Piper & Schnepf, 2008). While research is less conclusive on whether or not women give greater amounts of money to charity than men, a number of the more generalizable studies do find that women give higher amounts of money than men when income and other demographic factors are held constant (e.g., Eckel & Grossman, 1998; Eckel, Grossman, & Johnston, 2005;), however other studies find no gender difference in the amount given (e.g., Bolton & Katok, 1995; Cadsby, Servátka, & Song, 2010; List, 2004) or find that men give more (e.g., Belfield & Beney, 2000; Okunade, 1996; Shapiro & Ridinger, 2011).

One challenge to understanding men's and women's giving is that survey data are often collected at the household level and married couples' giving is combined. This is not surprising as married couples frequently pool their income and make giving decisions together; however, it is difficult to separate the effects of gender. To address this, several past studies isolate their analysis to households headed by single men and single women so that giving by married couples does not confuse the results. Among these studies, research shows that single-headed female households are significantly more likely to give and give higher amounts than male-headed households (Brown, Mesch, & Hayat, 2014; Mesch, et al., 2006; Mesch, 2010; Osili, Miller, & Mesch, n.d.; Piper & Schnepf, 2008). One study separated single individuals by never married, divorced/separated, and widowed, and found women were more likely to give in all single-headed households except for widowed females, who were less likely to give than widowed males (Mesch, 2010). A study with somewhat contrasting results found single women to be as likely to give as single men, but found that men gave significantly higher amounts to religious charities as compared to women (Einolf, 2011).

Past research also has demonstrated that individual characteristics such as age, income, and marriage may serve as intervening factors in determining the propensity to give and vary according to gender. Among individuals, List (2004) finds that older subjects contribute more than younger and middle-aged subjects, consistent with other generational giving research (WPI, 2012). When gender and age are considered together, a unique pattern emerges where women seem to give consistently over time; in other words, as they get older, their giving does not significantly increase with age (List, 2004). Men, on the other hand, give less when they are younger and increase their giving significantly as they age (List, 2004). In a study focusing on women born in the Baby Boomer generation (between 1946 and 1964) and older, research finds that single women are more likely to give to charity and give almost twice as much as their male counterparts (WPI, 2012). This was true for both the entire sample, as well as those in the highest income bracket. Brown et al. (2014) took an even smaller sample of single adults born before 1965 from the PSID waves from 2003 through 2007, and found that being female increases the likelihood that a person would donate to charity. In this study, we look to confirm these previous findings to better understand the differences among single men and women and their giving behavior. Therefore, our first research question investigates the giving behaviors of single men and single women to isolate the intervening factors that marriage introduces:

Question 1: How does gender impact giving among single men and single women? How do gender and giving vary by age and income level?

Among married couples, research shows that marriage itself has differing impacts for men's and women's giving. Overall, marriage typically results in higher levels of charitable giving and married people are more likely to give than singles of either sex (Brooks, 2007; Mesch et al., 2006; Rooney, Mesch, Chin, & Steinberg, 2005; Piper & Schnepf, 2008; Wiepking & Bekkers, 2012). This is thought to be due, in large part, to the fact that married people are more connected with social networks. In particular, research shows that marriage makes men more likely to give to charity and to give larger amounts (Einolf & Philbrick, 2014). Further, the effect was stronger on religious giving for men, and it was stronger the longer the participants were married. For women, marriage does not have a significant impact on overall charitable giving, but it does have a positive effect on religious giving (Einolf & Philbrick, 2014). These findings support the theory of gendered social norms where women influence men's charitable behavior through marriage (Croson, Handy, & Shang, 2010). Rooney et al. (2005) find that single and married females are more likely to donate than married males, who are themselves more likely to donate than single males. Mesch et al. (2006) confirm these findings, and the authors suggest that since being married or a single female is associated with an increase in the probability of giving, women may play a role in socializing men to philanthropy, reinforcing the social role theory described above. Our second question investigates the likelihood and amount of giving among single and married men and women, before turning to our analysis of gender and married couples' giving.

Question 2: How does marriage impact giving among men and women?

Next, we turn to the research on married couple's charitable giving to better understand the influence of gender, household economics, and charitable decision making. Among married couples, several studies have attempted to investigate how bargaining may affect charitable giving (Andreoni, Brown, & Rischall, 2003; Brown, 2005; Wiepking & Bekkers, 2010). Couples have several choices when it comes to making household decisions: a cooperative, unitary agreement where one partner decides; a joint decision that involves bargaining; or separate decisions by each individual (Brown, 2005). The majority of couples report making charitable giving decisions jointly (WPI, 2015). We would expect that if a husband and wife share agreement on charitable decisions, they would increase their charitable giving since household economies often free up resources for expenditures. However, if the man's and woman's preferences differ, the bargaining involved in joint decision making could set up a conflict within the household, leading to a reduction of giving. Researchers have found support for both outcomes (Andreoni et al., 2003; Yörük, 2010). Overall, researchers find that households where the male partner decides make the largest donations, whereas female deciders, joint deciders, and separate deciders are smaller donors (Andreoni et al., 2003; Wiepking & Bekkers, 2010). In this study, we investigate household charitable decision making for both a general population sample, as well as among high net worth households.

Question 3: How does household decision making influence charitable giving?

In the most comprehensive study of household charitable decision making to date, Andreoni et al. (2003) also investigate how income and education influence the type of decision-making model used in the household. They find that among joint deciders, income is a significant predictor of the likelihood of giving and the husband's educational attainment is significant, but not the wife's. Among households where the husband or wife individually control decision making, higher educational attainment among the decision maker is positively related to the likelihood of giving. In terms of the amount of giving, again, among joint deciders, the husband's educational attainment is significant, but not the wife's, and both income and education are significant among husband-only and wife-only deciders (Andreoni et al., 2003). While these findings provide important insights, they do not compare the intra-household factors of relative income or educational attainment on the likelihood and amount of giving among a married couple. That is, does it matter if the husband or wife earns more? What if educational levels are the same or different among a married couple? A second limitation is that many survey samples often do not include high net worth households among their respondents, where giving patterns may differ from the general population (Wiepking & Bekkers, 2012). Therefore, we investigate the complex arrangements of contemporary households by analyzing how giving is influenced by the incomes and educational attainment of husbands and wives, including how they are relative to one another.

Question 4: How do husbands' and wives' incomes and educational levels influence giving in the household?

We are not aware of empirical studies that specifically address this research question. Therefore, this paper provides the first exploration of the relationship between these intra-household variables and giving behaviors. This analysis pushes beyond the unitary household model and looks at the income and educational differences between members of a couple to understand their effects on charitable giving. We also investigate how these variables are similar and different among the general population and high-income samples.

