Changes in Religious Giving Reflect Changes in Involvement: Life-Cycle and Cross-Cohort Evidence on Religious Giving, Secular Giving, and Attendance

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Abstract

This paper describes religious giving, secular giving, and religious service attendance patterns over time. Two types of patterns are described: a life-cycle pattern for the pre-war cohort (born 1924-1938) between their middle adult (ages 35-49) and senior (ages 62-76) years, and a cross-cohort pattern comparing their middle adult years with the middle adult years of the baby boom (born 1951-1965). Patterns are described for all families as well as separately for Catholic and Protestant families. We use data from three sources to describe the patterns.

The patterns indicate little change in religious giving and attendance over the pre-war cohort's life-cycle, but compared to the pre-war cohort in middle adulthood, baby boomers give less-than-expected to religion and attend less. Baby boomer giving is noticeably less-than-expected and attendance noticeably lower among Catholic boomers, but not as much among Protestant boomers. We argue that together all these patterns are evidence that changes in religious giving reflect changes in religious involvement.

Keywords: charitable giving, donations, church attendance, religious affiliation, baby boom, generational change.

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1. Introduction

This paper presents evidence that recent changes in American religious giving reflect changes in involvement. Recent changes in religious giving are described in the chapters of the volume edited by Chaves and Miller (1999), and Chaves' (1999) summary and interpretation of those chapters makes the argument that giving changes reflect involvement changes. Starting with the observation that religious giving is lower than would have been expected from earlier trends, Chaves' argument is that lower-than-expected religious giving reflects an underlying decline in religious involvement because religious giving tends to go with religious involvement.

The argument is a priori compelling, but not the only possible explanation of changes in religious giving. It is also possible that the religious giving of the religiously involved is lower-than-expected because they have diverted some of their giving to other purposes, such as human services, poverty relief, education, health, and international aid. Diversion could occur if the religiously involved consider other-purpose giving to be a close substitute for giving to their local congregation or its national affiliate.

In addition, the argument that across-time changes in religious giving reflect across-time changes in involvement is not based on across-time evidence. Rather the argument hinges on cross-sectional evidence that religious giving and religious involvement are (in economics terminology) complementary activities rather than substitutes for each other.[1] However, there is across-time evidence suggesting that giving and involvement are substitutes (Gruber 2004).

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[1]See Clain and Zech (1999) and the additional references therein. Clain and Zech also argue that giving crises are involvement crises (p. 940).

This paper presents additional across-time evidence about giving and involvement patterns. We look at two patterns: a life-cycle pattern for the pre-war cohort (born 1924-1938) and a cross-cohort pattern comparing the pre-war and baby boom (born 1951-1965) cohorts at similar points in their life cycles. Our argument is two-fold. First, if recent changes in religious giving reflect an involvement decline then very little of the giving change should be seen in the pre-war cohort's life-cycle pattern (moving from middle adulthood to senior years). The reason is that on average religious practices are established by middle adulthood with much less change thereafter (e.g., see Spilka et al. 2003, p. 348; Hoge, Johnson and Luidens 1994, pp. 8-9; Argue, Johnson and White 1999). Rather, if the giving changes reflect an involvement decline the pattern should be seen in the baby boom. Second, if giving changes reflect an involvement decline then changes in giving should parallel changes in involvement. Not only should the parallel be apparent when examining involvement changes among all families, but the parallel should also follow the distinct involvement declines among Catholics and Protestants.

To describe giving patterns we use data from the 1974 *National Study of Philanthropy* and the 2001 *Center on Philanthropy Panel Study*, and to describe involvement we use religious service attendance data from the 1972-2002 *General Social Survey*. There are three main results. First, the pre-war cohort's religious giving changed very little over their life-cycle in that the pre-war cohort's giving grew at the same rate as national income. In contrast, the baby boom's religious giving is less than expected based on an extrapolation of the pre-war cohort's middle adulthood religious giving. Second, these giving patterns are paralleled by attendance patterns: the pre-war cohort's attendance has changed little over their life-cycle, but the baby boom's attendance in middle adulthood is less than the pre-war cohort's middle adulthood attendance. Further, the changes in baby boomer religious giving compared to the pre-war cohort are different among Catholics and Protestants, and the giving differences are in parallel with the different changes in Catholic/Protestant identification and attendance. Third, most of the results indicate that giving to other purposes has not increased faster than income growth either in the pre-war cohort's life-cycle pattern or in the comparison of pre-war and baby boom giving in middle adulthood; this undercuts a diversion explanation of changes in religious giving.

2. Background

It is well-known that cross-sectional data indicate that at a point in time, older people give more than younger people, both in dollars and as a percentage of income.[2] It is also well-known that point-in-time evidence cannot be used to infer either that people give more as they age, or that the current young are giving less now than the current old did in the past. For example, Steinberg and Wilhelm (2003) find using the *Center Panel* that in 2000 a lower percentage of the baby boom cohort gives to religious organizations compared to the pre-war cohort (51 versus 62 percent); while sometimes such evidence is used to conclude that there is a financial crisis in American religion. this conclusion may not be justified because perhaps a lower percentage of the pre-war cohort gave to religion when they, too, were in middle adulthood.

