## Religious Giving

December 18, 2007

# DRAFT: NOT FOR CITATION OR REPRODUCTION WITHOUT PERMISSION FROM AUTHOR 

By Patrick Rooney*<br>Director of Research<br>Center on Philanthropy at Indiana University<br>And<br>Professor of Economics and Philanthropic Studies, IUPUI

*The author thanks Mark Wilhelm for sharing several relevant calculations. I also want to thank Ke (Samuel) Wu, Brian Getz, and Xing Wei for research assistance. Of course, any remaining errors or omissions remain the sole responsibility of the author.


#### Abstract

Religious giving has grown every year in both nominal and inflation-adjusted dollars since it has been tracked by Giving USA in 1955. Even during recessions, religious giving has grown, but it has grown relatively slowly averaging only 2\% per year over the last 40 years compared to 5\% per year for total giving. Over the last decade religious giving has grown $2.1 \%$ per year vs. $6.5 \%$ per year for total giving. The result is that religious giving as a share of total giving has fallen dramatically from over one-half for many years to under one-third today.

In spite of the fact that many talk of the Biblical tithe, we find that less than 3\% of US households give $10 \%$ or more to religious organizations and only $8.3 \%$ give $5 \%$ or more of their income to religion (including the $2.6 \%$ who give $10 \%$ or more). We also find substantial variation in average giving levels by various religious affiliations. However, virtually all of the major religious affiliations for which there was data in both 1987/89 and 2001, we found religious giving as a share of income has fallen by between onefourth and three-fourths and that most faiths have experienced a decline of approximately one-third.

We find that income and wealth are important predictors of how much households donate and that tax itemizers give more than non-itemizers, even after controlling for differences in income and wealth. Marrieds and those with more children give more to religion. Religious giving grows with educational attainment but does not vary by race or ethnicity after controlling for income, wealth, etc. Not surprisingly, those with a religious affiliation give more than those without and those who are unemployed give significantly less than those who are employed.


## Religious Giving

This paper measures household giving levels to religious organizations in the aggregate and per household both overall and to a lesser degree by religious affiliation and religiosity (as proxied by frequency of religious attendance). It uses the largest datasets ever collected on religious giving by households in the USA by their relevant populations: The Center on Philanthropy Panel Study (COPPS) is used to measure giving by the households in the lower $97^{\text {th }}$ percentiles of income and wealth and the Bank of America Study of High Net Worth Philanthropy, which was conducted by the Center on Philanthropy at Indiana University, is used to study religious giving by the top three percentiles of income and wealth. Comparisons are made to prior research results to the extent available.

Religious giving has grown every year in both nominal and inflation-adjusted dollars since it has been tracked by Giving USA in 1955. Even during recessions, giving has grown, but it has grown relatively slowly averaging only 2\% per year over the last 40 years compared to 5\% per year for total giving. Over the last decade religious giving has grown 2.1\% per year vs. $6.5 \%$ per year for total giving. The result is that religious giving as a share of total giving has fallen dramatically from approximately onehalf for many years to under one-third today (Giving USA 2007). This result is despite the fact that more households give to religion than any other subsector (46\% per COPPS), and a larger share of household philanthropy goes to religion than any other subsector (60\% per COPPS).

In the most recent national survey of Americans (COPPS 2005), donors to religion gave an average gift of $\$ 1,887$ (median = $\$ 700$ ). In spite of the fact that many talk of the Biblical tithe, we find that less than $3 \%$ of US households give $10 \%$ or more to religious organizations and only $8.3 \%$ give $5 \%$ or more of their income to religion (including the $2.6 \%$ who give $10 \%$ or more). We also find substantial variation in average giving levels by various religious affiliations with Mormons giving the largest share of their income on average (4.7\%).

We find that income and wealth are important predictors of how much households donate and that tax itemizers give more than non-itemizers, even after controlling for differences in income and wealth. Marrieds and those with more children give more to religion. Religious giving grows with educational attainment but does not vary by race or ethnicity after controlling for income, wealth, etc. Not surprisingly, those with a religious affiliation give more than those without and those who are unemployed give
significantly less than those who are employed. Finally, those living in rural areas and those living in the South give more.

Among high net worth households, religion is the most important subsector for giving measured by dollars given ( $22 \%$ of high net worth households dollars given) and is one of the most frequently donated to subsectors (72\%). More high net worth households donate to education (80\%) and basic needs (75\%), but these subsectors garner much smaller shares of the total dollars given ( $22 \%$ and $7 \%$, respectively). High net worth households who donate to religion give an average of $\$ 18,851$ (median = $\$ 4,000$ ) vs. the rest of the population in which donors to religion average $\$ 1,858$ (median $=\$ 700$ ). (Rooney and Frederick, 2007).