III. Data and Research Methodology

This study uses three unique data sets—the Philanthropy Panel Study (PPS), the Bank of America/U.S. Trust Studies of High Net Worth Philanthropy surveys (HNW), and the Million Dollar List (MDL)—to examine the four research questions listed above. We selected these data sets because they provide the ability to compare a nationally-representative, longitudinal panel sample with a survey of high net worth households to explore the effect of income and wealth on men’s and women’s giving. The addition of the MDL allows for a comparison of high net worth donors based on actual giving compared to self-reported data. The data are all recently collected. We use the Philanthropy Panel Study’s newest available data from the 2011 wave, as well as the U.S. Trust Study of High Net Worth Philanthropy data from the 2014 survey wave, as well as prior waves to enhance analysis.

The PPS is the most comprehensive household survey about charitable giving, conducted in partnership with the University of Michigan Institute for Social Research’s Panel Study of Income Dynamics (PSID). The Indiana University Lilly Family School of Philanthropy designed and sponsored a philanthropy component beginning in 2001, and the PPS has been conducted every two years since 2001, resulting in six waves of data. The PPS is seen as a high-quality data source in philanthropic studies because of its regularity and its partnership with the PSID (Wilhelm, 2006). For this study, we primarily rely on the most recent 2011 wave of data, but check findings for robustness using previous waves.

The second data set, the Bank of America/U.S. Trust Studies of High Net Worth Philanthropy, is from a biennial study conducted by the Lilly Family School of Philanthropy since 2006. The High Net Worth (HNW) study provides a random selection of high net worth households with comparative data for average-income households; however, compared to the PPS, it is a relatively small sample and is not a longitudinal panel. This current study pools data from the 2012 and 2014 surveys, and previous years depending on data availability (not all survey questions were asked in each wave). This data source and the PPS both provide detail about each spouse in a married-couple household, which allows us to better understand the reasons why some married households give differently than others.

Finally, we use the MDL, a database of publicly announced million dollar-plus charitable donations from U.S. donors, which provides unique gift-level analysis. Data on donations from individual (i.e., non-institutional) donors are collected from public announcements and other publicly available sources. We use data on donations made or announced from 2000 to 2013. Appendix A provides further detail on methodology, including specific analyses and control variables not displayed in the results below.

IV. Summary Statistics

The PPS data used for our analysis include 8,622 households (8,907 households are included in the raw data, but a number are excluded due to missing information). For the 2011 wave (which we use for most analyses), 4,457 or about 51.7 percent of these households indicate they have given to charity in the past year. Among all households that give, the average amount given to charity is \$2,315.85. Married couples are both more likely to give and give higher amounts than single-headed households. These summary statistics are in Table 1 below.

Table 1: Philanthropy Panel Study (PPS) Summary Statistics

	Fraction of Total Households	Incidence of Giving (2011 wave)	Total Observations
Couples	54.5%	63.2%	4,697
Single Male	15.0%	33.5%	1,291
Single Female	30.5%	40.1%	2,634
Total	100.0%	51.7%	8,622
	Average Giving Amount Conditional on Giving (2011 wave)	Observations of Donor Households	
Couples	\$2,772	2,968	
Single Male	\$1,512	433	
Single Female	\$1,363	1,056	
Total	\$2,316	4,457	
	Fraction of Total Households	Average Giving Amount Conditional on Giving (2005 wave)	Observations of Coupled, Donor Households
Male Decides	3.9%	\$4,529	68
Female Decides	6.5%	\$2,532	112
Separately Decides	16.2%	\$2,757	281
Jointly Decide	73.4%	\$2,861	1,274
Total	100.0%	\$2,888	1,735

Note: The 2005 wave is the most recent year in which decision-making questions were asked.

Unlike the PPS, the HNW is a point-in-time study and surveys a random sample of the wealthiest U.S. zip codes in each survey year. For many analyses, we combined respondents over a number of years to allow for an adequate sample size to obtain meaningful statistical analysis. Table 2 below shows summary statistics for the HNW pooled sample, combining responses from 2005, 2008, 2010, 2012, and 2014 (4,031 total households). In the analyses in this paper, we use different samples to answer different questions as certain questions about giving are not asked in all years. Whereas 51.7 percent of the general population in the PPS gives to charity, among high net worth households, over 96 percent of all individuals participate in charitable giving. The HNW sample is older on average than the PPS sample (66 years compared to 45 years), more likely to be married (82.9 percent compared to 54.5 percent), and HNW respondents also have a higher average level of education (17.6 years for HNW compared to 13.1 for PPS).

Table 2: High Net Worth (HNW) Study Summary Statistics

	Fraction of Total Households	Percentage of Giving	Total Observations
Couples	82.9%	96.8%	3,341
Single Male	7.0%	94.3%	282
Single Female	10.1%	91.4%	408
Total	100.0%	96.1%	4,031
	Average Giving Amount (\$) Conditional on Giving	Observations of Donor Households	
Couples	\$165,693	3,238	
Single Male	\$52,239	265	
Single Female	\$188,441	371	
Total	\$160,111	3,874	
	Fraction of Total Households	Average Giving Amount (\$) Conditional on Giving	Observations of Coupled, Donor Households
Male Decides	19.3%	\$59,592	386
Female Decides	5.6%	\$13,251	112
Jointly Decides	49.9%	\$325,131	1,000
Others	25.3%	\$52,154	507
Total	100.0%	\$187,561	2,005

Note: The first two panels are based on pooled data from 2005-2014. The third panel is based on data from 2010-2014 (decision-making questions were asked only in those years).

Finally, the MDL is a database comprised of million dollar-plus gifts; therefore, there are no non-donors on the MDL to allow us to determine differences between donors and non-donors. Summary statistics for the MDL are in Table 3 below.

Table 3: Million Dollar List (MDL) Summary Statistics

	# of Donors	# of Gifts	Fraction of # Total Individual Gifts	Aggregate Giving (in billions)	Fraction of \$ Total Individual Gifts
Couple	2,724	3,410	41.6%	\$48.02	29.8%
Family	382	414	5.1%	\$2.85	1.8%
Individual Female	1,071	1,362	16.6%	\$18.45	11.5%
Individual Male	2,264	3,014	36.8%	\$91.68	57.0%
All Individuals	6,441	8,200	100.0%	\$161.01	100.0%

Note: MDL summary statistics and analysis based on data for calendar years 2000-2013.

V. Results

We present our results in order of the research questions detailed above. We begin by describing our findings for the general population first (PPS) and then consider our analysis of the other two datasets, HNW and MDL, to compare results from the general donor population sample and the high net worth donor population sample.

Question 1: How does gender impact giving among single men and single women? How do gender and giving vary by age and income level?

Key findings:¹

- Consistent with prior research, single women are more likely than single men to give to charity, and also are more likely to give higher dollar amounts than single men.
- Divorced/separated, never-married, and widowed women are more likely to give, and give higher amounts than their male counterparts, and among most men overall.
- As women's incomes rise, they become more likely to give to charity than their male counterparts; they also give, and give more to secular causes than their male counterparts for the top 60 percent of income earners.
- Millennial, Boomer, and older (Silent/Great generation) women are more likely to give in general and also to secular causes than their male counterparts.
- In a new finding, we show that high net worth single women and single men do not significantly differ in their incidence or amount of giving, either in total giving, or in giving to religious or secular causes.