Indeed, it is hard to find evidence of a financial crisis in American religion by looking at aggregate time-series data. Figure 1 plots a time-series of religious giving as a percentage of personal income from 1963-2003 using estimates of religious giving and data on personal income from *Giving USA* (2004, pp. 222 and 225). True, a decline in religious giving as a percentage of personal income is noticeable if one uses the beginning of the period as a reference

[2]See Hoge and Yang (1994) and the references on p. 107 of Hoge (1994).

point (in 1963 the percentage was 1.2 and in 2000 it was 0.9), but not if one uses the early 1970s when the pre-war cohort had entered their middle adult years (the percentage was also 0.9 in 1973).[3]

The flat aggregate time-series since the early 1970s could be masking underlying change going on within the cohorts that make up the population. The time-series cannot be used to determine whether the pre-war cohort has been sustaining, in their senior years, the level of religious giving initiated in their middle adult years. Neither can the time-series be used to learn whether the baby boom's middle adulthood giving being done now differs from the pre-war cohort's initial level of religious giving done in the past.

However, the religious life of baby boomers does differ from the pre-war cohort's religious life in other ways. The religious life of baby boomers differs in terms of religious exploration (Roof 1993), importance placed on institutions and institutional religion (Roof 1993, p. 41; Davidson et al. 1997), individualism and pluralism (Hoge, Johnson and Luidens 1994), denominational loyalty, and emphasis on religious programs that bring satisfaction (Hoge et al., 1996). Among Catholics the religious life of baby boomers differs because their formative years were during the changes leading up to and following the Second Vatican Council (Davidson et al. 1997).

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[3]The results are similar if either disposable personal income or gross domestic product is used in the denominator. It is possible that *Giving USA.* overestimates religious giving (see Chaves 1999, pp. 176-177), but Brown, Harris and Rooney (2004) calculate religious giving for 2002 using three different methods (including the method used by *Giving USA*) and find close agreement across methods. Ronsvalle and Ronsvalle (1999) report declining per member religious giving as a percentage of per capita disposable income since the early 1970s, but it may be that their use of giving to 29 denominations misses increases in giving to other denominations.

And, in contrast to the flat religious giving time-series, data from the *General Social Survey* show evidence of slightly declining attendance at religious services in the 1970s and 1980s (e.g., Chaves 1989). Whether these declines are attributed to age, period, or cohort effects depends upon the identification assumptions one makes (see Chaves 1989, 1991 and Firebaugh and Harley 1991). We find more compelling the assumptions that ultimately attribute attendance decline to younger cohorts, and in addition there is other evidence suggesting younger cohorts attend less frequently (e.g., see Hoge et al. 1994 pp. 7-8; Presser and Stinson 1998, Table 4).

3. Data and Methods

We use the 1974 *National Study of Philanthropy* to measure giving in calendar year 1973. The *National Study* consists of two surveys: one survey conducted by the University of Michigan's Survey Research Center (SRC) and the other by the Census Bureau. We use the SRC survey because it, unlike the Census survey, includes questions about religious affiliation.[4]

The *National Study* is distinguished from other giving surveys by its over-sampling of high-income households. The Survey Research Center obtained a high-income over-sample by over-sampling high income geographical areas and by over-sampling respondents either older than 25 years or with a college education. Over-sampling high-income households is desirable because the distribution of giving—even religious giving—is very skewed (Iannaccone 1997). Because of skewness there is the potential to underestimate average giving if the survey does not adequately measure the top of the giving distribution.

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[4]The *National Study*'s SRC sample was drawn using an area probability design. The response rate was 75 percent, and heads-of-household were interviewed. See Morgan, Dye and Hybels (1979) for further information about the study.

We use the 2001 *Center on Philanthropy Panel Study*—a module within the *Panel Study of Income Dynamics* (*PSID*)—to measure giving in calendar year 2000.[5] Even though the *Center Panel* does not contain a high-income over-sample, it does the best job of all other recent giving surveys in measuring giving at the top of the distribution (Wilhelm 2004). Hence, the use of the *Center Panel* is crucial because other recent giving surveys would bias the results toward showing a decline in giving relative to the 1974 *National Study*.[6] In contrast, the *Center Panel*'s and the *National Study* SRC survey's conditional giving distributions—the distributions excluding all those who do not give—match very closely: Figure 2 shows that, with the exception of the 99th percentile, the top percentiles from both surveys are nearly identical.[7]

To make the *National Study* data comparable to the *Center Panel* data in Figure 2 and throughout the paper we multiply the 1973 figures from the *National Study* by the growth in household incomes over 1973-2000 (a factor of 4.69). That is, the 1973 *National Study* figures are adjusted to reflect what they would have been in 2000 had they increased proportionally with

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[5]The *PSID*'s nationally representative sample was drawn in 1968 using stratified multistage selection (the *PSID* also contains a low-income over-sample, but we use only the representative sample). The 1968 response rate was 76 percent, and subsequent studies indicate that the *PSID* remains representative (e.g., see Fitzgerald, Gottschalk and Moffitt 1998). Most interviews are conducted with male heads-of-household. See Hill (1992) for further information about the *PSID*.