## Prior Research

Research on religious attendance, participation and giving is relatively new. Adam Smith in his 1776 publication, The Wealth of Nations, made the fundamental argument for economic study of religious giving, asserting that economic forces influence religion as much as any other sector (Smith 1776). However, it took about 150 years before the Gallup Organization began collecting reliable data about religion in America. Almost 200 years after The Wealth of Nations, Azzi and Ehrenberg proposed the first simple economic model of religious participation. This study found that age determines religiosity and assumed that afterlife consumption is the goal of religious participation. Two years later, Long and Settle responded with a model that showed no impact of wealth, income or age on religious attendance. One benefit of these early efforts was to spur thought about religion in economic and measurable terms. By 1992, Hoge and Griffin noted that most research on religious giving was exploratory and not guided by any theoretical models (Hoge, Griffin 1992). While this is still largely the case, Hoge has given five assumptions through which religious giving can be viewed (Hoge 1994).

1) Religious giving is a rational behavior that can be statistically modeled,
2) People strongly committed to God will give more money to the church,
3) Members with more discretionary income will give more to the church,
4) Distribution of giving to any church is greatly skewed, and
5) The amount given to churches is variable, not fixed.

Both congregational and individual level data are necessary to understand the full scope of religious giving in the United States. Because churches are not required to file the IRS forms 990, which report charitable giving and finances, it is more difficult to find data on these organizations. Also, since many churches do not belong to large denominations, even surveys of denominations cannot measure the full scope of religious giving. Nonetheless, several organizations have compiled congregational-level estimates of religious participation and giving. The National Council of Churches of Christ publishes an annual yearbook of churches. The U.S. Congregational Life Survey randomly sampled churches in 2001 and gathered data from both churches and individuals within them. Data on religious giving at the individual level comes most notable from the Center on Philanthropy Panel Study (or COPPS). Giving USA
reports total religious giving each year based on triangulation from several data sources (Brown, Harris, and Rooney 2004).

In 2006, $\$ 96.82$ billion were given to religion, making up $32.8 \%$ of total giving. Thirty years earlier, only $\$ 14.18$ billion (inflation adjusted) were given to religion, but these donations made up 44.5\% of total giving (Giving USA 2007). Thus, while religious giving increased, it did so at a slower pace than giving as a whole. Similarly, while the number of church-goers increased, the percentage of the population attending religious services nearly every week or more declined from $34.9 \%$ to $32.8 \%$ over the thirty year period (ARDA 2007). Also, the percentage of household income given to religion declined over this period (Wilhelm, Rooney, and Tempel, 2006).

Iannaccone (1998) focused on the rise of religious participation and church attendance over the past two centuries, growing from 17 percent of the population in America during the revolution to over 60 percent in 1998. He also noted that religious giving as a percentage of GDP had been fairly constant (1\%) since 1955. However, this percentage has not held in recent years. Using data from Giving USA 2007, we can readily calculate that religious giving as a percentage of GDP is now at $0.6 \%$ (approximately one-third of total giving is now religious giving and total giving is now around $2 \%$ of GDP as opposed to when it was half of total giving and total giving was $2 \%$ of GDP). Barro et al. (2003) found that there is an association between economic growth and religious attendance and belief, but did not extend the link to religious giving. Wilhelm, Rooney, and Tempel (2007) did find a correlation between the decline in religious participation across generations over time and the declining share of income going to religion.

Previous studies have identified several factors correlated with religious giving. As in all philanthropy, people with higher income tend to giver larger amounts to religion. However, the poor tend to give a higher percentage of their income to religion than the wealthy (Hoge, et. al. 1996). Age has a positive effect on giving. It peaks at 50-60 years old and then begins to decline (Hoge, et. al. 1996). Wilhelm et. al. (2007) studied differences across generational cohorts and found that, boomers' total giving is higher than their parents. However, they give less to religion.

Brown and Rooney (2007b) examined data on religious giving from COPPS and the Bank of America Study by income as a share of total giving and found that the share of total giving going to religion declines fairly precipitously as incomes grow. For example, of those households earning less than
$\$ 100,000$ per year, they donated an average gift to religion of $\$ 1,423$ and accounted for $59 \%$ of all household giving that went to religious charities. Among those earning between $\$ 100,000$ and $\$ 200,000$, they gave an average gift of $\$ 2,316$ to religious charities or $11 \%$ of total giving to religion. Those earning from $\$ 200,000$ to $\$ 1$ million/year, gave an average gift of $\$ 12,105$ to religion and accounted for $21 \%$ of the total giving to religion. Finally, those earning \$1 million or more per year donated an average gift of $\$ 61,060$ to religious organizations and generated $9 \%$ of the total dollars given to religion.

Church involvement is positively correlated with giving (Wilhelm, Rooney, Tempel 2007). The more often a person attends religious services, the more they are likely to give, not only to religion, but to secular causes as well (Wuthnow, Hodgkinson 1990). The number of children in a family often leads to increased church involvement. Therefore, it would seem that the number of dependent children would also be related to religious giving. However, Hoge, et. al. did not find a correlation between the two.