We begin our analysis by looking at the PPS sample of single-headed households and divide it into single male-headed and single female-headed households. Consistent with prior research based on earlier waves of the PPS, we find that, controlling for all other variables, single women are more likely than single men to give to charity—both in their total giving, as well as when we look at religious and secular giving separately. These results are shown in Table 4, Panel A. Specifically, holding all other factors constant, 50.8 percent of single women would give to charity, compared to 40.9 percent of single men. For giving to religion, 29.8 percent of women would give compared to 21.1 percent of men. And for giving to secular causes, 43.6 percent of women would give compared to 31.5 percent of men.

Single women are also more likely to give a higher average dollar amount to charity than men and give more when we look at religious and secular causes separately. Both the incidence and amount of giving results are highly significant ($p < 0.001$). Holding all other factors constant, single women are associated with giving higher dollar amounts than single men.

We then divide single men and women into sub-categories according to marital status: never married, divorced or separated, and widows/widowers (see Table 4, Panel B). We find that in all categories, women are more likely to give to charity (overall, as well as when religious and secular causes are considered separately) than men and give larger amounts. An interesting finding is that male widowers are more likely to give to religious causes than any other category of single men, as well as any other category of single women, except for female widows who on average, are the most likely to give to religious causes. As prior research showed how marriage

¹ Unless otherwise specified, all key findings regard the PPS general population sample.

has a positive influence in men’s giving, we can see how widowers behave differently than never married men. Being a female widow is associated with giving the highest amounts across the board—by total giving, religious giving, and secular giving. Divorced/separated women are also more likely to give than divorced/separated men.

Table 4: PPS Results for Single-Headed Households: Gender and Single Marital Status

	Incidence of giving (Probit)			Amount of giving (Tobit)		
	Total Giving	Religious Giving	Secular Giving	Total Giving	Religious Giving	Secular Giving
Panel A: Gender						
Female	0.319*** (4.66)	0.309*** (4.31)	0.412*** (5.86)	1.386*** (4.75)	1.973*** (4.15)	1.787*** (5.61)
Observations	3856	3842	3853	3864	3864	3864
Panel B: Single-headed households by marital status						
Divorced/ Separated Female	0.391*** (3.51)	0.332** (2.84)	0.418*** (3.65)	1.571** (3.23)	2.214** (2.85)	1.729** (3.27)
Never Married Female	0.295** (3.15)	0.249* (2.44)	0.329*** (3.38)	1.232** (2.92)	1.651* (2.38)	1.394** (3.03)
Widow Female	0.490** (3.22)	0.724*** (4.66)	0.538*** (3.42)	2.166*** (3.41)	4.650*** (4.73)	2.275** (3.24)
Divorced/ Separated Male	0.0471 (0.39)	-0.0395 (-0.31)	-0.0594 (-0.47)	-0.0469 (-0.09)	-0.206 (-0.24)	-0.424 (-0.71)
Widower Male	0.256 (1.14)	0.629** (2.93)	0.138 (0.63)	1.423 (1.66)	4.265*** (3.30)	0.728 (0.79)
Observations	3856	3842	3853	3864	3864	3864

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on 2011 wave of data. Reference group for Panel B is never married male.

We now turn to the effects of income and age on giving by single men and single women. Research based on previous waves of the PPS data has examined differences between single men and single women finding significant differences among giving by personal income levels as well as generational cohort effects (Mesch, 2010; WPI, 2012). Here, we repeat those analyses on single male- and female-headed households using the newest wave of PPS data to confirm these trends over time.

We divide our sample of single women and men into five equal groups according to their income levels (see Table 5). The coefficients in each cell in Table 5 are for a female-headed household as compared to a male-headed household in the same income group. We find that women are more likely to give than men, and generally give higher amounts in all groups above the 40th percentile (starting at \$21,000 annual income). For religious giving, women are more likely to give and give more for the middle quintile (\$21,000 - \$33,378 annual income). As women’s incomes rise, they are more likely than men to give, and also give more to secular causes in the top income quintiles (\$21,000 annual income and up).

Table 5: PPS Results for Single-Headed Households: Income Groups

	Incidence of giving (Probit)			Amount of giving (Tobit)		
	Total Giving	Religious Giving	Secular Giving	Total Giving	Religious Giving	Secular Giving
Q1: < \$10,859	-0.165 (0.201)	-0.331 (0.244)	0.164 (0.221)	-0.947 (1.213)	-2.158 (1.565)	1.098 (1.342)
Q2: \$10,859 - \$21,000	0.147 (0.193)	0.360 (0.194)	0.204 (0.204)	0.624 (0.936)	2.005 (1.089)	0.993 (1.041)
Q3: \$21,000 - \$33,378	0.331* (0.160)	0.493** (0.169)	0.334* (0.168)	1.526* (0.700)	2.509** (0.908)	1.565* (0.777)
Q4: \$33,378 - \$52,410	0.462** (0.144)	0.310 (0.158)	0.604*** (0.146)	1.722** (0.562)	1.805 (0.945)	2.282*** (0.583)
Q5: > \$52,410	0.415** (0.138)	0.242 (0.138)	0.466*** (0.136)	1.363*** (0.398)	1.525 (0.856)	1.513*** (0.441)

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Robust standard errors in parentheses. Analysis is on 2011 wave of data. Quintile levels determined by dividing sample of single-headed households into five groups based on number of observations; 20 percent of all observations fall within a given interval. Reference group is single males for each quintile.

Next, we explore whether women and men give differently based on their generational cohorts. We divide women and men into four generational groups: the Silent and Great generation (born before 1946); Boomers (born 1946-1963), Gen-X (born 1964-1980), and Millennials (born since 1980). We find that Millennial, Boomer, and older (Silent/Great generation) women are more likely to give in general and also to secular causes than their male counterparts (See Table 6). Boomer women are also more likely to give to religious causes. For the amount of giving, results depend on the model specification. In one model, Boomer women give more overall and to religious causes than Boomer men. In another model, women in all cohorts were shown to give more than their male counterparts in overall giving and in giving to secular causes.

Table 6: PPS Results for Single-Headed Households: Cohort/Generation

	Incidence of giving (Probit)			Amount of giving (Tobit)		
	Total Giving	Religious Giving	Secular Giving	Total Giving	Religious Giving	Secular Giving
Millennial (born since 1980)	0.294* (0.123)	0.214 (0.141)	0.343** (0.129)	1.405* (0.635)	1.473 (1.061)	1.812** (0.683)
Gen X (born 1964-1980)	0.177 (0.149)	0.0408 (0.152)	0.281 (0.157)	1.027 (0.581)	0.486 (1.002)	1.285 (0.674)
Boomer (born 1946-1963)	0.466*** (0.125)	0.452*** (0.131)	0.528*** (0.129)	1.644*** (0.479)	2.697*** (0.809)	1.728*** (0.503)
Silent & Great (born before 1946)	0.354 (0.192)	0.353 (0.181)	0.584** (0.188)	1.094 (0.653)	1.702 (0.989)	1.925** (0.677)

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on 2011 wave of data. Reference group is single males for each cohort.