[6]It might be argued that the *Center Panel* overestimates giving, but Wilhelm's (2004) finding that the *Center Panel* matches the Internal Revenue Service's distribution of giving through the 90th percentile indicates not.

[7]We conducted chi-square tests for differences between the percentiles based on the distribution of the *Center Panel* relative to the *National Study* (see Handcock and Morris 1999 for a description of relative distributions). When tested separately, all the differences between percentiles were insignificant at ten percent. However, joint tests (say, of the equality of all ten pairs of percentiles) do reject equality; despite this ability to statistically distinguish between the distributions, the point is that with the exception of the 99th, differences between percentiles are quantitatively small.

income growth. Hence, when comparing 2000 giving to 1973 giving we are comparing 2000 giving to what 1973 giving would have been in 2000 had it grown at the same rate as income.

Giving measured in both the *National Study* and *Center Panel* can be disaggregated into religious giving and secular giving. We measure religious giving in the *National Study* by using the names of organizations to which the respondent made his four largest gifts. The organization names were sorted by the Survey Research Center into types: religious, combined appeals (e.g., United Way), community, health, education, social welfare, culture, public affairs, environment, international aid, private foundation, and other. Churches and church groups were assigned the "religion" type, but religiously-affiliated organizations whose primary purpose was not religious (e.g., religious grade schools, Catholic Charities) were sorted into one of the latter 12 types. Our 1973 religious giving variable is all gifts to religious organizations; our secular giving variable is all gifts to the other 12 organization types.[8]

In the *Center Panel* giving is queried separately by type of purpose. Respondents were asked about giving "for religious purposes or spiritual development, for example to a church, synagogue, mosque, TV or radio ministry;" this forms our 2000 religious giving variable. When asked about religious giving respondents are instructed not to report giving to "schools, hospitals, and other charities run by religious organizations" because this giving will be queried with subsequent questions about giving for combined purposes, for poverty relief, health, education, youth and family services, culture, communities, environment, international aid, and

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[8]An alternative would be to use the question that asks about the percentage of all gifts made to religious activities; this question indicates a slightly higher amount going toward religious activities (Morgan, Dye and Hybels 1979). Hence, our calculations based on the four largest gifts may slightly understate religious giving in 1973 and, if so, overstate increases (and understate decreases) between 1973 and 2000.

other purposes. Giving to all these subsequent purposes is combined to form our 2000 secular giving variable.

Thus the *National Study* and the *Center Panel* achieve a similar split of total giving into religious and secular parts. We use the label "secular" even though some of the giving included in this variable is going to religiously-affiliated organizations whose primary purpose is something besides worship or spiritual development.

The *National Study* is used to measure the pre-war cohort's giving in middle adulthood (ages 35 to 49 in 1973, n = 574). The *Center Panel* is used to measure the pre-war cohort's giving in their senior years (ages 62 to 76 in 2000, n = 578) and the baby boom's giving in middle adulthood (ages 35 to 49 in 2000, n = 1,527).

Methods

We present patterns in giving over time by examining estimates of average family giving. The averages are weighted using the weights from the two surveys. The *National Study* weights are intended to adjust for the effect of the high-income over-sample when estimating population averages. The *Center Panel* uses the *PSID*'s "family weights;" the weights are intended to adjust for attrition and mortality since the *PSID*'s beginning in 1968. Averages from the *Center Panel* are very similar whether weights are used or not.

The methods must handle two data issues. First, a respondent in the *National Study* who said that he gave something but that altogether his giving was $100 or less was asked no further questions to pin down the amount given. For such respondents all we know is that they gave between $1 and $100 (or $4.69 and $469 in income-growth adjusted 2000 dollars); we set such gifts to $4.69 in 2000 dollars. To make the *Center Panel* data comparable, we artificially imposed this same lack of information about gifts under $469; in particular we reduce all amounts in the *Center Panel* under $469 to $4.69. This has the effect of lowering the average gift in the *Center Panel* by about $50, but has no effect on the 60th and higher percentiles. Hence, we use data patterns at higher percentiles as a check on the patterns in the averages.

Second, we drop one observation from the *Center Panel* pre-war cohort whose secular giving is clearly an outlying amount.[9] If instead we include this observation, on its own the influential observation alters the pre-war cohort's life-cycle pattern of average secular giving to indicate much faster growth than income. Unlike estimates of averages, estimates of higher percentiles are robust against outliers; we find that estimates of higher percentiles do not indicate faster-than-income growth in secular giving, even when the influential observation is included.

Finally, we check whether the patterns arising in the estimated averages persist after adjusting for income and wealth. The adjusted estimates are formed by regressing giving on cohort, income, and wealth (separate least-squares regressions for 1973 and 2000 using all of the data from the surveys, n = 1,872 and 4,444) and then using the regression coefficients to estimate giving for pre-war and baby boom families who have average income and wealth. This procedure will indicate whether the patterns in unadjusted averages we attribute to age or cohort are really due to income or wealth.