Educational attainment has a positive effect on giving in most denominations (Hoge 1994). The effect is somewhat tied to income, since more educated people tend to make more money. Interestingly, giving by Catholics is not dependent on education (Hoge, et. al 1994). Gender is also important in giving. While more women attend church and a higher percentage of women give, the average gift size from men is larger (Wuthnow, Hodgkinson 1990). Important, though harder to quantify, one’s personal faith, view of their religious leaders, agreement with doctrines and attitudes toward church are positively correlated with religious giving (Hoge 1994).

From the organizational perspective, the size of a church or parish is negatively correlated with giving (Hoge 1994). It is likely that as parishioners see their gifts making a smaller proportional impact, they are more tempted to become "free-riders," gaining the benefits of the church, while letting others pay for the services. Hoge, et. al. found that churches that used a pledge system, in which parishioners committed to a certain amount, had higher giving (Hoge 1994).

Wilhelm, Brown, Rooney, and Steinberg (2007) find that religious giving is transmitted from one generation to another. After controlling for income, wealth and a plethora of other explanatory variables, they found that the adult children of parents who give to religion were both more likely to be religious donors and to give more than the adult children of parents who were not religious donors. To quantify this relationship, a $10 \%$ increase in religious giving by the parents is associated with a $5.6 \%$ increase in
religious giving of their adult children holding income, wealth, education, etc. constant. Brown and Rooney (2007) found that those who give to religion are significantly more likely to also give to combined funds (like United Ways), the needy, health care, youth, international and tsunami relief, but less likely to give to environmental causes.

Meslin, Rooney, and Wolf (2008, forthcoming) found that religious attendance was a more important predictor of religious giving than religious affiliation. Religious attendance was not a significant predictor of secular giving in that dataset, but since religious giving is such an important part of total giving, religious participation was a significant predictor of total giving as well as religious giving. However, neither religious affiliation nor religiosity had a significant effect on any of the forms of biological philanthropy tested (blood donor, organ donor, body donor).

However, there is very little recent research on religious giving by the various major affiliations and whether religiosity (as proxied by frequency of religious attendance) matters more than religious affiliation. Finally, there has been little or no research on whether religious giving is above and beyond secular giving (a complementary good in economics) or giving instead of secular donations (a substitute in economics). Whether religious giving and secular giving are complements or substitutes is important to both practitioners, scholars, and policy makers, because they are frequently treated as one in the same but may in fact be quite different, which would have implications for how fundraisers approach donors, how scholars treat charitable gifts, and how policy makers view the tax preferential treatment of various types of gifts.

## Methodology

This paper uses COPPS to ascertain religious giving behaviors and its determinants for the majority of American households (i.e., those in the lower $97^{\text {th }}$ percentile of income and/or wealth). COPPS is ideally suited for this because the philanthropy questions have been added to the University of Michigan’s Panel Study of Income Dynamics (PSID), which is the largest and longest running panel study in the world. In each module since 2001, the PSID has added questions about household giving and volunteering. Given that the PSID is a large representative sample (and has an over-sample of low income and minority households), which has been described in great detail elsewhere, and given that the PSID
interviewees have been asked a series of detailed questions about their income and wealth by source of income and wealth for many years, we feel that adding questions about their specific giving patterns is more likely to be more accurate than most surveys (whether by mail or Random Digit Dialing [RDD]). These households are accustomed to answering financial questions and doing so with expected levels of specificity that might annoy many households. Furthermore, because these questions about household giving are embedded in a 90-minute survey, it is highly unlikely that there should be concerns about selecting into or out of the sample that might confront a traditional RDD survey about any given topic.

Given that COPPS has scores of other variables in the dataset, we are able to utilize many variables in estimating the determinants of giving. We can look at these differences both at the simple mean level but also after controlling for income, wealth, educational attainment, race/ethnicity, etc. in a regression model to estimate the marginal effects of these other variables on religious giving. We use probits and tobits to take into account the fact that donations are truncated at zero (i.e., one cannot make a negative gift—no matter how badly one might want to do so!).

In addition to using COPPS results, we incorporate some general results from the Bank of America Study of High Net-Worth Philanthropy (BOA) conducted by the Center on Philanthropy to ascertain giving at the high end (i.e., the top 3 percent of income). While not going into as much detail from the BOA study as we do with the COPPS data, it provides a great backdrop to see how much high net worth households give to religion and how this differs not only in absolute dollar amounts but also in shares of giving, etc. The Bank of America Study is the first national, proportionally random sample of high net worth households and their philanthropy. It is also the first large-scale ( $\mathrm{n}=1,398$ ) study addressing these issues. Finally, it is the most comprehensive study of high net worth households and their philanthropy as well as the factors that motivate them to give more or less and the vehicles through which they give (Rooney and Frederick, 2007).