Finally, we examine the incidence and amount of giving in the HNW pooled sample, and limit our analysis to single male-headed and single female-headed households. Contrary to the general population, our results indicate that high net worth single women and single men do not significantly differ in their incidence of giving, either in total giving, or in giving to religious or secular causes. Second, we find there is no significant difference between single women and single men in the amount of giving. We used multiple analyses (including OLS and quantile regression, results not included in Table 7 below), but did not find a significant difference by gender. This could be the case because the high net worth sample tends to be more homogeneous in terms of education, age, and income. Single-headed households also are a smaller percentage of the high net worth sample. This sample also includes a high proportion of donors, with only a small proportion of non-donors. Table 7 illustrates these results.

Table 7: HNW Results for Single-Headed Households: Gender

	Incidence of giving (Probit)			Amount of giving (OLS)		
	Total Giving	Religious Giving	Secular Giving	Total Giving	Religious Giving	Secular Giving
Panel A: Gender						
Female	-0.0257 (-0.13)	-0.104 (-0.86)	-0.101 (-0.51)	0.0790 (0.33)	-0.311 (0.02)	0.0676 (0.28)
Observations	558	536	558	558	536	558

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on pooled survey responses for 2008, 2010, 2012, and 2014 studies.

Given these findings—that a general donor population shows significant gender effects on both the incidence and amount of giving, but high net worth households do not—we further examined the data from single male and single female-headed households in the high net worth sample, investigating the effects of income. We divided these households into two income groups: those with a total household income of less than \$200,000, and those earning \$200,000 or more. Our results (available in technical appendix upon request) indicate that there is no significant difference between females and males in either incidence or amount of giving (overall, or to religious and secular causes considered separately) in either income group. This finding shows that once one attains high net worth, whether a household is on the low end or high end of that definition does not significantly influence charitable giving.

Question 2: How does marriage impact giving among men and women?

Key findings:²

- Being married, regardless of gender, increases both the likelihood of giving, and the amount of giving.
- Single females are the most likely to give to secular causes, and give the highest amounts (compared to single men, and married men and women).
- Among high net worth households, being married does not significantly affect the likelihood of giving. However, married couples do tend to give higher amounts overall and to specifically secular causes, compared to single men and women.

² Unless otherwise specified, all key findings regard the PPS general population sample.

Next, we investigate the differences between married and single men and women, and find that being married increases both the likelihood and amount of giving, finding support for the theory that marriage increases a household’s charitable resources (results in Table 8 below). Compared to single males (the reference category), single females, married men, and married women are more likely to give—in general, as well as when religious and secular causes are considered separately. For total giving, married men are most likely to give, followed by married females, single females, and then single males. This pattern is the same for religious giving, which likely influences the overall results. The pattern changes when analysis is limited to secular giving. For secular giving, single females are most likely to give, followed by married females, then married males, and finally single males. Marriage appears to correspond to a higher likelihood of giving (overall, and to religious causes specifically), since married males and married females are more likely to give than single males and single females.

We also explore the amount of giving in addition to giving incidence. Similar to the incidence of giving, we find that for total and for religious giving, married males give the highest amounts, followed by married females, then single females, and finally single males. For secular giving, single females give the highest amounts, followed by married females, then married males, and finally single males.

Table 8: PPS Results: Household Giving by Marital Status

	Incidence of giving (Probit)			Amount of giving (Tobit)		
	Total Giving	Religious Giving	Secular Giving	Total Giving	Religious Giving	Secular Giving
Single Female Respondent	0.348*** (5.42)	0.304*** (4.56)	0.446*** (6.74)	1.273*** (5.39)	1.774*** (4.35)	1.683*** (6.39)
Married Male Respondent	0.579*** (7.88)	0.606*** (8.69)	0.355*** (5.03)	2.083*** (8.36)	3.765*** (8.98)	1.365*** (5.07)
Married Female Respondent	0.508*** (7.29)	0.492*** (7.42)	0.441*** (6.53)	1.986*** (7.87)	3.157*** (7.71)	1.664*** (6.31)
Observations	8,295	8,295	8,292	8,295	8,295	8,295

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on 2011 wave of data. Reference group is single male.

Unlike the PPS data, we are unable to separate married females and married males within couples in the HNW study; therefore, we use the categories of single females, single males, and couples (see Table 9 below). Unlike the PPS results, we find that being married does not significantly affect the likelihood of giving among high net worth individuals. However, married couples do tend to give higher amounts overall and to specifically secular causes, compared to single men and women (note this is robust only for OLS but not other specifications). The increase of couples’ giving to secular causes varies from the general population results where single women had an increased likelihood of giving higher amounts to secular causes.

Table 9: HNW Results: Household Giving by Marital Status

	Incidence of giving (Probit)			Amount of giving (OLS)		
	Total Giving	Religious Giving	Secular Giving	Total Giving	Religious Giving	Secular Giving
Single Female	-0.254 (-1.09)	-0.174 (-1.01)	-0.236 (-1.04)	-0.0389 (-0.11)	-0.0175 (-0.03)	0.0832 (0.23)
Couple	-0.0137 (-0.07)	0.122 (0.88)	0.0123 (0.07)	0.545* (2.06)	0.788 (1.91)	0.595* (2.20)
Observations	1,552	1,552	1,552	1,516	1,419	1,516

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on pooled survey responses for 2008, 2010, 2012, and 2014 studies.

Question 3: How does household decision making influence charitable giving?

Key findings:³

- For giving to religious causes, households where the husband is the sole decision maker are most likely to give; separate deciders are least likely to give. Compared to joint deciders, households where the wife is the sole decision maker and separate deciders give less to religious causes.
- Female-deciding and separate-deciding households are more likely to give to secular causes. Compared to joint deciders, only separate deciders are statistically more likely to give higher amounts to secular causes.
- Decision-making style does not affect the incidence of giving in high net worth households. When either the wife or husband is a sole decision maker, the amount of giving for religious purposes is lower than jointly-deciding households.

Next, we revisit the analysis conducted by Andreoni et al. (2003) to investigate the influence of decision making on the charitable behavior of coupled households. We divide the married and cohabitating households in the PPS into four groups: couples where the females are the sole decision maker about charitable giving; couples where the males are the sole decision makers; couples where the husband and wife jointly decide, and couples where the husband and wife make separate decisions about charitable giving. Results are reported below in Table 10.

Note that we do not analyze the incidence of total giving. All respondents that indicated how their household made giving decisions had also given to charity in the past year, therefore there is no variation for the incidence of total giving. For religious causes, households where the husband is the sole decision maker are more likely to give than households where joint decisions are made; households where decisions are made separately are least likely to give. For secular giving, the relationship between likelihood of giving and decision making is less statistically significant. However, households where the women are the sole deciders or where husbands and wives decide separately are more likely to give to secular causes than jointly-deciding couples.