[9] The family gave $490,000 toward health purposes, an amount about ten times higher than the next highest secular gift in the *Center Panel*. In contrast, the highest amount given to secular purposes in the *National Study* is only 70 percent higher than the next highest gift: $159,460 versus $93,800.

Religious Identification and Attendance at Religious Services

We use the 1972-2002 *General Social Survey* to describe religious identification and attendance at religious services for the pre-war cohort over 1972-75 and the pre-war and baby boom cohorts in 1998-2002 (we use additional years near 1973 and 2000 to increase the sample size).[10] There is evidence that more respondents report attending religious services weekly than who actually attend (see Chaves and Stephens (2003) for a review; also see Smith 1998). Smith presents evidence that the overreporting is due to social desirability, telescoping (people reporting nearly weekly attendance as weekly), and respondents' broad interpretations of attendance at "religious services" to include more than worship services (e.g., attendance at Bible studies, choir practices, fellowship meetings).

"Overreported" attendance is not a problem if the survey responses are intended to measure religious involvement, broadly defined. Chaves and Stephens go further, speculating that respondents may broaden the attendance question to be a question about religious identity and that the overreports may be accurate reports of the respondents' "identities as religious individuals who attend services more or less regularly, even if not weekly" (p.90).

For our purposes we need the attendance question to serve as a measure of broad religious involvement. This mitigates concern that would arise if it was important for our purposes that the attendance measure literally be a measure of weekly attendance. Further, to mitigate potential telescoping problems we use the percentage of respondents who say they attend religious services once every two weeks or more. The patterns we find are the same if instead we use all the response categories to impute a continuous attendance variable.

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[10]The *General Social Survey* uses a stratified multistage design. Response rates are 70 percent or higher. Interviews are conducted with a randomly selected adult (18 years or older) within the household. See Davis and Smith (1992) for further information.

4. Results

Table 1 presents our results for all families regardless of their religious identification, including those whose identification is "none." The table has three major headings to describe total, religious, and secular giving. Within each heading are three columns: the first is for the pre-war cohort in 1973, the second column is for the pre-war cohort in 2000, and the third is for the baby boom in 2000. The 2000 pre-war cohort results do not include the influential observation.

The first row presents unadjusted estimates of average giving. The estimated average total giving of the pre-war cohort in middle adulthood is $1,687. Recall, this is an estimate of what their giving would have been in 2000 had it grown at the same rate as income. Their actual giving in 2000 is $1,609. Hence, the giving of the pre-war cohort grew a little slower than income between 1973 and 2000, but the difference is fairly small.

The pattern of religious giving of the pre-war cohort—$1,035 in 1973 and $1,040 in 2000—indicates the cohort's religious giving grew in line with income growth. Secular giving of the pre-war cohort—$652 in 1973 and $568 in 2000—indicates growth a little slower than income: just under $100 less than would have been expected had giving kept pace with income growth.

Baby boomer average giving during their middle adult years was $1,371. This is $316 less than an extrapolation of the pre-war cohort's middle adulthood giving from 1973 forward to 2000 using income growth ($1,687). In this sense, baby boomer giving in middle adulthood is "less-than-expected." The baby boomers' religious giving is $789, about $250 less-than-expected compared to the pre-war cohort in middle adulthood. Secular giving is $70 less-than-expected.

Patterns similar to those seen in the averages emerge when looking at estimates of the higher percentiles in rows 2 through 5. The similar patterns in averages and percentiles suggests that the patterns in averages are not substantially altered by our handling of the *Center Panel*'s gifts under $469. For example, in 2000 the higher percentiles of the pre-war cohort's religious giving are not very different from what they were back in 1973 (e.g. $1,233 to $1,100 at the 75th percentile), indicating growth in line with income. In contrast, the baby boom's 75th and 90th percentiles ($500 and $2,400) are noticeably less-than-expected compared to the 1973 pre-war cohort, whereas the 95th and 99th ($4,500 and $9,000) are not. This is the first hint that the giving change reflects an involvement change: the less-than-expected religious giving is not due to the baby boom's large givers (who compare fairly closely to the pre-war cohort's large givers during middle adulthood), but to more baby boomers—the bulk of the cohort that is below the 90th percentile—making small gifts.

Row 6 presents regression-adjusted giving estimates for families at average income and wealth (roughly $69,000 and $281,000 in 2000 dollars). Although there are quantitative differences in the patterns produced by the adjusted estimates, the adjusted patterns are qualitatively similar to the patterns in unadjusted averages. The most notable quantitative difference is that the regression-adjusted cross-cohort pattern in secular giving shows baby boomer giving in line with an extrapolation of the pre-war cohort's middle adulthood giving, but recall that the unadjusted pattern indicated boomer giving only a little less-than-expected. Hence, there is not much qualitative difference in the two patterns.

In summary, the estimates suggest that the religious giving of the pre-war cohort kept pace with income growth as they aged, but that pre-war secular giving grew a little slower than income. The baby boom is giving less-than-expected to religion compared to what the pre-war cohort was giving in middle adulthood. Baby boomer secular giving is a little less-than-expected compared to the pre-war cohort's middle adulthood giving, but clearly not to the same extent as their religious giving.