## Results

## A. COPPS: Descriptive Statistics

We start with some simple descriptive statistics of religious giving amounts from COPPS among donors to religion (similar results for the entire sample including non-donors is available upon request from the author). In Table 1, we see that male-headed households are both more likely to be donors to religion than female-headed households (49\% vs. 37\%) and to donate more (\$1,940 vs. 962). The percentage of donors grows with age from $31 \%$ of those under 40 to $49 \%$ for those between 40 and 64 and up to $61 \%$ for those 65 and older. While the median amounts donated grows over the life cycle ( $\$ 350$ vs. $\$ 750$ vs. $\$ 900$, respectively), the mean amounts donated grows from $\$ 1,184$ for the younger cohort to $\$ 1,970$ for the prime-aged households before falling to $\$ 1,586$ for the "retirement-eligible" cohort.

## INSERT TABLE 1 HERE

There are fairly wide variations in the mean levels of giving by race/ethnicity and percentage of donors but much smaller ranges in the differences when examining median gifts. The two most generous groups (not controlling for income or wealth, etc.) are Whites ( $48 \%$ give with a mean gift of $\$ 1,803$ ) and Asian/Pacific Islanders (48\% give with a mean gift of \$1,618). Blacks are more likely than Native Americans to give (36\% vs. 28\%) but Native Americans give slightly more than Blacks (\$1,486 vs. $\$ 1,460$ ). "Other" races/ethnicities are more likely than Latinos to be donors (45\% vs. 35\%) but Latinos donate just over \$200/year more than "Others" (\$952 vs. \$741).

Education seems to have a positive effect on religious giving both with respect to being a donor at all and the amounts donated. Just under one-third (32\%) of those with a high school education or less give to religious causes, and they give an average of $\$ 1,097$ per year. Households headed by those with some college are more likely to be donors (48\%) and to give much more (\$1,615). Similarly, those graduating from college are much more likely to be donors (58\%) and to give more $(\$ 1,980)$. Those with a postgraduate degree are about as likely as college grads to be donors (59\%), but they give substantially more (\$2,699 vs. \$1,980).

Marital status also plays a huge role in the likelihood of being a donor at all as well as the amounts donated. Married households are more than twice as likely as those never married to be religious donors ( $58 \%$ vs. $22 \%$ ) and to give almost three times as much (\$2,125 vs. \$780). Divorced/Annulled households
are similar to those separated ( $34 \%$ vs. $32 \%$ and $\$ 854$ vs. $\$ 749$ ), but are both quite different from those who have been widowed (53\% are donors giving an average of $\$ 1,258$ ).

Both the number of children and the age of the youngest child living at home play a role in understanding religious giving, but these insights are not as clean or as anticipated as one might expect. The proportion of donors and the dollars donated both grow incrementally with the number of children up through four children: $45 \%$ of those with no kids give an average of $\$ 1,663$ and $51 \%$ of those with four children give and average gift of $\$ 2,371$. However, with five or more kids, the propensity to give at all plummets ( $17 \%$ for those with five children and $16 \%$ for those with 7 or more) as does the mean amounts donated ( $\$ 655$ vs. $\$ 25$, respectively). The likelihood of being a religious donor is not much affected by the age of the youngest child at home (ranges from $39 \%$ to $60 \%$ in an inconsistent pattern), but does seem to drop off from $50-60 \%$ for the early teen years ot $48 \%$ for 16 year olds and then to $35 \%$ for 17 year olds. Conversely, the amounts donated bounce around between $\$ 1,300$ and $\$ 1,800$ for younger children and then grow to $\$ 1,900$ to $\$ 2,400$ for teens and jumps to almost $\$ 4,000$ for those whose youngest child at home is 17.

Religious giving grows fairly dramatically with both income and wealth. Just over one-third (36\%) of those with less than $\$ 50,000$ in income were donors who gave an average gift of $\$ 1,140$. Over one-half of those (54\%) with incomes between \$50,000 and \$100,000 gave an average gift of \$1,791. High-income households in COPPS (>\$100,000) were much more likely to be donors (61.5\%) and gave much more (\$2,761). Similarly, those with a negative net worth (excluding their homes) were much less likely to be donors (27\% were religious donors) and gave relatively small amounts to religion $(\$ 1,140)$. Whereas almost two-thirds (64\%) of those households with net worth in excess of \$200,000 (excluding their homes) were donors giving an average gift of \$2,490.

Religious affiliation makes a big difference in the likelihood of being a donor and the mean amounts given. Among Catholics, 50\% are donors and they give an average gift of \$915. Just under half (48\%) of households identifying themselves as Jewish give at all and they give an average gift of \$1,329. Half (50\%) of Protestant households give at all and they give an average of \$2,147. Just over one-third (37\%) of Nonchristian/Muslim/Budhists give and they give an average gift of \$1,886. Just over half (52\%) of Greek/Russian/Eastern Orthodox give an average gift of \$722. "Other" faiths give an average gift of
$\$ 1,950$ but only $41 \%$ of these households report giving at all to religion. Similarly, only $30 \%$ of those whose religion is missing report giving to religion, but they give an average gift of $\$ 1,221$. Not surprisingly, only 7\% of those reporting to be agnostic/atheist/none give to religion with an average gift of \$582. Table 1 delineates these same socio-economic factors by each of the major religious affiliations and allows comparisons across these affiliations as well as to the overall averages.