³ Unless otherwise specified, all key findings regard the PPS general population sample.

Table 10: PPS Results for Married/Cohabiting Households: Decision Making

	Incidence of giving (Probit)			Amount of giving (Tobit)		
	Total Giving	Religious Giving	Secular Giving	Total Giving	Religious Giving	Secular Giving
Male Decides	N/A	0.512* (2.16)	0.256 (1.04)	N/A	0.544 (1.35)	0.502 (1.59)
Female Decides	N/A	-0.187 (-1.18)	0.527* (2.12)	N/A	-0.965* (-2.19)	0.362 (1.47)
Separately Decide	N/A	-0.313** (-2.87)	0.351* (2.44)	N/A	-1.236*** (-3.60)	0.475* (2.33)
Observations	N/A	1560	1561	N/A	1588	1588

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on 2005 wave of data. Reference group is couples where husband and wife jointly make decisions. All respondents to the question about decision making gave to charity, so results are only available to predict religious versus secular giving.

Results on the amount of giving differ according to model specification as well. The Tobit model in Table 10 shows that households where the wife and husband decide separately give less than all other households to religious causes, but tend to give higher amounts to secular causes. Other models show that when the female is the decision maker, the household gives less to religious causes than all other households (not pictured).

When we examine the HNW data, we find that the decision-making style does not affect the incidence of giving (Table 11). For the amount of giving, the results show that when either the wife or husband is a sole decision maker, the amount of giving for religious purposes is lower than jointly-deciding households. Among high net worth households, female-deciding couples are associated with giving the least to religious causes (note these results are not robust to Tobit and quantile regressions).

Table 11: HNW Results for Married/Cohabiting Households: Decision Making

	Incidence of giving (Probit)			Amount of giving (OLS)		
	Total Giving	Religious Giving	Secular Giving	Total Giving	Religious Giving	Secular Giving
Male Decides	0.0875 (0.52)	-0.0807 (-0.84)	0.0276 (0.17)	-0.206 (-1.17)	-0.609* (-2.18)	-0.150 (-0.82)
Female Decides	0.283 (1.18)	-0.46 (-3.46)	0.289 (1.19)	-0.391 (-1.80)	-2.016*** (-4.93)	-0.172 (-0.81)
Separately Decide	0.200 (0.81)	-0.0686 (-0.51)	0.119 (0.52)	0.0331 (0.15)	-0.292 (-0.74)	0.0289 (0.12)
Observations	1,277	1,277	1,277	1,277	1,202	1,277

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on pooled survey responses for 2012 and 2014 studies. Reference group is couples where husband and wife jointly make decisions.

Question 4: How do husbands' and wives' incomes and educational levels influence giving in the household?

Key findings:⁴

- The impact of husbands' and wives' incomes is complex; however, a husband having unearned income (from trusts or investments) makes it significantly more likely that a household will give to charity, whereas a wife having unearned income has no significant impact.
- A husband's or wife's income seems to matter differently for different causes; an increase in men's income tends to increase the likelihood and amount of giving to nearly every subsector, whereas an increase in women's income tends to increase the likelihood of giving to education, environment, and basic needs organizations.
- A husband's or a wife's respective income does not affect whether high net worth households give. The high net worth husband's income is related to the amount of giving from the household, both overall and to secular giving.
- Generally, intra-household education does not impact the incidence or amount of giving for either the general population or the high net worth sample.

Our final research question addresses the intra-household variables of income and education, which have been studied the least and diverge from the unitary household model. Here, we focus on married and cohabitating households to understand the effects of relative income and educational attainment among men and women. We explored a number of ways of measuring income, looking at the total amount of income, separating earned and unearned income, as well as the wage rate and the percentage of total household income earned by one party. We found that the model that included earned and unearned income for both the husband and the wife provided the most robust results. This model was also chosen because it is consistent with the literature and was less likely to introduce endogeneity. This was an important empirical concern because not all household members have labor income, as the decision to work is often a choice that the household makes based on preferences, relative earning potential, and other family considerations.

When exploring earned income (e.g., wages from a job) and unearned income (e.g., investments or trusts) separately, we find that the decision to give (incidence) is related to both the earned and unearned incomes of both the husband and wife; these results are shown in Appendix B, Table A. Our results indicate that the earned incomes (e.g., wages from a job) of both the husband and wife have a robust relationship with the incidence and amount of giving by the household compared to the effect of unearned incomes (e.g., investments or trusts). In another specification (see Appendix B, Table B, specification 3), using unearned income as an indicator variable, the husband's unearned income is significant for incidence of giving but the wife's unearned income is not. In general, the impact of income may be quite complex on charitable giving. The relationship between gender, income, and the amount of giving tends to vary across specifications. Further, unearned and earned incomes tend to vary over time and depend on labor and asset markets. Future research should examine permanent income (the average over a period of time), as well as assets at the time of marriage, among other explanatory variables.

⁴ Unless otherwise specified, all key findings regard the PPS general population sample.

Additionally, we examine income according to wage rate, which provided some interesting results (see Appendix B, Table C). Using the measure of wage rate may help to account for the possibility that women's incomes may be lower overall because they may be working fewer average hours. We grouped couples into three categories: where the husband's wage rate was much higher than the wife's; where the husband's and wife's wage rates were similar; and where the wife's wage rate was much higher than the husband's. For this final group (where husbands' wage rates are less than the wage rate of their wives), we found this had a significant and negative effect on the incidence of household giving. This indicates that, in households where the wife's income has a disproportionate effect on the household economy, giving to charity is less likely.

Given that women's incomes and status as breadwinners has increased in recent decades, the disproportionate impact of the husband's income was somewhat unexpected. Due to the complexity and nuance of these results, we chose to analyze individual subsectors to determine how men's and women's earned and unearned incomes might affect giving to particular subsectors (see Appendix B, Table F for results). We found that an increase in the husband's earned income results in a higher likelihood that the household will give to nearly every subsector, with the most significant results for education, international, and combination organizations; an increase in the wife's earned income results in a higher likelihood that the household will give to environment, education, or basic needs organizations. An increase in the wife's earned income also results in a lower likelihood that the household will give to religious organizations. Looking at the amount of giving, we found that an increase in the husband's earned income results in higher levels of giving nearly every subsector, with the most significant results for religious, basic needs, health, and education; an increase in the wife's earned income results in higher levels of giving to education (and other subsectors, to a lesser extent). An increase in the wife's earned income also results in a lower amount given by the household to religion. Overall, this implies that men and women bring their own resources into the relationship, and these resources affect how and to what causes households give. In short, a husband's or wife's income matters for different causes.

Again, we are interested in how income among husbands and wives may be similar to or different from a high net worth donor population. We examined the data from HNW surveys in 2012 and 2014, when questions were asked about each member of the couple. We explored a number of ways of measuring income, first looking at the share of the total household income earned by the husband versus the wife. We found no significant difference between men and women in the incidence or amounts of giving using this income measurement (see Appendix B, Table D).