Giving Patterns among Catholic and Protestants

Table 2 presents the giving results separately for Catholic and Protestant families. For Catholic families in the pre-war cohort religious giving did not change much as they aged, either keeping pace with income growth (row 1) or perhaps growing a little slower (in the row 3 adjusted estimates). Catholic secular giving kept pace with income growth in the unadjusted estimates, though not when controlling for income and wealth. For Protestant pre-war families religious giving grew slightly more than income in both unadjusted and adjusted estimates; their secular giving did not keep pace with income growth.

Baby boom Catholic families are giving less-than-expected to religion compared to what pre-war Catholic families were giving in middle adulthood: about $200 less in the unadjusted estimates and about $330 less in the adjusted estimates. Catholic baby boomer secular giving is also less-than-expected compared to pre-war Catholics in middle adulthood.

A different pattern emerges for Protestant baby boomers: religious giving is less-than-expected compared to Protestant pre-war families, but the difference is smaller than seen in the comparison of pre-war and baby boom Catholics. The different Catholic-Protestant patterns are more striking in percentage terms (24 percent less-than-expected for Catholics and only 12 percent less for Protestants) and more striking in the adjusted estimates (31 percent less-than-expected for Catholics and only 10 percent less for Protestants). Protestant baby boomer secular giving is essentially in line with an extrapolation of pre-war Protestant secular giving in middle adulthood (row 1) or perhaps is a little more than expected (in the row 4 adjusted estimates).

Identification and Involvement Patterns

Identification and involvement patterns are presented in Table 3. Row 1 shows that there have been declines in the percentage of respondents identifying themselves as Catholic. Although the declines are both over the life-cycle of the pre-war cohort (from 27 percent to 24) and between cohorts (25 percent of the middle adulthood baby boomers identify as Catholic), the declines are very small. The row 2 pattern showing respondents identifying themselves as Protestant is different: no life-cycle decline in the pre-war cohort (in fact, a one percentage point increase), but a large decline between cohorts: 64 percent of the pre-war cohort in middle adulthood identified as Protestant compared to only 52 percent among middle adulthood baby boomers.

Rows 3 through 5 present the involvement patterns, both for all families and separately for Catholic and Protestant families. Among all families, the percentage attending religious services every other week or more has increased over the life-cycle of the pre-war cohort (from 48 to 52 percent), but has decreased between the cohorts at middle adulthood (to 39 percent). Over the life-cycle of Catholic pre-war families attendance has not changed: 62 percent attended biweekly or more in middle adulthood and 62 percent attend biweekly or more in their senior years, but the percentage of Catholic middle adulthood baby boomers attending biweekly or more is only 43 percent, dramatically less.

Once more the pattern for Protestants is different. Over the life-cycle of Protestant pre-war families attendance has increased: 47 percent attended biweekly or more in middle adulthood and 54 percent attend biweekly or more in their senior years. Unlike Catholic boomers, the percentage of Protestant middle adulthood baby boomers attending biweekly or more is the same as Protestant pre-war families in middle adulthood: 47 percent.[11]

5. Discussion and Conclusion

Our results indicate that none of the change in religious giving is seen in the life-cycle pattern of the pre-war cohort. The change is due to the baby boom cohort, who give less-than-expected based on an extrapolation of what the pre-war cohort was giving in their middle adult years. Involvement follows a parallel pattern: little of the change in religious involvement is due to the life-cycle pattern of the pre-war cohort, but the baby boom cohort is markedly less involved. This is evidence that changes in giving reflect changes in involvement.

If this interpretation is correct the giving patterns should parallel the distinctly different identification and involvement patterns of Catholics and Protestants. The Catholic pattern is a very small decrease in the percentage of baby boomers identifying as Catholic (compared to the pre-war cohort in middle adulthood), but among these Catholic boomers, a striking attendance decline. The Protestant pattern is different: a smaller percentage of baby boomers identifies as Protestant, but among Protestant boomers attendance is similar to pre-war Protestant families in middle adulthood. The religious giving patterns parallel this distinction. Religious giving among Catholic baby boomers is much less than expected. Protestant baby boomers are giving less than expected too, but not to the same degree as Catholic baby boomers.

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[11] Others have reached similar conclusions about identification and attendance patterns; see Putnam (2000, pp. 75-76) and Smith and Kim (2004).

The results suggest that differences in giving and attendance patterns between Catholics and Protestants are to some extent caused by selection. Less involved Catholics give less-than-expected and attend less, but still claim a Catholic identity; the set of Catholics therefore contains a mixture of involved and not involved people.[12] Less involved Protestants stop identifying themselves as Protestant, selecting themselves out of the set of people surveys identify as Protestant. This implies that the set of people surveys identify as Protestant contains relatively more people who are involved. To our knowledge this is a new explanation of differences between the giving of Catholics and Protestants.[13]

If the selection interpretation is correct than it should play out in the secular giving results as well. It does. The secular giving of Catholic boomers is less-than-expected compared to the Catholic pre-war cohort in middle adulthood, while the secular giving of Protestant boomers is in line with the Protestant pre-war cohort in middle adulthood. Unlike selection, other explanations for differences between the religious giving of Catholics and Protestants may not readily transfer over to explain the difference in secular giving.[14]

There is only one result lending some support to the argument that less-than-expected religious giving may be due to more giving being diverted toward secular purposes: when the

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[12]Hoge et al. (2001, p. 220) make a similar argument that young adult Catholics like identifying as Catholic but are less attached to Catholic institutions.