## B. Generosity by Various Religious Affiliations

In Table 1, we made comparisons of giving without making any adjustments for differences in income. In Tables 2 and 3, we make comparisons of generosity by religious affiliation after taking into account differences in household incomes (but not wealth, educational attainment, etc.). Table 2 measures generosity by ranking total giving as a share of income by households affiliated with different religions and Table 3 measures religious giving as a percentage of income. By holding the top spot for both total giving as a percentage of income (5.2\%) and religious giving as a percentage of income (4.7\%), we see that Mormons are by far the most "generous" group of households by religious affiliation.

## INSERT TABLES 2 And 3 HERE

Among the five most generous religious affiliations (Mormons, Other Protestant, Pentecostal/ASG, Muslim/Buddhist, and Baptists) when measured by total giving as a percentage of income (see Table 2), all but Muslim/Buddhist remain in the top 5 of religious giving as a share of income. The middle five of total giving as a share of income (Jewish, Episcopal, Presbyterian, Lutheran, and Methodist) are also largely in the middle five of religious giving as a share of income (Lutheran, Methodist, Presbyterian, Jewish) with Muslim/Buddhist being the exception. There is also a consistent pattern among the "least generous" religious affiliations. The bottom five least generous groups (Catholic, None, Jehovah Witness, Missing, and Orthodox [Greek/Russian/Eastern]) are also the least generous when considering total giving as a percentage of income and religious giving as a percentage of income.

While we found substantial variation in average giving levels by various religious affiliations, virtually all of the major religious affiliations for which there was data in both 1987/89 and 2001, we found religious giving as a share of income has fallen by between one-fourth and one-half and that most faiths have experienced a decline of approximately one-third (see Table 3). The smallest percentage fall was for

Lutherans which was still almost 27\%! Jehovah Witnesses experienced the greatest percentage decline of 74\%, followed by Presbyterians (55\%) and Pentecostal/ASG (42\%). Most of the larger Christian-based faiths experienced a decline in religious giving as a share of income of approximately one-third (e.g., Catholics, Baptists, Methodists, Episcopalians) as did Mormons.

There are some important methodological concerns in examining the decline in religious giving as a share of income. First, not all faith groups were examined in the first wave as reported by Hoge, et al. (1996) based on data from the General Social Survey (GSS) (1987-89), so we lack a comprehensive picture of what has happened. Second, the GSS sample replies are based on those who attend religious services at least annually. Whereas the replies for the second wave of data (COPPS, 2001) are based on self-reported religious affiliation but not restricted by religious attendance parameters. Third, The GSS and COPPS are two different surveys and two different samples. Rooney, Steinberg and Schervish (2001 and 2004) and Wilhelm (2007) clearly document how important methodological differences in giving surveys can be in yielding differences in reported levels of giving. The differences in methods and/or sampling could account for much of the reported differences in giving as a share of income. In spite of all of these methodological concerns, the very large differences in religious giving as a share of personal income in the two time periods strongly suggests that religious giving has fallen as a share of income in the period of time from 1987/89 to 2001.

## C. Do Americans "Tithe"?

For religious leaders and scholars, another way of thinking about this is do Americans "tithe"? Clearly, the answer is that while a few American families may tithe, NONE of the religious affiliations come close to tithing the traditional $10 \%$ of income tithe. Mormons are the closest with $4.7 \%$ of income being given to religious organizations. However, only Pentecostals (2.95\%) and Mormons give more than $2 \%$ of income to religious organizations. Besides them, only Baptist (1.99\%), Other Protestants (1.85\%), Episcopal (1.1\%), and Lutheran (1.08\%) give more than 1\% of income to religious organizations. Most of the other religious affiliations give an average of between $0.5 \%$ and $1 \%$ of income to religion (Methodist [1.0\%], Presbyterian [0.97\%], Jewish [0.92\%], Muslim/Buddhist [0.8\%], Catholic [0.77\%], and Jehovah’s Witness [0.67\%]).

In Table 4, we see that most Americans give zero percentage of their income to religious organizations (54\%) and that another $21 \%$ give between zero and $1 \%$ of their incomes to religious organizations. Perhaps surprisingly, we see that three-fourths of Americans give 1\% or less of their income to religion. Almost $8 \%$ give between $1 \%$ and $2 \%$ of their incomes to religious charities and another $9 \%$ give between $2 \%$ and $5 \%$ of their household incomes. Only $8 \%$ of US households give $5+\%$ of their incomes to religious charities, including only $2.6 \%$ of US households who give $10+\%$ of their incomes to religious causes. Clearly, most Americans do not "tithe" in anything that approaches the "Biblical tithe."