However, when we analyze the imputed incomes of the husband and wife (estimated according to the share of household income and the income bracket identified), we find that the husband's income has a positive, significant relationship with the amount of giving (overall, and to specifically secular causes; note that this is not robust to all specifications). The income of the husband and wife does not seem to impact the incidence of giving or the amount of giving to religious causes. Table 12 shows these results.⁵

⁵ As a robustness check, we also analyze the husband's employment status relative to the wife. Results show that couples where only the husband works have a higher incidence of giving to secular causes, compared to couples where both husband and wife work. Couples where only the husband works also tend to give more to charity, both in total giving and for secular giving in particular. Note that these results are not robust to all specifications; results are shown in Appendix B, Table E.

Table 12: HNW Results for Married/Cohabiting Households: Income

	Incidence of giving (Probit)			Amount of giving (OLS)		
	Total Giving	Religious Giving	Secular Giving	Total Giving	Religious Giving	Secular Giving
Wife's Imputed Income	-0.0166 (-1.18)	-0.00935 (-1.21)	-0.0179 (-1.30)	-0.0249 (-1.88)	-0.0440 (-1.91)	-0.0282* (-2.09)
Husband's Imputed Income	0.0147 (0.97)	-0.000512 (-0.05)	0.0100 (0.67)	0.0463** (2.60)	0.0251 (0.87)	0.0463** (2.66)
Observations	1,126	1,126	1,126	1,126	1,069	1,126

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on pooled survey responses for 2012 and 2014 studies.

We now turn to exploring the effect of relative educational attainment on giving. For this analysis, we divided the sample of married or cohabiting households into three groups: the husband has a higher education than the wife, the husband and wife have an equal level of education (the reference category), and the husband has a lower level of education than the wife. We find that for secular giving only, households where the husband has a higher education relative to the wife are more likely to give (see Table 13). These households are also associated with giving more to secular causes, but this finding is not robust to multiple specifications. Unlike prior research, we find that intra-household education seems to have no significant effect on the incidence and amount of total giving and religious giving for the general population.

Table 13: PPS Results for Married/Cohabiting Households: Education

	Incidence of giving (Probit)			Amount of giving (Tobit)		
	Total Giving	Religious Giving	Secular Giving	Total Giving	Religious Giving	Secular Giving
Husband has higher education	0.120 (1.35)	0.0238 (0.30)	0.184* (2.19)	0.375 (1.72)	0.251 (0.62)	0.589* (2.39)
Wife has higher education	-0.157 (-1.85)	-0.0688 (-0.89)	-0.117 (-1.50)	-0.370 (-1.66)	-0.430 (-1.07)	-0.331 (-1.35)
Observations	4284	4284	4282	4284	4284	4284

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on 2011 wave of data. Reference group is couples where husband and wife are equally educated.

For the high net worth population, we similarly divide all couples into the same three intra-household education groups for the 2012 and 2014 surveys combined: the husband has a higher education than the wife, the husband and wife have an equal level of education, and the husband has a lower level of education than the wife. Our results show no significant difference in the incidence or amount of giving (either total, or religious and secular separated) based on education level. These findings are shown in Table 14 below.

Table 14: HNW Results for Married/Cohabiting Households: Education

	Incidence of giving (Probit)			Amount of giving (OLS)		
	Total Giving	Religious Giving	Secular Giving	Total Giving	Religious Giving	Secular Giving
Husband has higher education	0.0384 (0.25)	-0.0336 (-0.36)	0.0502 (0.33)	0.213 (1.18)	0.128 (0.46)	0.278 (1.55)
Wife has higher education	-0.138 (-0.72)	-0.127 (-1.05)	-0.185 (-1.00)	-0.153 (-0.65)	-0.0367 (-0.10)	-0.121 (-0.50)
Observations	1,277	1,277	1,277	1,277	1,202	1,277

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on pooled survey responses for 2012 and 2014 studies. Reference group is couples where husband and wife are equally educated.

VI. Discussion and Implications

Women and men are not homogeneous groups. Much of the current research treats men and women as unified categories when looking at the effects of gender on giving. When we more closely examine the characteristics of each group, nuances appear that have not been previously studied. In this study, the use of multiple data sets, and the analysis of single-headed and married couple households by multiple demographic factors, contribute to a comprehensive picture of the changing American household and provide a more nuanced explanation of how and why men and women give differently. As a result, not only do we affirm results from previous studies, but we have also provided new findings that add to the current literature. We show that the effects of age, marriage, divorce, income, education, and employment all shape the preferences of individual men and women, as well as the ways they make decisions together as couples.

The effect of age and income on giving by singles

As prior research has shown, we find that among a general population sample, single women are more likely to give, and give higher average amounts, holding other factors constant. However, when we look only at a high net worth sample, single men and single women are more similar in their charitable giving behavior. Our detailed analysis on single-headed households also reveals that having been married affects one's charitable behavior. Widows and widowers are more likely to give and give higher amounts than divorced/separated and never married men and women. Marriage has a positive effect on men's giving; divorced/separated men and never married men are the least likely to give, and associated with making the smallest gifts.

Age and income also influence giving among single-headed households. In examining generational cohorts, women are more likely to give than their male counterparts across generations, although we find Gen-X to be the exception. When single-headed households are categorized by income groups, men and women are more similar in their charitable behavior at both the very highest and lowest income levels. Only in the higher-income, general population groups do we see women more likely to give, and give more than men who earn comparable amounts.

This study demonstrates that a one-size-fits-all fundraising model is obsolete. Profiles of individual donors with as much accompanying demographic information as possible are essential for fundraisers to achieve their goals. As single donors—especially women—become an increasingly larger part of donor databases, extra care, communications, and stewardship will create more loyal and generous donors.

The effect of income and education on giving by couples

We also show the gender and giving relationship among married and cohabitating couples to be varied and complex. In the general population sample, we see that being married is associated with an increase in the likelihood and amount of giving as compared to single-headed households. While the results from the MDL show that high net worth couples make more million dollar gifts than individuals of either gender, the HNW study only finds significant differences in the amount of charitable giving, not in the likelihood of making a gift. For the high net worth sample, couples give larger amounts compared to single men and single women, both in total giving and to secular causes in particular.

Past research has also shown that *how* couples make charitable decisions influences the amount and type of their charitable giving. We find that in the general population, the decision-

making model does not impact the incidence or amount of giving to secular causes. It does impact the incidence of giving to religious causes: separately-deciding households give less, and male-deciding households give more. Again, there is less diversity in the high net worth sample, although we do find that female-deciding households give the smallest amounts to religious causes.