[13]However, Olson and Caddell (1994) offer a selection argument to explain why congregations declining in membership have higher per-member giving.

[14]See Zaleski and Zech (1994) and Hoge et al. (1999) for reasons explaining some of the lower levels of Catholic religious giving observed in cross-sectional data. Of these reasons, less emphasis on giving in parishes may transfer over to explain a secular giving difference. However, most of our cross-sectional results suggest that Catholic secular giving is higher (not lower) than Protestants; see Table 2. The one exception is the cross-sectional comparison of the adjusted estimates for Catholic and Protestant baby boomers ($434 and $495), but even these estimates are fairly close together.

results are adjusted for income and wealth Protestant baby boomers' secular giving is more than expected and their religious giving is less than expected. None of the other results for either the pre-war or baby boom cohorts indicate that giving toward secular purposes grew faster than income. And recall that although Protestant baby boomers do give less than expected to religion the most important change among boomers is the lower percentage identifying as Protestant.

There are two qualifications readers should keep in mind while thinking about the results. First, the sample sizes of the *National Study* and *Center Panel*, though not small, are not large enough to provide the precision necessary to conclude that any single change between estimates is statistically significant.[15] The argument we have made—that changes in giving reflect changes in involvement—is not built on the statistical significance of any one change, but rather on how all of the changes together suggest a unified interpretation.

Second, although the *Center Panel* is the only recent survey that measures giving high enough into the distribution to even attempt describing giving patterns based on a comparison with the *National Study* SRC survey, it should be kept in mind that both surveys have fewer observations of giving above the 90th percentile than appear in tax data. Because of this it is possible in principle, though we think not likely, that giving patterns above the 90th percentile would counter the patterns we have described. We think it not likely because (taking the cross-cohort comparison in religious giving as an illustration) a counter-pattern above the 90th

[15]For this reason we have not presented standard errors for the changes in estimates over the pre-war cohort's life-cycle or between the two cohorts. Standard errors for any of the changes in estimates (as well as for the estimates themselves) are available upon request. For example, the standard error on the −$246 change in religious giving between the pre-war and baby boom cohorts (Table 1, row 1, columns 4 and 6) is $182. Of course, standard errors on the regression-adjusted estimates are larger: the standard error on the −$328 change in religious giving between the Catholic pre-war and baby boom cohorts (Table 2, row 3, columns 4 and 6) is $513.

percentile would imply a sizable minority of baby boomers acts radically different than the rest of their cohort and gives so much more than expected to religion that it would escape neither the anecdotal statements of church leaders nor media reports. To our knowledge there have been no such statements or reports.

Our conclusion that religious giving and involvement change together is different from Gruber's (2004) result that tax cuts lower giving but raise attendance. The results may differ because they are based on different sources of variation: our results are based on age variation within a cohort and variation between two cohorts and Gruber's results are based on variation across-time within income groups within states. One possibility is that both sets of results are correct, but our results would have shown even greater attendance declines among baby boomers had it not been for tax cuts over the time period. Another possibility is that the pre-war cohort received larger tax cuts than the baby boomers (by virtue of the pre-war cohort's generally higher incomes over the period) and increased their attendance due to aging while the baby boom reduced their attendance due to a cohort effect; this second possibility could be checked by seeing whether the tax-cuts-raise-attendance result holds within the pre-war and baby boom cohorts, an interesting topic for future research.

The present results are of interest for several reasons. First, to our knowledge, the results are the first to describe the giving of a cohort as they age and the first to compare two different cohorts at comparable points in their life-cycles. Second, the results provide evidence that generational change is at the foundation of recent changes in American religious giving, similar to our results and the results of others that generational change is at the foundation of recent changes in American religious involvement. Third, differences between Catholics and Protestants in their giving and involvement patterns are to some extent caused by selection.

Selection is likely to become a more important explanation of Catholic-Protestant differences because Generation X Catholics are continuing to identify as Catholics while reducing their involvement (Davidson et al. 1997). Most importantly, the results offer evidence that changes in American religious giving across-time reflect changes in involvement.