INSERT TABLE 4 ABOUT HERE

## D. Crowding Out between Religious Giving and Secular Giving

One of the curiosities among scholars of philanthropy is whether or not religious giving crowds out or displaces secular giving and vice versa. While not a perfect test, Table 5 sheds some light on this question. The results in Table 5 suggest that there may not be a great deal of "crowding out" or displacement between secular and religious giving. Religious giving did not vary much (for either means or medians) whether or not donors also gave to secular causes (yes: mean $=\$ 1,763$; median $=\$ 624$; no: mean $=\$ 1,511$; median $=\$ 500$ ). Similarly, secular giving did not vary hardly at all by whether or not the household also gave to religion (yes: mean $=\$ 881$; median $=\$ 325$; no: mean $=\$ 835$; median $=\$ 300$ ). Taken together, these results suggest that for most donors, there is not a tendency to trade-off religious and secular giving.

## INSERT TABLE 5 ABOUT HERE

## E. COPPS: Multiple Regressions

## E. 1 Factors Affecting the Probability of Being a Religious Donor

Income, Wealth, and Tax Effects. We used Probits to determine the marginal effects of various socio-economic factors on the probability of somebody being a donor to religion. Surprisingly, we found no significant effect between income and the probability of being a donor after controlling for wealth, tax itemization status, as well as several other variables-except in the base model when controlling for religious attendance in which case income does have a positive and significant effect on the probability of being a religious donor (see Table 6). Wealth has highly significant but relatively small effect on the
probability of being a religious donor. We split wealth into positive and negative net worth. A 10\% increase in positive net worth is associated with between a $0.2 \%$ and $0.3 \%$ increase in the likelihood of being a religious donor, but a $10 \%$ decrease in net worth is associated with between a $0.2 \%$ and $0.3 \%$ decrease in the likelihood of being a religious donor. After controlling for income and wealth, tax itemizers were between $13 \%$ and $21 \%$ more likely to be religious donors.

## INSERT TABLE 6 ABOUT HERE

Age, Gender, Marital Status, Number of Dependents, Health Status. Age has a very small, but significant and positive effect on the probability of being a religious donor. We found no difference between male headed and female headed households. Married couples were between $12 \%$ and $17 \%$ more likely to be religious donors. The number of dependents increased the likelihood of being a religious donor but not after controlling for differences in religious attendance. Those in good health are more likely to be religious donors, but this effect becomes insignificant after controlling for religious attendance.

Educational Attainment. The likelihood of being a religious donor increased significantly with educational attainment, especially in the models that do not control for religious attendance. Those who have attended college are between $5 \%$ and $9 \%$ more likely to be religious donors than are those with a high school education or less. Those with a BA/BS degree are between $7 \%$ and $10 \%$ more likely to be religious donors than those with a HS degree or less-except in the model with religious participation and all of the religious affiliation interactions. Those with a postgraduate education were no more or less likely to be religious donors than those with a HS degree or less.

Race and Ethnicity. There were no significant differences in the likelihood of being a religious donor by race or ethnicity in the models that control for religious attendance. However, Blacks were between 7\% and $10 \%$ more likely to be religious donors than Whites if we do not control for differences in religious attendance.

Religious Affiliation and Religious Attendance. Not surprisingly, those religiously affiliated were more likely to be religious donors than those who were not religiously affiliated. Religious attendance was associated with the likelihood of religious giving. While the marginal effects of more frequent attendance were small, they were highly significant. Furthermore, adding religious attendance tended to swamp the
significance of several other variables (e.g., number of children, being in good health, race, and being from the South).

Employment Status. After controlling for income, wealth, etc., we found no difference in the likelihood of being a religious donor between retirees and those employed. However, the unemployed and those of "other employment status" (students, homemakers, those on disability, those on temporary leave, and "other") are between $13 \%$ and $19 \%$ less likely to be religious donors than were those who were employed.

Geography. Those living in the South were 5\% more likely to be religious donors in the base model, but once we controlled for religious attendance the South was not significantly different from the rest of the country. After controlling for all of the factors listed above, those living in a metropolitan community were no more or less likely to be a religious donor.

Crowding Out and Secular Giving. To test whether or not religious giving and secular giving crowd out (or displace one another), we added secular giving to the base Probit regression model and found that on the contrary, secular giving is positively associated with religious giving in a large and significant manner. In Model 4 in which we interact religious affiliation with the log of the amount of secular giving by each household, we found that a $10 \%$ increase in secular giving is significantly associated with a $0.3 \%$ increase in the likelihood of being a religious donor. We also found that there are some differential effects by religious affiliation and secular giving and the likelihood of being a religious donor. For example, whether or not they give to secular causes matters for some religious affiliations: For Catholics, Protestants, and "Other Religions" being a secular donor is positively associated with a much higher probability of giving to religion (see Model 2 in Table 6). Furthermore, the amounts donated to secular causes is associated with higher probabilities of being a religious donor among Catholics (3\%) and "Other" religions (5.8\%).