The analysis of intra-household measures of income and education provides the most significant new contributions to the current literature on gender and giving. Despite the growing share of female incomes in married-couple households, we find a consistent, positive relationship between the husband's income and the likelihood and amount of giving by married couples to most subsectors or causes; however, the wife's and husband's incomes matter differently for different causes. This is true in both the general and high net worth donor populations. In contrast, educational levels matter less than previously thought. When husbands' educational levels are higher than those of their wives, we see a small increase in giving to secular causes—both in incidence and amount of giving; however, this result is only statistically meaningful for the general population.

Why do we see far fewer differences among male and female high net worth donors than among the general population? Within this population, there is less variation among household variables such as income and wealth. And when couples marry, being a high-income household is far more important than who is earning the money, though we still find a slight increase in charitable giving when husbands earn more. Still, at the highest income levels, we find women to be as generous as men, an important finding for fundraisers working with major donors.

All married couples must decide how they will spend their money, and bargaining (or joint decision making) is still the preferred model for couples' who give. When couples decide jointly, we find they give more. In a collaborative giving arrangement, it makes sense that couples would choose priority causes and have additional resources to engage in charity. At the highest gift levels, we see evidence of this in the number of million dollar gifts given by couples and families.

In this study, we have begun to untangle the relationship between income, gender, and charitable giving in married couples. In the past, fundraisers and researchers may have assumed that charitable giving would "follow the money." However, before income is even earned, husbands and wives must decide who will work outside the home. We find that when both individuals earn income, charitable decision making is equally affected by the husband's and the wife's earned income. However, when a husband provides the majority of the household income, it drives charitable giving. In contrast, when women significantly out-earn their husbands, charitable giving drops.

As household structures and the factors that influence charitable giving continue to shift, more research is needed to understand the implications on philanthropy. This study disentangles some of the complexities among households, and adds new insights related to income, age, education and gender. Other issues such as women's attitudes about ownership and guardianship of the household financial resources; the intersection of gender with race, ethnicity, and religious affiliation; and the influence of entrepreneurship on charitable giving have yet to be explored. The study also raises intriguing new questions about household dynamics in charitable decision making, including why female-deciding households give the smallest amounts to religious causes and why when women out-earn their husbands, charitable giving drops. We encourage future research to engage these questions to enhance our understanding of gender and giving among the many different models today's households take.

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Appendix A: Methodology

We use several empirical methods in this study, controlling for relevant demographic variables to analyze gender differences in giving. For both the PPS and HNW data, we use Probit analysis when we look at the incidence of giving. Probit is a binary response model where the dependent variable is coded as 1 if an individual made a donation, and zero otherwise. We report marginal effects since these are easier to interpret. Specifically, marginal effects explain the how the conditional probability of giving incidence changes when there is a small change in the value of an explanatory variable, holding other determinants constant.

When we look at the amount of giving, we use Tobit analysis for the PPS and OLS for the HNW. The Tobit model is designed to estimate linear relationships between variables when there is either left- or right-censoring in the dependent variable. In our case, donations can only take non-negative values. Hence, the likelihood function to be estimated is written in, taking this left-censoring into account. Generally, findings about the amount of giving are more sensitive to specification, because giving is highly skewed (a number of households do not give at all to charity, and some households give a large amount); therefore, we tested additional specifications including OLS and quantile regression. We also tested alternative specifications of the dependent variable, the amount of giving, before settling on using log of amount +1.

We include a number of control variables in all analyses, attempting to be consistent across data sets. For the PPS, all models include income (natural log of total family income + 1), wealth (wealth without equity), HOH age, HOH race, number of children, age of youngest child, HOH education (number of years) whether head of household (HOH) is working, and HOH health status,. For intra-household analyses, we also include wife's age, wife's health status, wife's race, and wife's education (number of years). For the HNW analyses, all models include income, wealth, age, race, number of children, respondent's education level, region of residence, and dummy variables for different survey years. For intra-household analyses, we also include control variables for spouse's education level.

For MDL data, we provide summary statistics to provide a view of the very highest level of giving in the U.S. We do not provide a statistical analysis because in-depth information about each donor is unavailable. While we can provide information about the numbers of gifts given from specific donor types or to specific charitable subsectors in each year, publically-available information does not typically include a donor's age, donor's education, wealth, and so on.

Appendix B: Additional Results

Table A: Philanthropy Panel Study (PPS) Results for Married/Cohabiting Households: Earned and Unearned Incomes

	Incidence of giving (Probit)			Amount of giving (Tobit)		
	Total Giving	Religious Giving	Secular Giving	Total Giving	Religious Giving	Secular Giving
Husband's unearned income	0.0778* (2.15)	0.0244 (1.67)	0.105** (3.28)	0.0219 (0.97)	0.0420 (1.51)	0.0501 (1.22)
Wife's unearned income	0.105* (2.31)	0.0113 (0.59)	0.0537 (1.37)	0.0782 (1.96)	0.0732 (0.93)	0.139* (2.43)
Other FU members' unearned income	0.159 (1.46)	0.157 (1.63)	-0.00712 (-0.07)	0.176 (0.70)	0.613 (1.44)	-0.281 (-0.88)
Husband's earned income	0.0527*** (4.78)	0.00597 (1.83)	0.0548*** (6.27)	0.0403*** (4.72)	0.0317** (2.71)	0.0493*** (4.68)
Wife's earned income	0.0581*** (3.92)	-0.0226** (-2.71)	0.0481*** (3.93)	0.0786*** (3.64)	-0.0948* (-2.15)	0.111*** (4.26)
Other FU members' earned income	0.00919 (0.30)	0.00898 (0.32)	0.0643* (2.25)	0.0317 (0.40)	0.0583 (0.41)	0.184* (2.16)
Observations	4261	4261	4259	4261	4261	4261

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on 2011 wave of data. Variables in the left-hand column are all measured in \$/10,000. FU = family unit.

Table B: PPS Results for Married/Cohabiting Households: Earned and Unearned Incomes, Additional Specifications Including Indicator Variables (Incidence of Giving using Probit)

Incidence of Total Giving	Specification (1)	Specification (2)	Specification (3)
Husband's unearned income	0.0778* (2.15)	0.0340 (1.27)	0.0587* (1.97)
Wife's unearned income	0.105* (2.31)	0.0456 (1.09)	0.0751 (1.50)
Other FU members' unearned income	0.159 (1.46)	0.135 (1.26)	0.143 (1.35)
Head has unearned income (dummy)		0.253*** (3.78)	
Wife has unearned income (dummy)		0.0684 (1.03)	
Other FU members have unearned income (dummy)			
Husband's earned income	0.0527*** (4.78)		
Wife's earned income	0.0581*** (3.92)		
Other FU members' earned income	0.00919 (0.30)		
Head's unearned income ²			-0.000459* (-2.36)
Wife's unearned income ²			-0.00117 (-0.54)
Observations	4261	4261	4261

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on 2011 wave of data. Variables in the left-hand column are all measured in \$/10,000. FU = family unit. State indicators are controlled for all specifications.