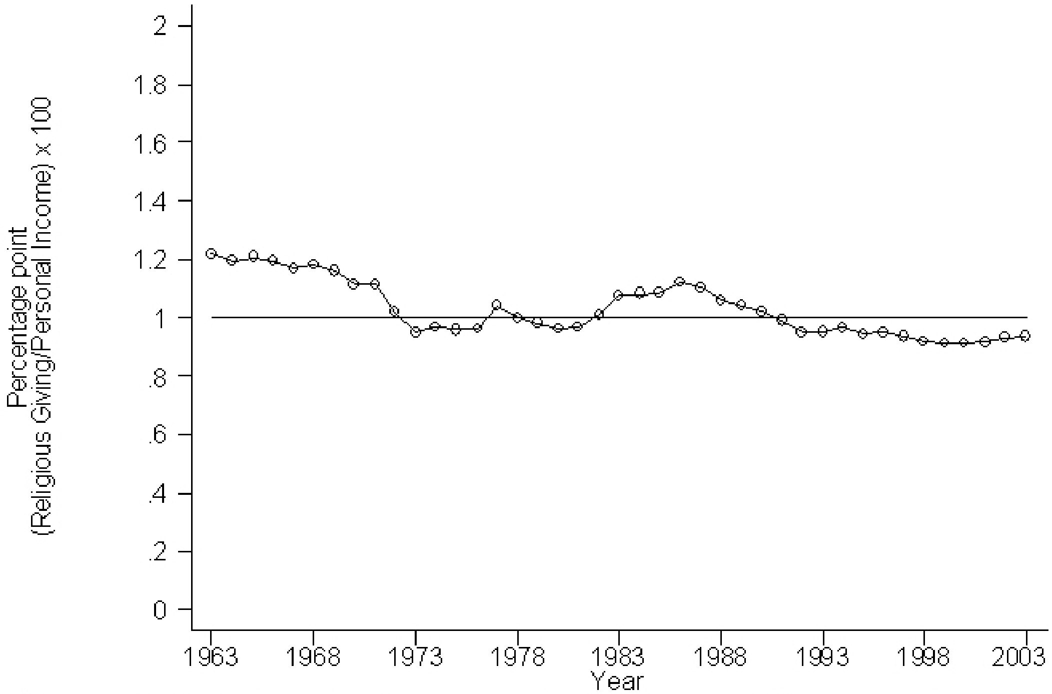

Figure 1. Religious Giving as a Percentage of Personal Income.

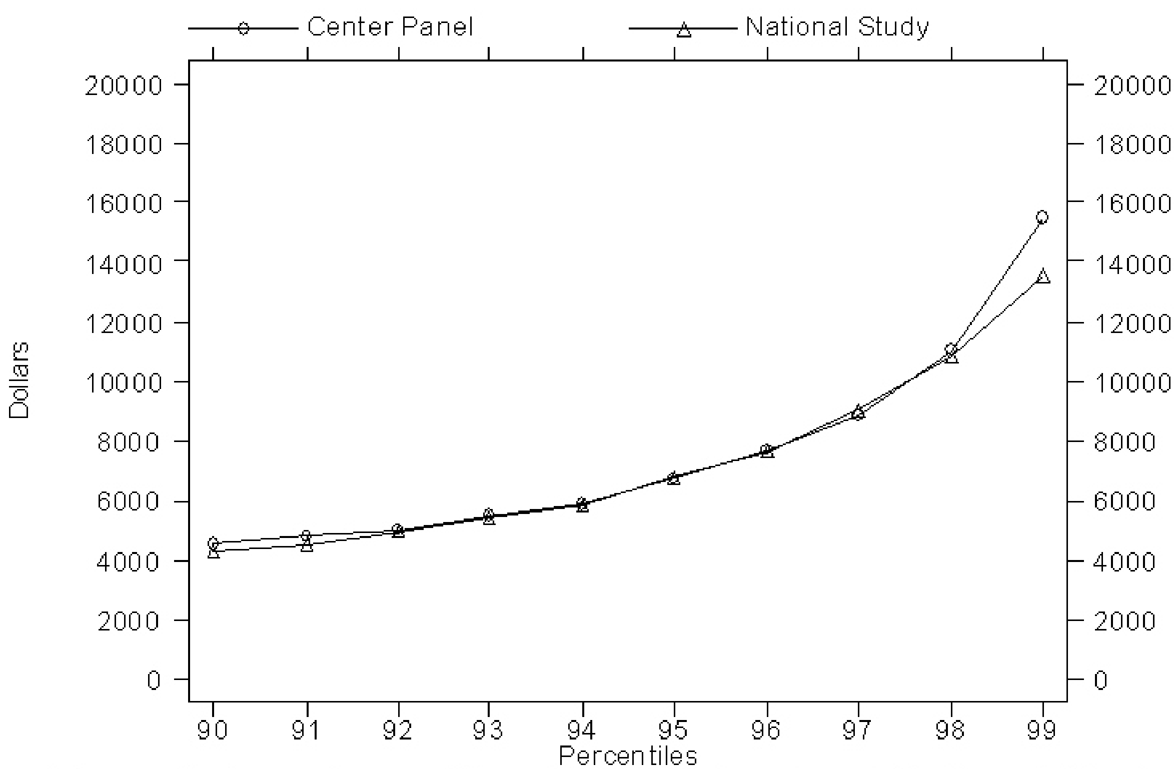

Figure 2. Top Percentiles: Center Panel and National Study.

Table 1. Giving by Cohort and Age: All Families.