## E. 2 Factors Affecting Amounts Donated to Religious Charities

Income, Wealth, and Tax Effects. We used Tobits to determine the marginal effects of various socio-economic factors on the amounts households donated to religion. We found varying levels of significance and levels of the significant effect between income and the amounts donated to religion after
controlling for wealth, tax itemization status, as well as several other variables-except in the base model with secular giving in which income became insignificant (see Table 7). A $10 \%$ increase in income is associated with an increase in the amount given to religion ranging from $1.6 \%$ to $3.2 \%$. Wealth has highly significant but relatively small effect on the amounts donated to religion. We split wealth into positive and negative net worth. A $10 \%$ increase in positive net worth is associated with between a $0.8 \%$ and $1.3 \%$ increase in the amount donated to religion, but a $10 \%$ decrease in net worth is associated with between a $0.9 \%$ and $1.4 \%$ decrease in the amounts donated to religion. After controlling for income and wealth, tax itemizers donated significantly more than non-itemizers, which suggests that even religious donors are tax price sensitive.

## INSERT TABLE 7 ABOUT HERE

Age, Gender, Marital Status, Number of Dependents, Health Status. Age has a very small, but significant and positive effect on the amount donated to religion. We found no difference between male headed and female headed households. However, married couples donated significantly more than singles to religion. The number of dependents increased the likelihood of being a religious donor even after controlling for differences in religious attendance. Those in good health donated more to religion, but this effect becomes insignificant after controlling for religious attendance.

Educational Attainment. The amounts donated to religion increased significantly with educational attainment, especially in the models that do not control for religious attendance. Those who have attended college donated more to religion than those with a high school education or less in all of the specifications. Those with a BA/BS degree gave significantly more to religion than those with a HS degree or lessexcept in the model with religious participation and all of the religious affiliation interactions. Perhaps surprisingly, those with a postgraduate education were no more or less likely to be religion than those with a HS degree or less.

Race and Ethnicity. There were no significant differences in the likelihood of being a religious donor by race or ethnicity in the models that control for religious attendance. However, Blacks donated more than Whites if we do not control for differences in religious attendance, but that difference goes away once we control for religious attendance. Not surprisingly, those religiously affiliated donated significantly more
to religion than those who were not religiously affiliated. Religious attendance had a small but significant effect that was independent of religious affiliation.

Religious Affiliation and Religious Attendance. Not surprisingly, those religiously affiliated were more generous donors to religion than those who were not religiously affiliated. Religious attendance was significantly associated with increased religious giving. While the marginal effects of more frequent attendance were small, they were highly significant. Furthermore, adding religious attendance tended to swamp the significance of several other variables (e.g., number of children, being in good health, race, and being from the South).

Employment Status. After controlling for income, wealth, etc., we found no difference in the likelihood of being a religious donor between retirees and those employed. However, the unemployed and those of "other employment status" (students, homemakers, those on disability, those on temporary leave, and "other") donated significantly less than were those who were employed.

Geography. Those living in the South donated significantly more to religion in the base models, but once we controlled for religious attendance, the South was not significantly different from the rest of the country. After controlling for all of the factors listed above, those living in a metropolitan community did not give significantly more to religion than those from smaller communities.

Crowding Out and Secular Giving. To test whether or not religious giving and secular giving crowd out (or displace one another), we added secular giving to the base Tobit regression model and found that on the contrary, secular giving is positively associated with religious giving in a large and significant manner: a $10 \%$ increase in secular giving is associated with a $7.3 \%$ increase in religious giving, holding all other factors constant. We also found that there are some differential effects by religious affiliation and secular giving and the amounts donated to religion. For example, the amounts given to secular charities by Catholics, Protestants, and "Other Religions" is positively associated with the amounts donated to religion.

Robustness of Results. In a test of robustness of our results, we tested whether or not the results remained more or less stable if we used "permanent" income rather than this year’s income as one of the key explanatory variables. We find essentially no difference in our results between income measured on the most current year or from the average of the past three years (permanent income). We also find robust results from COPPS in the 2001, 2003, and 2005 waves.

## F. Bank of America Study of High Net-Worth Philanthropy and Religious Giving

Over half (56\%) of high net worth households reported that their religious beliefs were an important or very important motivator for their giving overall. We also found a fairly linear relationship between religious participation and religious giving among high net worth households. Those who report not attending religious services gave an average of $\$ 591$. Those who attend weekly give (average $=\$ 24,020$ ) several times more than those who attend once or twice every six months (mean $=\$ 4,105$ ). Giving drops a bit for those who attend more often than weekly $(\$ 16,574)$. The anomaly is those who attend once or twice a year gave an average of $\$ 13,087$.