Table C: PPS Results for Married/Cohabiting Households: Wage Rate (Incidence of Giving using Probit)

	Total Giving	Religious Giving	Secular Giving
Husband's wage rate > 1.5*Wife's	0.00305 (0.05)	-0.00199 (-0.03)	0.0698 (1.15)
Husband's wage rate < .5*Wife's	0.138 (1.60)	0.0154 (0.20)	0.201* (2.47)
Observations	4284	4284	4282

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on 2011 wave of data. State indicators are controlled for all specifications. Reference group is couples where the husband's wage rate is between (0.5*wife's wage rate) and (1.5*wife's wage rate), i.e. reference group is couples where husband's and wife's wage rates are within a certain range of one another.

Table D: HNW Results for Married/Cohabiting Households: Husband and Wife Share of Total Household Income

	Incidence of giving (Probit)			Amount of giving (OLS)		
	Total Giving	Religious Giving	Secular Giving	Total Giving	Religious Giving	Secular Giving
Wife share of total household income	-0.00180 (-0.61)	-0.00187 (-0.97)	-0.00164 (-0.57)	-0.00114 (-0.32)	-0.00339 (-0.59)	-0.00237 (-0.68)
Husband share of total household income	-0.000593 (-0.29)	-0.00190 (-1.46)	-0.000764 (-0.39)	0.00302 (1.31)	-0.00212 (-0.55)	0.00299 (1.31)
Observations	1192	1192	1192	1192	1125	1192

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on pooled survey responses for 2012 and 2014 studies.

Table E: HNW Results for Married/Cohabiting Households: Employment Status

	Incidence of giving (Probit)			Amount of giving (OLS)		
	Total Giving	Religious Giving	Secular Giving	Total Giving	Religious Giving	Secular Giving
Only wife works	-0.104 (-0.37)	-0.154 (-0.76)	-0.0436 (-0.16)	-0.256 (-0.64)	-0.627 (-1.02)	-0.178 (-0.46)
Only husband works	0.319 (1.91)	0.126 (1.41)	0.333* (2.02)	0.469** (3.00)	0.507 (1.94)	0.512** (3.22)
Neither spouse works	-0.0650 (-0.32)	0.0797 (0.57)	-0.0123 (-0.06)	-0.191 (-0.71)	0.268 (0.65)	-0.144 (-0.54)
Observations	1277	1277	1277	1277	1277	1277

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on pooled survey responses for 2012 and 2014 studies. Reference group is couples where both the husband and wife work.

Table F: Philanthropy Panel Study (PPS) Results for Married/Cohabiting Households: Earned and Unearned Incomes, Additional Specifications by Subsector

	Religion	Youth	Environ- ment	Combi- nation	Basic Needs	Health	Education	Arts	Neigh- borhood	Interna- tional	Other
Panel 1: Incidence of Giving (Probit)											
Husband's unearned income	0.0244 (1.67)	0.0329* (2.18)	0.00604 (0.94)	0.0238 (1.67)	0.0296* (2.15)	0.0337* (2.38)	0.0199 (1.41)	0.0266 (1.58)	-0.011 (-0.93)	0.0132 (1.11)	0.0017 (0.27)
Wife's unearned income	0.0113 (0.59)	0.00963 (0.48)	0.0149 (0.7)	0.0209 (1.02)	0.0883** (2.76)	0.0424* (2.04)	-0.014 (-0.68)	0.0571* (2.2)	0.0261 (1.13)	0.0141 (0.65)	-0.0143 (-0.53)
Other FU members' unearned income	0.157 (1.63)	-0.149 (-1.12)	-0.268 (-1.28)	-0.0701 (-0.63)	-0.147 (-1.38)	-0.141 (-1.18)	0.0221 (0.18)	0.23 (1.45)	-0.0565 (-0.33)	0.0328 (0.25)	0.0985 (0.68)
Husband's earned income	0.00597 (1.83)	0.00780* (2.16)	0.00765* (2.17)	0.0186*** (4.02)	0.0106* (2.32)	0.0112* (2.56)	0.0117** (2.67)	0.00905* (2.08)	0.00264 (0.8)	0.0103** (2.74)	-0.0017 (-0.51)
Wife's earned income	-0.0226** (-2.71)	0.00722 (0.77)	0.0234* (2.25)	0.0167 (1.44)	0.0202* (2.19)	0.00659 (0.75)	0.0224* (2.5)	0.0198 (1.8)	0.0184 (1.69)	0.00348 (0.33)	-0.0147 (-1.20)
Other FU members' earned income	0.00898 (0.32)	0.0364 (1.08)	-0.0314 (-0.75)	0.0788** (2.68)	0.00595 (0.21)	0.0604* (2.01)	0.0387 (1.25)	-0.0552 (-0.77)	0.0429 (0.88)	-0.0352 (-0.87)	-0.013 (-0.31)
Observations	4261	4152	4175	4253	4253	4235	4233	4167	4119	4175	4166
Panel 2: Amount of Giving (in log)											
Husband's unearned income	0.042 (1.51)	0.0924* (2.46)	0.026 (1.09)	0.0366 (1.1)	0.0432 (1.34)	0.0612 (1.78)	0.054 (1.83)	0.0356 (0.99)	-0.0947 (-1.01)	-	0.00926 (0.15)
Wife's unearned income	0.0732 (0.93)	0.0936 (0.82)	0.128 (0.86)	0.145 (1.34)	0.325*** (3.53)	0.238** (2.91)	-0.0314 (-0.28)	0.452** (2.91)	0.231 (1.23)	-	-0.0994 (-0.38)
Other FU members' unearned income	0.613 (1.44)	-0.934 (-1.07)	-1.851 (-1.23)	-0.653 (-1.00)	-0.644 (-1.08)	-0.809 (-1.21)	0.0971 (0.13)	1.549 (1.56)	-0.389 (-0.27)	-	0.982 (0.73)
Husband's earned income	0.0317** (2.71)	0.0507* (2.18)	0.0565* (2.57)	0.0805*** (5.3)	0.0464** (3.16)	0.0501*** (3.49)	0.0552*** (3.73)	0.0505* (2.22)	0.0262 (0.9)	-	-0.0129 (-0.41)
Wife's earned income	-0.0948* (-2.15)	0.0551 (0.88)	0.168* (2.52)	0.131* (2.14)	0.0894* (2.41)	0.0482 (1.08)	0.112** (2.7)	0.129* (2.16)	0.166 (1.81)	-	-0.145 (-1.24)
Other FU members' earned income	0.0583 (0.41)	0.249 (1.13)	-0.266 (-0.89)	0.461** (2.81)	0.0263 (0.18)	0.311* (2.05)	0.23 (1.29)	-0.324 (-0.70)	0.364 (0.9)	-	-0.12 (-0.29)
Observations	4261	4261	4261	4261	4261	4261	4261	4261	4261	-	4261

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. T-statistics in parentheses. Analysis is on 2011 wave of data. Variables in the left-hand column are all measured in \$/10,000. FU = family unit. State indicators are controlled for all specifications. Results for amount of international giving are not available as STATA cannot converge.