	Total Giving			Religious Giving			Secular Giving		
	Pre - war		Baby boom	Pre - war		Baby boom	Pre - war		Baby boom
Family type	35 - 49 in 1973	62 - 76 in 2000	35 - 49 in 2000	35 - 49 in 1973	62 - 76 in 2000	35 - 49 in 2000	35 - 49 in 1973	62 - 76 in 2000	35 - 49 in 2000
All families									
Average	1,687	1,609	1,371	1,035	1,040	789	652	568	582
75th percentile	2,345	2,100	1,400	1,233	1,100	500	704	500	500
90th percentile	4,690	4,000	3,800	3,049	3,000	2,400	1,501	1,500	1,275
95th percentile	7,035	6,090	6,000	4,690	5,000	4,500	2,345	2,350	2,400
99th percentile	14,070	10,650	13,400	9,380	9,000	9,000	8,442	6,100	7,200
Families with average income and wealth	1,787	1,583	1,453	1,302	1,246	976	485	337	477

Notes: The sample sizes are: *n* = 574 (pre-war cohort in 1973), *n* = 578 (pre-war cohort in 2000), and *n* = 1,527 (baby boom cohort in 2000). Rows 1 through 5 contain unadjusted univariate statistics. Row 6 contains estimates based on regressions of giving on cohort, income, and wealth (*n* = 1,872 for the 1973 regressions and *n* = 4,444 for the 2000 regressions); using the regression coefficients, the row 6 estimates are of average giving for a family with average income and average wealth. All the estimates in the table are calculated with survey weights from the *National Study* for the 1973 estimates and the *PSID* for the 2000 estimates. All entries in the table are dollar amounts. Amounts for 1973 (columns 1, 4, and 7) have been scaled up by 4.69—the amount of inflation and income growth between 1973 and 2000—hence, these columns show what the 1973 amounts would have been in 2000 had they increased in proportion to nominal income.

Table 2. Giving by Cohort and Age: Catholic and Protestant Families.

Family type	Total Giving: Pre - war, 35 - 49 in 1973	Total Giving: Pre - war, 62 - 76 in 2000	Total Giving: Baby boom, 35 - 49 in 2000	Religious Giving: Pre - war, 35 - 49 in 1973	Religious Giving: Pre - war, 62 - 76 in 2000	Religious Giving: Baby boom, 35 - 49 in 2000	Secular Giving: Pre - war, 35 - 49 in 1973	Secular Giving: Pre - war, 62 - 76 in 2000	Secular Giving: Baby boom, 35 - 49 in 2000
All Catholic families	1,562	1,585	1,246	822	825	625	741	760	621
All Protestant families	1,700	1,612	1,537	1,174	1,255	1,031	526	357	505
Catholic families with average income and wealth	1,680	1,390	1,453	1,070	960	742	611	431	434
Protestant families with average income and wealth	1,913	1,785	1,841	1,503	1,583	1,347	409	202	495

Notes: The Catholic sample sizes are: *n* = 137 (pre-war cohort in 1973), *n* = 136 (pre-war cohort in 2000), and *n* = 423 (baby boom cohort in 2000). The Protestant sample sizes are: *n* = 371 (pre-war cohort in 1973), *n* = 385 (pre-war cohort in 2000), and *n* = 928 (baby boom cohort in 2000). Rows 1 and 2 contain unadjusted averages. Rows 3 and 4 contain estimates based on regressions of giving on cohort, income, wealth, Catholic identification, Protestant identification, and identification interacted with cohort (*n* = 1,872 for the 1973 regressions and *n* = 4,444 for the 2000 regressions). Using the regression coefficients, the row 3 estimates are of average giving for a family with average income and average wealth who is Catholic; the row 4 estimates are of average giving for a family with average income and average wealth who is Protestant. All the estimates in the table are calculated with survey weights from the *National Study* for the 1973 estimates and the *PSID* for the 2000 estimates. All entries in the table are dollar amounts. Amounts for 1973 (columns 1, 4, and 7) have been scaled up by 4.69—the amount of inflation and income growth between 1973 and 2000—hence, these columns show what the 1973 amounts would have been in 2000 had they increased in proportion to nominal income.

Table 3. Religious Identification and Involvement by Cohort and Age.

Variable	Pre - war		Baby boom
	35 - 49 in 1973	62 - 76 in 2000	35 - 49 in 2000
Identification			
Catholic	27	24	25
Protestant	64	65	52
Involvement – attending biweekly or more			
All families	48	52	39
Catholic families	62	62	43
Protestant families	47	54	47

Notes: To facilitate comparison of this table with Tables 1 and 2 we have retained the column headings used in the earlier tables even though in the present table data from additional years are used: column 1 contains 1972-75 data for the pre-war cohort; column 2 contains 1998, 2000, and 2002 data for the pre-war cohort; and column 3 contains 1998, 2000, and 2002 data for the baby boom. The sample sizes are: n = 1,545 (pre-war cohort in 1972-75), n = 1,153 (pre-war cohort in 1998-2002), and n = 2,701 (baby boom cohort in 1998-2002). All entries in the table are percentages.

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