## Conclusions

We see several patterns that are consistent in both the cross sectional data and in the regressions. Religious giving tends to increase with age both in cross tabs and regressions. Educational attainment and being married have a positive effect in both cross tabs and regressions. Religious giving increases with both income and wealth in both cross tabs and regressions. Having children is associated with more religious giving in both cross tabs and regressions. Differences in religious affiliation makes a huge difference in the likelihood of being a donor and the amounts donated in both cross tabs and regressions. However, there were some patterns that showed up in the cross tabs that were not substantiated in the regressions. For example, religious giving differences by race and ethnicity in cross tabs go away in regressions.

If we define generosity as giving as a percentage of income, then Mormons are by far the most generous with respect to giving as a share of their income both overall and to religion among all religious affiliations. Catholics, Jehovah Witnesses, Orthodox (Greek/Russian/Eastern), and those with either missing values for religious affiliation or those with no affiliation are both the least generous donors overall as a percentage of income, as well as the least generous religious donors-at least as a share of income. Only 8\% of Americans give 5\% or more of their income to religion, including only $2.6 \%$ who give $10+\%$ of their incomes to religious causes. Americans overall do not "tithe" in the Biblical sense of $10 \%$ of income.

Contrary to some expectations, religious giving and secular giving do not seem to displace or "crowd out" each other with respect to behaviors on average. On the contrary, in regressions controlling for income, wealth, and several other factors that affect giving, increased secular giving is either insignificant or positively associated with increased religious giving.

High net worth households give large amounts to religious organizations (on average), but they tend to give a much smaller share of their total gifts to religion than do more typical Americans. Like other US households, high net worth households increase their religious giving with increases in income and frequency of religious attendance.

## Bibliography

Azzi, Corry, and Ronald Ehrenberg. "Household Allocation of Time and Church Attendance." The Journal of Political Economy 83, no. 1 (1975): 27-56.

Barro et al. (2003)
Brown, Melissa S., Joseph C. Harris, and Patrick M. Rooney. "Reconciling Estimates of Religious Giving." (2005) Working Paper available at www.philanthropy.iupui.edu

Brown, Melissa and Patrick M. Rooney (2007) Is there a Hierarchy of Giving? Working paper available at www.philanthropy.iupui.edu.

Brown, Melissa and Patrick M. Rooney. "Giving to the Poor." (2007b) Working Paper available at www.philanthropy.iupui.edu

Religious Service Attendance. The ARDA. http://www.thearda.com/quickstats/qs_55.asp.
Giving USA 2007. Researched and written by the Center on Philanthropy at Indiana University. Published by the Giving USA Foundation. Chicago, IL, 2007.

Hoge, Dean R., Charles Zech, Patrick McNamara, and Michael J. Donahue. Money Matters. Louisville, Ky.: Westminster John Knox Press, 1996.

Hoge, R. "Introduction: The Problem of Understanding Church Giving." Review of Religious Research 36, no. 2 (1994): 101-10.

Iannaccone "Introduction to the Economics of Religion" Journal of Economic Literature (1998).
Long, Stephen H., and Russell F. Settle. "Household Allocation of Time and Church Attendance: Some Additional Evidence." The Journal of Political Economy 85, no. 2 (1977): 409-13.

Meslin, Eric, Patrick Rooney, and James Wolf. "Health-Related Philanthropy and Traditional Philanthropy: Is there a Universal Donor?" Forthcoming in Nonprofit and Voluntary Sector Quarterly (2008).

Rooney, Patrick and Heidi Frederick. "Bank of America Study of High Net Worth Philanthropy." (2007) Working Paper available at www.philanthropy.iupui.edu

Rooney, Patrick, Kathy Steinberg, and Paul Schervish. "Methodology is Destiny: The Effect of Survey Prompts on Reported Levels of Giving and Volunteering." Nonprofit and Voluntary Sector Quarterly, Vol. 33, No. 4, 2004, pp. 628-654.

Rooney, Patrick, Kathy Steinberg, and Paul Schervish. "A Methodological Comparison of Giving Surveys: Indiana as a Test Case" Nonprofit and Voluntary Sector Quarterly, Vol 30, No. 3, September 2001, pp. 551-568.

Smith, Adam. The Wealth of Nations.
Wilhelm, Mark O., Patrick M. Rooney, and Eugene R. Tempel. "Changes in Religious Giving Reflect Changes in Involvement: Age and Cohort Effects in Religious Giving, Secular Giving, and Attendance." Journal for the Scientific Study of Religion 46, no. 2 (2007): 217-32.

Wilhelm, Mark, Eleanor Brown, Patrick Rooney, and Richard Steinberg (2007) "Transmission of Philanthropic Values across Generations." Working Paper under review.

Wilhelm, Mark 2007. Survey Methods. Get exact titles.
Virginia A. Hodgkinson, Murray S. Weitzman and Arthur D. Kirsch. In Wuthnow, Robert, and Virginia A. Hodgkinson, eds. Faith and Philanthropy in America. San
Francisco: Jossey-Bass, 1990.

